



A National Guideline for the Assessment and Diagnosis of Autism Spectrum Disorders in Australia

Evidence Tables

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October 2018

EVIDENCE TABLES

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Associated documents

- [National Guideline: Full Guideline \(Register to access\)](#)
- [National Guideline: Summary and Recommendations](#)
- [National Guideline: Administrative and Technical Report](#)
- [National Guideline: Responses to Public Consultation Submissions](#)

Publication Approval



Australian Government

National Health and Medical Research Council

The guideline recommendations on pages 5-309 of this document were approved by the Chief Executive Officer of the National Health and Medical Research Council (NHMRC) on 9 July 2018, under Section 14A of the National Health and Medical Research Council Act 1992. In approving the guideline recommendations, NHMRC considers that they meet the NHMRC standard for clinical practice guidelines. This approval is valid for a period of 5 years. NHMRC is satisfied that the guideline recommendations are systematically derived, based on the identification and synthesis of the best available scientific evidence, and developed for health professionals practising in an Australian health care setting. This publication reflects the views of the authors and not necessarily the views of the Australian Government.

Contents

Acknowledgements	vi
Introduction	1
Guideline Development Process.....	1
Grading Evidence for Recommendations	2
How to Read the Evidence Tables.....	3
Evidence Table 1: Diagnostic Criteria for ASD	5
Evidence Table 2: Guiding Principles (Evidence-based)	7
Evidence Table 3: Guiding Principles (Individual and Family Centred).....	9
Evidence Table 4: Guiding Principles (Holistic Framework).....	14
Evidence Table 5: Guiding Principles (Strengths Focused)	16
Evidence Table 6: Guiding Principles (Equity).....	19
Evidence Table 7: Guiding Principles (Lifespan Perspective).....	21
Evidence Table 8: Assessment Process (Content).....	22
Evidence Table 9: Assessment Process (Coordination)	25
Evidence Table 10: Assessment Participants (Professionals)	32
Evidence Table 11: Assessment Participants (Professionals)	41
Evidence Table 12: Setting (Clinic)	52
Evidence Table 13: Setting (Community)	54
Evidence Table 14: Setting (Community)	57
Evidence Table 15: Setting (Telehealth)	59
Evidence Table 16: Referral (Professionals)	62
Evidence Table 17: Referral (Professionals)	67
Evidence Table 18: Referral (Information).....	71
Evidence Table 19: Referral (Outcome)	74
Evidence Table 20: Referral (Outcome)	77
Evidence Table 21: Assessment of Functioning (Professionals)	79
Evidence Table 22: Assessment of Functioning (Professionals)	85
Evidence Table 23: Assessment of Functioning (Information)	90
Evidence Table 24: Assessment of Functioning (Information)	97

Evidence Table 25: Assessment of Functioning (Information)	109
Evidence Table 26: Assessment of Functioning (Setting).....	113
Evidence Table 27: Assessment of Functioning (Outcome)	115
Evidence Table 28: Assessment of Functioning (Outcome)	118
Evidence Table 29: Assessment of Functioning (Repeated Assessment)	120
Evidence Table 30: Medical Evaluation (Professionals)	122
Evidence Table 31: Medical Evaluation (Professionals)	124
Evidence Table 32: Medical Evaluation (Professionals)	126
Evidence Table 33: Medical Evaluation (Information).....	130
Evidence Table 34: Medical Evaluation (Information).....	132
Evidence Table 35: Medical Evaluation (Setting)	139
Evidence Table 36: Medical Evaluation (Outcome)	140
Evidence Table 37: Single Clinician Diagnostic Evaluation (Professionals).....	142
Evidence Table 38: Single Clinician Diagnostic Evaluation (Professionals).....	155
Evidence Table 39: Single Clinician Diagnostic Evaluation (Professionals).....	158
Evidence Table 40: Single Clinician Diagnostic Evaluation (Professional).....	162
Evidence Table 41: Single Clinician Diagnostic Evaluation (Information)	168
Evidence Table 42: Single Clinician Diagnostic Evaluation (Information)	169
Evidence Table 43: Single Clinician Diagnostic Evaluation (Information)	177
Evidence Table 44: Single Clinician Diagnostic Evaluation (Setting)	186
Evidence Table 45: Single Clinician Diagnostic Evaluation (Outcome).....	191
Evidence Table 46: Single Clinician Diagnostic Evaluation (Outcome).....	194
Evidence Table 47: Consensus Team Diagnostic Evaluation (Professionals)	198
Evidence Table 48: Consensus Team Diagnostic Evaluation (Professionals)	208
Evidence Table 49: Consensus Team Diagnostic Evaluation (Professionals)	222
Evidence Table 50: Consensus Team Diagnostic Evaluation (Professionals)	225
Evidence Table 51: Consensus Team Diagnostic Evaluation (Information).....	229
Evidence Table 52: Consensus Team Diagnostic Evaluation (Information).....	230
Evidence Table 53: Consensus Team Diagnostic Evaluation (Information).....	241
Evidence Table 54: Consensus Team Diagnostic Evaluation (Setting)	242
Evidence Table 55: Consensus Team Diagnostic Evaluation (Outcome)	247

Evidence Table 56: Consensus Team Diagnostic Evaluation (Outcome)	250
Evidence Table 57: Sharing Findings (Style).....	254
Evidence Table 58: Sharing Findings (Content)	264
Evidence Table 59: Important Considerations (Age)	275
Evidence Table 60: Important Considerations (Intellectual and/or Communication Capacity)	283
Evidence Table 61: Important Considerations (Gender).....	284
Evidence Table 62: Important Considerations (Gender).....	287
Evidence Table 63: Important Considerations (Culturally and Linguistically Diverse Backgrounds).....	288
Evidence Table 64: Important Considerations (Culturally and Linguistically Diverse Backgrounds).....	292
Evidence Table 65: Important Considerations (Culturally and Linguistically Diverse Backgrounds).....	295
Evidence Table 66: Important Considerations (Regional and Remote Location)	296
Evidence Table 67: Important Considerations (Regional and Remote Location)	298
Evidence Table 68: Important Considerations (Complex Psychosocial Factors)	300
Evidence Table 69: Important Considerations (Co-occurring Conditions).....	304
Evidence Table 70: Important Considerations (Differential Diagnosis)	309
References	312

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Hidden under the layers of the $\frac{3}{4}$ of an infinity symbol are a normal distribution curve, a brain and branches seeking connection from a brain/person to an anchor. The $\frac{3}{4}$ infinity symbol also more explicitly shows the variety within the spectrum but the gaps in knowledge and connections.

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Introduction

This document outlines the supporting evidence for each of the 70 recommendations made in the Guideline, available from autismcrc.com.au:

Whitehouse AJO, Evans K, Eapen V, Wray J. A national guideline for the assessment and diagnosis of autism spectrum disorders in Australia. Autism CRC Ltd, Brisbane, 2018.

The methodology used in the development of this Guideline is described in the Administrative and Technical Report. The Evidence Tables summarise the evidence for each recommendation of the Guideline.

Guideline Development Process

A series of literature reviews and community consultation activities was conducted over a 12-month period (September 2016 to August 2017) to ensure this Guideline adhered to international best practice standards. These activities are described in detail in the accompanying Administrative and Technical Report. In brief, these activities comprised the following:

Literature Review. An initial scoping review was conducted to map the breadth and depth of the available evidence on the ASD diagnostic process within similar cultures (Chapter 3 of the Administrative and Technical Report). A series of systematic reviews was then conducted to determine the extent and quality of the existing published evidence (Chapter 3 of the Administrative and Technical Report). This included systematic reviews of ASD diagnostic guidelines published in the Anglosphere (Australia, New Zealand, North America and the British Isles), along with academic literature on the diagnostic accuracy of ASD diagnostic instruments, experiences of individuals, caregivers and practitioners of the ASD diagnostic process, and factors influencing temporal outcomes during the completion of an ASD diagnostic assessment.

Community Consultation. Two open consultation processes were conducted, in which any individual living in Australia who was interested in providing input on important considerations during an assessment of ASD concerns could participate. The first was a brief online submission portal completed by 238 individuals (Chapter 4 of the Administrative and Technical Report) and the second was a series of eight workshops held in capital cities across Australia (including one workshop conducted via videoconference to facilitate consultation with rural stakeholders) and attended by 273 individuals (Chapter 5 of the Administrative and Technical Report).

In addition, three sets of targeted consultations were undertaken, in which the perspectives of specific professional groups and clients were elicited. First, consensus recommendations for ASD diagnosis were sought from a group of 77 medical, health and educational experts through a survey that adopted the Delphi method (Chapter 6 of the Administrative and Technical Report). Second, the relative importance of different aspects of an assessment of ASD concerns was measured through a Viewpoint survey with 12 adolescents and adults on the autism spectrum, and 26 caregivers of adolescents and adults on the autism spectrum (Chapter 7 of the Administrative and Technical Report). Finally, the personal experience of individuals undergoing an ASD diagnostic assessment was explored through individual interviews with 14 adults on the autism spectrum (Chapter 8 of the Administrative and Technical Report).

Feedback and Revision. The Research Executive Committee coordinated a comprehensive feedback process on the draft Guideline involving members of the community and methodological experts. Following the publication of the draft Guideline on 7 September 2017, there was a six-week consultation period during which all interested individuals and organisations were encouraged to make a submission on the draft Guideline. This period closed at midnight on Thursday 19 October 2017. One hundred and sixty-one submissions were received from a range of stakeholders, including state government departments, public and private clinical service organisations, consumer and advocacy groups, and individuals. In addition, organisations represented on the Steering Committee and other key stakeholders were invited to provide feedback on this revised Guideline during a four-week period (10 February – 11 March 2018). In accordance with NHMRC requirements, versions of the Guideline were reviewed by a total of eight external reviewers with relevant methodological and/or topic expertise. The Guideline was further revised in response to the additional feedback provided by these organisations and external reviewers.

Given the iterative Guideline development process, the evidence contained in the following Evidence Tables at times reflects out-dated terminology that has been updated with subsequent revisions (e.g. 'diagnostician', 'tier 1').

Grading Evidence for Recommendations

The strength of each consensus-based recommendation was evaluated using a modified approach based on the NHMRC grading technique (Table 10, [1]). Due to a paucity of high-level evidence identified through the systematic literature review, this modified approach allowed supporting evidence from community consultation activities and international guidelines to be reviewed alongside the research evidence from peer-reviewed journals. The consensus-based rating was restricted to the NHMRC consistency criteria and breadth of evidence from multiple sources for several reasons: (1) it was deemed inappropriate to rate the evidence-base quality of our own research projects; (2) it was not possible to measure clinical impact for the included research designs; and (3) evidence was obtained only from similar cultures and applicable healthcare settings.

The Chair and Coordinator of the Research Executive each independently assigned a rating for three descriptors for each consensus-based recommendation, according to a set of descriptors developed for this project based on NHMRC terminology (#, Table 10). The first descriptor was 'consistency', and a rating of 'fully', 'mostly', 'somewhat' or 'not' could be assigned. The second descriptor was 'evidence sources', and a rating of 'numerous', 'number', 'limited' or 'lacking' could be assigned. The third descriptor was 'support from experts', and a rating of 'excellent', 'good', 'satisfactory' or 'poor' could be assigned. These ratings were compared and discussed, leading to agreement for all ratings. The final consensus-based recommendation grade was the lowest descriptor rating for the item, where this ranged from 1 (highest) to 4 (lowest). Consensus-based recommendations were initially graded for the first draft of the Guideline, and the grading process was repeated prior to submitting the third draft for external review to ensure grades reflected new or revised recommendations following feedback processes.

Table 1. Evidence source descriptor and grades for consensus-based recommendations

Category	Evidence source	Grade	
Consensus-based recommendation (CBR)	Scholarly literature that was systematically identified and critically appraised. Expert* opinion obtained through community consultation and/or a systematic review of consensus guideline documents, where a systematic review of published research studies revealed an absence of quality evidence.	1	Body of evidence is consistent across numerous evidence sources, and there is excellent support from experts for recommendation(s). Recommendation(s) with this grade are labelled CBR-1 and are prefaced by 'It is recommended ...'.
		2	Body of evidence is mostly consistent across a number of evidence sources, and there is good support from experts for recommendation(s) with few caveats. Recommendation(s) with this grade are labelled CBR-2 and are prefaced by 'It is suggested ...'.
		3	Body of evidence is somewhat consistent but with some uncertainty or limited to a small number of evidence sources, and there is satisfactory support from experts for recommendation(s) with some caveats. Recommendation(s) with this grade are labelled CBR-3 and are prefaced by 'It may be appropriate ...'.
		4	Body of evidence is inconsistent or lacking and there is poor support from experts for recommendation(s). Recommendation(s) with this grade are labelled CBR-4 and are prefaced by 'It may or may not be appropriate ...'.
* An 'expert' is someone with expertise in the ASD diagnostic process gained through lived or professional experience.			

How to Read the Evidence Tables

Evidence from the literature reviews and community consultations have been summarised in an Evidence Table for each recommendation, with each of the sources of evidence assigned to a row. The general format of the Evidence Tables from top to bottom is:

- Evidence Table number and short title
- the recommendation as worded in the Guideline

- grade, or strength, of the consensus-based recommendation as determined by a modified approach based on the NHMRC grading technique (Table 1, [1]), where two researchers agreed on these grades
- rationale for recommendation and grade, in terms of breadth, consistency and extent of evidence
- scholarly literature evidence from research studies published in peer-reviewed journals, with an indication of the Level (where 'I' represents the highest level possible) and Quality of evidence (where 100% represents the highest quality possible)
- other guideline evidence sourced from the 10 international guidelines from the Anglosphere with the highest quality ratings
- community consultation evidence from the multiple research projects that investigated the perspectives of people with lived and/or professional experience of the ASD diagnostic process (Online submissions, Workshops, Delphi surveys, Viewpoint surveys and/or Interviews);
- additional feedback received during the public consultation period (first draft) and from national peak bodies (second draft)
- published information sources cited in the Evidence Tables through a number in square brackets (with all references listed at the end of this document).

Evidence Table 1: Diagnostic Criteria for ASD

Evidence source	Details
Recommendation	It is suggested that the Assessment Team use the current versions of either of the following international diagnostic manuals to make diagnostic decisions in relation to ASD: <ul style="list-style-type: none"> - Diagnostic and Statistical Manual of Mental Disorders - International Statistical Classification of Diseases and Related Health Problems.
Grade	Consensus-based Recommendation, Grade 2
Rationale	Numerous evidence sources suggest the current version of the DSM or ICD diagnostic criteria, with most of the evidence consistently supporting DSM and/or ICD and good support from experts to provide a choice of either (although some felt one should be recommended).
Scholarly literature	Australian practitioners were found to almost exclusively use the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) to diagnose ASD (Level III, Quality 75%, [2]).
Other guidelines	Only five guidelines focused on the current diagnostic criteria for ASD as laid out by the DSM-5 [3–7].
Online submissions	<ul style="list-style-type: none"> • Consensus with reference to DSM-5 • Describe what feature criteria need to be present in a person to apply a diagnosis (as in DSM-5) • 27 mentions of DSM, 2 mentions of ICD
Workshops	DSM-5 assesses across settings
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that the national guideline should include the current version of the Diagnostic and Statistical Manual of Mental Disorders (e.g. DSM-5). Consensus was not achieved as to whether this should be the only diagnostic criteria or an option alongside the current revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10). The ICD-10 was not considered appropriate as the only diagnostic criteria. • Either the DSM-5 or ICD alone is not enough. • While the DSM-5 is the more commonly used criteria a number of other health professionals use the ICD-10. The scope should be in the area of their expertise. • It may be necessary to use both diagnostic manuals to tease out subtle presentations of ASD (e.g. “My clinical work has involved working with adolescent girls who did not fit into the classic ASD profile but struggled to understand their world. Their presentation was definitely on the spectrum”). • ICD-10 does not discuss the sensory issues well but has a better way of describing the social aspects of the condition than DSM-5. • The current diagnostic criteria are not ideal for females on the spectrum.

	<ul style="list-style-type: none"> • There are issues with regard to DSM-5, especially in relation to girls with ASD Level 1. • The categories PDDNOS and Asperger's were very useful and should not have been taken out of the DSM-5. • DSM-5 is widely understood and is the most used diagnostic criteria in Australia. • Using one set of diagnostic criteria from the DSM-5 ensures consistency when considering crossovers with other mental health and disruptive behavioural problems as part of a diagnostic clarification process. • Stipulating one version reduces confusion (e.g. to reduce the likelihood that someone might meet criteria under one criteria but not another). • ICD-10 alone is adequate. • ICD continues to be the diagnostic guidelines for the rest of the world. • The diagnosis is made by clinicians with experience and excellent clinical judgement. The use of one or other classification system is irrelevant.
Viewpoint surveys	Diagnostic criteria were considered to have a neutral to positive level of importance.
Interviews	Diagnostic criteria were not featured in the qualitative findings.
Feedback	Not applicable

Evidence Table 2: Guiding Principles (Evidence-based)

Evidence source	Details
Recommendation	It is recommended that the process for assessing ASD concerns follow an evidence-based approach, where clinical decision-making is based on a review of the best available research evidence.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently suggest an evidence-based approach, and there was excellent support from experts with both lived and professional experience to utilise this approach.
Scholarly literature	<ul style="list-style-type: none"> • A diagnosis can be a catalyst for positive change and an increased understanding of needs can lead to decreased stress. However, misdiagnosis can result in a lack of appropriate service provision or the provision of inappropriate interventions (Level III, Quality 65%, [8]). • ‘Some clinicians in Australia may not be practising in a manner that is consistent with international best practice guidelines or statements from Australian professional bodies for ASD assessment and diagnosis’ (p. 6, Level III, Quality 75%, [2]). • ‘Future empiric evidence must incorporate this clinical heterogeneity, evaluating the trade-offs between guaranteeing a comprehensive assessment for all children with suspected ASD and providing a more streamlined approach that is tailored to the child’s presentation’ (p.10, Level III, Quality 55%, [9]). Empirical evidence is not available to support many clinical guidelines, therefore this lack of evidence needs to be made transparent (Level III, Quality 55%, [9]).
Other guidelines	<ul style="list-style-type: none"> • ‘Current research and scientific evidence should inform diagnostic evaluations to enable earlier and more accurate identification of children with ASD’ [4]. • Different levels of available evidence indicate what level a recommendation should be given, from ‘clinical standard’ (for rigorous empirical evidence, e.g. meta-analyses, systematic reviews, individual randomised controlled trials, and/or overwhelming clinical consensus) to ‘clinical option’ (for emerging empirical evidence, e.g. uncontrolled trials or case series/reports, or clinical opinion but lack strong empirical evidence and/or strong clinical consensus), to ‘not endorsed’, (for practices that are known to be ineffective or contraindicated) [5].
Online submissions	<ul style="list-style-type: none"> • To develop robust, evidence-informed processes with consistent use of assessments and commonly understood concepts to identify and support people with ASD and their families. • Diagnostic decisions should be reached using a combination of strategies, including the use of evidence-based diagnostic tools. • Profiling of skills and behaviours across environments and with different communication partners using evidence-based tools.

	<ul style="list-style-type: none"> • Communication: transparent and evidence based. • A booklet should be provided with evidence-based therapy options and services.
Workshops	<ul style="list-style-type: none"> • Evidence based. • Research behind all assessments i.e. recommended measures used. • Timely, efficient, evidence-based process.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that the guideline should involve an evidence-based approach (i.e. decisions when planning and undertaking the assessment are based on a review of the best available research evidence). • Most interventions recommended currently do not have strong evidence base to support them – but they make sense based on developmental principles. However, an evidence-based approach is critical. • This allows the clinician to better interpret the context of a child's unique situation, and the level of uncertainty inherent to complex clinical situations e.g. comorbidities, family context. • Internationally accredited and nationally approved evidence is necessary for ASD assessments. This evidence should be found from the previous literature, research and case studies of past assessment and interventions. • Aids in service delivery. • A correct diagnosis depends on the quality of evidence. • Clinical guidelines and policy documents are important. • Not everyone fits the 'evidence-based' generalisations.
Viewpoint surveys	Using a research evidence-based approach was given neutral importance by all Viewpoints.
Interviews	Evidence-based assessment did not emerge as a theme from the interviews.
Feedback	Not applicable

Evidence Table 3: Guiding Principles (Individual and Family Centred)

Evidence source	Details
Recommendation	It is recommended that the process for assessing ASD concerns follow an individual- and family-centred approach, by which assessment professionals collaborate with individuals and their families to identify the unique needs, strengths and contexts of the person undergoing assessment and their broader family unit.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently suggest individual- and family-centred approaches, and there was excellent support from experts with both lived and professional experience to utilise this approach.
Scholarly literature	<p><i>Individual centred</i></p> <ul style="list-style-type: none"> Adults who had diagnosed themselves with ASD often distrusted health professionals in the disclosure of their concerns. This barrier to diagnosis highlights the importance of health professionals listening and working in collaboration with the individual so their concerns are validated (Level III, Quality 85%, [10]). Involve the patients in their own diagnostic experience and incorporate their personal understanding of their life experience (Level III, Quality 60%, [11]). Diagnostic disclosure should be tailored to the specific individual (Level III, Quality 100%, [12]). Services need to consider how young people can become active partners in the ASD assessment process (Level III, Quality 100%, [13]). In regards to a clinician, “parents valued clinicians getting to know their child as an individual and being interested in the family as a whole” (p. 378, Level III, Quality 90% [14]). <p><i>Family centred</i></p> <ul style="list-style-type: none"> It is important to the parental experience of the ASD diagnostic process that parents are well informed and work in collaborative partnership with clinicians (Level III, Quality 73-100%, [15, 16]), as it is recognised that parents have a unique understanding of their child’s needs and difficulties (Level III, Quality 80%, [17]). Parents can have a meaningful role in the diagnostic process as they often have expert knowledge about their child, beyond the clinic (Level III, Quality 77- 95%, [18, 19]). However, some parents reported feeling labelled by professionals when the parents did not ascribe to professional opinion (Level III, Quality 55%, [20]). Dismissal of parental concerns by healthcare professionals led to later diagnoses and support service access for children with ASD (Level III, Quality 59%, [21]).

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- There is a need for the remodelling of the diagnostic process, in which the process better serves families (Literature Review, [22]).
 - Parents whose children undergo an ASD diagnostic/assessment process are an important resource to clinicians (Level III, Quality 60-82%, [23]).
 - Where families using private health care had more satisfaction post-assessment, professionals actively involved parents in the sessions and allow them to build a trusting relationship as they will need support from the team for many years, even after the diagnosis (Level Ib, Quality 95%, [24]).
 - Parents felt they could not raise their concerns as they thought the “medical professional knew best” and they didn’t want to bother the clinicians (Level III, Quality 85%, [25]).
 - Counsellors’ attitude during diagnosis delivery was a predictor of maternal satisfaction (Level III, Quality 82%, [26]).
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Other guidelines

Individual centred

- Individuals are part of a larger family and community system [27].
- The needs and preferences of individuals and carers should be taken into account when establishing treatment and they should have the opportunity to make informed decisions about this [28].
- For adolescents and adults, encourage family/partner/carers/advocate involvement and facilitation, and support negotiation between the person with autism and their family regarding confidentiality and ongoing support [29].

Family centred

- A family-centred approach should be foundational to the ASD evaluation process as a significant portion of the process involves listening to and interviewing families about the child [5, 27, 30].
 - It is critical that clinicians are trained in a family-centred approach and that families are recognised as essential, equal and valuable partners in the ASD evaluation process [5, 27, 28]. This process begins by respecting and focusing on caregiver questions and concerns [27].
 - Families are a part of a larger community system and family centeredness during diagnosis “sets the stage for ongoing collaboration and communication” after diagnosis [27].
 - Families consist of the people that the client chooses to call ‘family’ and the clinician must be inclusive of (non-biological) members [5].
 - In order to be family centred, a clinician must be flexible and sensitive in terms of scheduling, respectful of social, religious and cultural values, and responsive to the individual family’s education (more specifically knowledge of ASD), language, socioeconomic factors, resources and strengths (such as coping skills) [5, 30, 31].
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	<ul style="list-style-type: none"> • Clinicians “should be sensitive to the parents’ concerns regarding the completeness of the [ASD] evaluation” and refer for further evaluation if the parents feel that the evaluation is not representative of the child’s functioning [27]. • All family members’ needs and strengths should be assessed [3]. • Family-centred diagnosis disclosure is recommended for children with ASD; however, while more dependent adolescents and adults may prefer/require family involvement in the diagnosis disclosure, some more independent adolescents and adults may prefer more privacy with the option of a chosen support person [3]. • For adolescents and adults, relevant ‘mental capacity’ laws need to be taken into account when discussing if and how families are to be informed and involved during and after diagnosis [29]. • All communication with families, both written and verbal, must be individualised to that family’s uniqueness, be clear and understandable, useful and respectful [30]. • In the Canadian guideline, the parent advisory committee emphasised the importance of considering the ‘real family’ at the centre of the ASD evaluation and the “tears, fears, joy, relief, anguish, and hope” occurring beyond parallel to the symptoms and questionnaires [30]. • The impact of ASD can be significant and social support and family networks play an important role [4]. • Families may be required to take on multiple roles (including co-therapist and advocate) during and after an ASD evaluation and families should be supported in these roles [4]. A significant burden of care may rest with the families of individuals with ASD, not only because of the potentially significant personal and social functioning impairments of the individual, but also because of the lack of contact individuals with ASD have with regular service providers / external support [29].
Online submissions	<p><i>Individual centred</i></p> <ul style="list-style-type: none"> • Those who do not present stereotypically ASD symptoms, understand nuances of people and have developed coping/masking strategies, should be recognised. • Doctors must remember that ASD is different for everyone. This includes differences of ASD in genders. • The ADOS is designed for one type of ASD – low functioning. <p><i>Family centred</i></p> <ul style="list-style-type: none"> • Children and parents should receive information about therapies that are best suited for the child. • Practice should be family centred always. • Talk directly to the family members and/or carers who are in direct contact / living with a person with ASD. • Family members should be informed of the results/outcome, when applicable, on the day of the assessment.

	<ul style="list-style-type: none"> • Direct examples from observational interactions should be used when explaining the diagnosis to the family. • Parents' perceptions and concerns should be taken seriously.
Workshops	<p><i>Individual centred</i></p> <ul style="list-style-type: none"> • Person-centred assessments. • Move away from a generalist medical model with technology and reports, to viewing the person as an individual and focusing on their strengths. • Capture views and experiences of clients, this allows them to feel empowered. • Each person is an individual, considerations from 'other' people in their lives such as family members should be considered in the wider picture. • Support both individuals on the autism spectrum and their families. • Assessments should commence with family/individual stating their needs. • Understanding the family/individual perspective is a challenge; however, they must be recognised when completing the ASD assessments. These assessments should be tailored to suit the individual's needs but must be kept evidence based. <p><i>Family centred</i></p> <ul style="list-style-type: none"> • Incorporating supports that will allow the family to cope throughout the process of assessment and diagnosis. • How does the family impact the client? • Parent strategies versus school strategies. • Inform families early that the diagnostic process will focus on many deficits. • The role of family-centred treatments is important. • A parent guide needs to be established to assist in pre-diagnosis appointment and information gathering. • Allow parents to have some "reflection time" rather than being put on the spot during the actual diagnosis to answer questions about their child. • Some families may have difficulty expressing their child's needs or concerns and may not like to communicate a deficit (particularly to unfamiliar professionals). • Families should receive practical and meaningful suggestions about the move forward with intervention/planning. • Allowing the families to understand why more than one professional needs to be involved in the diagnosis (including the time and cost). • The family's expectations set at diagnosis/assessment needs to carry through to intervention. These expectations must be equitable for all families.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that the guideline should involve a client- and family-centred approach (i.e. collaborating with individuals and their families to identify the unique needs, strengths and

	<p>contexts of the person undergoing assessment and their broader family unit).</p> <p><i>Individual centred</i></p> <ul style="list-style-type: none"> • Each ASD case is individual and the client will have their own requirements, therefore, should be diagnosed accordingly. • An inner-city model will not work in rural and may discriminate against rural and Indigenous children. Reinforcing an individual-centred approach is necessary. • Client- and family-centred approach is key, for any assessment and clinical work, not just ASD assessments. <p><i>Family centred</i></p> <ul style="list-style-type: none"> • Allowing the parents to navigate through the system easier. • It can often be quite confronting dealing with a possible ASD diagnosis but also very stressful for parents not knowing which step to take first and who is the first point of contact. • There is considerable variability in this country for ASD diagnosis and a set of guidelines would contribute towards rectifying this issue and give families some guidance as to the type of assessment services they should be seeking.
Viewpoint surveys	Focusing on the needs of the whole family was given high importance by one Viewpoint. Focusing on the strengths of the person being assessed was ranked as having high importance to one Viewpoint. Comments highlighted the need to listen to and include individuals and their families in the assessment phase and beyond. Experiences where individuals and/or families were not included and listened to were reported to be distressing and frustrating.
Interviews	Some participants reported having experiences with diagnostic health professionals with a lack of sensitivity or personal connection.
Feedback	Not applicable

Evidence Table 4: Guiding Principles (Holistic Framework)

Evidence source	Details
Recommendation	It is recommended that the process for assessing ASD concerns follow a holistic framework, where an individual is evaluated within their personal, activity and environmental contexts (as outlined, for example, by the World Health Organization's International Classification of Functioning, Disability and Health), and that referrals for further supports are based on an individual's functioning and needs, rather than their clinical diagnosis.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently suggest a holistic framework, and there was excellent support from experts with both lived and professional experience to utilise this approach.
Scholarly literature	Parents valued clinicians who were holistic and hopeful in their approach (Level III, Quality 85%, [14]).
Other guidelines	'When a child presents with developmental or behaviour concern, ASD should be considered as a potential diagnosis, however other diagnoses should also be considered' [28].
Online submissions	<ul style="list-style-type: none"> Differential assessment as part of one diagnostic assessment so family and service providers get the fuller picture of needs/issues. I believe these assessments should be conducted by teams at different times, on different days, in different locations, to ensure the most holistic view of the person is taken into consideration before a decision is made. Look at the underlying causes of behaviours such as emotional regulation, sensory processing, social and communication issues.
Workshops	<ul style="list-style-type: none"> One of the frequently mentioned 'most important considerations' was being holistic in support planning. The ASD assessment scope should follow a holistic approach, where everyone should have input to gather the whole picture (i.e. parents, school, day care, clinicians). Developmental framework should be a central consideration (i.e. don't focus on ASD in isolation). Assessment needs to be on a continuum – not a one-size-fits-all approach.
Delphi surveys	<ul style="list-style-type: none"> A comprehensive assessment system would allow parents, carers, teachers and healthcare providers to better assist and care for the child in a more appropriate way. Rather than having a diagnosis followed by an 'ASD assessment' that will be ignored by the treating clinician, it would be better to have ASD diagnosis combined with comprehensive diagnosis and screening for other conditions.

	<ul style="list-style-type: none"> • There are so many factors (e.g. remoteness, services, child presentation) that can have an impact on the service that is available and/or appropriate for the child with autism, that the guidelines would have to be broad.
Viewpoint surveys	The focus of one of the three Viewpoints, named 'See it all', was assessment of functional and family impact. The statements of highest importance for this Viewpoint included assessing the daily living skills of the person being assessed, focusing on strengths of the person, focusing on the needs of the whole family, assessing in the home setting, and having professionals from different training backgrounds.
Interviews	<ul style="list-style-type: none"> • 'Information should be collected from ALL the team – parents, educators, Speechies, OT, colleagues and be considered of equal importance.' • 'I think all three think a holistic health plan would be the best way. I don't know that western medicine can give one answer, or naturopaths can give one answer, or psychology, I think at the end of the day it needs to be a blend of the whole lot.'
Feedback	Not applicable

Evidence Table 5: Guiding Principles (Strengths Focused)

Evidence source	Details
Recommendation	It is recommended that the process for assessing ASD concerns follow a strengths-focused approach, in which identifying the strengths, skills, interests, resources and support systems of the individual and their caregiver(s) and/or support people is recognised as being as important as identifying limitations.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently suggest a strengths focused approach, and there was excellent support from experts with both lived and professional experience to utilise this approach.
Scholarly literature	<ul style="list-style-type: none"> • A strengths-focused approach is advocated in the literature, and involves practitioners exploring the individual's and family's strengths, interests and goals (Level Ib-III, Quality 68–82%, [32, 33]). In addition, practitioners promote optimism and realistic hope by explaining opportunities for improvements with intervention, while keeping in perspective that ASD is a significant and lifelong disability (Level III, Quality 60-85%, [14, 34]). • 'By focusing on their unique gifts and thought processes rather than their weaknesses, parents develop solutions and aid in increasing their child's self-esteem' (p. 115, Level III, Quality: 95%, 2012, [18]). • In the context of disclosure, 'clinicians mentioning strengths and conveying hope seemed to make these feelings a little easier to bear' (p. 380, Level III, Quality 90%, [14]). • Parents valued clinicians who recognised strengths as well as difficulties (Level III, Quality 85%, [14]). • Counsellors' attitude during diagnosis delivery was a predictor of maternal satisfaction (Level III, Quality 82%, [26]). • Use a strengths-based approach in disclosing ASD diagnosis (Level III, Quality 100%, [12]).
Other guidelines	A full assessment of areas of strength is important for intervention purposes and planning. People with ASD are unique with respect to their strengths, likes, personalities and other aspects [3–5, 27, 28, 30, 31, 35].
Online submissions	<ul style="list-style-type: none"> • Strengths-focused and neurodiversity framework are important considerations. • Strengths and weaknesses should both be assessed.
Workshops	<ul style="list-style-type: none"> • Good recommendations and treatment planning would recognise both strengths and challenges. A diagnostic report should emphasise the weaknesses but identify the strengths so that the next steps can be justified.

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- Every assessment report should always start with detailing the person's strengths, suggestions at the end should always detail how to use them to support the person with the deficits.
 - Both strengths and deficits are important, deficits determine support needs and strengths lead to motivation, confidence and resources to alleviate challenges.
 - Reports should list both from the assessments.
 - Strengths need to be part of every aspect of the ASD diagnosis and report.
 - Encourage strengths as identified by individuals, along with from assessment results (e.g. strengths-focused interview questions, such as using positive wording 'can your child get dressed without your assistance?')
 - There are certain aspects of ASD that are different but are strengths.
 - Focus on support needs, not deficits.
 - Current model needs to be changed.
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Delphi surveys

- Round 1 agreement that the guideline should involve a strengths-focused approach (i.e. positive aspects, such as strengths, skills, interests, resources and support systems, remain central throughout the process).
 - The assessment should focus on both the strengths and weaknesses of the individual. It is also nice feedback to give to individuals and parents/caregivers.
 - Strengths and weaknesses inform the best interventions. The focus of intervention is to acknowledge both weaknesses and strengths and maintain and extend the strengths while improving in areas of weakness.
 - It is important to identify these strengths to refocus the assessment on an individual's potential rather than deficiencies and acknowledge the positive supports that are already present. Important in helping the family retain optimism for the future of their child and their family.
 - With any diagnostic service (and to gain access to funding), there is a large focus on identifying the areas of impairment/difficulty ('deficit model') – it's important to focus on identifying behaviours which may be consistent with the diagnostic criteria. Hence, there needs to be a balance between strengths based and identifying deficits/difficulties as well (where this is explored in a meaningful and sensitive way).
 - Part of good clinical practice – a good clinician will focus on strengths in assessment too.
 - No standardised assessment is needed – taken in the history, clinical observation and through interview.
 - Given time constraints, can be assessed at a follow-up appointment.
 - This is helpful but not necessary for a diagnostic assessment. These assessments will contribute to diagnosis but are most relevant to intervention goals.
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Viewpoint surveys	Focusing on the strengths of the person being assessed was ranked as having high importance to one Viewpoint; assessing the strengths and resources of the person being assessed and their parent/carers was of neutral importance to all Viewpoints.
Interviews	<ul style="list-style-type: none"> • Assessment professionals have a role to play in empowering individuals undergoing autism assessment. • 'That's the biggest thing, I think, in being diagnosed, there was nothing there to empower me.'
Feedback	Not applicable

Evidence Table 6: Guiding Principles (Equity)

Evidence source	Details
Recommendation	It is recommended that the process for assessing ASD concerns be accessible and rigorous for all Australians regardless of age, gender, cultural background, socioeconomic status or geographical location.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently suggest the importance of equity, and there was excellent support from experts with both lived and professional experience to utilise this approach.
Scholarly literature	Not identified
Other guidelines	Not identified
Online submissions	'Equity of funding.'
Workshops	<ul style="list-style-type: none"> • Equity across the lifespan • 'Individuals shouldn't "get lucky" with professional they have.' • 'Equity and accessibility is particularly important in relation to families, gender, age, Aboriginal services and in regional areas.' • 'Parents/kids should not be disadvantaged by financial capacity to pay for assessment.' • 'Public services needed as there are major equity issues surrounding private consultations with minimal wait times (wealthy people can pay to be seen first).'
Delphi surveys	'I think it is a worthwhile project. My concern is about equity and the logistics of implementing the guidelines across the nation.'
Viewpoint surveys	Not identified
Interviews	Not identified
Feedback	<ul style="list-style-type: none"> • 'I think it is important to note that the suggested diagnostician roles will still leave children and adults in regional and remote areas of Australia struggling to obtain a diagnosis due to the lack of availability of these professionals.' • 'The development of this guideline must also be driven by the principle of equity: aiming to ensure that all Australians, regardless of age, gender, race, or geographical location can access timely, rigorous and reliable diagnostic, and functional and needs assessments. Consistency in diagnostic decision making and functional and support needs assessments, across all Australian states and territories, is essential.' • 'The principle of equity must lead the development of the diagnostic evaluation process, ensuring that it promotes timely and low-cost access to a reliable diagnostic evaluation for all. Reliable diagnostic evaluations are essential to instilling consumer confidence in the process, as well ensuring the cost-

effectiveness of supports provided under the NDIS for governments and the broader community.'

- 'Diagnostic evaluations must be affordable.'
 - 'We support the four principles identified in the Guideline. We would also add: Accessible for all irrespective of race, age, ethnicity, socio-economic background, age, geographical location etc.'
 - 'I encourage you to think about how to ensure provision of like with like assessments and interventions for all Australians.'
 - '[Organisation] is concerned that a Tiered system will reduce the equity and quality of assessment rather than enhance them. ASD diagnosis needs to sit within a comprehensive review of the child's development, health, and family. All children with ASD are complex, though the diagnosis may be less subtle in some, the need for a full review.'
 - '[Organisation] is strongly supportive of implementing nationally consistent diagnostic criteria for ASD and believe that this will significantly increase equity across Australia and minimise the challenges that people with ASD experience when moving between states.'
 - '[Organisation] is committed to principles of substantive equity as they apply to individuals in rural and remote areas.'
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Evidence Table 7: Guiding Principles (Lifespan Perspective)

Evidence source	Details
Recommendation	It is recommended that the process for assessing ASD concerns take a lifespan perspective, where consideration is given to the individual's present and future challenges and opportunities.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently suggest taking a lifespan perspective, and there was excellent support from experts with both lived and professional experience to utilise this approach.
Scholarly literature	Not identified
Other guidelines	Not identified
Online submissions	'Timely access to a free multidisciplinary assessment, across the lifespan, to enable all factors to be considered.'
Workshops	<ul style="list-style-type: none"> • 'Equity across lifespan.' • 'Minimizing costs needs to be seen over lifespan, not just at time of diagnosis.'
Delphi surveys	<ul style="list-style-type: none"> • 'There needs to be some flexibility in the system but there also needs to be basic criteria met. I believe the diagnostic system could be streamlined but it would need to rely on highly trained in the specifics of neurodevelopmental disorders and their presentation across the lifespan.' • 'We are still learning a lot about ASD across the lifespan.'
Viewpoint surveys	Not identified
Interviews	'The ways of being diagnosed are across Australia and across the lifespan, like, so it depends how old you are and where you live and all of that.'
Feedback	<ul style="list-style-type: none"> • 'What the Guideline seems to lack is a recommendation regarding appropriate quality control mechanisms to ensure consistency in practice, process and pricing across the spectrum and across the lifespan.' • 'Guiding principles should include a statement that diagnosis should consider issues from a lifespan perspective.' • 'We support the development of a national minimal standard for diagnosis of ASD that is embedded in a developmental ... lifespan ... approach.' • 'A lifespan perspective should be a key element of the diagnostic process, given the long-term implications of a diagnosis of ASD.' • 'Functional and support needs are likely to change through the lifespan, so we recommend specifying that this assessment may need repeating when appropriate.'

Evidence Table 8: Assessment Process (Content)

Evidence source	Details
Recommendation	It is recommended that the process for assessing ASD concerns incorporate: <ol style="list-style-type: none"> 1. a Comprehensive Needs Assessment 2. a Diagnostic Evaluation.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently suggest a dual focus on Comprehensive Needs Assessment and Diagnostic Evaluation, and there was excellent support from experts with both lived and professional experience to utilise this approach.
Scholarly literature	<ul style="list-style-type: none"> • An ASD assessment integrating diagnostic and functional assessment is needed (Level III, Quality 100%, [1]). • Parents want information to be tailored to their individual child and include their specific prognosis and information about functional limitations (Level III, Quality 70%, [2]). • In regards to the recommendations of a referral to services and diagnostic process ‘a functional approach may better serve the child and the family by prioritizing implementation of services and therapies as soon as concerns are identified in order to improve the outcome for that child’ (p. 856, [3]). • Parents whose children underwent an ASD diagnosis process in Ireland reported the lack of needs-specific recommendations (Level III, Quality 85%, [36]). • Parents (with autistic children) report valuing having their child’s needs met more than having a diagnostic label (Level III, Quality 64%, [37]).
Other guidelines	<ul style="list-style-type: none"> • The focus of an ASD assessment should also consider the person’s physical, psychological and social functioning, and any risks they may face, along with educational, occupational and housing needs [3, 5, 28, 29]. • Diagnostic evaluation and assessment for intervention planning may occur simultaneously, it is not essential that both steps be completed at the same time [27].
Online submissions	<ul style="list-style-type: none"> • In relation to aspects that are poorly assessed: The impact on functional outcomes is not identified (especially where there is a low level of training). • Family assessment to identify parental knowledge of child development and behaviour, family’s strengths, systemic stresses and available resources and supports. • Diagnostic assessment based on DSM-5 criteria for ASD and should reflect strengths and challenges. • Include identifying support needs. • The diagnostic results give more individual information about the specific behavioural features of that person’s ASD so the family and school could really understand what they are seeing

	<p>in the child are behavioural expressions of the disorder. We still hear, in 2017, 'I know they have autism, but what about their behaviour?'</p>
Workshops	<ul style="list-style-type: none"> • How functional impairment (or perceived lack of) impacts on a diagnosis. • The guidelines are clear and allow for complex assessment of functional needs and comorbidity. • A holistic approach to assessment covering all these areas would be essential in the diagnostic process. • Yes/No Diagnosis + Needs Assessment package. • Possible to conduct a needs assessment while waiting for a verification on diagnosis.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that the national guideline should describe a Diagnostic Evaluation and a Comprehensive Needs Assessment, either as part of the same assessment session or separately. • Round 2 agreement that the Diagnostic Evaluation should focus on determining if the autism diagnostic criteria have been met or not, and the Comprehensive Needs Assessment should focus on identifying for the individual (and if appropriate their caregivers) the expressed and observed needs; strengths and resources; and supports to address these needs within the accessible environment. • A diagnostic assessment needs to address all the diagnostic criteria, regardless of whether they are an area of concern for the family or whether they would be a focus of intervention. • There is a fundamental difference between a diagnostic assessment and an assessment for treatment planning. • It is my experience that some families/carers of individuals being assessed, and some adults being assessed, find dealing with the assessment process and identification of a disability/difference overwhelming and stressful and do not have intervention goals at this point. • I think clients/families would appreciate a choice here. • Assessments require multiple sources of information and observation due to the increasing complexity of reporting biases of symptoms due to high levels of awareness of ASD symptoms. • I think it would be best to keep the diagnostic process quite focused, as it is often very complex. Further, in some instances professionals who administer diagnostic assessments are not actually directly involved in delivering the intervention. I also feel that some of the behaviours which are important to identify for diagnostic purposes are not always as relevant for intervention planning. • This can be such a difficult process and time for families, often unexpected, that this is not necessarily appropriate and needs

	<p>to be left up to the discretion of the assessment team based on individual circumstances.</p> <ul style="list-style-type: none"> • Really? The primary goal is to ascertain whether the individual has an ASD. Looking to intervention goals prior to a diagnosis is premature. • Intervention is a separate process in most cases and individual therapists specialise in different areas which is of benefit to the person being assessed. • I'm a bit torn here, while I acknowledge that this is important, I'm not sure about its place in a diagnostic guideline.
Viewpoint surveys	Not identified
Interviews	Not identified
Feedback	<ul style="list-style-type: none"> • Feedback relating to the structure of the assessment process centred predominantly on four major themes: <ol style="list-style-type: none"> 1. The importance of a comprehensive needs assessment in providing the foundation for a diagnostic evaluation; 2. The importance of the Guideline being compatible with existing clinical pathways, and that the original draft may have the effect of creating a 'separate stream' for ASD diagnosis, which is an approach that is inconsistent with the guiding principles; 3. The importance of flexibility in the assessment process, both in adapting to the individual being assessed as well as to the large range of settings and services in which assessments already take place in Australia; and 4. The importance of simplifying the assessment model in order to ensure the highest levels of transparency for individuals being assessed and their families.

Evidence Table 9: Assessment Process (Coordination)

Evidence source	Details
Recommendation	It is suggested that the process for assessing ASD concerns be coordinated by a nominated clinician (or their delegate) from the initial referral for an assessment until findings have been communicated to the individual and/or their caregiver(s).
Grade	Consensus-based Recommendation, Grade 2
Rationale	Numerous evidence sources suggest the importance of coordination, with most of the evidence consistently supporting this approach and excellent support from experts.
Scholarly literature	<ul style="list-style-type: none"> • Parents found the diagnosis process difficult to understand, including those involved, their roles and the chronology of the process (Level III, Quality 70%, [15]). • Parents felt alone and unsure, they wanted guidance with how to proceed after the diagnosis was given (Level III, Quality 85%, [25]). • Clinicians discussing the efficacy of referrals suggested providing a support contact to increase the rate of attendance at appointments (Level III, Quality 100%, [38]). • Parents whose children underwent an autism diagnostic process often reported having a lack of reliable information regards the process of diagnosis (Level III, Quality 95%, [39]). • Parents found it helpful when information was given throughout the diagnostic process (Level III, Quality 71%, [23]). Information about the diagnostic process was seen as empowering (Level III, Quality 85%, [36]). Therefore, having a coordinator with expertise in the ASD diagnostic process will be influential in shaping the diagnostic experiences of clients.
Other guidelines	<ul style="list-style-type: none"> • All children with reported developmental concerns are assigned to a developmental service coordinator, who assists in the referral process [3]. • Coordination among multiple disciplines is optimal practice [35]. • Coordinators have expertise in child development [3]. • The coordinator works with health services and educational services [3]. <ul style="list-style-type: none"> ○ A number of international guidelines suggest that a coordinator should be appointed for each individual identified with developmental concerns that indicate the need for an ASD evaluation. Suggested activities for the coordinator include [3, 27, 28]: ○ acts as a single point of contact for the parents or carers and, if appropriate, the child or young person being assessed, through whom they can communicate with the rest of the autism team

	<ul style="list-style-type: none"> ○ arranges the provision of information and support for parents, carers, children and young people as directed by the autism team ○ keeps parents or carers and, if appropriate, the child or young person, up to date about the likely time and sequence of assessments ○ arranges and coordinates onward referral to appropriate agencies for assessment and ensures that assessment occurs in a timely manner ○ coordinates a response to diagnostic need ○ assists in gathering information ○ assists in developing the individual support or service plan ○ assists in finding service providers ○ supports the family through the assessment process ○ takes enquiries from families and professionals. ● 'Contact details for the local developmental services coordinator and ASD coordinator should be widely disseminated to all potential referrers' [3]. ● 'A single point of referral should be provided to access the "autism team"' [28].
Online submissions	<ul style="list-style-type: none"> ● Importance of coordinated multidisciplinary assessment and formulation of diagnosis. ● Coordinators needed to collate all information – questionnaires, reports etc.
Workshops	<ul style="list-style-type: none"> ● Who coordinates the considerations/reports/guides transition and process? How will this be funded? ● How can you coordinate professionals in and visiting remote areas? Particularly for [Consensus Team Diagnostic Evaluations].
Delphi surveys	<p><i>Centralised coordination</i></p> <ul style="list-style-type: none"> ● Round 1 agreement that the ASD assessment process should be coordinated by a central contact person/team, from the time of referral until the ASD assessment findings have been communicated. ● Central person or team. ● There needs to be a contact person. ● In current practice, the individual or family is expected to coordinate the process. ● Makes it easier for carers to navigate the system. ● There is a professional responsibility to communicate during the process and the outcome. ● I think that this is helpful if possible, but not essential. ● This would be logistically very difficult and create long waiting lists which in turn would cause much frustration for families. A centralised contact person would not allow flexibility for families. ● Where the team is physically located in the one place or when approaching a private physician for an assessment.

- This can be very impersonal for families, create long waiting lists and does not allow for flexibility by team members. Triaging would need to be available in such a system.
- When appropriate.
- If available, but probably not necessary and probably too expensive.
- Not sure whether this would help or hinder the assessment process. If there were standard assessment processes, then this person may not be necessary. This role would be helpful to help parents navigate a system that is not streamlined.
- Waste of resources for coordination.

Nominated clinician (or their delegate)

- Round 1 agreement that the ASD assessment process should be coordinated by allied health / medical professionals with appropriate training and experience.
 - Round 2 agreement that the ASD assessment process should be coordinated by administrative staff with appropriate training and experience, where this is limited to explaining the autism assessment process, ensuring all documents are completed/shared in a timely fashion, scheduling appointments, being a key contact person to answer questions (although they may seek answers from the multidisciplinary team) and providing support.
 - Coordination (who).
 - Needs to be a clinician.
 - GP with special interest in developmental disability.
 - Ideally, paediatricians or psychiatrists would be available to coordinate all tiers of assessment and treatment planning, although this is not realistic with the current demand.
 - I have worked in environments where allied health professionals have done it and others where excellent admin staff have done it.
 - There is a level of clinical judgement that is required throughout the process. Administration support is valuable but the process needs to be coordinated by someone with clinical experience.
 - Medical and allied health professionals may be too expensive to hold a coordinator role.
 - Anyone with appropriate training and experience.
 - The coordinator does not require skill or experience, but more so availability, empathy, efficiency and communication skills.
 - Admin staff may play a supportive role (e.g. making bookings, distributing reports).
 - This is possible in community and hospital settings but not currently possible in private practice given the enormity of the admin load.
 - This might put a lot of pressure on admin staff to follow up with professionals regarding timing of assessments and reports. This onus should sit with the professionals conducting the assessment.
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	<ul style="list-style-type: none"> Administration staff can if they are literally acting upon the advice of the medical / allied health team who have provided an outline of the process and assessment needs. Admin staff would not have the appropriate training to know which assessments would be indicated without medical or allied health guidance, given the hugely different presentations. Without qualified medical staff guiding the process, important things would be missed or excessive/costly. The process is too complex to be neatly turned into an administrative protocol.
Viewpoint surveys	Not identified
Interviews	Not identified
Feedback	<ul style="list-style-type: none"> 'Having one person coordinating the whole assessment can be difficult when multiple private practitioners are involved in the diagnostic process. Appointing a separate coordinator or expecting a diagnostician to take on this role in addition to their assessment work is likely to add significant cost to the family. I think it should either be the role of the referring clinician or the diagnostician themselves on intake to describe the assessment process, what the individual or family should expect and support them on feedback to understand the results of the assessment and what to do moving forward.' 'When our daughter was diagnosed, scant information was provided on how to meet her support needs. While struggling with our own stress levels, it was indescribably difficult to access services when we didn't know where to start. Regarding the Coordinator role in 5.2 and 6.3, my questions are: <ol style="list-style-type: none"> Who funds this/pays for this service? Who employs this person in this role? Does the family have any choice over who is their Coordinator? How does this fit in with NDIS LC role? Overlap? Replace? For those who are not going to be in an NDIS area for another two years, will Medicare cover rebates for this service? More codes needed and most importantly MORE FUNDING! 'The Coordinator is listed as potentially having an Administration background. Personally, and professionally, I believe the Coordinator should be an allied health professional with qualifications, skills and experience in understanding the complex field of autism.' 'The coordinator will play a vital role in ensuring the process remains within the designated time frame and also supports families in understanding the process and implications.' 'Whilst we have a highly skilled administrator in the coordination role for our not-for-profit multidisciplinary clinic, we have concerns about who would be willing or able to offer this role in the private sector? If there were to be a shortage of

clinicians/others willing to offer this role, would this create a “bottle neck” in accessing assessments privately, and would it increase costs for families/individuals?’

- ‘The “[coordinator] role” should be the responsibility of the lead [clinician].’
- ‘A nationwide, Commonwealth government funded, ASD diagnostic service would also support equal access for all Australians, ideally coordinating screening, diagnosis, professional training and post diagnosis support.’
- ‘Historically there has been a lack of coordination and collaboration across the disability, mainstream health and other sectors.’
- ‘[Organisation] supports the recommendation for a central coordinating person when multiple professionals are involved in a comprehensive assessment process ... and welcomes the statement that a coordinating person may be from an allied health background, and supports the requirement for them to have specific expertise.’
- ‘With respect to the professional discipline required for the Coordinator role it was suggested that it would be difficult for an administrator to fulfil the tasks of the role, particularly in respect to explaining the ASD assessment process. It was indicated that only those with clinical expertise would have sufficient training to be able to inform the client of the process to the extent that they can provide informed consent as to do or not do the assessment.’
- ‘The draft Guideline states that one person should be assigned to coordinate the assessment process; this would be very difficult when multiple private practitioners are involved in the diagnostic process. Moreover, some of the state tasks are unrealistic such as ‘ensuring all documents are completed and shared in a timely fashion.’ Private practitioners are extremely variable in terms of their timelines regarding reports. There would need to be specific instructions related to what is meant by a ‘timely fashion’. In brief, appointing a separate coordinator or expecting a diagnostician in private practice to take on this role in addition to their assessment work is likely to add significant cost to the family. The situation in the public health sector is different, where funds are provided for administrative staff to perform this role, although this support is minimal in many school environments. [Organisation] acknowledges that in the case of a [Single Clinician Diagnostic Evaluation], the [clinician] would be the one to coordinate all the information collected as part of their assessment, so it would be appropriate for them to act as a coordinator. However, in the case of [Consensus Team Diagnostic Evaluation], particularly with multiple organisations involved, rather than there being one coordinator, it should be the responsibility of each clinician to advise the family regarding the process for their part of the assessment and how it fits in the overall picture for an ASD

diagnosis. If multiple assessments are occurring at the same time, it would be preferable for the client to consent for clinicians to be in contact by phone or email to discuss their diagnostic impression of the client. Each [clinician] should also provide feedback for their part of the assessment. Families should have the opportunity to speak to each diagnostician during or following feedback regarding the results if they have questions.'

- 'The coordinator role is clearly defined but should additionally include following up the family post-diagnosis. For many clients it is unclear who might take this role on particularly in the private sector. It is also important for families that there is streamlining of information sharing so families are not required to share their stories over and over.'
- '[Organisation] supports the need for a well-coordinated assessment process, with good connections and communication between all professionals involved, particularly for those requiring more complex and comprehensive assessment. Developmental assessment can be complicated and stressful for children and carers. It is important that the coordination function and the advice and support is clinically informed.'
- '[Organisation] supports the provision of well-coordinated care. The coordination function should remain the responsibility of the lead clinician. This does not prevent a clinician choosing to delegate some coordination activities to an administrative resource or the use of technology to provide practical assistance and information.'
- 'The coordinator role is both clinically important and administratively demanding. A multidisciplinary team should have both administrative and clinical coordination support. Clinical expertise (medical or allied health) is required from point of referral triage onwards and an administrator-only model would not be sufficient to complete this role, as described in its entirety. In general, position descriptions of administrative staff specifically exclude clinical competencies.'
- 'Strengths: Making explicit the role of the coordinator or case manager is useful in providing an integrated approach for children and families.'
- 'The guidelines include a new role called a Care Coordinator to support families through the diagnostic process. This role is poorly defined and does not currently exist, as a specific individual, within private or public providers. The role of Coordinator or Linker around diagnosis is a feature of Non-Governmental Organisations and has been part of the move towards National Disability Insurance Scheme. Therefore, it does not sit within the diagnostic process currently. This shift will have significant workforce and resourcing implications for diagnosticians and assessment services.'
- 'Coordinator - Nursing is not currently mentioned as a potential discipline for this role. [Organisation] would suggest that

appropriately experienced nurses can fulfil this role highly effective (as currently occurs within [organisation]).’

- ‘We agree in principle that a coordinator would be very useful but it may not be achievable across settings. If there is not a coordinator, the diagnostician needs to explain, and assist the family from assessment to diagnostic finalisation and connection to services as appropriate.’
 - ‘Best practice should be to minimise handovers in care from the intake to the assessment process.’
 - ‘Recognise that coordination and continuity of care is important, and is primarily a clinical role rather than administrative. Funding should be identified for this important role.’
 - ‘We note the far wider range of people able to co-ordinate a diagnosis and worry that this could cause a level of confusion.’
 - ‘[Organisation] agree with the importance of this role. Our only concern is that, as the role description is inclusive of specialist clinical care (supporting families navigating the diagnostic journey) and not simply an administrative role - extensive training and support would be required if this role was filled by an administrative officer.’
 - ‘Given the clinical complexities of this role, we recommend that a co-ordinator needs to have a clinical background rather than an administrative background.’
 - ‘The practice’s secretary already has a defined role with limits set around patient care to minimize medico-legal risk to the practice. It is added burden, and one that is not paid, for a private secretary to assume a co-ordinator role in autism assessments. This includes them seeking informed consent and chasing up and [creating] patient records. With privacy laws it is also increasingly difficult for a private practitioner to request records from the public system. That request has to be made by the patient or their guardian or custodial parent.’
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Evidence Table 10: Assessment Participants (Professionals)

Evidence source	Details
Recommendation	<p>It is recommended that all clinicians involved in assessment of ASD concerns obtain relevant training and expertise covering all the following areas:</p> <ul style="list-style-type: none"> – typical and atypical development across the age range assessed in their practice – presentation of the signs and/or symptoms of ASD and other neurodevelopmental disorders across all developmental stages in which they practise, along with the manifestations of these symptoms in previous developmental stages to that of their clients – presentation of symptoms of ASD and other neurodevelopmental disorders among male, female and, where applicable, gender-diverse individuals – the impact of other important considerations, such as intellectual and/or communication capacity, culturally, linguistically and/or socio-economically diverse background, regional or remote location, or complex psychosocial factors, on the assessment of ASD concerns – assessment of ASD and other neurodevelopmental disorders – administration of standardised assessments (with all prerequisites for using the instrument in clinical practice met) – clinical reasoning in weighing evidence, integrating findings and reaching assessment conclusions – clinical report writing – communicating with individuals on the autism spectrum and their caregivers.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of assessing clinicians having appropriate expertise, and there was excellent support from experts for this set of expertise required.
Scholarly literature	<p><i>Relevant training and expertise</i></p> <ul style="list-style-type: none"> • Diagnosticians need wide knowledge of ASD, including subtle presentations (Rogers, Level III, Quality 82%, [40]). • The most positive experiences were when professionals acted professionally, and had experience of ASD (Level III, Quality 85%, [25]). • Many individuals who are self-diagnosed with autism were often distrusting of health professionals and were often afraid health professionals would not take their concerns about their suspected ASD diagnosis seriously (Level III, Quality 85%, [10]). Therefore, 'regardless of whether or not they are formally diagnosed, healthcare professionals must recognize the critical need to screen these individuals for comorbidities and situational grief' (p. 579, Level III, Quality 85%, [10]).

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- Parents whose children underwent an autism diagnostic process in Ireland expressed the need for professionals with expertise in ASD (Level III, Quality 85%, [36]).
 - A US study found that most paediatricians felt as if their training in developmental screening was limited (Level III, Quality 79%, [41]). In addition, 48% of paediatricians completing the survey did not receive any ASD-specific training as part of their practical placements (Level III, Quality 79%, [41]).

Gender

- There needs to be greater recognition of the female autism phenotype, including the increased tendency to internalise mental health issues (Level III, Quality 80%, [42]). Females with ASD are commonly quite adept at camouflaging, which can make detection more difficult, and often causes consumers to doubt themselves (Level III, Quality 80%, [42]). Additional training needs to be emphasised for health professionals to avoid missed diagnoses and misdiagnoses. Diagnosing professionals also need training to be more sensitive and receptive to clients' concerns.
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Other guidelines

Relevant training and expertise

- Parents identified one of their greatest challenges was dealing with professionals without specific training in ASD. In contrast, dealing with helpful and knowledgeable professionals facilitated support and hope [30].
 - Inadequately trained staff for diagnoses is a barrier to diagnosis [3].
 - Diagnostic Evaluation must be within the scope of clinician's practice [5].
 - Diagnosticians from all disciplines need extensive experience evaluating individuals with developmental disabilities and ASD [5].
 - Diagnosticians need ASD-related knowledge and experience [27], specifically:
 - discriminating atypical behaviours from typical developmental patterns and age-appropriate behaviours [4, 5, 27]
 - variability in ASD presentation due to gender, age, cognitive abilities or developmental level [4, 27, 31]
 - recognising and identifying core ASD symptoms, including subtle presentation [4, 5, 27, 29, 30]
 - distinguishing ASD from other psychiatric and neurodevelopmental disorders [27, 28, 30]
 - current diagnostic systems used in locality [4, 5, 29, 30]
 - family-centred care principles [5]
 - conducting Diagnostic Evaluation and establishing a diagnosis of ASD [4, 27–29]
 - collecting history and conducting a behavioural observation through direct interaction [27]
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	<ul style="list-style-type: none"> ○ communicating with individuals with suspected or known autism and their caregivers [28] ○ potential comorbidities [30] ○ interpreting, reporting and using assessment results [29]. <p><i>Standardised assessment tools</i></p> <ul style="list-style-type: none"> • The use of standardised tools (whether for data collection of ASD behaviours or the intellectual, adaptive and cognitive skills of the individual) is preferable but not essential, such as when a clinician with expertise in ASD documents atypical behaviours strongly indicative of an ASD in addition to delays in communication and social skills [3–5, 27, 28, 30, 31].
Online submissions	<p><i>Relevant training and expertise</i></p> <ul style="list-style-type: none"> • Experience and training in the area of development and neurodevelopmental disorders. • Assessments should be conducted by professionals who have extensive experience of assessing and diagnosing ASD. • Define the skill set / experience / qualification needed to diagnose. • Diagnostic assessment should be undertaken by a person/s with training and experience in the diagnosis of ASD. • There needs to be widespread training to be able to distinguish autism from these other presentations. <p><i>Typical and atypical development, signs and/or symptoms of ASD and other neurodevelopmental disorders</i></p> <ul style="list-style-type: none"> • The professional should be knowledgeable and experienced in childhood or lifespan development, comorbid mental health and other neurodevelopmental conditions. • Knowledge of personality traits/disorders, differential diagnoses, comorbidities. • In addition to baseline qualification, they should have completed training to be able to review differential diagnostic criteria. <p><i>Typical and atypical development across age range and gender</i></p> <ul style="list-style-type: none"> • Clinicians should conduct assessments having specific autism knowledge of children, adults and the elderly, covering male and female presentation. <p><i>Standardised assessment tools</i></p> <ul style="list-style-type: none"> • Proper training for assessors to be reliable in standardised assessment tools. • The professionals conducting assessment need to meet minimum standards e.g. five years post-qualification and be trained in evidence-based assessment tools. • This should encompass broad skills in assessment of developmental and behavioural problems, not just 'ASD-specific' assessments.
Workshops	<p><i>Relevant training and expertise</i></p> <ul style="list-style-type: none"> • Need to clearly identify minimum training requirements for clinicians.

	<ul style="list-style-type: none"> • ‘How to structure guidelines to ensure diagnostic assessment and needs assessment are addressed’ training: skill of the assessor. • Clinicians and professionals must be trained and competent in the diagnostic process. • Experience and expertise of clinicians is crucial. • Opportunities for professional development and training. <p><i>Gender</i></p> <ul style="list-style-type: none"> • Clinical diagnosis should clarify clinician’s professional skills and experience in working with children and adults and women. <p><i>Other important considerations</i></p> <ul style="list-style-type: none"> • Training; understanding cultural differences. <p><i>Communication</i></p> <ul style="list-style-type: none"> • ‘How to address concerns’: training for clinicians and quality monitoring.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that a professional who conducts ASD assessments should have knowledge of and/or experience in: • typical and atypical development across the age range assessed in their practice • ASD symptom presentation across all developmental stages in which they practise • symptoms associated with common comorbid and differential diagnosis conditions • administering ASD diagnostic assessments • current ASD diagnostic criteria (e.g. DSM-5 and/or ICD-10) • clinical reasoning in weighing evidence, integrating findings, reaching assessment conclusions and making diagnosis decisions • clinical report writing • communicating with individuals on the autism spectrum and their carers / family members • local services and supports for individuals with ASD and their families. <p><i>Relevant training and expertise</i></p> <ul style="list-style-type: none"> • Apart from professional groups, individuals need to specialise / have expertise / be qualified in working with individuals with ASD. • The most important thing is that the person/s conducting the ASD assessment have expertise and suitable training in ASD. • A professional who is conducting assessment for the purpose of diagnosis needs to have extensive experience in not only the diagnosis process but in interaction/intervention planning and understanding of ASD. • ‘Knowledge, training or expertise’ are essential to consider, more so than mandating which professionals should be included in the assessment. • Other professionals say working with a child with ASD is not necessarily part of their training. Therefore, other professionals would need extra training in ASD.

- It is a broad and wide presentation of traits that can only be seen over years of experience and clinical expertise.
- ASD and neurodevelopmental behavioural issues had been largely managed by primary care physicians with special interest in this area. The experiences gained by some of these have not been fully passed on, as there is no formal delivery pathway for these clinicians.
- New clinicians will need time to accumulate experience but the validity of their autism assessments can be improved by greater focus on training and supervision before independent practice.
- It is very important to be able to see what you learn and also be able to understand that the variability is quite common but a professional needs to be able to have seen different presentations of ASD to understand the differences and similarities in the spectrum.
- Absolutely. Although everyone needs to learn, so experience is not vital as long as professionals have access to mentors/supervisors.
- Attitude, knowledge and skill are components of the Participation Model, taught to undergraduate and master's level speech pathology students. We know that they are opportunity barriers for individuals with any communication disorder.
- This is vital. The person needs to know about this and engage in ongoing education to maintain it.

Typical and atypical development across age range

- Typical and atypical development.
- Demonstrate evidence of continued experience in typical development especially when their practice is primarily related to atypical presentations.
- It is essential that regular professional development about typical development and opportunities to engage with typical populations are provided as it is common for professionals who work just with those with atypical development to 'forget' what typical development looks like.
- You cannot determine an individual's level of functioning/delay if you do not have good knowledge of the range of normal at different ages/levels.
- Expertise needs to be considered in the age range they assess.
- Should have special training in child development generally and ASD especially.

Signs and/or symptoms of ASD and other neurodevelopmental disorders

- Good knowledge of ASD symptoms across all developmental stages (in which they practise). (2)
 - This is essential as a lack of understanding of the presentation of ASD as it relates to the person's developmental level can lead to misdiagnosis.
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- Yes, as symptoms vary from child to child, some may present with signs or symptoms at a very young age while others may not display such obvious signs until a later age.
- Identifying core symptoms (DSM-5) of autism for accurate diagnosis and differentiation from other conditions and determining autism severity level which will inform support needs.
- There is need for those differentiating ASD from other developmental / mental health disorders to have appropriate training and competence in neurodevelopmental and behavioural paediatrics. They will then be able to make the appropriate choice in individual situations, as to what is required before finalising diagnosis.
- You cannot make a call on whether ASD is the most appropriate diagnosis unless you also know about other conditions that may present in a similar way or present alongside ASD.
- Assessment of comorbid conditions (mental health, behaviour, sleep, specific learning difficulties, intellectual disability) and interpretation.
- Comorbid conditions and differential diagnosis conditions are what makes diagnosing ASD so difficult, an understanding of other conditions will ensure that misdiagnosis is not made.
- Comorbid diagnoses and different diagnosis conditions across ages and sex are important and should be possessed by any one conducting ASD diagnoses.

Gender and gender diversity

- Professionals should restrict themselves to the area they know. Presentations of children versus adults is widely different. Boys/men and girls/women present in many divergent ways. There actually needs to be some accreditation system which endorses people to work in different areas which also recognises training to increase areas.
- There needs to be specific training on girls/women with ASD as part of the assessment requirement.
- Increase awareness/training in regard to the diagnostic process for individuals who are female.

Assessment of ASD and other neurodevelopmental disorders

- Administering ASD diagnostic assessments.
 - Having clinicians with a high level of expertise in the assessment and diagnosis of ASD is vitally important when ASD assessments are being conducted.
 - Knowledge and experience in conducting developmental assessment on young children.
 - Assessment professionals need to work to reduce any barriers in their clinical practice and definitely when conducting assessments.
 - What is crucial is that all diagnosticians understand thoroughly the diagnostic criteria being used – DSM or other. A
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diagnostician should be able to conduct an assessment armed only with knowledge.

- These diagnostic assessments are useful, however not essential and contribute to the diagnostic process, but do not alone represent the complete diagnostic assessment. Scores obtained from these assessment tools must be considered with reference to the complete multidisciplinary assessment. (2)
- Not always necessary. Many paediatricians practise without using standard diagnostic assessment. They can diagnose obvious cases and make informed referrals for formal assessment in less clear-cut cases.
- Straightforward diagnoses may not require this.
- This would seem very important if someone is going to conduct an ASD assessment, as the process of diagnosis is different to assessing for other purposes (e.g. treatment).

Standardised assessment tools

- Should be trained in administration of diagnostic tools such as ADOS and ADI-R.
- Needs to be experienced in this area especially ADOS.
- A number of tools (e.g. ADOS) are useful diagnostic tools, but I would emphasise at all times the choice and implementation of tools appropriate to each individual and relevant to differential diagnosis.
- CARS/ADOS.
- The tools are a help and are important but the knowledge of the criteria and how they present is learned knowledge and makes the diagnostician a tool within themselves.
- The level of knowledge and the type of instrument should vary depending on the profession. For instance, a GP is not set up to do a CARS but should be able to identify individuals who could have autism and would need the screen.
- The available tools to assist with making a diagnosis of autism are not diagnostic instruments in isolation. The tools give a likelihood of the diagnosis by eliciting features of autism. I don't believe that the clinician needs to be experienced in routinely administering a tool such as an ADOS, for example, in order to confirm an ASD diagnosis. (2)
- Tools should be encouraged when it is helpful and time saving but not as an alternative to understanding. The diagnostician needs to be able to proceed with the assessment without the tool if need be.
- The experience is helpful to standardise your assessments, but most are not viable in normal mental health practice, except where there is a specific question.
- Assessment of cognitive and adaptive behaviour and interpretation.

Clinical reasoning

- Clinical reasoning.
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- Assessors need to know how to gather all relevant information and how the different criteria fit together in reaching an accurate diagnosis. It is important to remember that consistency across diagnosis is important. A high level of clinical reasoning is required in the diagnostic process.
 - Be able to assess the need for referrals to other allied health and medical professionals for assessment based on information gathered during diagnosis and assessment (GP, psychiatrist, paediatrician, OT, speech pathologist).
 - ASD diagnosis is so complex and varied and behavioural symptoms do come with a degree of subjectivity so clinical reasoning is crucial.
 - All allied health / medical practitioners would have experience in clinical reasoning.
 - Not always necessary e.g. a speech pathologist's formal assessment can contribute greatly to the understanding of a complex child without the speech pathologist necessarily needing to weigh up all the data about the child or developing an overall formulation.

Clinical report writing

- Clinical report writing is a skill.
- The diagnostic process can be a blur for families and the report is the one concrete piece of information that they take with them so clinical report writing is really important.
- 'Clinical report writing' obviously important for all parties involved in the ongoing care of the individual.
- This is a learned skill and needs to be unique to each individual.

Other comments

- I feel very strongly that this is important.
- This is particularly important to prevent over diagnosing ASD.
- This is vitally important. They also need a clinical resource group to refer to for those very, very complex ones.
- Self-evident.
- Absolutely.
- Imperative.
- Mandatory.
- Absolutely necessary.
- Essential.
- This is helpful but not essential.

Viewpoint surveys

- Having professionals who have experience in diagnosing autism was given very high importance by two Viewpoints. Comments also highlighted the importance of experience and expertise in autism and expressed frustration and disappointment with clinicians who were not viewed as experienced enough, leading to a longer diagnostic process or misdiagnosis. Also preferred was multiple assessors from different professional backgrounds.
 - All Viewpoints rated highly having clinicians with both experience in diagnosing autism and the right training.
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Interviews	<ul style="list-style-type: none">• Importance of training diagnostic health professionals in being able to recognise and diagnose ASD in adults, particularly in relation to the presentation of ASD in women.• Some participants reported diagnostic experiences with health professionals that had 'no experience with adults with autism'.
Feedback	Not applicable

Evidence Table 11: Assessment Participants (Professionals)

Evidence source	Details
Recommendation	It is recommended that all clinicians involved in assessment of ASD concerns, in addition to the foundation qualification(s) relevant to their professional discipline, obtain and maintain relevant training and expertise through peer observation, peer supervision and peer mentoring. Formal training courses and/or further qualifications may supplement these peer learning approaches.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of assessing clinicians having appropriate training, and there was excellent support from experts for this set of training requirements.
Scholarly literature	Not identified
Other guidelines	<p><i>ASD-specific training and expertise</i></p> <ul style="list-style-type: none"> • Sufficient training and experience is essential [5, 28–30]. • More experienced diagnosticians make more accurate diagnosis [5]. • During training clinicians should gain knowledge of the interventions and services available for individuals with ASD [5]. • Experience assessing sufficient numbers of children with and without ASD, typical and atypical child development, is important [5, 27]. • Specialised training and experience in ASD is important in providing a diagnosis of ASD, particularly with diagnoses of young children [30]. • Diagnosis of ASD in young children should only be conducted by psychologists or physicians if they have graduate or postgraduate training in child development and ASD, and have received supervised clinical experience in ASD assessment and diagnosis [30]. • During training the supervisor/mentor should provide considerable opportunities for the trainee to evaluate a broad age group of individuals who display the diverse range of behaviours indicative of ASD [5]. • Supervision by clinician with significant experience diagnosing ASD should be provided with multiple opportunities to observe signs and symptoms of ASD in a range of ages and presentations [5]. • There should be an increase in the availability of ASD-related information and training [30]. • Training and knowledge about ASD is limited among primary and secondary care professionals [29, 43]. • Ongoing professional education is essential to remain current with research and best practice evidence [5, 27, 30].

	<ul style="list-style-type: none"> • Ongoing, periodic training is necessary for diagnosticians as knowledge of ASD increases and evolves [27]. • Professionals involved in sharing of an ASD diagnosis and information provision should receive ongoing education and training [4]. • Professional education plays an important role in updating clinical skills [30].
Online submissions	<p><i>ASD-specific training and expertise</i></p> <ul style="list-style-type: none"> • Should be more training of those involved in diagnosis in other possible disorders that may be misdiagnosed as autism, or disorders that coexist with autism. • Should be documented ongoing training for clinicians involved in diagnosis, e.g. new information about autism, new diagnostic information. • As you know, there is absolutely no oversight whatsoever regarding competency benchmarks for those offering opinions on ASD diagnosis. I know in WA you have tried to address this with the diagnosticians' forum. I suggest taking this a step further, with some form of mandatory credentialing process. • They should have ASD-specific training beyond just the training required to enter the profession, and ideally would be 'accredited' as an ASD diagnostician after an intensive 'on the job' training program. • I feel the assessment training may need to be more rigorous. • The professionals undertaking assessment need to meet minimum standards e.g. five years post-qualification and be trained in evidence-based assessment tools such as the ADOS. • Completion of ADOS training. • The assessment should be conducted by a professional who is accredited as a diagnostician and who has experience and training in the area of development and neurodevelopmental disorders. • Diagnosticians should be required to complete ASD relevant professional development to maintain standards. • Have a follow up component to keep up to date and informed of changes.
Workshops	<p><i>ASD-specific training and expertise</i></p> <ul style="list-style-type: none"> • Evidence-based standardised and moderated/regulated training and/or professional development for a broad range of clinicians involved in diagnosis and support. • Skill level of people diagnosing and supporting effectively and efficiently. • Rigorous qualification/accreditation (involving proof of experience, skills, assessment/differential diagnosis). • Training needs to be inclusive of experience. • Training and accreditation. • Online training. • Knowledge and education.

	<ul style="list-style-type: none"> • ‘How to address concerns’: training for clinicians and quality monitoring. • Programs for diagnostic coordinators. • Staff get trained in care settings (childcare, school) in how to conduct observations and to know what to look for. <p><i>Peer observation, supervision and mentoring</i></p> <ul style="list-style-type: none"> • Peer mentoring for single assessor. • Mentoring; for future diagnosticians to be able to work in remote/regional areas. • Need to ensure not just initial training is provided but ongoing skill development regarding advances in the field. • Training; a rigorous and continuous professional development process needs to be established. • Improved education on diagnosis for doctors e.g. Grad.Dip.ASD.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that a professional who conducts autism assessments should have observed peers conducting ASD assessments and making diagnostic decisions and received peer mentoring in ASD assessment and diagnosis. • Round 1 partial agreement that a professional who conducts ASD assessments should have received peer supervision in ASD assessment and diagnosis. • Training for diagnosis also needs to be uniform across different states. • The level of credentialing will also depend on the stage the assessment is at. • The challenge for those in private practice is accessing these opportunities once qualified and running a financially viable service. • ASD knowledge is gained from both theoretical and practical realms. • Endorse the ‘Apprenticeship’ Model: Working in a multidisciplinary team (with an expert psychologist) and able to build knowledge and skills over a long period of time that allowed professionals to learn about the diversity in ASD presentations, differential diagnosis issues, etc. • Continued professional development such as an ADOS course combined with peer support/mentoring and undergraduate/postgraduate degree in a health or special education discipline as well as experience in working with this population should qualify a professional to participate in ASD diagnosis. • It is good to be able to go to courses on ASD. <p><i>Postgraduate university qualifications</i></p> <ul style="list-style-type: none"> • I think this is important and it should be an aim, but grandfathering may be required until these courses are created and to get people trained. It may also depend on the person’s qualification and experience.

- The current postgraduate psychology and medical courses do not provide adequate training in diagnosis. I encourage the development of accredited courses in the diagnosis of ASD for psychologists, paediatricians and psychiatrists (child and adult).
 - A postgraduate qualification in ASD assessment and diagnosis or equivalent (training course in ASD after clinical psychology degree) should be recommended.
 - Additional knowledge/study would surely be helpful.
 - I think postgraduate qualifications are a nice optional extra – desirable but not mandatory.
 - It would be nice – but just a keen interest in ASD would be great.
 - Can be helpful, but not necessary – there are other ways to get the appropriate skills for ASD assessment.
 - A postgraduate qualification should be a recommended option, but it should still be possible for a university-qualified medical or clinical psychologist or speech pathologist to learn in a structured mentoring program about ASD assessment. The key is the combination of knowledge and experience in undertaking the assessments.
 - We need to measure competence not just accept tick boxes. The university qualification would provide a measure of basic competence and is thus very helpful. There should, however, be acceptance of other pathways to competence.
 - I believe this is ideal, however, am concerned about the cost implications for individuals and organisations. It would be essential that this course is covered fully by HECS loans. Additionally, those enrolled in and actively working towards completion should be considered to be meeting the criteria.
 - The professional needs to show extra training and significant experience but not postgraduate qualifications.
 - If ASD assessments are already taught by some professional colleges, then I don't think a separate postgraduate qualification is required.
 - While I think professionals who conduct ASD assessments should complete specific training, I'm not sure if this needs to be in the form of a tertiary qualification. I also worry that if we put too much focus on the tertiary qualification if the person's skills/competencies will be followed up on over time.
 - Doing an ASD assessment needs to be learned in an apprenticeship model. Working with experienced clinicians watching them do it, doing it with supervision and then doing it alone.
 - Should have some form of experiential training on top of undergraduate degree and clinical experience – not necessarily at tertiary level.
 - You can have expertise without having these ('postgraduate studies').
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- This does not take into account those who have years of expertise in the area.
 - This negates the professional training, experience and skills of many expert clinicians involved in the diagnostic process.
 - Experience in the field is the really important part and mentoring of the newbies in the process by the old hands.
 - Experience and a course should be fine.
 - Postgraduate degrees specific to ASD assessment and diagnosis are not necessary but training is.
 - I think clinical speech pathologists with adequate training would be well suited to be a member of the diagnostic team.
 - There are some very experienced clinicians that are competent in this area without postgrad qualifications and there are clinicians with postgrad qualifications that are not competent in this area.
 - Limiting the number of professionals able to diagnose.
 - While a postgrad qualification in ASD assessment is great for recent graduates, those with postgrad degrees in the health professions (psychology, occupational therapy, speech pathology, special education, for example) should not be required to undergo an additional postgraduate degree for this purpose.
 - Speech pathologists are trained in undergraduate and masters courses the assessment, diagnosis and intervention of qualitative impairments in social communication and atypical behaviour as a communication. Speech pathologists on graduation have the necessary training, skills and knowledge to provide ethical evidence-based ASD assessments.
 - Many experienced professionals from a range of disciplines have the clinical expertise to contribute to ASD diagnosis and intervention planning.
 - Few exist for relevant specific qualifications.
 - Currently there is no such thing as postgrad qualification in ASD but reliance on clinicians with track experience and special interest in ASD assessment and diagnosis. If there is postgrad qualification in ASD, what about other areas of developmental disabilities? Why should ASD be singled out whereas other disabilities require as much or more attention in terms of specialist expertise in assessment.
 - On the one hand I think it would be ideal as helps ensure quality, but I think the focus should be on differential diagnosis of a range of conditions, including consideration of typical variation in development, and so think requiring postgrad-level training in every single condition would be counterproductive and untenable.
 - If such a qualification is available there may be scope within the qualification to have information about all ages and assessment structures but also to specialise in a particular demographic.
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- A consistent and rigorous approach to training in ASD assessments can be achieved without requiring postgraduate qualification and associated costs.

Other formally assessed training

- Should be a 'grandfather clause' for people who have been working in the field. However, this should be supported by ... peer review.
 - ASD assessors need to have further training in ASD assessment, however I'm less concerned about whether the training is formally assessed or not. An advantage of formally assessed training would be that there is a level of quality control built into the training.
 - Usually yes.
 - Any type of tool used for developmental assessment of a child needs to be shown, taught, supervised and ticked off (formally assessed).
 - Especially if we want accurate and consistent diagnostic practices. However, we need to make sure there is ready access to suitably qualified professionals.
 - In the absence of a national standard for postgraduate qualifications, formal training should be required for all diagnosticians. I am, however, concerned about the cost implication of this to organisations.
 - Definition of formally assessed training will differ depending on your profession. This may include training under supervision with acknowledgment of competence by a senior clinician, or by completion of specific training tasks within a specific timeframe. Those entering private practice directly from university should have an opportunity to work under the supervision of an appropriately skilled senior clinician.
 - Strongly support continued professional development to validate skills in this scope of practice for a range of disciplines.
 - Depends on the training background of the assessor and how much training was provided in their postgraduate qualifications. People other than paediatricians, child psychiatrists, developmental/educational psychologists and clinical psychologists would likely need extra ASD-specific qualifications, while the former should be covered with a sound knowledge basis already.
 - Depends on the undergraduate training of the professional.
 - Knowledge of all ages and assessment structures but option to focus on a particular demographic.
 - Period of supervision should suffice.
 - Specially if we want accurate and consistent diagnostic practices. However, we need to make sure there is ready access to suitably qualified professionals.
 - Any additional knowledge would be helpful.
 - It would be preferable, but not sure it's essential.
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- That would be nice, but let's not make it too difficult or you'll have only half a dozen or so for the whole state.
- Not always necessary. Many paediatricians practise without using standard diagnostic assessment. They can diagnose obvious cases and make informed referrals for formal assessment in less clear-cut cases.
- Formal qualifications do not ensure competency and are not equivalent to experience and clinical expertise in the area.
- Formal qualifications do not ensure competency – clinical experience is required.
- Assessed when – they completed their training 20 years ago or in the last five years? How, when and who will do it? Who will pay for it? We should not put barriers into the way of diagnosis which will ultimately disadvantage children.
- A measure of competence at this time is what is needed.
- Yes, but not realistic.
- That is simply not practical in 2017.
- There are many people to assess and provide services for. This is a noble goal but not one which could meet the demand for services in the time required. It should be encouraged but other pathways accepted. A measure of competence at this time is what is needed.
- People who are trained in complex assessment can add other assessments reasonably easily with mentoring. The first and basic task is to train in assessment of complex disorders and then the person has the framework to base the addition of other conditions. The assessor must have training in complex assessment in their university qualifications. The knowledge and proficiency required for ASD assessment can be an add on as long as it involves close mentoring, which is a different type of evaluation. In the future formalised training will be possible. Care needs to be taken in the cost of such training exceeding the financial capacity of those who need to train.
- Not sure what is intended by 'formally assessed training'.

Non-assessed training

- Not sure what is available.
 - This may be a better option.
 - Non-assessed training is better than no training.
 - In the absence of formal qualifications or training being recommended via the guidelines, there should be details about what constitutes minimum standards of training and experience.
 - Some training – any training would be useful – as long as it is standardised.
 - Clinicians doing ASD assessments need to have further training in ASD assessment, however I am less concerned about whether the training is formally assessed or not.
 - This might be a good way to complement assessed training (required) and maintain skills, however might need to be
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regulated in some way so that information is consistent and up to date with the best evidence available.

- Individual assessment of qualifications/experience should be used.
- It's not enough to attend some professional development and then begin assessing for ASD. To be highly skilled at assessing ASD the professional needs to have a very thorough understanding of ASD. Assessing the professional's training would provide a standard of professional ability that I think is necessary for ASD assessment.
- I think ASD assessment training needs to have an assessment process to ensure consistency and quality control.
- Additional training even if non-assessed can still provide valuable experience and assist with clinical judgement but there should be some measure of competence at some point in the training.
- This could be on-the-job training with a competent team.
- A period of time shadowing another professional conducting assessments.
- It would be preferable, but not sure it's essential.
- Could take the form of requirements within professional associations to explicitly document relevant training in professional development plans linked to registration etc.
- I would support a requirement for a minimum number of continued professional development hours in the area of autism assessment and intervention to qualify a professional.
- Don't understand 'non-assessed training'. If it means be trained informally through mentoring and clinical placement, then I agree.
- Not sure I know what non-assessed training is? Does this mean you get the training online or by watching videos and then hope for the best? I strongly disagree.
- How would we ensure the quality of this training? Especially at [Consensus Team Diagnostic Evaluations] or when planning intervention?
- The preference would be for assessed or accredited training.
- Building on knowledge in any way would be helpful.
- Should be assessed as competent.
- Diagnosticians should have completed training in complex assessment and that needs to have been assessed.
- Needs to be assessed for standards.

Peer observation

- Peer observation provides opportunity for discussion and reflection about clinical inconsistencies, and observation of the variable presentation of people with autism.
 - Considering differential diagnosis and comorbidities is also part of the process and observing peers go through this process is part of the learning.
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- ASD assessment should involve multidisciplinary team, or at least professional liaison among professionals involved.
- Not just their professional peers but other professions e.g. speech pathology, occupational therapist, psychologist.
- Studying and training alone is not enough to gather the requisite skills. Peer training/observation is crucial.
- Very helpful learning strategy, and vital for gaining experiencing in conducting ASD assessments.
- Usually and should be part of training and certification for these skills.
- The best way to learn in this process.
- Absolutely.
- This can be done via video/online.
- Helpful but not mandatory. Most helpful for those in the early stages of their careers.
- May be beneficial but not sure if an advantage or not.
- Do not think that every diagnostic assessment should be observed by peers.
- Difficult in rural areas.

Peer supervision

- It is important to impart the standards and because so much information needs to be gathered in particular by the clinical psychologist – competence cannot be achieved without mentoring and mentored supervision.
 - Supervision needs to be ongoing and linked to new developments in research and practice. It should also be possible to insist that the trainee continue training until they understand.
 - There are a small number of trainees who seem to grapple with understanding how to fit the complex picture together. Peer supervision in my experience expands skills and knowledge.
 - This knowledge needs to be pooled and brought together for discussion.
 - It is a complex area and needs complex supervision from a more experienced peer to develop the diagnostic skills.
 - Important to put the observations into context and see whether there may be other comorbidities.
 - Useful to develop a truly reflective practice and to encourage personal professional growth.
 - Multidisciplinary team assessment provides this opportunity without formalising it.
 - Mentoring and peer supervision may be more applicable to those in independent private practice needing support.
 - If someone has been formally assessed following training, then peer supervision may not be required.
 - During training.
 - Supervision is vitally important.
 - On a continuous basis.
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- Helpful but not mandatory for established clinicians. It is particularly valuable for new clinicians.
 - It would be preferable, but not sure it's essential.
 - Where possible.
 - This is not necessarily available or feasible and may be helpful in reflecting on an individual's approach but not essential to being involved in the process.

Peer mentoring

- Mentored supervision and thorough knowledge and understanding of the criteria which can be applied by the assessor without a standardised tool to measure is essential to good practice in ASD diagnosis.
 - Learning the knowledge is part of the process and often the role of undergraduate and postgraduate institutions this is a logical path forward. However, the second part of assessment is the understanding of the different presentations and issues to be considered in the actual assessment is best learnt through mentoring after knowledge acquisition. This is the harder of the components to set in place but is vital.
 - This is mentoring and is vital. They need mentoring which provides feedback on the process and the trainee assessor's own performance.
 - Mentoring may be more applicable to those in independent private practice needing support.
 - All clinicians conducting ASD assessments should have access to peers who they can consult for support, advice, training and input.
 - Peer mentoring is a proven method to assist learning.
 - The assessments are very complex and mentoring emphasises this.
 - Mentoring provides a direct link between knowledge and use of that knowledge in diagnosis.
 - This is fundamentally the most important aspect of the training at least equal to the knowledge base.
 - The less secure members of the group tend to be mentored unconsciously by the old hands. Often shared rooms provide options for tea room discussions of what to try.
 - Part of certification.
 - More applicable for preschool- and school-age children.
 - Would be nice.
 - This is helpful but not essential for established clinicians. It is particularly valuable for new clinicians.
 - Where possible, peer mentoring is really helpful to ensure support is always available.
 - Good general knowledge with opportunity to focus on one age group / structure.
 - The logistics will be a problem.
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- This is not necessarily available or feasible and may be helpful in reflecting on an individual's approach but not essential to being involved in the process.
- It can be a combination of training/mentoring/observations.
- Unsure about this

Continued learning

- This should be supported by continuing professional education
- Post university training they need to maintain skills by attending professional development on ASD and other associated conditions which add to that knowledge on a regular basis.
- Part of maintenance of professional standards processes, but it must not be a pay for a yearly ticket type process. It needs not to be a for-profit empire building exercise.
- There is a need to train those who did not receive training either in their course or as PD. ASD assessment and diagnosis is very complex and all professionals involved in assessment and intervention need to retain currency in the area.
- In brief, there is often a lack of clinical experience as well as up to date skills and training in the complexities of how individuals with ASD present.

Viewpoint surveys	Having professionals with the right training was ranked to have high importance by two Viewpoints.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 12: Setting (Clinic)

Evidence source	Details
Recommendation	It is recommended that a clinic setting be considered an appropriate, but not essential, venue for an assessment of ASD concerns.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the relevance of a clinic setting, and there was excellent support from experts for this environment.
Scholarly literature	Not identified
Other guidelines	<ul style="list-style-type: none"> Diagnostic assessments can occur ... in a clinical environment. The space used for evaluation should allow ample room for the interviews, observation and interaction and should be appropriate for people with hyper- and/or hypo-sensory sensitivities [29]. The clinic setting tends to provide the most ease and efficiency for the diagnostician (in terms of team communication, access to needed materials, cost, and environmental control) [30]. Some guidelines suggest that some degree of assessment in a controlled environment, such as a clinical setting, is essential to accurate ASD diagnosis [30]. For paediatric ASD assessments, the location should be 'child friendly' and should include toys at various developmental levels to observe the child's unstructured play. Be mindful not to inhibit the child's natural behavioural expression by lack of space or by only providing age/developmentally appropriate toys [5, 27]. Be mindful that individual's with ASD tend to be more sensitive than others to change and this may influence observations made of an individual in a new setting [30].
Online submissions	<ul style="list-style-type: none"> Local centre (team assessment session). Clinic Disclosure by team meeting with parents at Paediatrician/ Psychologist office (face to face) Office An autism assessment hub would be helpful - assessments should still involve a range of professionals, but the assessments should take place at the same place and at the same time. They should not be conducted in a Doctors surgery where most information is received as documents filled in and written (often just ticked boxes).
Workshops	<ul style="list-style-type: none"> Assessment can be done both at home and in the clinic i.e. observation across multiple environments. Diagnostic centres.

Delphi surveys	<ul style="list-style-type: none"> • Round 1 partial agreement that information for the ASD assessment process should be collected in the clinic. • Round 2 agreement that the clinic should be considered an appropriate venue for an autism assessment (if information is also obtained from other settings), however it is not necessary to conduct part of the autism assessment in a clinic if there is an appropriate space to undertake assessment tasks in the individual's community. • Where possible, information should be collected in a clinic setting. Firstly, this is more time effective for clinicians, it's a neutral setting for carers and family members and it allows observation of the individual in a novel environment. • A clinic or doctor office would obviously be included in an assessment place. One of a variety of settings • ADOS must be undertaken in a clinic environment - this is part of what creates the opportunities to elicit autism symptoms. • This is the convention and with an experienced diagnostician, this is appropriate. Other settings could be considered such as the child's home, but there would be problems with travel time. • The office is a calm neutral space and useful for many. However if it involves excessive travel or provokes extreme anxiety as it does for some ethnic and cultural groups an alternative location should be considered.
Viewpoint surveys	Collecting information in the clinic was ranked as having low importance by all viewpoints.
Interviews	May be challenging for some adults to access due to sensory symptoms – shouldn't be only option.
Feedback	Not applicable

Evidence Table 13: Setting (Community)

Evidence source	Details
Recommendation	It is recommended that information about an individual's presentation in all community settings relevant to their daily life be collected.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the relevance of a community setting, and there was excellent support from experts for this environment.
Scholarly literature	Parents felt like their child's full potential was not displayed as the assessments were not completed in the home environment (Level III, Quality 85%, [25]).
Other guidelines	<ul style="list-style-type: none"> • Diagnostic assessments can occur in a community setting, such as an individual's home or education setting [3–5, 28]. • The space used for evaluation should allow ample room for the interviews, observation and interaction and should be appropriate for people with hyper- and/or hypo-sensory sensitivities [29]. • Be mindful that individual's with ASD tend to be more sensitive than others to change and this may influence observations made of an individual in a new setting [30]. • A familiar setting allows the diagnostician to assess how an individual typically behaves and interacts and can clarify a diagnosis [3, 5]. • Information about the individual's behaviour in multiple settings may be obtained through interview with caregivers and significant others rather than direct observation [4].
Online submissions	<ul style="list-style-type: none"> • Greater awareness that children can present differently in appointments opposed to more natural environments. • E.g. child's home/ day care/ school (e.g. observations, parent/carer/teacher interview) • Should occur half at school and half at home. • Observed her at school • In familiar learning settings. • Combination of settings • Assessment should take place within several functional locations and settings. • Naturalistic setting information collection. • Assessments should be done across a clinic, at home and at school if possible. • When being assess it should be completed in all environments. • child's school, out, at home as part of the assessment • In a future world, inclusive schools with physiotherapists, psychologists, occupational therapists and education community in one environment.

	<ul style="list-style-type: none"> For people at the 'high functioning' end of the spectrum only real world contexts give a true perspective of the impact of e.g. social deficits. Many children present fine one on one with an adult, but their ASD is far more obvious when with their peers. not just be completed in a clinical setting be conducted in a variety of environments - the home, the school and the child's club or interest group.
Workshops	<ul style="list-style-type: none"> Natural settings were considered an important part of ASD assessments. Assessment should take place within several functional locations and settings. Naturalistic setting information collection.
Delphi surveys	<ul style="list-style-type: none"> Round 1 agreement that information should be collected in the individual's community (e.g. childcare centre, school, workplace, playground, social setting). Round 2 agreement that an individual's home should be considered to be an example of their community. Good compromise and often where problems are most disruptive I think that it is important to have information from multiple sources, however I do not believe that this means the diagnosing clinician has to go into a number of different settings (e.g. you could get a teacher to answer a questionnaire rather than actually having to go into the school). I feel behaviour at school, playground and childcare centres is an insight into behaviour in a different setting and important information for the assessment. This is appropriate, often very helpful, but not always needed. The presentation may be adequately clear using carer report, and observation and assessment in the clinic. Observations at child care/ school can assist with determining social interaction skills with peers that may not be obvious in a clinic situation and to which parents may not have sufficient information to share during an interview. Visits of this nature are essential for intervention planning in order to support generalisation of skills into meaningful environments. This doesn't have to be done as an in-person observation, at times community workers could provide observational data.
Viewpoint surveys	<ul style="list-style-type: none"> Collection of information in the home setting was rated high by one viewpoint, and collection in other settings such as the childcare centre, school, or workplace was given neutral importance by all viewpoints Collection of information in more than one setting or location was rated to be of neutral or moderate importance by all viewpoints. Collection of information in the clinic setting was rated to be of very low importance by all viewpoints, but

	collection in the home setting was rated high by one viewpoint, and collection in other settings such as the childcare centre, school, or workplace was given neutral importance by all viewpoints. Comments by participants also advocated for multiple settings for assessment.
Interviews	‘Assessments should take place across all environments – clinic, home, school/work.’
Feedback	Not applicable

Evidence Table 14: Setting (Community)

Evidence source	Details
Recommendation	<p>It is recommended that information about an individual's presentation in community settings be obtained by one or more members of the Assessment Team through a combination of:</p> <ul style="list-style-type: none"> – direct observation in the community setting – asking the client(s) about behaviour in the community setting during an interview or through a questionnaire or survey – observation of video recordings of the individual in the community setting that have been recorded and supplied by the client or other professional(s) with the client's permission – verbal or written communication about the client's behaviour in the community setting from other professional(s).
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the relevance of flexible approaches to assessing in a community setting, and there was excellent support from experts for this environment.
Scholarly literature	'There were significant differences between teacher and parent reports on the SRS, where teachers were significantly more conservative in assessing the child's social deficits when compared to the parents' (p.77, Level III, Quality 82%, [33]).
Other guidelines	<ul style="list-style-type: none"> • Several the international guidelines suggest it is best to carry out observations across multiple environments to heighten validity [3, 4, 28, 30]. • Multiple setting observation is not necessary for every individual being assessed but should be considered if there is diagnostic uncertainty or inconsistency in behaviour [28]. • Information about the individual's behaviour in multiple settings may be obtained through interview with caregivers and significant others rather than direct observation [4].
Online submissions	<ul style="list-style-type: none"> • It is important that the child be observed by the clinician in a preschool, playgroup or school setting where peer interactions can be observed. • Both the Social Worker and Child Psychologist should do a Home/Day Care/School Observation of the Child • As much as possible children being diagnosed should be observed in their classroom/daycare environments, esp. playground. • Careful consideration should be given to ensuring that there is a gold standard of assessment (e.g. observation in other settings). • should observe the child in a variety of settings
Workshops	Not identified
Delphi surveys	Round 1 agreement that information should be collected in multiple settings, and also that information should not be collected in a single setting only.

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- Round 2 agreement that information for the ASD assessment process should be collected from multiple settings through obtaining information from community based informants.
 - It is important to see the individual in one and sometimes two natural environments. This is not necessary in simple assessments or where there is a large amount of information. Direct observation helps enormously with the more complex assessments.

Viewpoint surveys	Collection of information in more than one setting or location was rated to be of neutral or moderate importance by all viewpoints. Collection of information in the clinic setting was rated to be of very low importance by all viewpoints, but collection in the home setting was rated high by one viewpoint, and collection in other settings such as the childcare centre, school, or workplace was given neutral importance by all viewpoints. Comments by participants also advocated for multiple settings for assessment.
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Interviews	Not identified
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Feedback	Not applicable
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Evidence Table 15: Setting (Telehealth)

Evidence source	Details
Recommendation	It is suggested that telehealth may be used to complement face-to-face meetings but is not to be used as the sole medium for conducting a Single Clinician Diagnostic Evaluation and/or Consensus Team Diagnostic Evaluation. It is important that at least one face-to-face assessment session is conducted with a Single Diagnostician and/or member of the Consensus Diagnosis Team. The use of telehealth as the predominant medium for conducting an assessment of ASD concerns should be restricted to exceptional circumstances, such as when conducting a face-to-face assessment in a clinic or community setting would be very difficult. Examples include when a client lives in a regional or remote location without access to assessment teams, or other significant travel restrictions prevent a face-to-face assessment occurring (such as challenges related to sensory or anxiety symptoms). If telehealth is used as the predominant medium for conducting part of an assessment of ASD concerns or sharing the findings, it is recommended that a local clinician (or other professional with relevant expertise) be physically present with the client during the telehealth meetings.
Grade	Consensus-based Recommendation, Grade 2
Rationale	Numerous evidence sources suggest telehealth is appropriate, with most of the evidence consistently supporting telehealth and good support from experts to allow telehealth in some circumstances.
Scholarly literature	<ul style="list-style-type: none"> There was substantial agreement between telehealth ASD assessment tool, Naturalistic Observation Diagnostic Assessment (NOVA), with an in-person ASD assessment, (Level III, [44]). It is recommended that the telehealth tool be a supplement for in-person assessments, when community based observations were needed or as a triage tool. 'Suspected ASC (Autism Spectrum Condition) should be discussed face-to-face with parents and relevant information should be provided to (and requested from) parents, with sensitivity to possible distress and/or confirmation bias' (Level III, Quality 65%, [45]).
Other guidelines	Further research is required to support the reliability of telehealth to diagnose ASD and to investigate the best systems and processes for providing telehealth support [30].
Online submissions	<ul style="list-style-type: none"> The need for country assessment facilities should be more accessible (support and diagnostic clinics). NOT by phone/email.
Workshops	<ul style="list-style-type: none"> Telehealth and regional service provision. System that can be used via videoconferencing for diagnosis. Video assessment acceptable for Tier 1, and Tier 2 – not Tier 3 [initial stages of Diagnostic Evaluation – indicates not in most complex cases]. Video recordings should become substantive evidence.

	<ul style="list-style-type: none"> • One clinician on site with the child, the other two clinicians via skype • Telehealth (teleconference) • Telehealth and regional service provision. • Provide video evidence in different settings.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 partial agreement that information should be collected through tele-health technology if necessary as a substitute or to supplement other information sources, such as through video recordings or videoconferencing. • Round 2 agreement that information for the ASD assessment process should be collected through video conferencing and/or video recordings where regional / remote location or travel restrictions makes face-to-face assessment very difficult. • Use of telehealth technology may increase access to services for those who are rural and remote. • Current diagnostic process in these regions is very different. • An inner-city model will not work in rural and may discriminate against rural and indigenous children. • Round 1 partial agreement that information should be collected through tele-health technology if necessary as a substitute or to supplement other information sources, such as through video recordings or videoconferencing. • Round 2 agreement that information for the ASD assessment process should be collected through video conferencing and/or video recordings where regional / remote location or travel restrictions makes face-to-face assessment very difficult. • Round 2 agreement that the diagnostic decision and assessment outcomes should be disclosed during a telephone or videoconferencing meeting only if regional / remote location or travel restrictions makes a face-to-face meeting very difficult. • Round 2 agreement that If the diagnostic decision and assessment outcomes are disclosed during a telephone or videoconferencing meeting, this should only occur if a suitable professional from the local community is present in a face-to-face meeting with the individual / caregiver at the same time: • In country areas three professionals may not always be available. Written or teleconference participation should be allowed.
Viewpoint surveys	Collecting information in a way that made it easier for those living in rural or remote areas was rated to be of very high importance by one viewpoint.
Interviews	<ul style="list-style-type: none"> • 'I had to take hours of public transport to and from the psychologist which is very difficult for me from a sensory and anxiety point of view. The building itself was not very autism friendly sensory-wise and I would be a mess of sensory overload before the sessions even began.'

	<ul style="list-style-type: none"> • 'At home. This is where I'm most comfortable. I find that to go someplace I have to ... I'm not that comfortable anymore. Here I'm comfortable. Here I can think.' • 'Assessments: in a setting conducive to comfort and wellbeing of the individual'
Feedback	Not applicable

Evidence Table 16: Referral (Professionals)

Evidence source	Details
Recommendation	It is suggested that a referral for an assessment of ASD concerns be initiated by a primary healthcare provider. This individual's professional discipline may differ between private and public healthcare settings, but they may need to meet specific professional requirements (e.g. be a general practitioner) to meet certain funding conditions, such as for Medicare.
Grade	Consensus-based Recommendation, Grade 2
Rationale	Numerous evidence sources suggest referrals should be made by a primary health care provider, with most of the evidence consistently supporting this approach with good support from experts.
Scholarly literature	Not identified
Other guidelines	Not identified (review did not focus on referral process)
Online submissions	<ul style="list-style-type: none"> • 'Referral for a diagnostic assessment should be more transparent and not just through a paediatrician. Many families only get a late diagnosis because they have to change paediatricians before they could access this process. Other professionals, such as teachers and therapists, should be able to refer.' • 'Referral by a GP.'
Workshops	Not identified
Delphi surveys	<ul style="list-style-type: none"> • 'GPs play an important role in gate-keeping to prevent excessive referrals for more rigorous assessment for those who clearly do not meet ASD criteria, or clearly do (and need to have their early intervention package fast-tracked). GPs assisting in this role would allow kids most in need to access help quicker, without needing to wait for a specialist appointment first (which can take many months to years in some cases). Kids who are age-appropriate in their social development, or who clearly have other explanations for their concerns (e.g. social, mental health, or disruptive behavioural problems) can then be redirected to more appropriate services, and thereby reduce waiting lists for specialists.' • 'GP are not consistent in their referral practices ... [but] they are a valuable member of the treatment team and also provide helpful referral pathways.' • 'The GP is critical part of the intervention team - assisting with referrals.' • 'Role of nursing is primary health care - referral on.' • 'If the nurse has adequate experience in this area and knows the child and family very well, they could be somehow involved in the initial process of getting referrals started.'
Viewpoint surveys	Not identified

Interviews	<ul style="list-style-type: none"> • '[What I think is important to address in conjunction with a national guideline] is the ease of referrals. So a lot of adults who perhaps have gone undiagnosed actually don't know where to go for referrals... More awareness in the medical community, as well as with psychologists regarding adults who come to them with particular concerns about their sensory needs, or their mental health wellbeing, and whether they themselves identify as being autistic. We know with ease of social media now, a lot more people are becoming connected, and they are finding communities in which they belong, so that is facilitating some of that referral process, so you'd get your recommendations from others who've already gone through the process. I think for a lot of adults they still don't know who to go to, or who to turn to, for referrals.' • 'I think going to a psychiatrist might seem, maybe, intimidating, or a more difficult process than seeing your local GP.'
Feedback	<ul style="list-style-type: none"> • It is recognised that the process for referring an individual for an assessment for neurodevelopmental disorders such as ASD, must fit within the prevailing clinical systems and funding mechanisms. The Guideline has been revised to state that referral for an assessment is to be made by an individual's primary health care provider. The profession of the primary health care provider may differ between private and public health care pathways (e.g., general practitioner, child health nurse). all Australians are able to self-refer to a primary health care provider to discuss neurodevelopmental concerns and seek referral for further assessment. • 'As a paediatrician I feel that children with developmental deficiencies including ASD are presenting late, as the concerns are brushed off by GPs and are later picked up by teachers or child care professionals. As GPs have limited training in such area and are too busy to make time for more learning, I feel that parents and carers of children with developmental concerns should be able to self-refer to paediatricians. Communication should then be patient-focused rather than doctor-focused. This will improve follow ups and the handling of sensitive information. Often the referring GPs are not the family doctors and seeing them for a referral letter is a waste of time as it does not include any relevant information. Parents with disabled children have limited time to spare sitting in a noisy medical centre to get a referral letter often seen by paediatricians as a waste of time. Self-referral is particularly important for children born prematurely as they are at higher risk, as you mentioned, and also for siblings of children affected by autism, but should be standardised to all children at least the ones under 6 years.' • 'You did not mention that many times children with developmental problems are also picked up in the children's wards of hospitals as they are assessed by paediatric doctors and nurses, as they have been missed by their GPs and many are not seeing a child and family nurse consistently.'

- 'It's important that initially individuals, carers and professionals can voice concerns that may lead to an ASD assessment. When this is formalised, in the guidelines, it gives permission and may help overcome stigma.'
 - 'The inclusion of consumers as referrers would trump the need for professionals to evaluate whether a referral for ASD assessment is required, unless the professional had ASD concerns that were not necessarily shared by the consumer... There is a risk that without being able to weigh the strength of evidence for ASD signs and symptoms that the consumer maybe put 'off-side.' Query- once the question has been raised by someone (consumer or professional) in relation to a child with possible ASD is there a need for assessment regardless to answer the question... [If] parents or clients are able to self-refer, this could have implications for waitlist. As our referral process is restricted to paediatricians, psychologists or psychiatrists, it steadies the flow of referrals somewhat... Overall, whilst there are clear benefits to consumers self-referring, there is the potential this may lead to significantly increasing waiting lists. Furthermore, whilst it is seen as really helpful to have referrers with more knowledge of autism, it was noted it can be difficult to encourage referrers to complete referral forms and pre-requisites to the assessment process. It is interesting that for the referrals, a professional needs to have awareness of autism, but consumers can just self-refer. While some parents recognize the symptoms well, I think there should be some sort of screening process, for example, to see if a global developmental delay is behind the concerns and no further assessment is required. The referral numbers may go up a lot otherwise... Whilst I agree that parents are the experts on their children and are normally the first to notice if something is not 'right', everyone has a different level of understanding of ASD, and we may see an influx of 'no' assessments. How will this affect services in terms of wait times for assessments? Also, will parents also be able to self-refer for reviews? Allowing a broader range of referral sources may make it easier for individuals to access diagnostic services. It may also mean that the person writing the referral is more informed, knows the individual better and has a better rationale for the referral (as opposed to a family seeing a paediatrician once to obtain a referral). I think it's great to have more detailed/experienced referrals. I think it would really help the referral process if the people who can refer are more educated on ASD symptomology, have a more detailed referral form to complete etc. Referrers having more knowledge of autism will really help ensure that the referrals we receive are appropriate and will cut down our wait times. The flip side of this may be that referrals are difficult to obtain for families and individuals because they need to be more detailed.'
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- 'The need for GP rather than consumer self-referral would ensure a basic medical assessment has occurred. Concern was raised that a GP assessment only may not be adequate for diagnostic purposes.'
 - '[Organisation] support the notion that a referrer could be from a range of backgrounds and includes consumers and professionals. If a professional, [organisation] concurs that there should be a solid understanding of ASD precipitating the referral.'
 - 'Consumers and education professionals provide essential information for functional and diagnostic assessment but do not have the relevant expertise to refer children directly for clinical assessments as many of the features that might suggest ASD may in fact be attributable to, or co-morbid with, other disorders; alternatively, they may be present for other reasons (e.g. developmental trauma). Recommendation: Referral and assessment of children for neurodevelopmental or behavioural concerns, including concerns about ASD, must be carried out within existing health system referral processes, rather than creating unnecessary parallel processes that duplicate existing structures and focus on one diagnosis. Referral for a neurodevelopmental and behavioural assessment must come from a child's primary care provider. Direct access to primary health care providers is readily available to parents or individuals who are concerned about ASD. Education and health professionals who are not involved in neurodevelopmental care but have concerns can advise families to seek assistance from a primary health care provider. Without a primary health care professional as the primary referrer, secondary and tertiary services are at great risk of becoming overwhelmed by the additional demand for these services through an increase in self-referrals or referrals from allied health and other staff working in the education sector. Also, primary health care professionals (e.g. maternal and child health nurses) can assist with access to existing funded services that are relevant, including state funded community child health (staffed by allied health professionals who are child experts) and state and federally funded early intervention services (staffed by allied health professionals and learning experts). Existing Medicare funding mechanisms for important components of further assessment and access to intervention require involvement of a paediatrician or psychiatrist, following referral from a general practitioner. To make recommendations that do not enable access to existing services and funding will potentially deprive families of assessments and interventions, unless another funding stream for these actions is identified.'
 - 'Whilst it's noted that they do not need any specific professional background it is unrealistic to expect that should the referrer also be a consumer that they would have the requisite knowledge and skills required.'
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- 'Involving general practitioners (GP) in the diagnostic referral process maintains their engagement in the health and wellbeing of the child and family and enables other important issues to be addressed. Continuing professional and resource development supports the responsiveness and value of these referral systems for the person with a potential ASD diagnosis and for their family.'
 - 'It is important that referral to a diagnostician come from a patient's primary health care professional.'
 - 'The child and maternal health services (birth to 3.5yr), the Medicare PIP and the PNIP facilities which are already in situ with in accredited general practices and the Aboriginal Torres Strait Island health initiatives, can be easily tasked to provide comprehensive screening.'
-

Evidence Table 17: Referral (Professionals)

Evidence source	Details
Recommendation	It is recommended that the primary healthcare provider has received formal professional training in typical child development and the signs and/or symptoms of common neurodevelopmental and behavioural conditions, including those associated with ASD, as well as common co-occurring and differential diagnosis conditions. If the primary healthcare professional administers clinical assessments as part of the process for initiating a referral for an assessment of ASD concerns, they should have training and expertise in administering these assessments (with all prerequisites for using the instrument in clinical practice met).
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of assessing clinicians having appropriate training, and there was excellent support from experts for this set of training requirements.
Scholarly literature	<ul style="list-style-type: none"> • 'The primary healthcare providers, school teachers, and all practitioners need to be involved in identifying the early signs of Asperger Syndrome. These are the professionals in the forefront of hearing the concerns of parents and in working with children' (p112, Level III, Quality 95%, [18]) • In Scotland, the delay in diagnosis for females relative to males, is due to the delay of referring females to specialist assessment teams (Level III, Quality 100%, [38]). Therefore, healthcare professionals should understand the ASD profile in females (Level III, Quality 100%, [38]). • At least one fifth of parents with children now diagnosed with ASD, had their initial concerns regarding development dismissed by health professional (Level III, Quality 82%, [46]). Dismissal of parental concern has also identified as a key barrier of ASD identification (Level III, Quality 95%, [39]). • In finding solutions for long wait-times in the diagnostic process, diagnostic clinicians in Scotland, expressed the importance of appropriate referrals to diagnostic assessments (Level III, Quality 100%, [38]). • A recent study in the USA saw autistic children diagnosed later than children with other developmental disorders, despite parents of autistic children becoming concerned of their child's development earlier than parents of children with other developmental disorders (Level III, Quality 88%, [47]). In addition, when parents of autistic children disclosed concerns to professionals, parents were more likely to have concerns dismissed, than recommend the involvement of school services (Level III, Quality 88%, [47]).
Other guidelines	<p><i>Training in ASD signs and/or symptoms</i></p> <ul style="list-style-type: none"> • The initial assessment of an individual may be undertaken by a single practitioner who determines whether further ASD

evaluation is warranted in which case, the child will continue to the multidisciplinary team [3].

- Recognising differences in development is an important aspect of ASD identification and these differences can be recognised as early as 18 months. To identify any difference all children should have routine developmental surveillance and specific screening for ASD at well child visits throughout infancy and childhood [3, 27, 48].
- Professionals who come across potential ASD should critically consider their own competence and always seek appropriate advice if there are gaps in their knowledge of ASD or the ASD evaluation process [3, 28].
- Parents have been identified as accurate in identifying developmental differences in their own children within the first two years of life and their concerns should be elicited, listened to, valued and actioned to expedite access to intervention and support [3, 27, 28, 30, 35, 48].
- Developmental surveillance and elicitation of parental concern is an ongoing responsibility of all professionals working with young children (e.g., physicians, speech pathologists, educators, nurses etc.) and these professional should have the knowledge to identify common behaviours indicative of ASD, discuss these with parents and capacity to prompt referral and provide support and resources when appropriate) [27, 28].
- Parents are encouraged to persist in expressing their developmental concerns about their children and to request standardised screening if necessary in order to advocate for their child [27].
- Decision making around whether to refer an individual for ASD evaluation can be supported by the use of documented developmental history, observations with standardised tools, in combination with parent reports, clinical judgement and identification of risk / protective factors [27, 28, 48].
- School professionals have an important role in ASD identification, especially in those children missed by well-child visits in healthcare settings as the school environment offers many opportunities for routine monitoring of educational performance and observation of social and emotional wellbeing. [27].

Training in common co-occurring and differential diagnoses

- When evaluating older child (for any reason) professionals should be aware that signs and symptoms of ASD may not have been previously recognised as indicating ASD due to the child's previous overall developmental level and/or that these signs/symptoms may have been previously masked by coping mechanisms, a supportive environment/disrupted home environment, cultural/linguistic variation, gender difference and/or other diagnosis' (e.g., hearing difficulty, intellectual disability) [28].

	<ul style="list-style-type: none"> Judgement about whether further ASD evaluation is warranted should be made as on balance judgement taking into account of the severity, duration and impact of symptoms as well as potential differential diagnosis [28].
Online submissions	<p><i>Training in typical child development</i></p> <ul style="list-style-type: none"> Parents often don't recognise the behaviour indications, particularly with a first/only child as they are unable to make informed comparisons to children at the same age/developmental stage. Early assessment and intervention are critical. Formal developmental assessment <p><i>Training in ASD signs and/or symptoms</i></p> <ul style="list-style-type: none"> There needs to be health experts who understand all the characteristics of an Autistic toddler who you can access earlier. Referral pathways to diagnostic assessments – how can we assist allied health professionals and educators to recognise warning signs and assist with streamlined referral processes. Referral for a diagnostic assessment should be more transparent, streamlined, clearer and easier to navigate. Simplified referral pathway flow charts would help. Early identification encouraged. From school / general practitioner/other medical specialist. Proper training for assessors to be reliable in standardised assessment tools. The professionals undertaking assessment need to meet minimum standards e.g. five years post qualification and be trained in evidence-based assessment tools. 'GP education is a key element that is missing from the current system. Parents often see several GP's and/or their concerns are dismissed before specialist referral is given for further expert opinion.' 'My concern is the number of children presenting at age 5 or 6 with behaviours indicative of ASD and not already identified by their GP as needing a referral for an assessment by a paediatrician. Parents often don't recognise the behaviour indications, particularly with a first/only child as they are unable to make informed comparisons to children at the same age/developmental stage. Early assessment and intervention are critical, and GPs do not seem to be well informed on the subtler indicators that a high functioning child might exhibit, the ones that are very apparent to teachers.'
Workshops	<ul style="list-style-type: none"> Pre-tier 1 screening process (lost in system). Entry point unclear - where do you go before Tier 1 for advice? Pre-tier 1 screening process / entry point needs to be clear so people don't get lost in the system. Easy entry point for families/adults in the first level of diagnosis. 'How to address concerns:' training for clinicians and quality monitoring.

	<ul style="list-style-type: none"> • Opportunities for professional development. • Training. • Professional development for all.
Delphi surveys	<ul style="list-style-type: none"> • A better referral system and/or diagnostic community awareness is required. • The most important thing they need is to be able to listen to a parent concerns • Parents often report that they were initially blocked from pursuing ASD assessment because their GP did not think there was anything to worry about with their child.
Viewpoint surveys	Not identified
Interviews	Not identified
Feedback	<ul style="list-style-type: none"> • 'As a paediatrician I feel that children with developmental deficiencies including ASD are presenting late, as the concerns are brushed off by GPs and are later picked up by teachers or child care professionals. As GPs have limited training in such area and are too busy to make time for more learning.' • 'Referrers having more knowledge of autism will really help ensure that the referrals we receive are appropriate and will cut down our wait times.'

Evidence Table 18: Referral (Information)

Evidence source	Details
Recommendation	It is suggested that the primary healthcare provider obtain information about ASD signs and/or symptoms in a structured way through client report and/or observation, along with administering a standardised developmental screening measure when age appropriate.
Grade	Consensus-based Recommendation, Grade 2
Rationale	Numerous evidence sources suggest referrers collect information in a range of ways, including standardised assessments, with most of the evidence consistently supporting this approach and excellent support from experts.
Scholarly literature	Not identified
Other guidelines	<ul style="list-style-type: none"> • Parents are encouraged to persist in expressing their developmental concerns about their children and to request standardised screening if necessary in order to advocate for their child [27]. • Decision making around whether to refer an individual for ASD evaluation can be supported by the use of documented developmental history, observations with standardised tools, in combination with parent reports, clinical judgement and identification of risk / protective factors [27, 28, 48].
Online submissions	<ul style="list-style-type: none"> • 'Referral pathways to diagnostic assessments – how can we assist allied health professionals and educators to recognise warning signs and assist with streamlined referral processes.' • 'Timely referral pathways.' • 'Simplified referral pathway flow charts.' • 'GPs and community nurses should conduct regular screening assessments using the CARS2.' • 'Use online questionnaires and screeners: Autism MSE.' • 'There should be a screening procedure using a tool that can be administered by a medical practitioner, early childhood nurse, clinical psychologist.'
Workshops	<ul style="list-style-type: none"> • 'Encourage the clinicians (referrers or assessors) to look deeper in to the individual's presentation i.e. do not assume ASD or non-ASD too quickly.' • 'Clear referral starting point needs to be provided and that is accessible to parents, health professionals, and teachers to access a needs assessment/services.' • 'Parents being supported in the ASD journey from "first- port of call" - parent's experiences validated and heard when wanting to get a referral for diagnosis.' • Suggested 'templates for referral.' • 'Initial screening useful in discerning whether a full diagnostic ASD evaluation is warranted and can direct the individual to

	receive support for the alternate explanation or diagnosis, if not ASD.'
Delphi surveys	'Initial screening with one agreed upon screening tool.'
Viewpoint surveys	Not identified
Interviews	'Maybe having a system where GPs have a ten-point check list where they could recognise possible indications, and make that referral, so it's easier for people to access the health care.'
Feedback	<ul style="list-style-type: none"> • '[Organisation] supports the use of developmental screening tools prior to referral for an ASD assessment, and that this referral is based on clinical reasoning and judgement, and this rationale is included in referral documentation.' • 'We also recommend that ASD specific diagnostic processes are effectively integrated into existing services, especially those for detecting and diagnosing developmental delay/disability.' • 'Specific changes that could improve this section include greater acknowledgement of existing early childhood development surveillance programs and primary health care services. These services provide vitally important mechanisms for developmental concerns to be raised, detected and then linkages with diagnostic and intervention services to be made.' • 'We acknowledge that screening for ASD behaviours as part of primary child health care is recommended in some jurisdictions (American Academy of Paediatrics for example) Within Australia, screening tools are part of developmental surveillance programs, and these programs specifically articulate what to do if concerns are raised. Currently, ASD screening tools are not used consistently in Australia and their role has not yet been established. Screening has the potential to do harm as well as good, and careful consideration of any screening programme would need to be undertaken before widespread recommendations could be made.' • 'Having a family member who has been diagnosed, as a factor that would increase the weight of the consumer warranting an ASD assessment.' • 'I think there should be some sort of screening process, for example, to see if a global developmental delay is behind the concerns and no further assessment is required. The referral numbers may go up a lot otherwise.' • 'What about use of a screening tool? I worry that this may run the risk of diagnoses being made without some quantitative evidence behind the decision.' • '[Organisation] welcomes the guidance provided in the draft guideline regarding screening tools and the additional factors to consider in determining whether to refer for an ASD assessment.' • 'The Developmental Behaviour Checklist: DBC, (Einfeld and Tonge 2002) completed by parents/carers and Teachers, an evidence based Australian normed screening tool for ASD... It is available in 21 languages and used internationally. It includes an autism screening algorithm with high sensitivity and

specificity for children aged 4-18 years. There is also a DBC early autism screen for children aged 18-48 months.'

- 'The Social Attention and Communication Surveillance tool (SACS-R) should be added as a commonly used screening tool by parents and carers (including nurses and early childhood education professionals). This tool has been developed in the Australian context and robust psychometric properties have been demonstrated in several studies (Barbaro et al, 2010, 2011, 2013). The SACS-R is currently being implemented across Australia and while it is relatively new, it should be included in this best practice guideline.'
 - 'Were ASD specific screeners also considered prior to a referral? e.g. ASD detect App, SACS?'
 - 'Removing the Denver screen as it has poor validity.'
 - 'As part of initiating an ASD assessment, the draft guidelines strongly encourage the administration of standardised developmental screening measures, three of which are highlighted to be used by professionals such as general practitioners. The cost of purchasing the complete package of resources relating to each of these screening tools is over \$1,000. This cost may be prohibitive for some of the designated 'referrers' including general practitioners.'
 - 'While it is important to use well validated developmental screening measures, it is also important to recognise that in some instances the costs may be prohibitive.'
 - 'The instruments for screening developmental delays filled by either parent or professional to warrant further investigation. We would be interested in further research on how sensitive these screening tools are for screening girls from birth to 7 years old, without any significant developmental delays. Screening tools can be a critical first step in triggering a timely pathway for an ASD diagnosis. As with the diagnostic tools themselves, we are concerned that these screening mechanisms may not always pick up ASD signs in young girls. Developmental delays in girls may not always be obvious, and may be missed by parents (especially if this is their first child) or by health professionals with little experience of females with ASD. We agree with the draft guidelines that screening tools should not be used in isolation to determine a referral.'
 - 'The document does not take a population health view of screening and assessment services for developmentally vulnerable and at-risk children.'
 - 'Assessments of neurodevelopment and behavioural symptoms should sit within a framework of universal developmental surveillance, screening and assessment and encompass a detailed review of the child's development and skills, medical and family history and psychosocial assessment.'
 - '[Organisation] also suggests that guidance is provided on the use of screening tools with adults.'
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Evidence Table 19: Referral (Outcome)

Evidence source	Details
Recommendation	It is recommended that the primary healthcare provider initiate an assessment of ASD concerns by discussing and obtaining the client's consent for the referral and then providing a written referral to the Assessment Team, including the reasons for referral and necessary information to efficiently commence the process.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of a primary healthcare provider initiating a referral, and there was excellent support from experts for this referral process.
Scholarly literature	<ul style="list-style-type: none"> An important predictor of assessment duration in adults was the risk of ASD (Level III, Quality 78%, [49]). Therefore, appropriate information within the referral, outlining key risk factors of ASD may help in the planning and preparation of ASD Assessment. In finding solutions for long wait-times in the diagnostic process, diagnostic clinicians in Scotland, expressed the importance of appropriate referrals to diagnostic assessments (Level III, Quality 100%, [38]).
Other guidelines	<ul style="list-style-type: none"> At identification of concern children should be immediately referred on for further evaluation (by an appropriate professional) and early intervention services [4, 27, 31]. Immediate referral to services prior to diagnosis may provide important supports for individuals/ families (especially in the case of extended wait times) and may yield information useful in the evaluation process [27]. If the concern has been professionally identified, the potentiality of ASD should be discussed with parents / caregivers prior to further referral and the evaluation process should be explained [28]. At identification of concern referral to a 'developmental services coordinator' can support individuals / families to manage the referral process [3]. Initiation of referral for ASD evaluation may occur through a number of pathways, including parent initiated referral (where a parent or caregiver identifies concerns regarding some aspect of their child's development) or health care provider initiated referral (where concerns regarding a child's behaviour are identified at a periodic health exam or when a child is being evaluated for another health condition or developmental delay, such as hearing loss or speech/language delay) [31]. Delays in referral are detrimental and suggestions for a parent to 'wait and see' is not appropriate [31] A clear and appropriate referral mechanism for individuals identified as requiring further evaluation is essential [31] At identification of concern a single point of referral should be provided to enable access to the professional(s) necessary for ASD evaluation [28].

	<ul style="list-style-type: none"> • Rapid identification, access to treatment and promotion of best outcomes for individuals and families relies on professionals working together in a coordinated process of referral, response, evaluation and onward referral [3, 27, 28]. • Once a child has been identified for further ASD evaluation, the first referral should be to a paediatrician or paediatric neurologist, who can refer on to other professionals as necessary [28]. • The referring professional should include a letter providing [28]: <ul style="list-style-type: none"> ○ Presenting symptoms reported from others (caregivers / other professionals) and observed ○ Birth developmental and medical history ○ Previous assessment outcomes ○ Risk factors • It was suggested that a period of 'watchful waiting' if the professional does not identify sufficient ASD concerns or if the child or parent prefers not to undergo an ASD evaluation; however this contrasts with recommendations from other guidelines which assert that 'wait and see' approached delays diagnosis and hence family support and early intervention [38].
Online submissions	<ul style="list-style-type: none"> • Referral for a diagnostic assessment should be more transparent and not just through a paediatrician. Many families only get a late diagnosis because they must change paediatricians before they could access this process. Other professionals, such as teachers and therapists, should be able to refer • If diagnostic practices under future guidelines were to mirror current referral practices, then many individuals could be susceptible to receiving an ASD diagnosis when this is not warranted. The complexity of ASD presentation with increasing age may account for some of this reduction in accuracy, but it is also likely to be driven by referrers' pragmatic approach to accessing supports available to the individual.
Workshops	<ul style="list-style-type: none"> • Easy entry point for families/adults in the first level of diagnosis. • Who accesses the process? • Referral and Entry Point - referral to a paediatrician should not be the start of the process. • Individual must be able to self-refer. • Commission clinical data indicates that relying on the Paediatrician referral alone for an authoritative diagnosis of ASD (as could be the case for Tier 1) could lead to an unacceptably high rate of misdiagnosis. Overall, approximately 72% of all paediatric referrals reviewed (N=761) resulted in an ASD diagnosis and the remaining 28% did not meet the criteria for ASD.
Delphi surveys	Not identified

Viewpoint surveys	Not identified
Interviews	Not identified
Feedback	'[Organisation] also suggests that this section includes a statement that the referral should been discussed with individual/family, as appropriate to gain their consent.'

Evidence Table 20: Referral (Outcome)

Evidence source	Details
Recommendation	It is suggested that, on receiving the referral, a nominated clinician (or their delegate) from the Assessment Team explain the process for assessing ASD concerns to the client, book the initial appointment (ideally within three months of referral), collate existing documents that may assist with the assessment (e.g. previously administered client questionnaires, reports from treating clinicians and school records) and give the client details for how to contact the Assessment Team.
Grade	Consensus-based Recommendation, Grade 2
Rationale	A number of evidence sources suggest how to respond to a referral, with most of the evidence consistently supporting this approach and good support from experts.
Scholarly literature	Parents found the ASD diagnostic process, as in Northern Ireland, difficult to understand and were not aware of the professionals involved in the process (Level III, Quality 83%, [15]).
Other guidelines	<ul style="list-style-type: none"> Suggested activities for the coordinator include [REF]: <ul style="list-style-type: none"> assist in gathering information support the family through the assessment process take enquiries from families and professionals keep parents or carers and, if appropriate, the child or young person, up-to-date about the likely time and sequence of assessments arrange the provision of information and support for parents, carers, children and young people as directed by the autism team A single point of referral should provide the individual / family access to all the necessary professionals for ASD evaluation [28]. The 'developmental services coordinator's' role is to manage the referral process for all children who have been identified with possible developmental concerns' [3].
Online submissions	<ul style="list-style-type: none"> The process from the referral from GP to paediatrician to psychologist to speech to DSC needs to be much clearer and easier to navigate. Coordinators needed to collate all information - questionnaires, reports etc.
Workshops	Not identified
Delphi surveys	<ul style="list-style-type: none"> Round 1 agreement that the ASD assessment process should be coordinated by a central contact person / team, from the time of referral Admin staff may play a supportive role (e.g. making bookings) This might put a lot of pressure on admin staff to follow up with professionals regarding timing of assessments and reports. This onus should sit with the professionals conducting the assessment.

Viewpoint surveys	Not identified
Interviews	Not identified
Feedback	'Timely - wait times need to be no longer than three months.'

Evidence Table 21: Assessment of Functioning (Professionals)

Evidence source	Details
Recommendation	<p>It is recommended that an Assessment of Functioning be conducted by a clinician or clinicians meeting one of the following eligibility criteria:</p> <ul style="list-style-type: none"> – medical practitioner who holds general or specialist registration with the Medical Board of Australia – nurse practitioner who holds general registration with the Nursing and Midwifery Board of Australia and is endorsed as a nurse practitioner or as a registered nurse with relevant experience as a clinical nurse specialist/consultant and is practising under appropriate medical supervision – occupational therapist who holds registration with the Occupational Therapy Board of Australia – psychologist who holds general registration, with or without a practice endorsement, with the Psychology Board of Australia – social worker who is eligible to be a member of the Australian Association of Social Workers – speech pathologist who is eligible to be a Certified Practising Member of Speech Pathology Australia.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of assessing clinicians having appropriate qualifications and registration, and there was excellent support from experts for this set of professional requirements.
Scholarly literature	<p><i>Medical Practitioners (Paediatricians, Psychiatrists and Neurologists)</i></p> <ul style="list-style-type: none"> • Developmental paediatricians were not identified as a resource for information about treatment or interventions (Level III, Quality 75%, [50]). • Neurologist can be a member of the team [5, 27, 28]. <p><i>Psychologists</i></p> <ul style="list-style-type: none"> • Psychologists have special skills as a Functional and Support Needs Assessment related to: <ul style="list-style-type: none"> o The completion of cognitive assessments may assist in individual / treatment planning [3, 29, 35]. o The completion of academic assessments, results from which may influence support planning for school aged children [48]. o Capacity to support families to identify resources / supports and to understand their child's condition [48]. o Capacity to offer counselling and education as needed throughout the process [48].
Other guidelines	<p><i>Speech Pathologists and Occupational Therapists</i></p> <ul style="list-style-type: none"> • Lead diagnostician should be a licensed health professional with ASD specific expertise [27]. • Occupational therapists with the necessary qualifications and experience are an appropriate professional to evaluate sensorimotor skills and the subsequent impact on daily life

	<p>(e.g. functional skills or occupational performance in play, leisure, activities of daily living, school or work tasks) [48].</p> <p><i>Psychologists</i></p> <ul style="list-style-type: none"> Psychologists have special skills as a Functional and Support Needs Assessment related to: <ul style="list-style-type: none"> The completion of cognitive assessments may assist in individual / treatment planning [3, 29, 35]. The completion of academic assessments, results from which may influence support planning for school aged children [48]. Capacity to support families to identify resources / supports and to understand their child's condition [48] . Capacity to offer counselling and education as needed throughout the process [48].
Online submissions	<p><i>Medical Practitioners</i></p> <ul style="list-style-type: none"> Who should assess - qualified and experienced Psychiatrist Assessments should be undertaken by a team of experienced and qualified allied health professionals with a psychiatrist as a suitable inclusion. <p><i>Occupational Therapists</i></p> <ul style="list-style-type: none"> Occupational therapists involved in the assessment of autism Assessment with occupational therapists should be considered Occupational therapists assisting in the assessment of: <ul style="list-style-type: none"> Play Participations Daily living skills. <p><i>Psychologists</i></p> <ul style="list-style-type: none"> Educational Psychologist contribute to full profile of functional level. Comprehensive profile enables appropriate adjustments.
Workshops	<p><i>Medical Practitioners</i></p> <ul style="list-style-type: none"> Improved education on needs assessment for paediatricians e.g. Grad.Dip.ASD <p><i>Occupational Therapists</i></p> <ul style="list-style-type: none"> Occupational therapists as part of a multidisciplinary team Occupational therapists as part of the team if they have special training in child development and ASD Occupational therapists as assessors Occupational therapists are holistic professionals who are best equipped to provide information about the child's functioning in all different environments including, home and school.
Delphi surveys	<p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> Round 1 agreement that aspects of ASD assessments should be undertaken by a paediatrician. Round 2 findings suggest that a paediatrician is eligible to be a Functional and Support Needs Assessor. Paediatricians undertake a range of roles around ASD diagnosis, but most importantly integrating information in order to address parents' concerns and provide expert guidance on what can be done. Paediatricians have a leadership role with respect to clinical practice, advocacy to bring about system

changes to improve support for children with ASD and other developmental conditions and research to better understand ASD and related conditions. Making an autism diagnosis includes exclusion of other potential diagnoses.

- Paediatrician can also make relevant referrals to appropriate services for intervention planning.
- Paediatricians have the knowledge and expertise to understand all the stages of childhood and what is normal behavioural skills and milestones and what is abnormal.
- Paediatricians are very important in intervention.
- Paediatricians are experts in the childhood field.
- Paediatrician are skilled in working in a multidisciplinary team.
- It is also essential that a paediatrician is involved in assessment for intervention planning but unfortunately this often does not occur.
- Well trained, especially community/developmental paediatricians. Can consider the whole child. Located in most cities/regions. Often has relationship with family and relevant local services.
- Would seem to be the most suited clinician for undertaking aspects of ASD assessments but expertise and ability varies.
- I regard ASD assessments as a specialised area requiring deep knowledge beyond what is provided in the general Postgraduate Paediatric Training programme. This is a Paediatric Specialty area and deserves postgraduate training, supervision, mentoring etc.
- There is a need to train paediatricians who did not receive training either in their course or as PD. ASD assessment and diagnosis is very complex and all professionals involved in assessment and intervention need to retain currency in the area.

Medical Practitioners (Psychiatrists)

- Round 1 agreement that aspects of ASD assessments should be undertaken by an adult psychiatrist (however, agreement not reached during Round 1 that a child psychiatrist should be involved).
- Round 2 findings suggest that both adult and child psychiatrists are eligible to be a Functional and Support Needs Assessor.
- Psychiatrist are very important in diagnosis and intervention for adults.
- May also help with parents and parenting skills and behaviour management.
- Many adult psychiatrists have skills or experience.
- Psychiatrists tend to be very 'medical' focused.
- Child Psychiatrists would be available to coordinate treatment planning, although this is not realistic with the current demand for their services.

Medical Practitioners (Neurologists)

- Round 1 disagreement that aspects of ASD assessments should be undertaken by a neurologist.
- Round 2 findings suggest that a Neurologist is not eligible to be a Functional and Support Needs Assessor.
- Not sure what a neurologist would add as an assessor.
- Neurologists are time poor, and I think allied health professionals can do assessments.

Nurse practitioner

- Nurse practitioner would be wonderful but often not available.

Occupational Therapists

- Round 1 agreement that aspects of ASD assessments should be undertaken by an occupational therapist.
- Round 2 agreement that an occupational therapist should be eligible to be a Functional and Support Needs Assessor.
- It is generally recognized that occupational therapists have an important role in ASD assessment of adaptive living / function (including self-care, play, socialising and learning), task analysis of everyday living skills and intervention planning.
- This is where an occupational therapist should be part of the assessment team.
- Occupational therapists are essential for intervention planning

Psychologists

- Round 1 agreement that aspects of ASD assessments should be undertaken by a psychologist.
 - Round 2 agreement that a psychologist should be eligible to be a Functional and Support Needs Assessor.
 - Those clinical psychologists who have the necessary training and experience in working in the area of ASD across all the developmental groups are well placed to undertake ASD assessments (taking the complexity of presentations into account).
 - Clinical psychologists also have a supervision process that helps them to extend their skills and expertise in becoming familiar with the diversity of ASD presentations and to obtain ongoing supervision around complex cases with a more experienced mentor.
 - Clinical psychologists also have a supervision process that helps them to extend their skills and expertise in becoming familiar with the diversity of ASD presentations and to obtain ongoing supervision around complex cases with a more experienced mentor.
 - May help prioritise intervention goals, where a greater level of information is required than can be gained from parents, child, and questionnaires/reports from school or pre-school setting
 - Contribute to multidisciplinary team
 - Psychologist are more necessary in intervention planning than diagnostic assessments
 - Useful for treatment planning
 - Vital / critical / key role in assessment for intervention planning
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	<ul style="list-style-type: none"> • Developmental/educational psychologists if clinical psychologist is unavailable. • Subgroup of developmental/educational psychologists who have necessary training and experience to conduct ASD assessment. • Developmental/educational psychologists undertake aspects of ASD assessment in selected cases. • Developmental/educational psychologists are well able to complete the cognitive, learning, educational assessments to help provide input into the treatment plan and recommendations • Educational psychologists who have appropriate training in ASD can provide useful input in more complex presentations or where there are concerns that learning and other educational aspects may be impacting the child/individual. • Suitable experienced developmental/educational psychologists can play a critical role in the intervention planning process. • Developmental/educational psychologists may be more relevant when assessing primary and secondary school aged children, therefore less relevant to preschool or adulthood. • Developmental/educational psychologists may not be essential
	<p><i>Social worker</i></p> <ul style="list-style-type: none"> • Social worker would be wonderful but often not available <p><i>Speech Pathologists</i></p> <ul style="list-style-type: none"> • Round 1 agreement that aspects of ASD assessments should be undertaken by a speech pathologist. • Round 2 agreement that a speech pathologist should be eligible to be a Functional and Support Needs Assessor. • Speech pathologists are crucial for treatment planning • Speciality with intervention planning • Speech pathologists should be central in most cases • Important for earlier years (up to 12 years), and outside of younger years, should be involved in a case to case basis • Within a multidisciplinary context • Can be involved if they have the right ASD specific training • Round 2 agreement that there should be flexibility to allow assessment professionals to be involved in one or both assessments (i.e. Comprehensive Needs Assessment and/or Diagnostic Evaluation).
Viewpoint surveys	<p><i>Medical Practitioners (Paediatricians, Psychiatrists and Neurologists)</i></p> <ul style="list-style-type: none"> • The inclusion of at least one medical or specialist medical professional was given neutral to low importance by all viewpoints. Participant comments supported the inclusion of medical professionals. <p><i>Allied Health Professionals (Psychologists, Speech Pathologists and Occupational Therapists)</i></p> <ul style="list-style-type: none"> • The involvement of at least one allied health professional was given high importance by one viewpoint. Participant comments supported the inclusion of allied health professionals.
Interviews	<p><i>Medical Practitioners</i></p> <ul style="list-style-type: none"> • Paediatrician listed as an appropriate member of a multidisciplinary team.

	<ul style="list-style-type: none"> • Psychiatrist listed as an appropriate member of a multidisciplinary team
Feedback	Not applicable

Evidence Table 22: Assessment of Functioning (Professionals)

Evidence source	Details
Recommendation	<p>It is recommended that an Assessment of Functioning be conducted by a clinician who, in addition to the relevant training and expertise required by all members of the Assessment Team, has relevant training and expertise in:</p> <ul style="list-style-type: none"> – the impact of the signs and/or symptoms of ASD and other neurodevelopmental disorders on daily functioning and participation in age-appropriate activities – the evaluation of the abilities, challenges, strengths, environmental context and support needs of individuals with ASD and other neurodevelopmental disorders (along with those of their caregivers and support people).
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of assessing clinicians having appropriate expertise, and there was excellent support from experts for this set of expertise required.
Scholarly literature	<p><i>Evaluation of abilities and strengths</i></p> <ul style="list-style-type: none"> • A strengths focused approach is advocated in the literature, and involves practitioners exploring the individual's and family's strengths, interests and goals (Level Ib-III, Quality 68-82%, [32, 33]). In addition, practitioners promote optimism and realistic hope by explaining opportunities for improvements with intervention, whilst keeping in perspective that ASD is a significant and lifelong disability (Level III, Quality 60-85%, [14, 34]). • 'By focusing on their unique gifts and thought processes rather than their weaknesses, parents develop solutions and aid in increasing their child's self-esteem' (p. 115, Level III, Quality: 95%, 2012, [18]) • In the context of disclosure, 'clinicians mentioning strengths and conveying hope seemed to make these feelings a little easier to bear' (p. 380, Level III, Quality 90%, [14]). • Parents valued clinicians who recognised strengths as well as difficulties (Level III, Quality 85%, [14]). • Counsellors' attitude during diagnosis delivery was a predictor of maternal satisfaction (Level III, Quality 82%, [26]). • Use a strength-based approach in disclosing ASD diagnosis (Level III, Quality 100%, [12]). <p><i>Evaluation of environmental context</i></p> <ul style="list-style-type: none"> • Obtaining and receiving diagnosis for a child is a difficult process, during which the parent and child experience stress and emotional turmoil (p111, Level III, Quality 90%, [18]) • 'Parents express varying degrees of distress relating to their child 's development. This distress may stem from uncertainty over their child 's future, where at times they stress skills and progress that was made and where

	<p>independence may be achievable' (p110, Level III, Quality 90%, [18])</p> <ul style="list-style-type: none"> • We need to understand and appreciate how difficult obtaining and receiving a diagnosis can be for a child. (p113, Level III, Quality 90%, [18]) • Parent described their experiences before receiving a diagnosis as frustrating and time consuming. And that an autism diagnostic label brought them discomfort because the stereotypes of autism influenced their understanding of the disorder (p131-2, Level III, Quality 95%, [51]). • 'During the screening and evaluation process, it is imperative that school psychologists listen to parents' concerns and provide information about school and community resources. By sharing this information, professionals can help ensure that children have access to available services when they are needed' (p. 136, Level III, Quality 95%, [51]). • Participating professionals realized that parents experience high levels of distress when trying to access efficient diagnosis. (p.394, Level III, Quality 59%, [52]) • Post diagnosis parents experience various emotional responses such as isolation, fear. (p.63, Level III, Quality 75%, [50]). • 'Parents receiving a diagnosis of ASD should be offered counselling or put in touch with community support groups' (p.20, Level III, Quality 73%, [53]). • 'Consistent with perceived benefit, in this study, private-assessment families better equipped to face perceived barriers because they were probably given the support by their diagnosing professional to weigh all the negative consequences attached to treatment models including the cost, side effects/dangers, and convenience level involved' (Level Ib, Quality 95%, [24]).
Other guidelines	<ul style="list-style-type: none"> • Any assessment should be undertaken by professionals who are trained and competent and have specific knowledge of autism [29]. <p><i>Impact on daily functioning and activity participation</i></p> <ul style="list-style-type: none"> • The use of standardised functional assessment tools is desirable / preferable for a diagnosis of ASD [3–5, 27, 28, 30, 31]. • An adaptive functioning measure should be used with any child assessed for an associated cognitive handicap [48]. • Behaviour likely to impact on participation in life experiences, such as intellectual ability, learning style, academic skills, speech language and communication skills, fine and gross motor skills, adaptive behaviour (includes self-help skills), socialisation skills, mental and emotional health, physical health, nutrition sensory hyper- and hyposensitivities should be assessed to future support and management [28] <p><i>Evaluation of abilities and strengths</i></p> <ul style="list-style-type: none"> • In-depth assessment to develop a profile of strengths and weaknesses [48].

- The completion of a thorough assessment of the individual's strengths, skills, impairments and needs will still provide benefit for continued support and management, even when the ASD evaluation outcome is uncertain [28].

Evaluation of environmental context

- Functioning can be evaluated and compared across multiple settings through instruments with several versions (e.g. parent and teacher) [30].
- Assessment of sensorimotor function/sensory profile is important for treatment planning [28, 30].
- Circumstances / abilities likely to impact on participation in life experiences, such as intellectual ability, learning style, academic skills, speech language and communication skills, fine and gross motor skills, adaptive behaviour (includes self-help skills), socialisation skills, mental and emotional health, physical health, nutrition sensory hyper- and hyposensitivities should be assessed to future support and management [28]
- Challenging behaviour (including triggers and maintenance factors), impact of physical environment (including impact of any physical or sensory differences) and social environment (including relationships with family members, partners, carers and friends and communication within these social circumstance), should be part of a functional assessment [29].
- Unstructured, 'real-life' observations can inform functional assessment [4].
- Setting impacts on individual function and should be assessed (such as education and employment setting) [4].
- Personal and social functioning is an important consideration in assessment and educational, occupational and housing should be addressed [29].
- Changes to environment, routines or personal circumstances require close monitoring [27, 29].

Evaluation of challenges and support needs

- If standardized instruments are not used for the data collection of ASD behaviours or the intellectual, adaptive and cognitive skills of the individual prior to or during the initial diagnostic evaluation, the diagnostician should refer to a qualified professional who can complete standardised testing as part of the assessment for intervention planning [5, 27, 30].
- Assessment of sensorimotor function/sensory profile is important for treatment planning [28, 30].
- Occupational therapy assessment should be considered where relevant and sensory behaviours should be taken into account when profiling the needs of individuals with ASD [4].
- Individuals diagnosed with ASD should have a comprehensive evaluation of their speech and language and communication skills for appropriate treatment planning [4, 30].
- Proper training for assessors to be reliable in standardised assessment tools.
- The professionals undertaking assessment need to meet minimum standards e.g. five years post qualification and be trained in evidence-based assessment tools.

Online submissions	<p><i>Evaluation of abilities and strengths</i></p> <ul style="list-style-type: none"> • Need to consider recognising what coping strategies are being used to cope and mask challenges - those self-taught and gained through therapy. • Should assess individual strengths. • Assessments that profile characteristics/strengths/deficits across multiple domains. <p><i>Evaluation of environmental context</i></p> <ul style="list-style-type: none"> • Too often interventions focus solely upon changing individual's processing, cognitions, behaviours, without addressing relationships and environments. • Should assess the level of support their carer's and families are providing to achieve the presenting level of needs / strengths. <p><i>Evaluation of challenges and support needs</i></p> <ul style="list-style-type: none"> • Important so deficiencies can be addressed as required, proper planning put in place and therapies reviewed for effectiveness. • Suggested use of the Vineland Adaptive Behaviour Scales • Formal developmental assessment is valuable
Workshops	<p><i>Impact on daily functioning and activity participation</i></p> <ul style="list-style-type: none"> • Knowing whether a child has autism is not as important as a full understanding of the functional impact. <p><i>Evaluation of abilities and strengths</i></p> <ul style="list-style-type: none"> • A commonly cited feature that participants most liked about the proposed guideline was the focus on strengths. • Looking at the strengths of the person to help them gain self-confidence and help alleviate challenges. • There are certain aspects of ASD that are different but are strengths. • Guidelines pick up strengths and not just a model based on deficits. <p><i>Evaluation of environmental context</i></p> <ul style="list-style-type: none"> • If in clinical setting: need to gather information from across a range of environments e.g. school; work; TAFE/uni; home (two or three settings). • Assessment across multiple settings and gathering information from multiple settings leads to a more rigorous diagnostic process.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that the ASD assessment process should include an adaptive functioning assessment (e.g. extent of independence and functional capacities of the individual to perform everyday tasks). <p><i>Impact on daily functioning and activity participation</i></p> <ul style="list-style-type: none"> • I do think that this is helpful, and that adaptive behaviour assists in providing a broad indication of an individual's functioning. • Adaptive assessments are valuable in determining focus areas for intervention. • A functional assessment is usually completed with a psychometric assessment if there is concern about intellectual disability but regardless it can be a useful marker to describe

	<p>the individual's application of living skills. This will also help to guide intervention goals.</p> <ul style="list-style-type: none"> • A functional assessment is important for intervention planning and would assist with applications for NDIS. • This should be performed as it is a significant indicator of level of 'disability'. • Standardised assessments should be used selectively and judiciously. May not require a standardised assessment i.e. if the child obviously has normal function then a formal assessment is a waste. • Adaptive function is very helpful for many ASD assessments. It is not needed for those individuals who live independently and do not require external support. This would thus include many adults. The role of adaptive behaviour assessment is more relevant for children and for teens and adults who are not coping living independently. • Considerations for instrument selection include age and ability to administer online. • Suggested instruments: Vineland Adaptive Behaviour Scales (widely available and good) or Adaptive Behaviour Assessment Systems (helpful). <p><i>Evaluation of abilities and strengths</i></p> <ul style="list-style-type: none"> • Round 1 partial agreement that the ASD assessment process should include a strengths assessment (e.g. assessment of an individual, familial and broader contextual strengths, resources and/or supports). • Round 2 agreement that the ASD assessment should focus on identifying for the individual (and if appropriate their caregivers) the strengths and resources. <p><i>Evaluation of environmental context</i></p> <ul style="list-style-type: none"> • Round 2 agreement that the ASD assessment should focus on identifying for the individual (and if appropriate their caregivers) the supports and accessible environments.
Viewpoint surveys	<p><i>Impact on daily functioning and activity participation</i></p> <ul style="list-style-type: none"> • The inclusion of an assessment of activities of daily living was rated of high importance by one viewpoint. <p><i>Evaluation of abilities and strengths</i></p> <ul style="list-style-type: none"> • Focusing on the strengths of the person being assessed was ranked as having high importance to one viewpoint, assessing the strengths and resources of the person being assessed and their parent/carers was of neutral importance to all viewpoints.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 23: Assessment of Functioning (Information)

Evidence source	Details
Recommendation	<p>It is recommended that information be collected during an Assessment of Functioning on the following topics:</p> <ul style="list-style-type: none"> – medical and health history, including any existing diagnoses – family history and family functioning – language/s used at home and level of written/spoken proficiency in English and any other home language – developmental and educational history – ASD-specific signs and/or symptoms – other relevant signs and/or symptoms – developmental and functioning abilities/impairments across a broad range of domains (e.g. cognitive, language, social-emotional, motor and adaptive behaviour) – activity-related and character strengths – environmental facilitators and barriers – observed and expressed support needs.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of collection information on a comprehensive range of topics, and there was excellent support from experts for these topics.
Scholarly literature	<ul style="list-style-type: none"> • Developmental and functioning abilities/impairments • Preschool teachers could be an important information source, in describing the everyday life of a child under assessment (Level Ib, Quality 68%, [32]). • Environmental facilitators and barriers • Obtaining and receiving diagnosis for a child is a difficult process, during which the parent and child experience stress and emotional turmoil (p111, Level III, Quality 90%, [18]) • ‘Parents express varying degrees of distress relating to their child ‘s development. This distress may stem from uncertainty over their child ‘s future, where at times they stress skills and progress that was made and where independence may be achievable’ (p110, Level III, Quality 90%, [18]) • We need to understand and appreciate how difficult obtaining and receiving a diagnosis can be for a child. (p113, Level III, Quality 90%, [18]) • Parent described their experiences before receiving a diagnosis as frustrating and time consuming. And that an autism diagnostic label brought them discomfort because the stereotypes of autism influenced their understanding of the disorder (p131-2, Level III, Quality 95%, [51]). • ‘During the screening and evaluation process, it is imperative that school psychologists listen to parents’ concerns and provide information about school and community resources. By sharing this information, professionals can help ensure that children have access to available services when they are needed’ (p. 136, Level III, Quality 95%, [51]).

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- Participating professionals realized that parents experience high levels of distress when trying to access efficient diagnosis. (p.394, Level III, Quality 59%, [52])
 - Post diagnosis parents experience various emotional responses such as isolation, fear. (p.63, Level III, Quality 75%, [50]).
 - 'Parents receiving a diagnosis of ASD should be offered counselling or put in touch with community support groups' (p.20, Level III, Quality 73%, [53]).
 - 'Consistent with perceived benefit, in this study, private-assessment families better equipped to face perceived barriers because they were probably given the support by their diagnosing professional to weigh all the negative consequences attached to treatment models including the cost, side effects/dangers, and convenience level involved' (Level Ib, Quality 95%, [24]).
 - Activity related and character strengths
 - A strengths focused approach is advocated in the literature, and involves practitioners exploring the individual's and family's strengths, interests and goals (Level Ib-III, Quality 68-82%, [32, 33]). In addition, practitioners promote optimism and realistic hope by explaining opportunities for improvements with intervention, whilst keeping in perspective that ASD is a significant and lifelong disability (Level III, Quality 60-85%, [14, 34]).
 - 'By focusing on their unique gifts and thought processes rather than their weaknesses, parents develop solutions and aid in increasing their child's self-esteem' (p. 115, Level III, Quality: 95%, 2012, [18])
 - In the context of disclosure, 'clinicians mentioning strengths and conveying hope seemed to make these feelings a little easier to bear' (p. 380, Level III, Quality 90%, [14]).
 - Parents valued clinicians who recognised strengths as well as difficulties (Level III, Quality 85%, [14]).
 - Counsellors' attitude during diagnosis delivery was a predictor of maternal satisfaction (Level III, Quality 82%, [26]).

Use a strength-based approach in disclosing ASD diagnosis (Level III, Quality 100%, [12]). *Support needs*

- When parents need help and support (e.g. counselling), should be offered such help. A key issue that can be considered is if within the parent training programs that offer opportunities to learn how to tackle behaviour problems, there is also the opportunities for families to explore the impact of diagnoses for them, and for the potential 'grieving' process that they need to engage in to come to terms with an ASD diagnosis (p.929, [54]).
 - 'It is suggested that parental functioning and psychological well-being are highly important to understanding the prognosis for the child's treatment' (p.929, [54]).
 - 'This research revealed that the diagnosis of an ASD leaves parents experiencing stages of grief (denial, depression and stress, anger, acceptance) and other powerful emotions before accepting their child's condition Once parents had received the ASD diagnosis and were able to appreciate the information' (p. 56, Level III, Quality 75%, [55])
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- ‘Regarding their child’s diagnosis, many indicated concerns for the future. A common concern was the care and support that the children would need throughout their lives, and how parents could best provide for this.’ (p. 57, Level III, Quality 75%, [55]).
- Parents of children diagnosed with ASD, in Hong-Kong and the USA, had a common felt experience that post-diagnostic support and follow-up was lacking (Level III, Quality 72-100%, [56, 57]). Parental dissatisfaction in the autism diagnosis of their child, was attributed to the inadequate resources to commence appropriate supports (Level III, Quality 75%, [58]). It was recommended that health professionals delivering the diagnoses also provide information on supports services, such as intervention, therapies and additional supports, giving parents a starting point (Level III, Quality 100%, [57]).
- ‘Any support offered to families should be tailored to the specific developmental needs of the individual and family’ (p. 69, Level III, Quality 100%, [13]). It was concluded that information about Asperger Syndrome needed to be tailored to the specific needs of an individual (Level III, Quality 100%, [13]).

Other guidelines

History

- Medical / health history – The prenatal, perinatal, past and current physical, developmental, intellectual and mental conditions, in particular seizures, encephalopathic events, behavioural issues, aggression, self-injury, sleep disturbances, eating problems, bowel / bladder control, and pica.
- Family history – ASD or other relevant medical, developmental, neurologic or psychiatric disorders. This history should cover the nuclear and extended family, including siblings, parents and other close relatives, such as grandparents, uncles, aunts and cousins.
- Developmental history – A summary of how the individual being assessed for ASD has presented during their lifetime in terms of global functioning, meeting a range of developmental milestones (especially for communication, motor and adaptive skills) and regression.
- Evidence associated with ASD diagnostic criteria – collected through interview and/or observation.

Developmental and functioning abilities/impairments

- If standardised instruments are not used for the data collection of ASD behaviours or the intellectual, adaptive and cognitive skills of the individual prior to or during the initial diagnostic evaluation, the diagnostician should refer to a qualified professional who can complete standardised testing as part of the assessment for intervention planning [5, 27, 30].

Activity related and character strengths

- In-depth assessment to develop a profile of strengths and weaknesses [48].
- The completion of a thorough assessment of the individual’s strengths, skills, impairments and needs will still provide

	<p>benefit for continued support and management, even when the ASD evaluation outcome is uncertain [28].</p> <p><i>Environmental facilitators and barriers</i></p> <ul style="list-style-type: none"> • Functioning can be evaluated and compared across multiple settings through instruments with several versions (e.g. parent and teacher) [27]. • Assessment of sensorimotor function/sensory profile is important for treatment planning [28, 30]. • Circumstances / abilities likely to impact on participation in life experiences, such as intellectual ability, learning style, academic skills, speech language and communication skills, fine and gross motor skills, adaptive behaviour (includes self-help skills), socialisation skills, mental and emotional health, physical health, nutrition sensory hyper- and hyposensitivities should be assessed to future support and management [28] • Challenging behaviour (including triggers and maintenance factors), impact of physical environment (including impact of any physical or sensory differences) and social environment (including relationships with family members, partners, carers and friends and communication within these social circumstance), should be part of a functional assessment [29]. • Unstructured, 'real-life' observations can inform functional assessment [4]. • Setting impacts on individual function and should be assessed (such as education and employment setting) [4]. • Personal and social functioning is an important consideration in assessment and educational, occupational and housing should be addressed [29]. • Changes to environment, routines or personal circumstances require close monitoring [27, 29].
Online submissions	<p><i>History</i></p> <ul style="list-style-type: none"> • Consider trauma history. ADOS may be used to gather information, but diagnosis decision to be made through discussion by the clinicians who have observed the child, against DSMV criteria. • Collecting extensive history (esp. for adults). <p><i>Activity related and character strengths</i></p> <ul style="list-style-type: none"> • Need to consider recognising what coping strategies are being used to cope and mask challenges - those self-taught and gained through therapy. • Should assess individual strengths. • Assessments that profile characteristics/strengths/deficits across multiple domains. <p><i>Environmental facilitators and barriers</i></p> <ul style="list-style-type: none"> • Too often interventions focus solely upon changing individual's processing, cognitions, behaviours, without addressing relationships and environments. • Should assess the level of support their carers and families are providing to achieve the presenting level of needs / strengths. <p><i>Support needs</i></p>

	<ul style="list-style-type: none"> Assessments identifying support needs are an important consideration. Some individuals on the spectrum have profound or complex needs. Should assess individual needs.
Workshops	<p><i>Activity related and character strengths</i></p> <ul style="list-style-type: none"> The ASD assessment process should include a strengths assessment (e.g. assessment of an individual, familial and broader contextual strengths, resources and/or supports). Support that the ASD assessment should focus on identifying for the individual (and if appropriate their caregivers) the strengths and resources. <p><i>Environmental facilitators and barriers</i></p> <ul style="list-style-type: none"> If in clinical setting: need to gather information from across a range of environments e.g. school; work; TAFE/uni; home (two or three settings). Assessment across multiple settings and gathering information from multiple settings leads to a more rigorous diagnostic process. <p><i>Support needs</i></p> <ul style="list-style-type: none"> The process needs to take the problem as the family/individual sees it. When it comes to adults, families often have different priorities and the needs of the adult are still often suppressed in those situations. I-CAN support needs/functional assessment can be used.
Delphi surveys	<ul style="list-style-type: none"> Round 1 agreement that information should be collected during the ASD assessment process on the topic of: <ul style="list-style-type: none"> Medical / health history (e.g. prenatal, perinatal, past and current physical, developmental, intellectual and mental conditions) Developmental history (e.g. how the individual being assessed for ASD has presented during their lifetime in terms of global functioning, meeting a range of developmental milestones and regression) Family history (e.g. nuclear and extended family with ASD or other relevant medical, developmental, neurologic or psychiatric disorders) ASD specific symptoms (i.e. social communication and restricted, repetitive patterns of behaviour) Other relevant symptoms (e.g. symptoms that indicate that further investigations are required, a co-morbid condition may be present, a differential diagnosis should be considered or functional limitations are present). Round 2 agreement that during a Tier One diagnostic assessment, information should be collected on the individual's medical / health history, developmental history, family history, autism specific symptoms and other relevant symptoms.

Medical/Health history

- Medical and health history may help when it comes to differential diagnosis and forms part of a comprehensive assessment.

Family history

- We know ASD has a genetic link and a knowledge of family history can assist with the assessment process.
- Family history is usually looked at with any diagnosis of illness I have been involved in with my own family so I assume this would also apply to ASD.
- Given ASD is most often genetic it makes sense to ask about family history. Many parents will self-refer after having their child diagnosed as they recognise the traits within themselves.
- The unfolding genetic testing and exploration is likely to end up with a diagnostic DNA test in at least some cases, but that may be 10 to 15 years away. The medical history and examination pertaining to other family members is important, or mouth swab for DNA should become part of the diagnostic assessment to allow the fulfilment of that potential contribution to research and diagnostic certainty.
- Diagnosis decisions should also consider family presentations (behavioural and neurological) of ASD, history of other family members.
- History
- Best practice.
- This is important but not always readily available.
- I think that this is important, but less important than some other areas.
- Sensitive around this area.
- Can prejudice assessment.

Developmental and educational history

- These dimensions (relevant a history of abuse, trauma, learning disability, attachment issues, possible FASD, speech issues, sensory deficits or sensitivities) will increase the complexity of the assessment and in a 3-tiered system result in the need for a higher tier assessment.
- This is vital to understanding the child, adolescent or adult's early history. It cannot always be obtained - especially with older individuals. If it can easily be obtained it may well provide important information which will inform the diagnosis and the intervention. Nonetheless assessment can proceed without it - should it no longer exist which is particularly the case for older individuals.

ASD specific and other relevant signs and/or symptoms

- I think that the most important aspect when it comes to collecting information for ASD assessment is that information is collected about all diagnostic criteria and that there is some standardised information obtained.

Activity related and character strengths

- Round 1 partial agreement that the ASD assessment process should include a strengths assessment (e.g. assessment of an individual, familial and broader contextual strengths, resources and/or supports).
- Round 2 agreement that the ASD assessment should focus on identifying for the individual (and if appropriate their caregivers) the strengths and resources.

Environmental facilitators and barriers

- Round 2 agreement that the ASD assessment should focus on identifying for the individual (and if appropriate their caregivers) the supports and accessible environments.

Support Needs

- Round 1 partial agreement that the ASD assessment process should include a support needs assessment (e.g. to determine what assistance the individual and/or their family members need to live a successful life in society).
- Round 2 agreement that the ASD assessment should focus on identifying for the individual (and if appropriate their caregivers) the expressed and observed needs.
- Support needs are the most important aspect to parents and the child / adult.
- This is clearly essential for assessment for intervention. Assessment for intervention planning should be based on the family/individual goals and assessment should not involve 'blanket' assessments but targeted to identify the current level of functioning in an area the individual/family are keen to address.
- A focus on support needs recognises the daily and ongoing role of family members and the level of support they are required to give. This is probably underestimated or not openly discussed when there is a focus on therapy goals for early intervention.
- The day to day challenges for families of children with autism may relate to limitations to parent employment, running a household, adequate rest for carers, particularly if there are overnight support needs, and enjoying time as a family outside of the home environment and therapy sessions.
- This should be part of the overall assessment in determining what the nature of the support needs are.
- The needs assessment should also focus on determining the early priorities for intervention, so that the child can move from this assessment into treatment.

Viewpoint surveys *History*

- Asking about medical, family, and developmental history was rated highly by all viewpoints.

Activity related and character strengths

- Focusing on the strengths of the person being assessed was ranked as having high importance to one viewpoint, assessing the strengths and resources of the person being assessed and their parent/carers was of neutral importance to all viewpoints.

Interviews	Not applicable
Feedback	Not applicable

Evidence Table 24: Assessment of Functioning (Information)

Evidence source	Details
Recommendation	<p>It is recommended that information be collected during an Assessment of Functioning through a variety of means, including:</p> <ul style="list-style-type: none"> – file review of existing assessment reports – interview with the client – observation of the individual undergoing assessment – administration of standardised and non-standardised assessments as required – communication with other professional(s) as required.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of collection information through a wide range of means, and there was excellent support from experts for these approaches.
Scholarly literature	<ul style="list-style-type: none"> • ‘Parents possess a key piece of the diagnosis and their experiences with their child with Asperger Syndrome needs to be consulted.’ (p111, Level III, Quality 95%, [18]). • ‘The primary healthcare providers, school teachers, and all practitioners need to be involved in identifying the early signs of Asperger Syndrome. These are the professionals in the forefront of hearing the concerns of parents and in working with children’ (p112, Level III, Quality 95%, [18]). • When the individual on the autism spectrum is not present, it was easier for families to express a greater level of description of the behaviours that they had witnessed and experienced (Level III, Quality 90%, [59]). • Clinicians need to be sensitive to the needs of the parents with a child on the autism spectrum and should focus on helping the family cope with their child (Level III, Quality 73%, [53]).
Other guidelines	<p><i>File Review</i></p> <ul style="list-style-type: none"> • All relevant records should be reviewed [27]. • Topics to be considered in file review: <ul style="list-style-type: none"> ○ should be ASD specific and include any background information that may aid in differential diagnosis [27] and [4]. ○ child family/ caregiver history including 3 generations [4, 5, 35]. ○ medical history including well child developmental records (including milestones) and birth records and newborn vision / hearing screening ○ whether the individual has had previous / receives current services and relevant assessments / reports from these [35]. ○ previous screenings and diagnoses / medical evaluations / specialist evaluations, results and reasons for these [4]

- medication history
 - school assessments / reports / education progress / behavioural reports
 - documented observations
 - previous and current behaviour and functioning
 - records of early development (e.g., videos or notes) [4, 29].
 - evidence or parent report of physical or sexual abuse or other traumatic experiences [4].
- A file review can prevent duplicate testing.
- File review should ideally be completed prior to the child's evaluation to allow for more focused questioning / assessment when face-to-face.
- The amount of prior information often is dependent on the age and functioning of the individual
 - younger children typically having had fewer encounters with professionals [27].
 - children who have significant impairments (e.g., motor, sensory, etc.), including those with risk factors for a developmental disability (e.g., premature birth, birth complications, substance exposure) are more likely to have extensive records [27].
 - older individuals may not have a developmental history, but similar information could be sought from a parent, sibling, or any person who knew the individual well as a child [4].
- Parents can facilitate clinician access to information by maintaining a file of documents relevant to their child's development to eliminate the turnaround time required to obtain records from third parties.

Observation

- Observation of an individual to directly assess the presence of behaviours consistent with ASD is a core component of ASD evaluation [5, 27, 28, 35].
- Necessary to:
 - to identify deficits that parents may not report because of their unknowing compensation [27].
 - allow observation of patterns of interaction with family and unfamiliar adults [3].
- Considerations for direct observations:
 - should evaluate the individual's behaviour in structured and unstructured situations (and may or may not include standardised tools) [3, 4, 27, 28].
 - should involve situations aimed purposefully to observe specific behaviours relating to ASD descriptors [27, 28, 30, 35].
 - Assessors should ascertain whether the observed behaviour is representative of the individual's typical behaviour. If observational assessment in the structured clinic setting is not representative of the child's typical

- behaviour, input from others and/or observation in the individual's typical environments is necessary [5, 27, 30].
- Ideally, observations should be taken across multiple familiar settings [3, 4, 30].
- Structured observations may be limited by noncompliance and elicit atypical behaviours because of unfamiliarity with materials and difficulty with changes in activity and interactive partners [27].
- Ample assessment time and potentially multiple assessment sessions should be allowed for direct observation and interaction [4, 27].
- Motor stereotypies or other repetitive behaviours or unusual interests may not be observed in the course of a single evaluation and hence information regarding this may rather be reported from parents / caregivers [27].
- If appropriate, direct behavioural observation includes an interview with the individual [3, 27].
- Direct observation still involves interpretation in the context of age, developmental level, level of engagement and cooperation [27].
- The interview setting should include a selection of toys for children at a range of developmental levels – sensory, functional, symbolic and so on [3].
- Eliciting clinical evidence of ASD requires the professional to have substantial clinical experience but may be completed by a range of disciplines with necessary training and expertise [4].

Client Interview (Caregiver)

- Themes to parent/caregiver/family value:
 - A number of international guidelines recognise the expertise of parents about their children and assert their critical importance to the ASD diagnostic process and recognised them as 'partners' in the diagnostic evaluation [5, 27, 30].
 - Consultation with individuals (other than parents) who care for or who have regular contact with the child undergoing evaluation is also recommended [30].
 - In ASD evaluations of adults it may not always be possible to access parents or others familiar with the individual's developmental history, however the diagnostician should attempt to involve a family member, partner, carer or other individual as an informant or seek documentary evidence of childhood development such as school reports [29].
 - Parents should be well informed as to why certain information is being gathered (particularly as some medical and psychiatric questions may cause discomfort) it's clinical necessity and implications for accurate diagnosis [27].
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- Information gathered from caregiver interviews is confidential and should only be provided with consent and when clinically relevant [27].
- Requirements of the diagnostician conducting the caregiver interview:
 - The lead diagnostic clinician must possess [27]:
 - exceptional skills in interviewing / interpersonal skills; including relieving interviewee's anxiety or uncertainty, open-ended questioning, ability to deliver formal protocols so that they appear more informal and relaxed, ability to interview flexibly such as reframing the wording of questions to increase comprehension.
 - a respectful regard for parents and caregivers as essential partners in the diagnostic process
 - an ability to interpret interview question responses within the framework of typical development and knowledge of individual family characteristics,
 - an ability to interpret interview data,
 - familiarity with developmental manifestation of the disorder at different ages.
- Elements of the caregiver interview [5, 27]:
 - be comprehensive
 - conducted in the parent's primary language
 - be in a setting that is comfortable and relaxed for interviewees
 - may be informal or guided by semi-structured or structured tools
 - should be specific to the age of the individual and interpreted within the context of typical development
 - reported behaviour should be validated by direct observation
- Outcomes of caregiver interview requires interpretation in the overall individual context [27].
- Components of a caregiver interview: Past and present behaviour included across items relating to features of ASD/formal diagnostic criteria (DSM-V/ICD-10)) [5, 27, 28, 30].
 - Item relating to broad diagnostic and family: reason for/ source of referral, family concerns, date of first concerns, caregivers goal(s) for the individual, broader family goals, education history, intervention history (response to previous intervention), family social history (substance abuse, incarceration), the impact a diagnosis of ASD may have on the family, including the family's ability to accept a diagnosis of ASD, family strengths and weaknesses, and the family's resources
 - Items relating social reciprocity, relationships and communication: social interaction skills; patterns of attachment to caregivers; engagement in reciprocal social games (e.g., peek-a-boo) or exchanges (e.g., conversation); emotional reciprocity such as shared enjoyment and empathy; social approach and response;

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- and interest in peers and/or siblings.; communication skills (e.g., communicative intent); play skills including pretend and interactive play; aggression,
 - Items relating to non-verbal: social use of nonverbal behaviours such as eye contact, facial expressions, and gestures; reciprocal use of nonverbal communication to compensate for delays in spoken language
 - Items relating to restrictive/repetitive behaviours and routines: any restricted/ atypical interests or repetitive behaviours (compulsion or rituals); motor stereotypes; any stereotyped or idiosyncratic use of words or phrases.
 - [Parent/caregiver report in this [restrictive/repetitive behaviours and routines] domain is particularly important because restricted interests and repetitive behaviours may not be demonstrated during brief clinical observations]
 - Items related to sensory: self-injury; unusual sensory interests or aversions.
 - Items related to medical family history: pregnancy and birth history, early development and milestones (including speech language and motor development), any history of regression (including skill loss or behavioural deterioration), medical history (including history of any seizures, hearing or visual impairments, acquired brain injury, allergies, immunization history), sleep difficulties, diet, any history of developmental disabilities in the preceding 3 generations (this may be important for indicators that genetic tests are warranted - may assist in differential diagnosis) including autism (current research clearly indicates a genetic component associated with ASDs, in addition to related developmental disabilities), genetic conditions, learning problems, mental (including anxiety) and medical health, alcohol/substance abuse and behavioural problems in family members. ** Medical Evidence Table?
 - Items relating to overall functioning: adaptive skills and current level of functional independence

Administration of standardised and non-standardised assessments as required

- Essential elements of a diagnostic assessment is a comprehensive medical examination [5].
 - The use of standardised tools (whether for data collection of ASD behaviours or the intellectual, adaptive and cognitive skills of the individual) is preferable but not essential, such as when a clinician with expertise in ASD documents atypical behaviours strongly indicative of an ASD in addition to delays in communication and social skills [3–5, 27, 28, 30, 31].
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- Occupational therapy assessment should be considered where relevant, particularly with the DSM-5 criteria including hyper- or hyporeactivity to sensory input within its diagnostic criteria [4].
 - Individuals diagnosed with ASD should have a comprehensive evaluation of their speech and language and communication skills by a speech pathologist for appropriate treatment planning [4, 30, 35].

Communication with other professional(s)

- Assessment for intervention planning requires involvement of professionals representing multiple disciplines [27].

Online submissions

- Careful consideration should be given to ensuring that there is a gold standard of assessment with flexibility for variation on the discretion of trained experienced clinicians (dependent on presentation, parent/carer report etc.).

File Review

- The assessment should include blood tests to identify genes, maternal health, child's health, tests regarding communication, sociability, habits and behaviours, eye tracking & constipation information.
- Diagnosis decisions should also consider family presentations of ASD, history of other family members.
- Diagnosis should take into account family history of behavioural and neurological characteristics.
- Prior developmental assessment should be provided.
- Historical evidence of criteria met/not met.

Client Interview (Individual)

- So, personal I feel the best way diagnose a child is with personal interaction with child by professional diagnosing child and with three professional agreeing in a multidisciplinary team.
- Interview with parent/guardian or individual to gather ASD history and observations/ play/ social session with individual.
- Assessment should include interview and observation of behaviours; and participation in conversational interaction, not just formal testing of language/ cognition.

Client Interview (Caregiver)

- Input from others beside the parents and allied health - i.e. teachers, sibs, other family members or friends.
 - Video footage taken and kept as diagnostic and baseline data.
 - The dx results give more individual information about the specific behavioural features of that person's ASD so the family and school could really understand what they are seeing in the child are behavioural expressions of the disorder. We still hear, in 2017, 'I know they have autism, but what about their behaviour?'
 - Parents given a 'Where to from here?' information pack, like the 'First 100 days' document used in the US was mandatory
 - Get history of behaviours and traits from parents/caregivers.
 - The perspective of parents and the autistic child should be paramount as many symptoms are internal (sensory or ways of
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viewing, interpreting and thinking about the world) and not always observable to others (i.e., teachers).

- Assessment information would best be collected in interview form. If necessary, use forms for parents/teachers but these aren't as good quality as most don't fully understand the questions and you miss the nuances in responses.
- Interview with parent/guardian or individual to gather ASD history and observations/ play/ social session with individual.
- Make sure you interview adults with Autism, and their family members.
- Information should be collected from the primary care giver, teachers either through questionnaire or direct interactions, allied health reports.
- 'assessment' should be in consultation with the parent
- Assessments should include information from family members
- Report from Parents
- parent/family interview/involvement
- history from multiple sources to ensure symptoms pervasive.

Administration of standardised and non-standardised assessments as required

- ADOS may be used to gather information, but diagnosis decision to be made through discussion by the clinicians who have observed the child, against DSMV criteria.

Communication with other professional(s)

- It is essential that a medical professional be involved in all assessments as part of differential diagnosis and review of general health. At a minimum this should be a GP, however my preference would be for a Paediatrician for children.
 - The assessment should include blood tests to identify genes, maternal health, child's health, tests regarding communication, sociability, habits and behaviours, eye tracking & constipation information.
 - physical considerations such as asthma, muscle tone, psoriasis, eczema, ticks
 - Consider trauma history.
 - Collecting extensive history (esp. for adults).
 - Information should be collected from ALL the team – parents, educators, speech therapists, occupational therapists, colleagues and be considered of equal importance.
 - 'assessment' should be in consultation with the school teacher, psychologist and the paediatrician to get a whole view of the child.
 - Assessments should include information from teachers, social workers
 - from school/general practitioner/other medical specialist.
 - Background information collected via questionnaire from school/childcare/other 3rd party.
 - preschool/day care feedback
 - Paediatricians/psychologists who have verbal conversations with educators will gain superior insight into the individual.
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	<ul style="list-style-type: none"> • history from multiple sources to ensure symptoms pervasive. • A second source i.e. other than a parent should provide information too.
Workshops	<ul style="list-style-type: none"> • Multiple sources of information. • Multidisciplinary assessment is very helpful for assessing function.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that information should be collected during the ASD assessment process through: <ul style="list-style-type: none"> ○ File review of existing documents written by other professionals ○ An interview with the carer of the individual being assessed for ASD ○ An interview with the individual being assessed for ASD ○ Observation of the individual being assessed for ASD ○ Medical evaluation of the individual being assessed for ASD. • The structure should not rely entirely on parent report or self-report. <p><i>File Review</i></p> <ul style="list-style-type: none"> • I do think that professionals should consult other sources of information (e.g. past reports, therapists working with the individual etc.) so that they have a comprehensive picture of the client's presentation. • I think that it is essential that clinicians review all past information prior to conducting an assessment- means that they have a more complete picture of the individual, gain information about the individual in multiple settings, and avoids repeating assessments etc. that have already been done. • It is important to have face to face (or telephone) discussion with all professionals involved (where consent is given). • The diagnosis may already be confirmed in the practitioner's head before seeing the client. It would be more objective to see the client, complete the assessment and then consult the other documents. • Assessment without this would be fraught. • Usually essential but may not be necessary in obvious cases. • Can prejudice the assessment. • This assumes that all families and individuals are happy for this to occur, which is not necessarily the case. • This is not my area of expertise however it seems common sense to collect all relevant data. • In my experience, so much of the previous record collecting and assessment information often fails to correctly identify the issues that are most pertinent to ASD. (For example, `red flags are often missed). Or, the most appropriate assessments to answer questions related to ASD have not been undertaken. • File review ensures that assessments can be more efficient and don't double up on assessments or observations that have already been conducted.

- There are some who are obvious and do not require multiple informants, but sensory deprivation can make even this group tricky.
- If needed and relevant. No different to other conditions - simply a case of good professional communication to prevent medical mishaps
- Clients should not have to recall details of history multiple times. this information should be shared by professionals.
- This is helpful to establish symptom presence and severity over time and in multiple settings.
- This should never be used without viewing the person and their parent or carer for a child.
- For adults, it may be these which provide vital information about the earlier years particularly those in the developmental period.
- Mandatory yearly paediatrician reviews.

Observation

- Functional, non-standardised assessing and observations are an essential component. many people with ASD may perform well on standardised testing, however, it is their functional qualitative performance which is impaired

Client Interview (Individual)

- The individual being assessed MUST be seen by the assessor(s). Interview is not possible in some circumstances such as very young children and not when the individual does not have the cognitive and/or language capacity for such interview. However, for all others interview should be attempted. The amount of information gathered from the individual will increase as their age increases.
- it is helpful to include older children (usually 14 plus) in the assessment of criteria as they have a very important current and past perspective. Adults are almost always included in the interview. Adult and older adolescent assessments take a different form and the provision for this is very important.
- I think that it is essential that the clinician spends time with the person being assessed. Exactly what this looks like, and the types of questions asked, would depend on the individual's age and developmental level.
- Depends on the age and intellectual capacity of the child. Talking to the child is very important because it gives you a firsthand experience of the child's verbal social and pragmatic functioning.
- This would depend on the age of the individual. Agree for adolescents and adults although this is not my area of expertise.
- Especially important for adolescents and adults suspected of having an ASD.
- 'Interview' tailored to age / communicative ability. Combination of standardised and unstructured interaction.
- Where possible (given age, communication ability).
- Even when the person has limited communication abilities an attempt should be made.

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- Unless it would be traumatic for the individual or of no benefit.
 - Don't normally 'interview' children, though interaction with them (verbal, play) is an important part of assessment.
 - It may be observational rather than interview.
 - Where appropriate I think here. I am thinking about the interview components of the ADOS for all ages. More comprehensive case history interview should also be conducted with adults if possible.
 - This depends on several factors such as the age and level of functioning of the individual, communication skills etc.
 - If it is adult and capable of providing information.
 - Presumably this is dependent on the age of the individual as well. e.g. it is not relevant to 'interview' a 3-year-old, but observational assessment would be.
 - It is essential that some time is spent observing the individual, either in a structured way or during informal observations. Not all individuals would be able to complete an interview, but it should be conducted when possible.
 - Only if age and communication allow.
 - Depends on person being assessed and level of communication.
 - If it is adult and capable of providing information.
 - An interview could only help.
 - I have been horrified mainly in the NT but also in rural and remote WA that children and adults who need services which are not available in their locality, but which could be provided effectively (at say 75% value of face to face in person) are not eligible for the services because of bureaucracy which requires ALL treatments to be in person.

Client Interview (Caregiver)

- This should comprise part but not the entire assessment.
 - Ideally, I think that parents/carers be involved in all assessments (even adult assessments) as early history is important when making diagnostic decisions around ASD.
 - May be relevant for adults in some cases.
 - May not be necessary in adults, depending on level of cognitive functioning.
 - Back ground information about life at home should give a picture of behaviour.
 - May require an interpreter or support person.
 - Not sure how this works in the adult world where it may be harder to find an intimate enough friend or relation to report on behaviours, responses etc. especially if the adult is a poor communicator. I dare say this also throws up privacy issues.
 - Carers should be considered experts in the development of their child. Too often concerns are ignored with a 'wait and see' approach leading to significant delays in diagnosis and service provision.
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- Carer interview, and comprehensive interview, is important, gives the carer a chance to report concerns and observations and gives an overall impression of the young person.
- For adults with ASD Level 1 seeking a diagnostic assessment, there may not be a carer. However, this should not be a reason not to conduct a diagnostic assessment.
- For children, an interview with the carer is very important in terms of gathering information about the now and about when the assessed individual was younger. The carer is always vital to determining what are the needs of the individual being assessed and what has been already done.
- An assessment should take place with one team member interviewing the parents/carers whilst another play with and observe the child.
- A critical component in ASD assessment is how the individual functions in a peer group setting - hence input is required from professionals/carers who have experience of the individual in this setting.

Communication with other professional(s)

- Medical information is very important if the assessment is simple then past reports may be adequate to inform the assessment. For complex assessments, which include neurological and physical issues this input is very important. Medical input is required for complex assessments.
 - The assessment should include blood tests to identify genes, maternal health, child's health, tests regarding communication, sociability, habits and behaviours, eye tracking & constipation information.
 - The diagnostic process should include written reports, video footage and coming from strengths as well as areas of challenge - physical considerations such as asthma, muscle tone, psoriasis, eczema, ticks and sensory profiling as well as rigidity of thought, speech delay (social context and appropriate social reciprocal speech should also be considered) and fixated interests.
 - I believe that this is helpful, but not essential. However, if the child/individual is presenting with specific medical or genetic related concerns then I think that it would be very important to consult a doctor. In other words, it would be important in some cases but not others.
 - I believe that a medical assessment be conducted prior to structured ASD assessment.
 - This should be done by the paediatrician before referral for full ASD Assessment at their discretion.
 - Surely this is part of the paediatrician's assessment and would be done as a part of their process and at their discretion.
 - To rule out other diagnoses.
 - Needs to be done before the assessment is even scheduled to rule out the presence of a neurological or physical disorder.
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	<ul style="list-style-type: none"> • Clinical observations for posture, motor planning, righting reactions, sensory modulation (e.g. gravitational insecurity) can be identified in these assessments. This helps to identify triggers for behavioural avoidance. • A critical component in ASD assessment is how the individual functions in a peer group setting - hence input is required from professionals/carers who have experience of the individual in this setting. • Fundamental information. • I don't think this necessarily must be done at the time of the assessment, could be done before. • I typically recommend genetic testing to rule out/identify the presence of any possible genetic conditions. • When relevant or needed. • We should be quite sophisticated about the diagnosis now using iPhone eye-motion apps and genetic testing. • This could be collected by someone who was not an expert using a standardised collection tool. To speed assessment process. • In the case of Adults, this type of exam may be indicated but is best recommended on a case by case basis.
Viewpoint surveys	Observation of the person being assessed was rated highly by one viewpoint and interviewing both the person being assessed and interviewing parent/caregivers were both rated of high importance by two viewpoints.
Interviews	Not applicable
Feedback	Not applicable

Evidence Table 25: Assessment of Functioning (Information)

Evidence source	Details
Recommendation	It is recommended that the use of standardised assessments that cover a broad range of developmental domains (e.g. cognitive, language, social-emotional, motor and adaptive behaviour) be strongly considered for the Comprehensive Needs Assessment.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of collection information through a wide range of means, and there was excellent support from experts for these approaches.
Scholarly literature	'Professionals perceived the use of standardised tools as very helpful' (p. 300, Level III, Quality 73%, [16]).
Other guidelines	<ul style="list-style-type: none"> • Modifications to assessment procedures are needed, so that adults with autism could receive the most effective care [29]. • Clinical assessment, standardised measure use and consultation need varies depending on individual presentation and the lead diagnostician's clinical competence/judgement [27], • The use of standardised tools (whether for data collection of ASD behaviours or the intellectual, adaptive and cognitive skills of the individual) is desirable/preferable but not essential for a diagnosis of ASD in all cases, such as when a clinician with expertise in the area of ASD documents atypical behaviours strongly indicative of an ASD in addition to delays in communication and social skills [3–5, 27, 28, 30, 31]. • It is the responsibility of the lead diagnostician to determine the complexity of the individual's presentation and hence to determine the level of evaluation required to provide sufficient evidence to support a diagnosis of ASD (methods, instruments and level of consultation with others) [27]. • Diagnosticians should consider the individual's and family's perception of completeness of evaluation and hence confidence in the diagnosis. The tier of evaluation should be elevated if concerns are raised regarding the thoroughness by the individual and/or family [27]. • At Tier 2, Diagnostic evaluation completed with the use of at least one standardised tool • Research has shown that using standardized behavioural observation instruments increases diagnostic accuracy in clinical settings [5, 27] particularly when the individual's presentation is mild or complex [27].
Online submissions	Careful consideration should be given to ensuring that there is a gold standard of assessment (e.g. ADOS, ADIR, observation in other settings) with flexibility for variation on the discretion of trained experienced clinicians (dependent on presentation, parent/carer report etc.).

	<ul style="list-style-type: none"> • Flexibility of diagnostic tools and process, for example diagnosis conducted over several sessions • There should be a required (appropriate) mixture of interview for information, assessment tools (ADI-R, ADOS-2) and observations. • Assessment should include social, developmental, educational, and cognitive assessment if possible. The diagnosis is guided by DSM5 criteria and ADOS or play session. • This includes: <ul style="list-style-type: none"> ○ Medical, family, developmental and behavioural history of child, specifically relevant to DSM-5 criteria ○ Medical examination, vision and hearing screening ○ Information gathered from playgroup, early childhood setting, school or other professionals known to the child ○ Structured behavioural observation in naturalistic setting (home, school) ○ Assessment of overall development, language, cognition and adaptive functioning ○ Family assessment to identify parental knowledge of child development and behaviour, family's strengths, systemic stresses and available resources and supports • Examples of assessments used: 1) ASD: ADOS-2, ADI-R, DISCO; ADEC; SCQ; AQ. 2) Cognitive: Mullen Scales, Bayley Scales, WPPSI-IV, WISC-V, WAIS-IV; 3) Adaptive: VABS-3. • It is noted that a 'tiered' response is being considered but, in relation to 'complex cases' there are concerns regarding how this is identified, what it means for families/individuals who undergo a different assessment process (with possibly different costs) because an individual is 'complex' compared to another individual.
Workshops	<ul style="list-style-type: none"> • Understanding the family/individual perspective is a challenge, however, they must be recognised when completing the ASD assessments. These assessments should be tailored to suit the individual's needs, however must be kept evidence based. • Person centred assessments. • The clinical skills are needed to tease out the symptoms of autism from co-occurring or related conditions.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that the guideline should include: <ul style="list-style-type: none"> ○ Hearing assessment (e.g. screening test or full auditory evaluation) ○ Developmental assessment (e.g. ability to meet expected developmental milestones related to motor and social-emotional domains) ○ Communication assessment (e.g. speech, language, social communication and social interaction) ○ Adaptive functioning assessment (e.g. extent of independence and functional capacities of the individual to perform everyday tasks)

- Behavioural assessment (e.g. challenging behaviour which falls outside the range of expected age-appropriate behaviour).
 - Round 1 partial agreement that the autism assessment process should include a:
 - Neurological and physical examination (e.g. measurements, abnormalities, dysmorphic features, neural function)
 - Cognitive assessment (e.g. intelligence tests, learning capability, cognitive strengths / weaknesses)
 - Mental health assessment (e.g. psychiatric screening or diagnostic tool to identify the presence of a range of mental health symptoms or conditions).
 - Round 2 agreement that during a Comprehensive Needs Assessment, an adaptive functioning, strengths and support needs assessment should be conducted.
 - Client and family centred approach is key, for any assessment and clinical work, not just ASD assessments.
 - Each ASD case is individual and the client will have their own requirements, therefore, should be diagnosed accordingly.
 - Referrals to psychologists, speech pathologists +/- other allied health and educational professionals for assessments in respective areas of expertise are required in more subtle or complex cases.
 - All developmental and psychiatric assessment of behavioural concerns in children should have an appropriately tiered assessment process to reduce time and money wasted on unnecessary assessment for cases who are simple and clear-cut (either ASD easy to diagnose or rule out), to reduce the already long waiting times for those with sufficient expertise to perform such assessments.
 - These tools are time consuming and expensive and should be used when indicated only in complex assessments where maximum information is required.
 - Given the expense of training and kits, accessibility is an issue for many families, especially given more complex assessment may require costs associated with OT, Speech, and Psychology observation assessments.
 - Standardised tools are essential to ensure assessments are reliable and valid.
 - Standardised tools can be very helpful but are not always required in clinical practice.
 - Clinical skill is the paramount measure. Other measures are not necessarily reliable but can be used to bolster clinical judgement
 - As determined by the clinical judgement of the professional involved upon the presentation of the individual being assessed - may not all be able to participate in a standardised assessment.
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- There is currently an over-reliance on these tools that are not meant to provide an 'official diagnosis' on their own. (Unfortunately, all too often the results are misinterpreted by inexperienced clinicians across all groups). Rather they are valuable tools that can be used to aid the assessment process.
- When making a diagnosis of ASD, it is important to make sure that enough evidence is collected to support the diagnosis (or non-diagnosis). However, exactly what is required does depend on the individual presenting for assessment. That said, I do believe that there should be some minimum standards that should be included in all assessments (e.g. ADOS +/- ADI-R)- it is just that other assessment components should be added/removed as appropriate depending on presentation (e.g. no need to assess for anxiety as a differential diagnosis if there are no symptoms of anxiety present).
- These tools would include speech assessment tools, sensory assessment tools, cognitive assessment tools, adaptive behaviour assessment tools, tools which assess mood (Depression, Anxiety, Stress) - these are needed to differentiate and understand the individual's mental health and how that interacts with other aspects of the individual, and personality tools - these are important also for differentiation in adolescents and adults in some cases.
- 'Standardised assessments should be used selectively and judiciously. May not require a standardised assessment i.e. if the child obviously has normal function then a formal assessment is a waste.'

Viewpoint surveys	The use of standardised assessments was rated of low importance by one viewpoint.
Interviews	Not identified
Feedback	Based on feedback received, the revised Guideline provides greater emphasis that standardised assessments of developmental and/or cognitive abilities are an essential element of the comprehensive needs assessment for children. Standardised assessments are important in facilitating a comparison of an individual's ability in relation to age-appropriate developmental and/or cognitive skills, as well as benchmarking performance for future follow-up assessments. However, there was also recognition that standardised assessments of cognitive function may not be appropriate for adolescents and adults undergoing assessment.

Evidence Table 26: Assessment of Functioning (Setting)

Evidence source	Details
Recommendation	It is recommended that the Assessment of Functioning take place in a setting where the client feels comfortable and confident to discuss their level of functioning and support needs. This may be in a clinic, community or telehealth setting. Information is to be collected about the individual's level of functioning in all relevant community settings, though it is not essential for the clinician to make direct observations at these locations.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of collecting information about a range of contexts, and there was excellent support from experts for this flexible process.
Scholarly literature	Not identified
Other guidelines	<ul style="list-style-type: none"> Information about an individual's skills and functioning should be gathered across a variety of settings [4]. Unstructured, 'real-life' observations can inform functional assessment [4]. Challenging behaviour, impact of physical and social environment should be assessed [29]. Assessment of an individual's functioning in a number of settings can be achieved through using standardized ratings scales with versions for different people in different settings (e.g. home or school) [27].
Online submissions	<ul style="list-style-type: none"> Assessments that are conducted over time and environments, and which profile characteristics/strengths/deficits across multiple domains. Settings requiring social participation, including observations from key people (parents/grandparents/teachers/allied health).
Workshops	<ul style="list-style-type: none"> If in clinical setting: need to gather information from across a range of environments e.g. school; work; TAFE/uni; home (two or three settings). Assessment across multiple settings and gathering information from multiple settings leads to a more rigorous diagnostic process.
Delphi surveys	<ul style="list-style-type: none"> An observation is essential, either at school or a social situation where the individual is familiar or if not possible with a parent or family member. It is important to see the individual in one and sometimes two natural environments. This is not necessary in simple assessments or where there is a large amount of information. Direct observation helps enormously with the more complex assessments.

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- I think that it is essential that the clinician spends time with the person being assessed. Exactly what this looks like, and the types of questions asked, would depend on the individual's age and developmental level.
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Viewpoint surveys	Not identified
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Interviews	Not applicable
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Feedback	Not applicable
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Evidence Table 27: Assessment of Functioning (Outcome)

Evidence source	Details
Recommendation	It is recommended that the Assessment of Functioning involve the following steps: <ul style="list-style-type: none"> – the identification and prioritisation of observed and expressed support needs – connection to appropriate services based on support needs where impaired functioning is identified, without the requirement for a clinical diagnosis of ASD.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of identifying and addressing support needs, and there was excellent support from experts for this process.
Scholarly literature	Not identified
Other guidelines	Not identified
Online submissions	Not identified
Workshops	<ul style="list-style-type: none"> • 'I-CAN support needs/functional assessment can be used.' • 'Inform support needs.' • 'For high functioning individuals who may develop strategies to mask their difficulties from the public eye and may not meet the criteria in the diagnostic assessment, they may still receive benefits from the identification of their support needs.' • 'As ASD is such a wide spectrum, every individual on the spectrum may have very different presentation and a diagnosis might not present those unique differences, an assessment identifying support needs can lead to individualised support.' • 'Support needs must be individualised and separate to diagnosis.' • 'Support needs not deficits.'
Delphi surveys	<ul style="list-style-type: none"> • '[Support needs are] the most important aspect to parents and the child/adult.' • 'I think that [support needs are] more relevant to intervention planning than diagnostic assessment.' • '[Support need] information (to some degree) will be highly valuable for individuals and parents/caregivers to take to their NDIS planning meeting. Currently, we identify the 'level of support' required as per the DSM-5 and provide a few examples, and some recommendations based on best available evidence.' • 'This should be done at a later stage post diagnosis. Families need some time to process the information regarding the diagnosis.' • '[Support needs identification is] part of wider information gathering and intervention planning process.'

- '[Support needs identification] would be ideal but not essential if there is a local service already involved.'
- 'Helpful for families and schools.'
- 'This would be relevant for intervention planning and consideration of goals for application for funding through the NDIS. A focus on support needs recognises the daily and ongoing role of family members and the level of support they are required to give. This is probably underestimated or not openly discussed when there is a focus on therapy goals for early intervention. In reality the day to day challenges for families of children with autism may relate to limitations to parent employment, running a household, adequate rest for carers, particularly if there are overnight support needs, and enjoying time as a family outside of the home environment and therapy sessions.'
- 'Functional ability is independent of intellectual ability, especially in older people.'
- 'What if there is no funding and no way of meeting these needs. Is it for research or to bludgeon government departments?'
- 'Even those with high IQ, often have high dependency needs.'
- 'I feel that this should come later and not necessarily as part of the diagnostic process.'
- 'May not be necessary at point of diagnosis - should be considered as part of planning with appropriate providers.'
- 'The extent of this process and whether it is formally undertaken will depend on the severity of the child's needs. It should be a routine component of paediatric assessment and management planning.'
- 'This should be part of the overall assessment in determining first what the nature of the support needs are and secondly what needs to be provided to improve or maintain the life and prognosis for the individual moving forward.'
- 'Support needs assessment should also focus on determining the early priorities for intervention, so that the child can move from this assessment into treatment.'
- 'I cannot imagine a situation where assessing for whether or not someone has an ASD does not involve evaluating their current strengths, challenges and support needs moving forward. Again, the fact that this question has arisen at all only further highlights the lack of adequate training of professionals to date.'
- 'The support needs should be individualized and be in the same report.'
- 'It needs to be left to the professional's discretion as to the needs/readiness of the individual /family/carer as to the timing and degree of the support needs - not all will be able to deal with this at the same time as a diagnosis.'

Viewpoint surveys Not identified

Interviews 'And I guess it's easier for people on the spectrum, who tend to have an average, or high IQ, to be adopting masking strategies, and there will be autistic individuals who really struggle with that, because their intellect is not at a point at which they can learn and

	adopt these strategies as well, so their support needs will be very different, as they grow as well.'
Feedback	<ul style="list-style-type: none"> • 'I applaud your inclusion of a Support Needs Assessment. When our daughter was diagnosed, scant information was provided on how to meet her support needs. While struggling with our own stress levels, it was indescribably difficult to access services when we didn't know where to start.' • 'Congratulations on including [Comprehensive] Needs Assessment in order to identify support needs, establish goals and link to the most appropriate support services. This is an excellent addition to the existing diagnostic process. Our own diagnostic process was isolating, depressing and unsupported. The [clinician] gave us our daughter's diagnosis at 6pm on a Friday night over the phone, with no offer of help or support or where to go next. This led to a long period of depression for me (primary caregiver) and a feeling of being lost, not knowing what services were available, which we needed to use, and subsequently our daughter missed invaluable early intervention and our family missed essential support, respite and funding that we could otherwise have accessed.' • 'The [Comprehensive] Needs Assessor can provide guidance on the type of supports that will assist the individual and/or their caregivers to address these prioritized support needs and goals through overcoming limitations / barriers and optimizing strengths / facilitators. Where required to access a service, the [Comprehensive] Needs Assessor can make a referral to appropriate service providers to ensure these supports are implemented.' • 'Over all, [organisation] believes this section of the guidelines has been very well thought through and developed. The guidelines also seem to suggest that it is up to the relevant professional to set specific goals. The [Comprehensive] Needs Assessment might indicate that a certain type of professional assessment is needed (e.g. speech assessment) but the speech therapist is given the flexibility to further identifying and prioritise specific goals for intervention. This flexibility is helpful as [organisation] would argue that the relevant professionals are well able to determine their own intervention goals in collaboration with their clients.' • '[Organisation] thinks that the suggestion that the [Comprehensive] Needs Assessment should identify whether the client needs to maintain current supports, increase supports, or have further supports added is praiseworthy.' • '[Organisation] strongly supports access to support based on function and support needs, rather than access based on specific diagnostic labels such as ASD.' • 'A comprehensive formulation should be developed, including details and outcomes of the ... [Comprehensive] Needs Assessment. This can then be used for multiple purposes, including development of a child and family centred management plan and determination of the level of support.' • '[Organisation] welcomes the recognition of this key aspect of assessment in relation to any diagnostic process. Function and

support needs should drive resource allocation in any service or model of care, as opposed to a specific diagnosis. A ... functional approach is essential for all who seek to provide important information about an individual's profile and/or need for specific services.'

Evidence Table 28: Assessment of Functioning (Outcome)

Evidence source	Details
Recommendation	It is suggested that when providing information to clients regarding services that may meet their support needs, clinician(s): <ul style="list-style-type: none"> – disclose to the client any financial or other conflicts of interest in service recommendations – provide information regarding a range of services available, where possible.
Grade	Consensus-based Recommendation, Grade 2
Rationale	A number of evidence sources consistently state the importance of minimising conflicts of interest, and there was excellent support from experts for this focus.
Scholarly literature	Not identified
Other guidelines	Not identified
Online submissions	Not identified
Workshops	<ul style="list-style-type: none"> • Conflict of interest emerged as a theme. • 'Difficulties with current [clinician] context around monopolies and conflict of interest.' • 'If there are specific tools, who decides what it is? Potential for some tools to generate lots of money – commercial implication?' • 'With service providers i.e. therapists and paediatricians gathering business together.'
Delphi surveys	Not identified
Viewpoint surveys	Not identified
Interviews	Not identified
Feedback	<ul style="list-style-type: none"> • '[A lack of rigour in the Diagnostic Evaluation] widens the possibility that an allied health provider may provide a diagnosis for an individual to access funding and in turn that individual may then use that funding within the same allied health provider's service, this is setting up multiple opportunities for conflicts of interest.' • 'We are concerned, particularly in the context of NDIS and private EI and therapy services shifting to more of a business/marketing model, that having a single allied health professional in [Single Clinician Diagnostic Evaluation] opens up a Pandora's box for potential conflict of interest downstream in the delivery of support and intervention. We recommend that safeguards are established to ensure the diagnostic process

remains independent and that ongoing monitoring for potential conflicts of interest is implemented.'

- '[Organisation] is very concerned about a number of conflict of interests which will arise from implementation of these guidelines. Firstly, the role of allied health diagnosticians who will then provide intervention and therapy: In all but large urban areas, there is a paucity of allied health providers. It is unlikely a family will be able to access two different professionals the first for the diagnostic process, functional assessment and support needs assessment and a second as the provider of the recommended intervention. This establishes a clear conflict of interests for those professionals. The role of the NDIA as funder and arbiter of the diagnostic process also presents a conflict of interest.'
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Evidence Table 29: Assessment of Functioning (Repeated Assessment)

Evidence source	Details
Recommendation	It is recommended that the Assessment of Functioning be repeated throughout the individual's life to ensure that changes to level of functioning and support needs are identified and acted on in a timely manner. Further assessment can be conducted as required by clinicians engaging with the client at the particular time.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of re-assessing support needs, and there was excellent support from experts for this process.
Scholarly literature	Not identified
Other guidelines	<ul style="list-style-type: none"> • Symptoms, impairment level and individual / family support needs will vary over time [27, 35]. • Professionals need to continuously work with individuals / families to monitor changes in behavioural presentation and symptoms, undertake n assessments as initiated. This is particularly important for transition periods [27]. • Professionals should remain involved in long-term support planning [35]. • Follow-up monitoring should be provided according to a schedule negotiated with the individual / family [27]. • Use of support services maybe sporadic [35]
Online submissions	<ul style="list-style-type: none"> • Any doubt child that child isn't on spectrum don't 'label' but observed over longer period. • Early years diagnoses without crucial education and support systems/plans in place, and early years non-ASD diagnosis that may need reassessment due to recent historical behaviours, flourish. • Autism behaviours change as a person becomes an adult. Certain repetitive physical behaviours as a child may change as the person matures into various repetitive mental behaviours. • A form of registry, where assessments can be registered, and some limits placed on alternative opinion seeking (e.g.; if a gold standard assessment has been conducted in which a clear opinion of not ASD is expressed, then a two-year period must elapse before another assessment can be undertaken).
Workshops	<ul style="list-style-type: none"> • Recommendations have a time limit and a review date. They should not be implemented after 12 months without a review. • Review process - Regarding diagnosis and assessment needs. • Some needs show up later, after diagnosis. • A recommended timeline should be devised for when to follow-up with client.

	<ul style="list-style-type: none"> • Clients need to be monitored to ensure they are progressing on the right track. • Review process regarding assessment needs. • Appeal system / second opinion. • Can you lose a lifelong illness? Or do functional needs change/diminish? • Fewer families coming back for confirmation diagnosis.
Delphi surveys	High functioning individuals may, with maturity, learn to minimise the impact of autism. There should also be the ability for individuals to be reclassified as 'autism - no longer affecting functioning' or something similar.
Viewpoint surveys	Not identified
Interviews	Not identified
Feedback	Not applicable

Evidence Table 30: Medical Evaluation (Professionals)

Evidence source	Details
Recommendation	It is recommended that a Medical Evaluation and investigations relevant to neurodevelopmental and behavioural disorders be conducted by a medical practitioner who holds general or specialist registration with the Medical Board of Australia.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of assessing clinicians having appropriate qualifications and registration, and there was excellent support from experts for this set of professional requirements.
Scholarly literature	<ul style="list-style-type: none"> Developmental paediatricians are a resource for an ASD diagnosis (Level III, Quality 75%, [50]). In the USA, a study conducted found that most paediatricians felt as if their training in developmental screening was limited (Level III, Quality 79%, [41]). In addition, 48% of paediatricians completing the survey, did not receive any ASD specific training as part of their practical placements (Level III, Quality 79%, [41]).
Other guidelines	<p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> Diagnostician can be a paediatrician [3, 27, 28, 48]. Paediatrician should be one of two first professionals to conduct ASD assessment [28]. <p><i>Medical Practitioners (Psychiatrists)</i></p> <ul style="list-style-type: none"> Lead diagnostician is a physician with ASD expertise [27]. The health care practitioners most likely to be able to diagnose ASD in young people and adults include: child and adolescent psychiatrists and adult mental health psychiatrists [3]. <p><i>Medical Practitioners (Neurologists)</i></p> <ul style="list-style-type: none"> Lead diagnostician should be a licensed physician with ASD expertise [27]. Paediatric neurologist should be one of two first professionals to conduct an ASD assessment [28].
Online submissions	<ul style="list-style-type: none"> Specific abilities provided by paediatricians: <ul style="list-style-type: none"> Medical evaluation Collate information from all sources Exclude other mental health or medical diagnoses that may overlap with ASD and often mimic its presentation <p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> Team should include paediatrician (some state required, others state if possible) for ASD assessments with children. Initial assessment by paediatrician suggested Paediatrician implied to be leader of team This includes either a fully qualified developmental paediatrician or paediatrician. <p><i>Medical Practitioners (Psychiatrists)</i></p>

	<ul style="list-style-type: none"> • Diagnosis should continue to be conducted by a multidisciplinary team, including a child psychiatrist in some teams. • Assessments must be conducted by a person able to diagnose via DSM-5 (including a psychiatrist). • Who should assess - qualified and experienced Psychiatrist • Psychiatrist one of only two suitable diagnosticians • Assessments should be undertaken by a team of experienced and qualified allied health professionals with a psychiatrist as a suitable inclusion.
Workshops	<p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> • Paediatrician is an appropriate member of a Diagnostic Evaluation team. <p><i>Medical Practitioners (Psychiatrists)</i></p> <ul style="list-style-type: none"> • All should be assessed by a one of two medical specialties (including psychiatrist), as a minimum.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that aspects of ASD assessments should be undertaken by a paediatrician or psychiatrist. • Medical screening to identify whether there are any genetic/medical factors at play • Assessment of aetiology requires paediatric training and expertise. • As a minimum ... there should be a medical professional in all assessments for diagnosis.
Viewpoint surveys	Not identified
Interviews	Not identified
Feedback	Not applicable

Evidence Table 31: Medical Evaluation (Professionals)

Evidence source	Details
Recommendation	It is suggested that a medical practitioner may receive assistance in collecting information for the Medical Evaluation from a nurse practitioner who holds general registration with the Nursing and Midwifery Board of Australia and is endorsed as a nurse practitioner or as a registered nurse with relevant experience as a clinical nurse specialist/consultant, practising under appropriate medical supervision.
Grade	Consensus-based Recommendation, Grade 2
Rationale	A number of evidence sources suggest certain nursing professionals can assist with Medical Evaluations, with most of the evidence consistently supporting this approach and good support from experts.
Scholarly literature	Not identified
Other guidelines	Not identified
Online submissions	<ul style="list-style-type: none"> • 'Who assesses: appropriate qualifications/experience including Nurse Practitioners authorised to assess, diagnose & treat people with ASD.' • 'Assessments should be conducted by allied and medical health professionals (... nurse, paediatrician, GP).'
Workshops	<ul style="list-style-type: none"> • 'Initial screen through mainstream/ community – GP's, community nurses.' • 'Professionals such as school nurses able to conduct screening tests.'
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that nurses are not appropriate to undertake autism assessments. • 'I think a multidisciplinary team should be involved in the assessment process - could include ... even a well-trained GP or C&FH nurse.' • 'Nurses would require further training and postgraduate level training would be appropriate.' • 'I have no experience with nurses interested in developmental paediatrics. I'm sure they could be valuable if interested and skilled in this area of practice.' • 'They have a role in triage and screening but not in assessment. So they can gather information before the child is seen.' • 'Aspects could be undertaken by a registered nurse trained in ASD assessments in the absence of a member of the ASD assessment team.' • 'Only if they have extra training.' • 'Community nurses in small rural communities are often pivotal players.' • 'Expertise is the relevant matter here. Nursing assessments may include supervised developmental and diagnostic

	<p>appraisals. I wouldn't rule them out. I think that the term 'could' rather than 'should' needs to be applied here.'</p> <ul style="list-style-type: none"> • 'The Registered Nurse can work with the GP to facilitate the care of these patients. The RN can spend time with the patient and parent assessing, planning, implementing and evaluating the care. The RN working with the GP can make sure the patient's needs are met, but also allowing the GP to participate in the higher-level skills, diagnosis and medications.' • '[If] the nurse has special training in child development.' • 'Nurses would be useful resources in rural and remote assessments and also possibly in assessments where conducting the assessment outside of the home is difficult. Trained nurses may well be able to contribute. Probably better to be Nurse Practitioner if available.' • 'Only if they have had specific training in this area. If so, they are well placed to have the time to spend completing these assessments.' • 'If they are trained in assessment they can contribute to the assessment as one of the clinicians but it shouldn't be a mandatory requirement.' • 'The Nurse Practitioner would need to acquire further training similar to the registered nurse if this was not covered in previous clinical experience. A program developed for GPs would be suitable for NP's.' • 'More straightforward assessments.' • 'In some GP practices especially in regional locations a nurse practitioner can take on a role in supporting the overall health and wellbeing of the person and may have essential information about the person's development and behaviour that is needed for the diagnostic assessment.' • 'I disagree that nurses could not have a role in this. A NP role could be supported especially for rural areas.'
Viewpoint surveys	Not identified
Interviews	<ul style="list-style-type: none"> • 'One of the important considerations then is education for health professionals, for ... maternal and child health nurses.' • 'A well-trained maternal and child health nurse.'
Feedback	<ul style="list-style-type: none"> • 'The Ages and Stages Questionnaire and Parents' Evaluation of Developmental Status are commonly used by universal early childhood service providers (e.g. Maternal and Child Health Nurses).' • 'Registered nurses would be valuable additions to the list of proposed professional informants.' • 'This response is a consensus document summarising the concerns of the Diagnostic and Assessment Teams at [organisation]. It includes the views of a diverse range of professionals who are expert in the diagnosis and assessment of children presenting with developmental and behavioural symptoms. Our teams include ... Clinical Nurse consultants.' • 'Coordinator - Nursing is not currently mentioned as a potential discipline for this role. [organisation] would suggest that appropriately experienced nurses can fulfil this role highly effective (as currently occurs within [organisation]).'

- 'We can easily build within the nursing PNIP and medical sector, a thorough and integrated system to help streamline diagnostic services and integrate the allied health assessments in a cost effective and efficient diagnostic national service. This is easily accomplished given the platform for this integrated system is currently in situ, the My Health Record.'

Evidence Table 32: Medical Evaluation (Professionals)

Evidence source	Details
Recommendation	It is recommended that a Medical Evaluation be conducted by a clinician who, in addition to the relevant training and expertise required by all members of the Assessment Team, has relevant training and expertise in medical evaluation relevant to neurodevelopmental disorders.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of assessing clinicians having appropriate expertise, and there was excellent support from experts for this set of expertise required.
Scholarly literature	<ul style="list-style-type: none"> • [Clinicians] need wide knowledge of ASD, including subtle presentations (Rogers, Level III, Quality 82%, [40]). • The most positive experiences were when professionals acted professionally, and had experience of ASD (Level III, Quality 85%, [25]). • Parents whose children underwent an autism diagnostic process in Ireland expressed the need for professionals with expertise in ASD (Level III, Quality 85%, [36]).
Other guidelines	<ul style="list-style-type: none"> • Parents identified one of their greatest challenges was dealing with professionals without specific training in ASD. In contrast, dealing with helpful and knowledgeable professionals facilitated support and hope [30]. • Inadequately trained staff for diagnoses is a barrier to diagnosis [3]. • Diagnostic Evaluation must be within the scope of [clinician's] practice [5]. • Clinicians need ASD-related knowledge and experience [27], specifically: <ul style="list-style-type: none"> ○ discriminating atypical behaviours from typical developmental patterns and age-appropriate behaviours [4, 5, 27] ○ distinguishing ASD from other psychiatric and neurodevelopmental disorders [27, 28, 30] • Potential comorbidities [30].
Online submissions	<ul style="list-style-type: none"> • Experience and training in the area of development and neurodevelopmental disorders. • Assessments should be conducted by professionals who have extensive experience of assessing ASD.

	<ul style="list-style-type: none"> • There needs to be widespread training to be able to distinguish autism from these other presentations. • The professional should be knowledgeable and experienced in childhood or lifespan development, comorbid mental health and other neurodevelopmental conditions. • This should encompass broad skills in assessment of developmental and behavioural problems, not just 'ASD-specific' assessments.
Workshops	<ul style="list-style-type: none"> • Need to clearly identify minimum training requirements for clinicians. • Experience and expertise of clinicians is crucial.
Delphi surveys	<ul style="list-style-type: none"> • The most important thing is that the person/s conducting the ASD assessment have expertise and suitable training in ASD. • 'Knowledge, training or expertise' are essential to consider, more so than mandating which professionals should be included in the assessment. • ASD and neurodevelopmental behavioural issues had been largely managed by primary care physicians with special interest in this area. The experiences gained by some of these have not been fully passed on, as there is no formal delivery pathway for these clinicians. • New clinicians will need time to accumulate experience but the validity of their autism assessments can be improved by greater focus on training and supervision before independent practice. • Demonstrate evidence of continued experience in typical development especially when their practice is primarily related to atypical presentations. • There is need for those differentiating ASD from other developmental / mental health disorders to have appropriate training and competence in neurodevelopmental and behavioural paediatrics. • You cannot make a call on whether ASD is the most appropriate diagnosis unless you also know about other conditions that may present in a similar way or present alongside ASD. • Having clinicians with a high level of expertise in the assessment and diagnosis of ASD is vitally important when ASD assessments are being conducted. • Knowledge and experience in conducting developmental assessment on young children.
Viewpoint surveys	<ul style="list-style-type: none"> • Having professionals who have experience in diagnosing autism was given very high importance by two Viewpoints. Comments also highlighted the importance of experience and expertise in autism and expressed frustration and disappointment with clinicians who were not viewed as experienced enough, leading to a longer diagnostic process or misdiagnosis. Also preferred was multiple assessors from different professional backgrounds. • All Viewpoints rated highly having clinicians with both experience in diagnosing autism and the right training.

Interviews	<ul style="list-style-type: none"> • Importance of training diagnostic health professionals in being able to recognise and diagnose ASD in adults, particularly in relation to the presentation of ASD in women. • Some participants reported diagnostic experiences with health professionals that had 'no experience with adults with autism'.
Feedback	<ul style="list-style-type: none"> • Specific training and expertise in each of these areas should be required and be a prerequisite to all prescribed professions undertaking ASD [assessments]. This will be key to reliable diagnostic evaluations and [Comprehensive Needs Assessments] that consumers, their families/carers and the NDIA can have confidence in.' • '[Organisation] are pleased to see the comprehensive and rigorous list of additional knowledge and expertise that would be required for a professional to be a [clinician].' • 'In relation to expertise in ASD, it was also mentioned that experience and competency in this area are not always indicated by professional title alone and that there needs to be consideration of experience, years of practice, settings of practice, and training when considering professional contribution to assessment of ASD.' • 'It is appropriate that the Guidelines make explicit reference to competency and currency of practice.' • '[Organisation] applauds the dual criteria established in the current draft indicating that [clinicians] are both qualified in a professional discipline and have demonstrated knowledge and expertise in ASD. [Organisation] further agrees with the suggested outline as to what constitutes "ASD-specific expertise".' • 'We fully support that ASD diagnosis should be undertaken by expert and experienced clinicians, however we are concerned about the practicalities of monitoring clinician skills in a meaningful way. Even for professional bodies to establish effective credentialing will be a difficult challenge.' • 'These specific skills and expertise in ASD must be regulated and a suitable credentialing process needs to be established and monitored.' • 'It is agreed that the [clinician] needs appropriate expertise in diagnosis of ASD. This must include the biological underpinnings of this disorder. The [clinician] must also have specialist training in all aspects of child development and paediatric medicine, using a biopsychosocial approach. This is because the presentation is an undifferentiated one at the start of the patient journey (or should be, to avoid bias) and, critically, the clinician must be able to recognise other aspects of the diagnostic formulation and differential diagnosis.' • 'The issue of defining expert knowledge and experience for [clinician] is seen as an appropriate step given the complex nature of ASD. However, the guidelines do not propose how this would/could be monitored or audited. Historically, most agencies (particularly non-government) have struggled to recruit clinicians

with suitable experience in child development and ASD to provide ASD assessments within current requirements.'

- 'Screening of other developmental disorders in children (including co-existing or differential medical conditions, e.g. Fragile X, Prader Willi etc.) is, in our experience, best provided by a Paediatrician. In our experience, GPs do not always have the necessary expertise to recognise and diagnose these conditions. Thus, GPs providing medical assessments in lieu of assessments by developmental Paediatricians is concerning.'
 - 'Concern with requirement of 'medical evaluation of the individual being assessed for ASD', may hold up diagnostic process with waitlists to get into specialists e.g. paediatrician. While a GP could complete some of the information, they may not be able to complete the entire form e.g. genetic testing.'
 - 'The guidelines provide a medical evaluation form which can be easily completed by a GP therefore this aspect of the guidelines is not one that we have a particular concern as there is some flexibility allowed for cases as described.'
 - 'We note that a 'medical assessment' by a general practitioner (GP) is a requirement in [an assessment of ASD concerns] if medical practitioner is not directly involved in assessment, but again, GPs are not specifically trained to diagnostically differentiate and evaluate neurodevelopmental disorders.'
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Evidence Table 33: Medical Evaluation (Information)

Evidence source	Details
Recommendation	<p>It is recommended that information be collected and synthesised during a Medical Evaluation on the following:</p> <ul style="list-style-type: none"> – overview of topics covered in the Assessment of Functioning – neurodevelopmental and behavioural symptoms – relevant biological investigations for aetiology and comorbid conditions (further testing may be indicated after Diagnostic Evaluation, e.g. chromosomal microarray) – developmental and growth status – congenital abnormalities and dysmorphic features – neurological, general systems, skin, injury, vision and hearing status.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of collection information on a comprehensive range of topics, and there was excellent support from experts for these topics.
Scholarly literature	Not identified
Other guidelines	See Evidence Table 23: Assessment of Functioning Information Topics
Online submissions	See Evidence Table 23: Assessment of Functioning Information Topics
Workshops	Not identified
Delphi surveys	<ul style="list-style-type: none"> • See Evidence Table 23: Assessment of Functioning Information Topics • Round 1 agreement that a hearing assessment (e.g. screening test or full auditory evaluation) should be completed during the ASD assessment process. • Round 1 partial agreement that a neurological and physical examination (e.g. measurements, abnormalities, dysmorphic features, neural function) should be completed during the ASD assessment process. • In Round 1, there was not consensus achieved that the ASD assessment process should include a vision assessment (such as a screening test, sight test or full ophthalmologist evaluation), selective metabolic and / or genetic screen (such as chromosomal microarray, amino acid chromatography, thyroid function) or further neurological testing (such as electroencephalogram, computed tomography scan, magnetic resonance imaging). • Round 2 agreement that a hearing, vision, neurological / physical, behavioural mental health and/or selective metabolic / genetic assessment should be conducted if the information would be valuable for determining the presence of a differential or co-morbid diagnosis.

	<ul style="list-style-type: none"> • The unfolding genetic testing and exploration is likely to end up with a diagnostic DNA test in at least some cases, but that may be 10 to 15 years away. The medical history and examination pertaining to other family members is important, or mouth swab for DNA should become part of the diagnostic assessment to allow the fulfilment of that potential contribution to research and diagnostic certainty. • We know ASD has a genetic link and a knowledge of family history can assist with the assessment process.
Viewpoint surveys	Asking about medical, family, and developmental history was rated highly by all viewpoints.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 34: Medical Evaluation (Information)

Evidence source	Details
Recommendation	<p>It is recommended that information be collected during a Medical Evaluation through a variety of means, including:</p> <ul style="list-style-type: none"> – file review of any relevant assessment reports – interview with the client – observation of the individual undergoing assessment – physical examination – standardised assessments – communication with other professional(s) as required.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of collection information through a wide range of means, and there was excellent support from experts for these approaches.
Scholarly literature	<p><i>Interview with client</i></p> <ul style="list-style-type: none"> • ‘Parents possess a key piece of the diagnosis and their experiences with their child with Asperger Syndrome needs to be consulted.’ (p111, Level III, Quality 95%, [18]). • ‘The primary healthcare providers, school teachers, and all practitioners need to be involved in identifying the early signs of Asperger Syndrome. These are the professionals in the forefront of hearing the concerns of parents and in working with children’ (p112, Level III, Quality 95%, [18]). <p><i>Standardised assessments</i></p> <ul style="list-style-type: none"> • ‘Professionals perceived the use of standardised tools as very helpful’ (p. 300, Level III, Quality 73%, [16]).
Other guidelines	<p><i>File Review</i></p> <ul style="list-style-type: none"> • All relevant records should be reviewed [27]. • Topics to be considered in file review: <ul style="list-style-type: none"> ○ should be ASD specific and include any background information that may aid in differential diagnosis [27] and [4]. ○ child family/ caregiver history including 3 generations [4, 5, 35]. ○ medical history including well child developmental records (including milestones) and birth records and newborn vision / hearing screening ○ whether the individual has had previous / receives current services and relevant assessments / reports from these [35]. ○ previous screenings and diagnoses / medical evaluations / specialist evaluations, results and reasons for these [4] ○ medication history ○ school assessments / reports / education progress / behavioural reports ○ documented observations

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- previous and current behaviour and functioning
 - records of early development (e.g., videos or notes) [4, 29].
 - evidence or parent report of physical or sexual abuse or other traumatic experiences [4].
 - A file review can prevent duplicate testing.
 - File review should ideally be completed prior to the child's evaluation to allow for more focused questioning / assessment when face-to-face.
 - The amount of prior information often is dependent on the age and functioning of the individual
 - younger children typically having had fewer encounters with professionals [27].
 - children who have significant impairments (e.g., motor, sensory, etc.), including those with risk factors for a developmental disability (e.g., premature birth, birth complications, substance exposure) are more likely to have extensive records [27].
 - older individuals may not have a developmental history, but similar information could be sought from a parent, sibling, or any person who knew the individual well as a child [4].
 - Parents can facilitate clinician access to information by maintaining a file of documents relevant to their child's development to eliminate the turnaround time required to obtain records from third parties.

Physical examination

- Essential elements of a diagnostic assessment is a comprehensive medical examination [5].

Online submissions

File Review

- The assessment should include blood tests to identify genes, maternal health, child's health, tests regarding communication, sociability, habits and behaviours, eye tracking & constipation information.
- Diagnosis decisions should also consider family presentations of ASD, history of other family members.
- Diagnosis should take into account family history of behavioural and neurological characteristics.
- Prior developmental assessment should be provided.
- Historical evidence of criteria met/not met.

Interview Individual

- So, personal I feel the best way diagnose a child is with personal interaction with child by professional diagnosing child and with three professional agreeing in a multidisciplinary team.
 - Interview with parent/guardian or individual to gather ASD history and observations/ play/ social session with individual.
 - Assessment should include interview and observation of behaviours; and participation in conversational interaction, not just formal testing of language/ cognition.
-

Physical examination

- The assessment should include blood tests to identify genes, maternal health, child's health, tests regarding communication, sociability, habits and behaviours, eye tracking & constipation information.
- physical considerations such as asthma, muscle tone, psoriasis, eczema, ticks
- It is essential that a medical professional be involved in all assessments as part of differential diagnosis and review of general health. At a minimum this should be a GP, however my preference would be for a paediatrician for children.

Communication with other professional(s)

- It is essential that a medical professional be involved in all assessments as part of differential diagnosis and review of general health. At a minimum this should be a GP, however my preference would be for a paediatrician for children.
- The assessment should include blood tests to identify genes, maternal health, child's health, tests regarding communication, sociability, habits and behaviours, eye tracking & constipation information.
- physical considerations such as asthma, muscle tone, psoriasis, eczema, ticks
- Consider trauma history. ADOS may be used to gather information, but diagnosis decision to be made through discussion by the clinicians who have observed the child, against DSMV criteria.
- Collecting extensive history (esp. for adults).
- Information should be collected from ALL the team – parents, educators, speech therapists and occupational therapists, colleagues and be considered of equal importance.
- 'assessment' should be in consultation with the school teacher, Psychologist and the paediatrician to get a whole view of the child.
- Assessments should include information from teachers, social workers
- from school/general practitioner/other medical specialist.
- Background information collected via questionnaire from school/childcare/other 3rd party.
- preschool/day care feedback
- Paediatricians/psychologists who have verbal conversations with educators will gain superior insight into the individual.
- history from multiple sources to ensure symptoms pervasive.
- A second source i.e. other than a parent should provide information too.

Workshops

Multiple sources of information.

Delphi surveys

- Round 1 agreement that information should be collected during the ASD assessment process through:
 - File review of existing documents written by other professionals
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- An interview with the carer of the individual being assessed for ASD
 - An interview with the individual being assessed for ASD
 - Observation of the individual being assessed for ASD
 - Medical evaluation of the individual being assessed for ASD.
- The structure should not rely entirely on parent report or self-report.

File Review

- I do think that professionals should consult other sources of information (e.g. past reports, therapists working with the individual etc.) so that they have a comprehensive picture of the client's presentation.
- I think that it is essential that clinicians review all past information prior to conducting an assessment- means that they have a more complete picture of the individual, gain information about the individual in multiple settings, and avoids repeating assessments etc. that have already been done.
- It is important to have face to face (or telephone) discussion with all professionals involved (where consent is given).
- The diagnosis may already be confirmed in the practitioner's head before seeing the client. It would be more objective to see the client, complete the assessment and then consult the other documents.
- Assessment without this would be fraught.

Usually essential but may not be necessary in obvious cases.

- Can prejudice the assessment.
 - This assumes that all families and individuals are happy for this to occur, which is not necessarily the case.
 - This is not my area of expertise however it seems common sense to collect all relevant data.
 - In my experience, so much of the previous record collecting and assessment information often fails to correctly identify the issues that are most pertinent to ASD. (For example, 'red flags' are often missed). Or, the most appropriate assessments to answer questions related to ASD have not been undertaken.
 - File review ensures that assessments can be more efficient and don't double up on assessments or observations that have already been conducted.
 - There are some who are obvious and do not require multiple informants but sensory deprivation can make even this group tricky.
 - If needed and relevant. No different to other conditions - simply a case of good professional communication to prevent medical mishaps
 - Clients should not have to recall details of history multiple times. this information should be shared by professionals.
 - This is helpful to establish symptom presence and severity over time and in multiple settings.
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- This should never be used without viewing the person and their parent or carer for a child.
- For adults, it may be these which provide vital information about the earlier years particularly those in the developmental period.
- Mandatory yearly paediatrician reviews.

Observation

- Functional, non-standardised assessing and observations are an essential component. many people with ASD may perform well on standardised testing, however, it is their functional qualitative performance which is impaired

Interview with client

- The individual being assessed MUST be seen by the assessor(s). Interview is not possible in some circumstances such as very young children and not when the individual does not have the cognitive and/or language capacity for such interview. However, for all others interview should be attempted. The amount of information gathered from the individual will increase as their age increases.
 - it is helpful to include older children (usually 14 plus) in the assessment of criteria as they have a very important current and past perspective. Adults are almost always included in the interview. Adult and older adolescent assessments take a different form and the provision for this is very important.
 - I think that it is essential that the clinician spends time with the person being assessed. Exactly what this looks like, and the types of questions asked, would depend on the individual's age and developmental level.
 - Depends on the age and intellectual capacity of the child. Talking to the child is very important because it gives you a firsthand experience of the child's verbal social and pragmatic functioning.
 - This would depend on the age of the individual. Agree for adolescents and adults although this is not my area of expertise.
 - Especially important for adolescents and adults suspected of having an ASD.
 - 'Interview' tailored to age / communicative ability. Combination of standardised and unstructured interaction.
 - Where possible (given age, communication ability).
 - Even when the person has limited communication abilities an attempt should be made.
 - Unless it would be traumatic for the individual or of no benefit.
 - Don't normally 'interview' children, though interaction with them (verbal, play) is an important part of assessment.
 - It may be observational rather than interview.
 - Where appropriate I think here. I am thinking about the interview components of the ADOS for all ages. More comprehensive case history interview should also be conducted with adults if possible.
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- This depends on several factors such as the age and level of functioning of the individual, communication skills etc.
 - If it is adult and capable of providing information.
 - Presumably this is dependent on the age of the individual as well. e.g. it is not relevant to 'interview' a 3-year-old but observational assessment would be.
 - It is essential that some time is spent observing the individual, either in a structured way or during informal observations. Not all individuals would be able to complete an interview but it should be conducted when possible.
 - Only if age and communication allow.
 - Depends on person being assessed and level of communication.
 - If it is adult and capable of providing information.
 - An interview could only help.
 - I have been horrified mainly in the NT but also in rural and remote WA that children and adults who need services which are not available in their locality but which could be provided effectively (at say 75% value of face to face in person) are not eligible for the services because of bureaucracy which requires ALL treatments to be in person.

Communication with other professional(s)

- Medical information is very important if the assessment is simple then past reports may be adequate to inform the assessment. For complex assessments, which include neurological and physical issues this input is very important. Medical input is required for complex assessments.
 - The assessment should include blood tests to identify genes, maternal health, child's health, tests regarding communication, sociability, habits and behaviours, eye tracking & constipation information.
 - The diagnostic process should include written reports, video footage and coming from strengths as well as areas of challenge - physical considerations such as asthma, muscle tone, psoriasis, eczema, ticks and sensory profiling as well as rigidity of thought, speech delay (social context and appropriate social reciprocal speech should also be considered) and fixated interests.
 - I believe that this is helpful, but not essential. However, if the child/individual is presenting with specific medical or genetic related concerns then I think that it would be very important to consult a doctor. In other words, it would be important in some cases but not others.
 - I believe that a medical assessment be conducted prior to structured ASD assessment.
 - This should be done by the paediatrician before referral for full ASD Assessment at their discretion.
 - Surely this is part of the paediatrician's assessment and would be done as a part of their process and at their discretion.
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	<ul style="list-style-type: none"> • To rule out other diagnoses. • Needs to be done before the assessment is even scheduled to rule out the presence of a neurological or physical disorder. • Clinical observations for posture, motor planning, righting reactions, sensory modulation (e.g. gravitational insecurity) can be identified in these assessments. This helps to identify triggers for behavioural avoidance. • A critical component in ASD assessment is how the individual functions in a peer group setting - hence input is required from professionals/carers who have experience of the individual in this setting. • Fundamental information. • I don't think this necessarily must be done at the time of the assessment, could be done before. • I typically recommend genetic testing to rule out/identify the presence of any possible genetic conditions. • When relevant or needed. • We should be quite sophisticated about the diagnosis now using iPhone eye-motion apps and genetic testing. • This could be collected by someone who was not an expert using a standardised collection tool. To speed assessment process. • In the case of Adults, this type of exam may be indicated but is best recommended on a case by case basis.
Viewpoint surveys	Observation of the person being assessed was rated highly by one viewpoint and interviewing both the person being assessed and interviewing parent/caregivers were both rated of high importance by two viewpoints.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 35: Medical Evaluation (Setting)

Evidence source	Details
Recommendation	It is recommended that the Medical Evaluation take place in a private location within a clinic or community setting.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of collecting information about a range of contexts, and there was excellent support from experts for this flexible process.
Scholarly literature	Not identified
Other guidelines	<ul style="list-style-type: none"> The space used for evaluation should allow ample room for ... observation and interaction [29]. The clinic setting tends to provide the most ease and efficiency for the [clinician] (in terms of ... access to needed materials, cost, and environmental control) [30].
Online submissions	Clinic.
Workshops	Assessment can be done both at home and in the clinic. Diagnostic centres.
Delphi surveys	<ul style="list-style-type: none"> Round 1 partial agreement that information for the ASD assessment process should be collected in the clinic. Round 2 agreement that the clinic should be considered an appropriate venue for an autism assessment (if information is also obtained from other settings), however it is not necessary to conduct part of the autism assessment in a clinic if there is an appropriate space to undertake assessment tasks in the individual's community. Where possible, information should be collected in a clinic setting. Firstly, this is more time effective for clinicians [and] it's a neutral setting for carers and family members. A clinic or doctor office would obviously be included in an assessment place. One of a variety of settings. This is the convention and with an experienced diagnostician, this is appropriate. Other settings could be considered such as the child's home, but there would be problems with travel time. The office is a calm neutral space and useful for many. However, if it involves excessive travel or provokes extreme anxiety as it does for some ethnic and cultural groups an alternative location should be considered.
Viewpoint surveys	Collecting information in the clinic was ranked as having low importance by all viewpoints.
Interviews	May be challenging for some adults to access due to sensory symptoms – shouldn't be only option.
Feedback	Not applicable

Evidence Table 36: Medical Evaluation (Outcome)

Evidence source	Details
Recommendation	It is suggested that if the Assessment of Functioning and Medical Evaluation indicate ASD is a queried diagnosis, the clinician in consultation with the client will make a referral for a Single Clinician Diagnostic Evaluation. If the client declines this referral, it is recommended this be documented by the clinician.
Grade	Consensus-based Recommendation, Grade 2
Rationale	A number of evidence sources consistently support the process of progressing to a Diagnostic Evaluation, and there was excellent support from experts for this focus.
Scholarly literature	Not identified
Other guidelines	Not identified
Online submissions	Not identified
Workshops	'If the path to interventions is faster, more time and money can be focused on the intervention.'
Delphi surveys	Not identified
Viewpoint surveys	Not identified
Interviews	Not identified
Feedback	<ul style="list-style-type: none"> • 'Consider adding a section on what referrers should do in the event that a family/individual declines a referral (particularly if the referrer feels strongly that a Diagnostic Evaluation is needed). Obviously, the family cannot be forced into an assessment, but it might be worth adding here the importance of documenting that a referral was suggested and discussed with the family, and that the family (or individual) declined referral for evaluation at that time.' • 'The diagnostic pathway for all children presenting with developmental and behavioural concerns should be through a comprehensive developmental assessment which includes an assessment of both functional and support needs, in order to determine the most appropriate diagnosis, or diagnoses, when sufficient clarity is achieved.' • 'When individuals display needs that require intervention, or have functional deficits, and choose not to identify as having been diagnosed with ASD, these families or individuals should not be disadvantaged, through denial or reduction in service, by this choice. The guidelines must provide clarification of this to support clinicians and families in these circumstances.' • 'That the [Comprehensive] Needs Assessment be completed prior to, or concurrently with, the diagnostic assessment process. The outcome of the [Comprehensive] Needs Assessment should be used to determine, or assist in the determination of: <ul style="list-style-type: none"> ○ whether pursuit of a diagnostic assessment is necessary or warranted; and

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- the patient's access to support through the NDIS including access to early intervention services.'
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Evidence Table 37: Single Clinician Diagnostic Evaluation (Professionals)

Evidence source	Details
Recommendation	<p>It is suggested that a Single Clinician Diagnostic Evaluation be conducted by one clinician meeting at least one of the following eligibility criteria:</p> <ul style="list-style-type: none"> – medical practitioner who holds specialist registration with the Medical Board of Australia in the field of community child health, general paediatrics, psychiatry or neurology – medical practitioner who holds general or specialist registration with the Medical Board of Australia and has at least six years of relevant experience, training or supervision in the assessment of neurodevelopmental and behavioural disorders – psychologist who holds general registration with the Psychology Board of Australia and practice endorsement in clinical psychology, educational/developmental psychology or neuropsychology.
Grade	Consensus-based Recommendation, Grade 2
Rationale	Numerous evidence sources suggest a restricted range of clinicians are able to be a single clinician, with most of the evidence consistently supporting this approach and excellent support from experts.
Scholarly literature	<p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> • Developmental paediatricians are a resource for an ASD diagnosis (Level III, Quality 75%, [50]). • Paediatricians can be encouraged to let parents know as soon as possible, if the possibility of a disability exists. (p.74, Level III, Quality 75%, [50]). • ‘The types of medical professionals that participants consulted in the course of their child’s ASD diagnosis ranged from neuro-physiotherapists, to assessment inspectors, with the most frequent assistance being sought from paediatricians, closely followed by speech and language therapists and educational psychologists’ (p. 54, Level III, Quality 75%, [55]) • ‘GPs and paediatricians have limited contact with parents of children with ASD, but that contact has the potential to have strong impacts of subsequent psychosocial treatments of the child’ (p. 929, [54]). • In the USA, a study conducted found that most paediatricians felt as if their training in developmental screening was limited (Level III, Quality 79%, [41]). In addition, 48% of paediatricians completing the survey, did not receive any ASD specific training as part of their practical placements (Level III, Quality 79%, [41]). <p><i>Medical Practitioners (Psychiatrists)</i></p> <ul style="list-style-type: none"> • Child psychiatrists generally provide diagnosis (Level 3, Quality 65%, [60]). <p><i>Psychologists</i></p>

	<ul style="list-style-type: none"> Participants frequently consulted educational psychologists in the course of their child's ASD diagnosis (Level III, Quality 75%, [55]).
Other guidelines	<p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> Diagnostician can be a paediatrician [3, 27, 28, 48]. Paediatrician should be one of two first professionals to conduct ASD assessment [28]. <p><i>Medical Practitioners (Psychiatrists)</i></p> <ul style="list-style-type: none"> Lead diagnostician is an physician or mental health professional with ASD expertise [27]. The health care practitioners most likely to be able to diagnose ASD in young people and adults include: child and adolescent psychiatrists and adult mental health psychiatrists [3]. <p><i>Medical Practitioners (Neurologists)</i></p> <ul style="list-style-type: none"> Lead diagnostician should be a licensed physician with ASD expertise [27]. Paediatric neurologist should be one of two first professionals to conduct an ASD assessment [28]. <p><i>Psychologists</i></p> <ul style="list-style-type: none"> Lead diagnostician should be a licensed mental health professional with ASD related expertise [27]. Psychologists have special skills as a Diagnostician related to: <ul style="list-style-type: none"> Cognitive assessments [3, 29, 35, 48]. Adaptive skills assessments [35]. Neuropsychological assessments [48]. Behaviour assessments [48]. Identify co-occurring mental health and/or behaviour conditions [3, 30]. Identify differential diagnosis or alternative explanations for symptoms (e.g., abuse, disrupted early attachment, psychiatric disorder [3, 30]. To offer counselling and education as needed [48]. Psychologist should be a core member of the autism team [8]. Many psychologists do not necessarily receive any specific training in the diagnosis of ASD despite being permitted by law to do so [28]. The health care practitioners most likely to be able to diagnose ASD in young people and adults include: clinical psychologists, educational psychologists [3].
Online submissions	<p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> Team should include paediatrician (some state required, others state if possible) for ASD assessments with children. Initial assessment by paediatrician suggested Paediatrician implied to be leader of team This includes either a fully qualified developmental paediatrician or paediatrician. Specific abilities provided by paediatricians: <ul style="list-style-type: none"> Medical evaluation Collate information from all sources

- Exclude other mental health or medical diagnoses that may overlap with ASD and often mimic its presentation
- ADOS assessments (if trained)
- Concern raised that there do not seem to be many paediatricians that diagnose.

Medical Practitioners (Psychiatrists)

- Diagnosis should continue to be conducted by a multidisciplinary team, including a child psychiatrist in some teams.
- Assessments must be conducted by a person able to diagnose via DSM-5 (including a psychiatrist).
- Who should assess - qualified and experienced Psychiatrist
- Psychiatrist one of only two suitable diagnosticians
- Assessments should be undertaken by a team of experienced and qualified allied health professionals with a psychiatrist as a suitable inclusion.

Psychologists

- Team should include neuro-psychologist
- ADOS assessments should be conducted by a range of professionals, including a psychologist.
- Assessments by Psychologist.
- Assessment should be undertaken by psychologist with specialized training
- Psychologist is one of key professionals who should undertake assessments I was diagnosed by a Psychologist from Autism SA and I had learned so much from her about having Asperger's Syndrome.
- Qualified and experiences Psychologists
- Diagnosis should continue to be conducted by a multidisciplinary team, including psychologist.
- Diagnosis should take into consideration the views of multiple health professionals, including psychologist
- Public services must include Psychologist as part of a multidisciplinary team to match up with Victoria DET guidelines
- Allied health team / multidisciplinary team, including psychologists, is the best option to make the diagnosis
- ASD should only be diagnosed by a psychologist.
- General psychologist often miss complex cases
- Educational Psychologist contribute to full ASD profile
- It is crucial to have the right professional to diagnose autism, e.g. psychologists with further training (clinical or educational and developmental psychologist).
- We have just needed to have our son diagnosed in Queensland because his first diagnosis was in NSW by a clinical psychologist not a paediatrician so it was not valid
- Not based on the opinion of one professional

Workshops

Medical Practitioners (Paediatricians)

- Improved education on diagnosis for paediatricians e.g. Grad.Dip.ASD.

	<ul style="list-style-type: none"> • Paediatricians shouldn't be able to see a child for 15 minutes and diagnose. • Paediatrician is an appropriate member of a Diagnostic Evaluation team. <p><i>Medical Practitioners (Psychiatrists)</i></p> <ul style="list-style-type: none"> • Team of diagnosticians at Tier 2 includes Psychiatrist • Comprehensive ASD assessments take time and require expert judgement by the Psychiatrist and other team members to determine the diagnosis. • Need skilled expert clinicians working in the ASD field (e.g. Psychiatrist) to screen with validated tools to determine if Tier 2 is warranted. • All should be assessed by a one of two medical specialties (including psychiatrist), as a minimum. <p><i>Psychologists</i></p> <ul style="list-style-type: none"> • Educational psychologists need more training
Delphi surveys	<p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> • Round 1 agreement that aspects of ASD assessments should be undertaken by a paediatrician. • Round 2 very strong agreement that a paediatrician should be eligible to be a Diagnostician. • A well trained paediatrician can take a good well rounded history and do a detailed medical examination which can often lead to a better outcome for the child because an underlying explanation for the autism description we give children can be made. • Well trained, especially community/developmental paediatricians. Can consider the whole child. Located in most cities/regions. Often has relationship with family and relevant local services. • Paediatricians in the 21st century are mostly well-trained and skilled in conducting developmental assessments, including for ASD and related problems. • Paediatricians are experts in the childhood field. • Would seem to be the most suited clinician for undertaking aspects of ASD assessments but expertise and ability varies. • Paediatricians have the knowledge and expertise to understand all the stages of childhood and what is normal behavioural skills and milestones and what is abnormal. • Paediatrician are skilled in working in a multidisciplinary team. • Complexity a strong factor to consider, however, all children will require a paediatrician. • Paediatricians are an essential component, given training and experience. • I'm probably bias here towards including Paediatrician, as this is current best practice. • Straightforward diagnoses can often be made by a paediatrician.

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- Families often go to private paediatrician as one off event to get an ASD diagnosis for funding / Centrelink carer payment.
 - Specific abilities provided by paediatricians:
 - Considering comorbid and differential diagnosis
 - Developmental assessment
 - Medical screening to identify whether there are any genetic/medical factors at play
 - Medical workup
 - Requesting genetic testing
 - Completing observations
 - There is a need to train paediatricians who did not receive training either in their course or as PD. ASD assessment and diagnosis is very complex and all professionals involved in assessment and intervention need to retain currency in the area.
 - Concerns raised about paediatricians in a Diagnostician role:
 - In some areas it is very difficult for families to access a paediatrician and I don't think that not being able to see a paediatrician should hold up the diagnostic process.
 - If trained, but sometimes it can be 'hit and miss'.
 - Paediatrician not required once child is an adult.
 - Depending on the age of the individual the paediatrician could assist the team in the diagnosis.
 - Paediatrician may not be essential for all.
 - Specialists such as Paediatricians are already in great demand and difficult to access by many families in both private and public settings.
 - Assessment of aetiology requires paediatric training and expertise.
 - I regard ASD assessments as a specialised area requiring deep knowledge beyond what is provided in the general Postgraduate Paediatric Training programme. This is a Paediatric Specialty area and deserves postgraduate training, supervision, mentoring etc.

Medical Practitioners (Psychiatrists)

- Round 1 agreement that aspects of ASD assessments should be undertaken by an Adult Psychiatrist.
 - Round 2 agreement that a Child Psychiatrist and Adult Psychiatrist were eligible to be a Diagnostician.
 - Psychiatrist are very important in diagnosis and intervention for adults.
 - It may be more appropriate to involve a psychiatrist especially considering the high comorbidity with psychiatric conditions.
 - May also help with parents and parenting skills and behaviour management. Some children look autistic, but it is really a behavioural management issue.
 - Particularly if there is a need to differentiate between mental health conditions and ASD and/or manage mental health conditions in conjunction with ASD.
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- A psychiatrist is the appropriate professional to differentiate ASD related symptoms from differential diagnoses, therefore is appropriately involved.
 - If there are any other underlying psychiatric concerns.
 - In my view, there is a great need for more adult psychiatrists to be able to assist adults with ASD (especially with complex cases, such as those with complex trauma, BPD, etc.).
 - Adult Psychiatrists vary enormously in terms of their helpfulness to adults undergoing ASD assessment. My experience is that there are few adult psychiatrists who are familiar with the complexity of ASD adult presentations to be able to contribute positively to the assessment and diagnostic process.
 - Psychiatrists more appropriate with younger aged children only if comorbid mental health concerns are noted.
 - Some child and adolescent psychiatrists can develop the right skills but not many because of the way they are currently trained in Australia and NZ.
 - Psychiatrist skilled in working in a multidisciplinary team.
 - I would think that a Psychiatrist is essential for all adult assessments.
 - Many adult Psychiatrists have skills or experience.
 - Psychiatrists tend to be very 'medical' focused and I have not always seen the value in including them in diagnostic evaluation.
 - Could be a need for medical input to process.
 - As a minimum ... there should be a medical professional in all assessments for diagnosis.
 - In those cases of people over 45 years who have very low adaptive behaviour and present for diagnosis to obtain support services in the community it is reasonable that either a Psychiatrist or Clinical Psychologist undertakes the diagnosis - not necessarily both.
 - Do not think that psychiatrists need to be involved in all ASD diagnostic assessments, however believe that they are necessary where the presentation is complex and/or there are co-morbid mental health concerns.
 - Adult psychiatrists have not had the training in ASD or extensive experience needed for a diagnostic assessment. There are rare exceptions.
 - Not many psychiatrists are interested in developmental disorders - though of course some are.
 - Generally they do not understand the importance of taking an early developmental history which might help with the diagnostic process.
 - Psychiatrists are very difficult to access in regional areas.
 - All child assessments should in my opinion involve one of two medical professionals, including a psychiatrist.
 - Child psychiatrists would be available to coordinate all tiers of assessment, although this is not realistic with the current demand for their services.
 - May be appropriate in addition where mental health related differentials remain and the situation is unclear.
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- Child psychiatrists seem most helpful with complexity and uncertainty of diagnosis.
 - Child psychiatrists are skilled in understanding developmental pathology. Furthermore, children and adolescents with ASD often have significant associated mental health problems.
 - Child psychiatrist could be an invaluable part of the diagnostic team but workforce availability is likely to be limited. Child psychiatrists are critical in complex mental health comorbidity, but there are too few adequately trained.
 - Do not think that psychiatrists need to be involved in all ASD diagnostic assessments, however believe that they are necessary where the presentation is complex and/or there are co-morbid mental health concerns.
 - Child psychiatry is valuable for children with complex presentations.
 - In children where there is potential alternate psychiatric diagnoses or comorbidities such as anxiety, PTSD, attachment disorder a psychiatry opinion is important in formulation and management planning.
 - If there is a complex case or if the different professionals have different opinions as to the correct diagnosis, or if there is social complexity.
 - Only in some cases, where there is significantly compromised mental health
 - Only if there is a need to differentiate between mental health conditions and ASD and/or manage mental health conditions in conjunction with ASD - this is a possibility but should not be a requirement.
 - Psychiatrists are usually not involved until 12 plus years.
 - Wouldn't like to see roles in the diagnostic assessment process limited to child psychiatrist, as these professionals seem so light on the ground that this would result in delays to diagnosis.
 - Child psychiatrists are rare and their training is inadequate in the diagnosis of ASD. The value would be in treatment, not diagnosis.

Medical Practitioners (Neurologists)

- Round 1 disagreement that aspects of ASD assessments should be undertaken by a neurologist.
 - Round 2 findings suggest that a Neurologist is not eligible to be a Diagnostician.
 - A neurologist was generally considered unnecessary, except under specific circumstances in which additional neurological concerns are indicated and their involvement as a Professional Informant is recommended by an assessing paediatrician or psychiatrist.
 - There should be a medical professional in all assessments for diagnosis.
 - Most Australian or American trained paediatric neurologists have no training in developmental paediatrics. This is different in the UK where they are all obliged to spend at least 6 months in a developmental service.
 - The neurologist will not necessarily have a developmental view.
 - Not sure what a neurologist would add as an assessor.
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- Neurologists may be able to provide useful information in some cases, however I do not believe that they should routinely be involved in ASD diagnosis.
 - Neurologists are time poor, and I think allied health professionals can do assessments.
 - If they are interested they can provide similar role to a paediatrician.
 - This would be an acceptable medical representative in a multidisciplinary team, again if this was a major part of the individuals practice with accumulated experience of seeing many children with variable presentations of ASD.
 - They might be helpful if the person has epilepsy and there is a differential diagnosis needed.
 - Only in complex cases where there are other factors, such as multiple disabilities and confusion over whether the issue is ASD or not, or where it is possible that other treatable conditions may be missed, such as absence seizures etc.
 - I don't see this as being essential, so long as appropriate medical review is completed and referrals made as necessary.
 - Unless the neurologist has special training in child development.
 - Disagree that Neurologists should assess individuals generally unless they have expertise in the area.
 - Neurologists will be trained in developmental disabilities, including ASD, so are in a position to diagnose ASD.
 - If indicated by symptomatology, complex diagnoses
 - Neurologists are hard to access in regional areas and generally beyond the means of many who need diagnosis.
 - This depends on the differential diagnoses being considered, but may also be clinically appropriate, and could be referred for.
 - I think having to see a neurologist as part of an autism diagnosis would be very restrictive and would increase wait times incredibly. I'm not sure at this stage that a neurologist would be necessary although the information would be helpful.
 - To rule out any other sort of pathology which may be contributing to the child's behaviour.
 - I think neurologists have a broad way of reflecting on a child's development but also being able to rule out particular conditions etc. But depends whether they focus on this type of area.

Psychologists

- Round 1 agreement that aspects of ASD assessments should be undertaken by a psychologist.
 - Round 2 agreement that a psychologist should be eligible to be a Diagnostician.
 - A clinical psychologist can implement the standard diagnostic assessments and analyse information provided by other professionals to complete objective behavioural assessments.
 - There should be a psychologist in all assessments for diagnosis.
 - Dependent on training and experience
 - With appropriate training, are ideal for the assessment of social and behavioural features of the diagnostic criteria
 - Central to assessment
 - Vital / critical / key role in all assessments for diagnosis.
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- There could be a need for psychological input to process.
- Those clinical psychologists who have the necessary training and experience in working in the area of ASD across all the developmental groups are well placed to undertake ASD assessments (taking the complexity of presentations into account)
- Clinical psychologists also have a supervision process that helps them to extend their skills and expertise in becoming familiar with the diversity of ASD presentations and to obtain ongoing supervision around complex cases with a more experienced mentor.
- As one component of the two clinicians carrying out the assessment.
- Psychologist are capable of diagnosis
- Important for developmental / IQ testing, comorbidity and differential diagnose in relation to mental and attention
- Play a role in cognitive assessments
- Assessment s could be undertaken by Clinical Psychologist
- If appropriately trained, psychologists can administer assessments (such as ADOS or ADI-R) and assess co-morbid mental health conditions.
- If appropriately trained developmental/educational psychologists can administer assessments (such as ADOS or ADIR) and assess co-morbid mental health conditions.
- Subgroup of developmental/educational psychologists who have necessary training and experience to conduct ASD assessment.
- Cognitive and educational testing/ assessment can be extremely helpful in many cases.
- Conduct relevant cognitive assessments if warranted.
- Developmental/educational psychologists are well able to complete the cognitive, learning, educational assessments to assist with issues to do with differential diagnosis, such as cognitive impairment.
- Cognitive evaluation is an important component of ASD assessment formulation and consideration of comorbid / alternate diagnoses.
- Important in developmental / IQ testing, discriminating between ASD and other mental, +/- attention and other conditions
- Be wary if developmental/educational psychologists only do assessments for eligibility for funding for school - this could be a conflict of interest.
- Developmental/educational psychologists undertake aspects of ASD assessment in selected cases may help, though clinical psychologist more appropriate where the differential diagnoses are thought to relate to mental health.
- Developmental/educational psychologists may be more relevant when assessing primary and secondary school aged children, therefore less relevant to preschool or adulthood.
- Useful for diagnosis
- Useful for treatment planning
- May help clarify differential diagnosis, where a greater level of information is required than can be gained from parents, child, and questionnaires/reports from school or pre-school setting

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- Clinical Psychologists should be the preferred Psychologist because they are trained to consider all neurodevelopment disorders. General Psychologists do not have this training in their courses. Clinical Psychologists have the training to consider in complex cases the role of known trauma, attachment issues, cognitive and learning issues and more when considering an autism diagnosis. This is very important for the person but also in terms of financial resources.

Clinical Psychologist

- One of the two most appropriate clinicians for diagnosis
 - Contribute to multidisciplinary team
 - Psychologists (Clinical / Educational and Developmental) were considered one of the most appropriate clinicians to make an autism diagnosis, due to their expertise with social, cognitive, behavioural and mental health features.
 - Educational and Developmental Psychologists are very useful in diagnostics assessment.
 - Educational psychologists who have appropriate training in ASD can provide useful input in more complex presentations or where there are concerns that learning and other educational aspects may be impacting the child/individual.
 - Suitable experienced developmental/educational psychologists can play a critical role in the diagnostic process.
 - If problem identified by diagnostic team
 - Well placed as diagnostician
 - Clinical Psychologists do not all have a good idea about sensory issues, vestibular system, motor skills and neurology.
 - Not all Clinical Psychologists have appropriate credentials for autism diagnosis.
 - Developmental/educational psychologists do not have a role in diagnosis.
 - Developmental/educational psychologists if clinical psychologist is unavailable.
 - Developmental/educational psychologists may not be essential.
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Viewpoint surveys *Medical Practitioners (Paediatricians)*

- The inclusion of at least one medical or specialist medical professional was given neutral to low importance by all viewpoints. Participant comments supported the inclusion of medical professionals.

Medical Practitioners (Psychiatrists)

- The inclusion of at least one medical or specialist medical professional was given neutral to low importance by all viewpoints. Participant comments supported the inclusion of medical professionals.

Medical Practitioners (Neurologists)

- The inclusion of at least one medical or specialist medical professional was given neutral to low importance by all viewpoints. Participant comments supported the inclusion of medical professionals.
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	<p><i>Psychologists</i></p> <ul style="list-style-type: none"> The involvement of at least one allied health professional was given high importance by one viewpoint. Participant comments supported the inclusion of allied health professionals.
Interviews	<p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> Paediatrician listed as an appropriate member of a multidisciplinary team. <p><i>Medical Practitioners (Psychiatrists)</i></p> <ul style="list-style-type: none"> Psychiatrist listed as an appropriate member of a multidisciplinary team.
Feedback	<ul style="list-style-type: none"> There were competing views regarding the most appropriate qualifications for medical practitioners involved in the assessment process. Particular concern was expressed that recommendations in the draft version of the Guideline were too restrictive and excluded a large number of career medical officers who have considerable experience in the assessment of neurodevelopmental disorders. Considerable feedback was received regarding the optimal qualifications for psychologists. The feedback from different respondents often put forward competing views, particularly regarding the use of the term 'registered psychologist' and whether practice endorsement in clinical, developmental/educational psychology and/or neuropsychology should be a requirement for involvement in the ASD diagnostic process. 'CMOs to be included with Paediatricians. Historically developmental assessments (e.g. Griffith assessment) often completed by CMOs who diagnose ASD, developmental delay, care and protection issues etc. Certainly, experienced and within multidisciplinary teams.' 'I also note that there are many professionals who can make the diagnosis, but CMOs have not been included in this list, despite there being CMOs with decades of ASD diagnostic and management experience. We have two CMOs connected to our team who are significantly better diagnosticians than most general Paediatricians.' 'In our service and others in NSW, many developmental assessments including autism-specific assessments are provided by Career Medical Officers/Senior Medical Officers who would meet the "current expert knowledge and experience". Within our service, CMOs have 20 years or more experience of assessing and supporting children's behavioural and developmental needs. A large proportion of our work relates to ASD assessment. We strongly suggest that there should be provision for CMOs working within diagnostic and assessment services to be included as an appropriate [clinician] for both [Diagnostic Evaluation stages].' 'We recommend that a Paediatrician, CMO, or GP with Disability specialist training be the minimum requirement for the diagnostic process.' 'Paediatricians, CMOs, and GPs with disability specialist training with "current expert knowledge and experience" have a wide knowledge and holistic approach across the domains of

paediatric medicine, and development and behaviour, which often includes the ability to administer formal developmental assessments.'

- 'The draft guidelines exclude a sizeable group of highly skilled and experienced Senior Career Medical Officers (SCMOs) and Senior Child Health Medical Officers who are working in the public sector as key diagnosticians within multidisciplinary teams.'
 - 'The draft guidelines as they stand presently exclude a sizeable group of highly skilled and experienced Senior Career Medical Officers and Senior Child Health Medical Officers who are working in the public sector as key diagnosticians within multidisciplinary teams. We believe we have equivalent training, expertise and skills competencies as outlined. In terms of our memberships, although we are not Fellows of the Royal Australasian College of Physicians (RACP), we are members of the Chapter of Community Child Health within the RACP Paediatrics and Child Health Division, as well as being active members of the Neurodevelopmental and Behavioural Paediatric Society of Australasia. Senior Career Medical Officers are required and expected to work independently at the level of a specialist physician in the public sector, and this grading is only granted to those with greater than 7 years' experience whose training, skills and experience meet this level of competency. We have extensive expertise in health and medical assessment, multidisciplinary teamwork, and developmental, autism specific and adaptive behaviour assessments. We are routinely involved in integrating findings, clinical report writing, and communicating results to families. We are active participants in formal training courses and peer and case review. We strongly believe we should be included as diagnosticians in the draft guidelines.'
 - 'One proposal I made to the committee was that suitably qualified GPs be able to diagnose tier 1 patients. These GPs would need to have a diploma of child health or dip in developmental disability (or similar) and have done the ADOS course (or similar). There are already a fair number of GPs who would easily fit the criteria plus there is no financial conflict of interest.'
 - '[The draft Guideline] suggest all types of Psychologists (generalist and endorsed) be considered Diagnosticians. However, standards of training vary greatly between generalist Psychologists and Psychologists with endorsement in a relevant specialised area (e.g. Clinical Psychologists, Clinical Neuropsychologists, Education and Developmental Psychologists) in the same way that the training of a General Practitioner (GP) is vastly different to that of a specialist Paediatrician.'
 - 'Recommendations - Physicians (Paediatricians, Psychiatrists, Neurologists), Clinical Psychologists, Clinical Neuropsychologists, and Education and Developmental Psychologists (i.e. with a minimum of Master's level Psychology Degree) are the only professionals considered as [appropriate for Single Clinician Diagnostic Evaluations]. Speech
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Pathologists, Occupational Therapists and generalist Psychologists are considered as [appropriate for Comprehensive Needs Assessments / Consensus Team Diagnostic Evaluations].'

Evidence Table 38: Single Clinician Diagnostic Evaluation (Professionals)

Evidence source	Details
Recommendation	<p>It is recommended that a Single Clinician Diagnostic Evaluation be conducted by a clinician who, in addition to the expertise required by all members of the Assessment Team, has relevant training and expertise in the following areas:</p> <ul style="list-style-type: none"> – clinical reasoning in weighing evidence, and performing diagnostic formulations and decisions – signs and symptoms associated with common co-occurring or differential diagnosis conditions – the criteria for ASD and co-occurring or differential diagnosis conditions described by the current version of international diagnostic manuals (e.g. DSM and/or ICD).
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of assessing clinicians having appropriate expertise, and there was excellent support from experts for this set of expertise required.
Scholarly literature	Not identified
Other guidelines	<p><i>Clinical reasoning and formulation</i></p> <ul style="list-style-type: none"> • Informed clinical judgement by professionals with ASD specific experience and training contributes significantly to reliable diagnosis [4, 27, 30, 48]. • Standardised tools can be used to structure clinical judgement but should not be used alone (without clinical judgement) [4, 30, 48]. • A diagnostic decision involves some level of interpretation of evaluation data (such as consideration of presenting behaviours in light of developmental level, environment etc.) [27, 28, 48]. <p><i>Co-occurring and differential diagnosis</i></p> <ul style="list-style-type: none"> • Assessment information should be integrated systematically with consideration of differential diagnosis to develop a clear outcome [3]. <p><i>Diagnostic criteria</i></p> <ul style="list-style-type: none"> • Sufficient data relating to ASD diagnostic criteria to meet or rule diagnosis must be collected [27]. • A number of guidelines mention the DSM-V (or IV if the guideline was published prior to the publication of the DSM-V) ASD diagnostic criteria and the ICD-10 criteria and that 'gold standard' decision making involves the collection of data based on the criteria presented in these documents [5, 27–31]. • Very young children with possible ASD may not yet show the full range of symptoms detailed in the DSM-IV-TR / ICD-10 [30].
Online submissions	<ul style="list-style-type: none"> • We need more specific and objective guidelines in this area. Can it be based on history? Does the behaviour impact current functioning? Does a child need to show several behaviours

	<p>within each criterion or is one significant behaviour (e.g. eye contact) sufficient, for example?</p> <ul style="list-style-type: none"> • Accurate diagnosis is crucial, however, social policy for differential diagnosis is equally important. I believe there is an unfair situation in which some individuals who meet criteria for ASD present with age-appropriate language, academics, IQ, and daily living skills and receive NDIS funding support; while some children who do not meet criteria for ASD, present with severe language delays, learning difficulties, and behavioural problems, and are given little to no NDIS support. This leads to 'fudged' diagnoses to give help to children who genuinely need it but dilutes the already nebulous definition of ASD even further. • Diagnostic decisions should be reached by registered psychologists (with specialist training) using a combination of evidence based diagnostic tools (ADOS and ADIR), impressions from school/child care/play group observations, impressions from allied health professionals (with training and experience in ASD presentations) and solid clinical formulation that includes differential diagnosis.
Workshops	<ul style="list-style-type: none"> • Diagnosis needs to be accurate • Translation of concepts into a reliable system that leads to consistent and reliable diagnosis. • Precision is required
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that the final decision regarding an ASD diagnosis should be made by integrating and weighing the available evidence against each diagnostic criteria. • Round 2 agreement that an ASD diagnosis should be made by testing alternative explanations for symptoms that may warrant alternative or comorbid diagnosis or other clinical pathways. • Round 2 agreement that the final decision regarding an ASD diagnosis should be made by taking into account all available information from informant. <p><i>Single Clinician</i></p> <ul style="list-style-type: none"> • If the presentation is clear, one professional should be sufficient. • In some rural and remote areas, there may only be one professional available. • In many cases one professional can quite confidently make the diagnosis. • Only in clear cases, but this would be very rare and would not recommend as the standard. • The individual making the diagnosis needs to have met the individual and undergone an assessment process with them to help inform their own conclusions. • As reiterated throughout this report, the knowledge, skills and expertise of the individuals is critical regarding diagnostic decisions - whether this is a single professional or several professionals working within a multidisciplinary team. • If the presentation is complex, more than one professional is required.

- Probably best if it's the doctor, to ensure all medical causes and complications have been considered.
- Single after team discussion
- Can be individual or team.
- With this approach, it gives too much power to one person who may not understand the whole picture.

Diagnostic criteria

- Certain criteria should be met for a diagnosis. The 1-3 rating system has a large gap between the levels.
- Attention /reflection needs to be given to the criteria. Just because a checklist puts the person within a significant range doesn't mean that they do meet the criteria.
- That reporting is based on one set of agreed criteria - namely the DSM5.
- This can become limiting for the females with ASD who are not always perfectly described by the DSM.
- When making a diagnosis of ASD, it is important to make sure that enough evidence is collected to support the diagnosis (or non-diagnosis). However, exactly what is required does depend on the individual presenting for assessment. That said, I do believe that there should be some minimum standards that should be included in all assessments (e.g. ADOS +/- ADI-R)- it is just that other assessment components should be added/removed as appropriate depending on presentation (e.g. no need to assess for anxiety as a differential diagnosis if there are no symptoms of anxiety present)
- Rather than having a diagnosis followed by an 'ASD assessment' that will be ignored by the treating clinician, it would be better to have ASD diagnosis combined with comprehensive diagnosis and screening for other conditions.

Viewpoint surveys	Not identified
Interviews	'Trust and understanding of what the process is and being able to pick up quirks in people's behaviour that may indicate Autism. I think that's probably one of the most important things.'
Feedback	Not applicable

Evidence Table 39: Single Clinician Diagnostic Evaluation (Professionals)

Evidence source	Details
Recommendation	It is recommended that the Single Clinician obtain and maintain the additional skills and expertise listed in Recommendation 38 through peer observation, peer supervision and peer mentoring. Formal training courses and/or further qualifications may supplement these peer learning approaches.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of assessing clinicians having appropriate training, and there was excellent support from experts for this set of training requirements.
Scholarly literature	Not identified
Other guidelines	<ul style="list-style-type: none"> • Ongoing professional education is essential to remain current with research and best practice evidence [5, 27, 30]. • Professional education plays an important role in updating clinical skills [30]. • Ongoing, periodic training is necessary for diagnosticians as knowledge of ASD increases and evolves [27]. • Professionals involved in sharing of an ASD diagnosis and information provision should receive ongoing education and training [4].
Online submissions	<ul style="list-style-type: none"> • Diagnosticians should be required to complete ASD relevant professional development to maintain standards. • Have a follow up component to keep up to date and informed of changes.
Workshops	<ul style="list-style-type: none"> • Peer mentoring for single assessor. • Mentoring; for future diagnosticians to be able to work in remote/regional areas. • Need to ensure not just initial training is provided but ongoing skill development regarding advances in the field. • Training; a rigorous and continuous professional development process needs to be established. • Improved education on diagnosis for doctors e.g. Grad.Dip.ASD.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that a professional who conducts autism assessments should have observed peers conducting ASD assessments and making diagnostic decisions, and received peer mentoring in ASD assessment and diagnosis. • Round 1 partial agreement that a professional who conducts ASD assessments should have received peer supervision in ASD assessment and diagnosis. <p><i>Peer observation</i></p>

- Peer observation provides opportunity for discussion and reflection about clinical inconsistencies, and observation of the variable presentation of people with Autism.
- Considering differential diagnosis and comorbidities is also part of the process and observing peers go through this process is part of the learning.
- ASD assessment should involve multidisciplinary team, or at least professional liaison among professionals involved.
- Not just their professional peers but other professions e.g. speech pathology, occupational therapist, psychologist.
- Studying and training alone is not enough to gather the requisite skills. Peer training/observation is crucial.
- Very helpful learning strategy, and vital for gaining experiencing in conducting ASD assessments.
- Usually and should be part of training and certification for these skills.
- The best way to learn in this process
- Absolutely.
- This can be done via video / online.
- Helpful but not mandatory. Most helpful for those in the early stages of their careers.
- May be beneficial but now sure if an advantage or not.
- Do not think that every diagnostic assessment should be observed by peers.
- Difficult in rural areas.

Peer supervision

- It is important to impart the standards and because so much information needs to be gathered in particular by the Clinical Psychologist - competence cannot be achieved without mentoring and mentored supervision.
 - Supervision needs to be ongoing and linked to new developments in research and practice. It should also be possible to insist that the trainee continue training until they understand.
 - There are a small number of trainees who seem to grapple with understanding how to fit the complex picture together. Peer supervision in my experience expands skills and knowledge.
 - This knowledge needs to be pooled and brought together for discussion.
 - It is a complex area and needs complex supervision from a more experienced peer to develop the diagnostic skills.
 - Important to put the observations into context and see whether there may be other comorbidities.
 - Useful to develop a truly reflective practice and to encourage personal professional growth.
 - Multidisciplinary team assessment provides this opportunity without formalising it.
 - Mentoring and peer supervision may be more applicable to those in independent private practice needing support.
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- If someone has been formally assessed following training, then peer supervision may not be required.
- During training.
- Supervision is vitally important.
- On a continuous basis.
- Helpful but not mandatory for established clinicians. It is particularly valuable for new clinicians.
- It would be preferable, but not sure it's essential.
- Where possible.
- This is not necessarily available or feasible and may be helpful in reflecting on an individual's approach but not essential to being involved in the process.

Peer mentoring

- Mentored supervision and thorough knowledge and understanding of the criteria which can be applied by the assessor without a standardised tool to measure is essential to good practice in ASD diagnosis.
 - Learning the knowledge is part of the process and often the role of undergraduate and postgraduate institutions this is a logical path forward. However, the second part of assessment is the understanding of the different presentations and issues to be considered in the actual assessment is best learnt through mentoring after knowledge acquisition. This is the harder of the components to set in place but is vital.
 - This is mentoring and is vital. They need mentoring which provides feedback on the process and the trainee assessors own performance.
 - Mentoring may be more applicable to those in independent private practice needing support.
 - All clinicians conducting ASD assessments should have access to peers who they can consult for support, advice, training, and input.
 - Peer mentoring is a proven method to assist learning.
 - The assessments are very complex and mentoring emphasises this.
 - Mentoring provides a direct link between knowledge and use of that knowledge in diagnosis.
 - This is fundamentally the most important aspect of the training at least equal to the knowledge base.
 - The less secure members of the group tend to be mentored unconsciously by the old hands. Often shared rooms provide options for tea room discussions of what to try.
 - Part of certification.
 - More applicable for preschool and school age children
 - Would be nice.
 - This is helpful but not essential for established clinicians. It is particularly valuable for new clinicians.
 - Where possible, peer mentoring is really helpful to ensure support is always available.
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- As per comments above, good general knowledge with opportunity to focus on one age group / structure.
 - The logistics will be a problem.
 - This is not necessarily, available or feasible and may be helpful in reflecting on an individual's approach but not essential to being involved in the process.
 - Don't think all the points above are necessary - it can be a combination of training/ mentoring/ observations.
 - Post university training they need to maintain skills by attending professional development on ASD and other associated conditions which add to that knowledge on a regular basis.
 - This should be supported by continuing professional education
 - Part of maintenance of professional standards processes, but it must not be a pay for a yearly ticket type process. It needs not to be a for-profit empire building exercise.
 - There is a need to train those who did not receive training either in their course or as PD. ASD assessment and diagnosis is very complex and all professionals involved in assessment and intervention need to retain currency in the area.
 - In brief, there is often a lack of clinical experience as well as up to date skills and training in the complexities of how individuals with ASD present.

Viewpoint surveys	Not identified
Interviews	Not identified
Feedback	Not applicable

Evidence Table 40: Single Clinician Diagnostic Evaluation (Professional)

Evidence source	Details
Recommendation	It is suggested that a Single Clinician Diagnostic Evaluation involve the collection of information from at least one other clinician from a different discipline or specialty to the Single Clinician, if information from at least one clinician from a different discipline has not yet been obtained (for example, from the Comprehensive Needs Assessment).
Grade	Consensus-based Recommendation, Grade 2
Rationale	Numerous evidence sources suggest clinicians from multiple disciplines are involved, with most of the evidence consistently supporting this approach and good support from experts.
Scholarly literature	<ul style="list-style-type: none"> • There is little consistency between autism diagnostic guidelines internationally, in regards to whether a multidisciplinary approach must be undertaken for an ASD diagnosis [9]. • Fewer professionals involved in the diagnostic process, was predictive of higher overall satisfaction with the diagnostic process (Level III, Quality 82%, [46]). • Some studies recommend a comprehensive multidisciplinary assessment should be used (Level III, Quality 68-90%, [38, 40, 61]) Many medical practitioners in the Australian context, did not have qualifications to use standardized assessment tools but referred consumers to other healthcare professionals (Level III, Quality 68%, [61]). This team includes a medical professional (such as a paediatrician or a psychiatrist) and allied health practitioners (such as psychologists, speech pathologists, and occupational therapists; Level III, Quality 68%, [61]).
Other guidelines	<ul style="list-style-type: none"> • A minimum requirement for ASD Diagnostic assessment is that the diagnostician is completed by qualified clinicians [29]. • Diagnosis is often a multidisciplinary assessment [29]. • It is beneficial for a single clinician to gather information from other specialists during ASD evaluation [27]. • ASD diagnosis could be conducted by professionals from one or two areas of expertise, however intervention planning requires involvement of multiple disciplines [27].
Online submissions	<ul style="list-style-type: none"> • As long as the child has had all relevant medical checks e.g. hearing, vision, blood tests, genetic screening etc. prior to the assessment I think one suitably qualified person is able to conduct an assessment for autism and arrive at a decision regarding autism. • I believe that the quality of an assessment is related to the expertise, knowledge, and skill of the professional/s involved (and not just more people/more assessments). You can have good, correct, high quality assessments conducted by a single professional and low quality assessments conducted by a team of professionals; and vice versa. Expertise and experience is

	<p>more important than having a specific number of people involved in the diagnostic process.</p> <ul style="list-style-type: none"> • The person who is best suited to the task. Could vary between individuals. If you specify specific disciplines this could cause barriers when that professional is not available. • Mandating the number of professionals for straight forward cases is likely to lead to unnecessary and redundant assessment which would be an onerous burden both on the families and health services. Health services are already struggling to meet the demand for services as is. • More related to the qualifications and expertise of the people involved, rather than the number of professionals involved in the assessment • More professionals does not automatically equate to a better assessment. • The diagnostic assessment should ideally be done by a team of 2 or 3 health professionals • Single professional diagnosis is not backed by research as being most appropriate for accurate diagnosis of ASD.
Workshops	<ul style="list-style-type: none"> • A consideration for the number of people assessing an individual – it can be overwhelming with more than 2 people in some cases. • The tiers are based on the belief that you can glance at someone across the room and say that is autistic behaviour, but there is no such thing. • How does one determine if a person really has it or doesn't if they are doing it alone? • The gold standard to the assessment is by having a multidisciplinary approach.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 did not result in agreement regarding the number of professionals involved in assessment, although a multidisciplinary team was supported to a greater extent. • Round 2 did not result in agreement that the guideline should recommend a Tier One ASD diagnostic assessment with at least two assessment professionals. <p><i>Single Clinician</i></p> <ul style="list-style-type: none"> • Preferable if they come from different backgrounds. • Perhaps a tier one assessment process could be conducted by one professional. • Professions as single diagnosticians • Opinions regarding a single diagnostician • The caveat is that the diagnosis of 'barn door' autism really only needs one person and arranging a second or team assessment takes time and money and thus should be allowed for recognising that intervention will require further assessments subsequently • Paediatricians are an essential component given training and experience, but other professionals also play important roles.

Straightforward diagnoses can often be made by a paediatrician.

- As long as there is consistency.
- Depends on severity.
- May be the only option in rural and remote areas. For this reason, I have selected all assessments. The barriers to seeking assessment from a number of professionals could create great social and financial barriers for some people.
- depends on the resources available.
- Traipsing from one professional to another is extremely stressful for parents who already have more than enough stress in their lives, especially in regional areas.
- As long as the child has had all relevant medical checks e.g. hearing, vision, blood tests, genetic screening etc. prior to the assessment, one suitably qualified person is able to conduct an assessment for autism and arrive at a decision regarding autism. If the child has not had any medical review, then a doctor should be involved at the time of assessment (for 0 to 12 only). An intervention planning assessment would benefit from input from psych, OT and speech for 0 -12 'years of age'.
- If an individual is adequately trained and experienced in the diagnosis of ASD, then they are able to conduct an effective assessment without the involvement of another person in the assessment. That said, I do think that professionals should consult other sources of information (e.g. past reports, therapists working with the individual etc.) so that they have a comprehensive picture of the client's presentation. I also believe that they should consult others (of the same or different discipline) if they are not sure diagnostically or if they need information outside of their area of knowledge.
- I would suggest that a single professional with extensive and demonstrated experience could provide a single person diagnosis. The DSM criteria are an attempt to distil several decades of research and clinical experience into 7 sentences. Clinical experience is of greater value than 7 sentences.
- Some children may be able to be diagnosed by a single clinician, if they are 'classical' of ASD, or most definitely do not have ASD. It is the children in the 'grey zone' who require often assessment by multiple clinicians including observations in the school setting etc.
- I think that ASD assessments could be screened by a single professional who is suitably qualified and experienced for that age and category of patient. A small number of cases are very straightforward - usually with younger people.
- This is occasionally appropriate - e.g. with paediatricians in cases of frank or unambiguous autism.
- Only appropriate for unambiguous cases.
- Depends on the presentation. A single professional may be adequate in clear-cut cases, but more often it is preferable for

multiple professionals to assess from their disciplinary expertise, if not to add to dx certainty (which may be needed) then to enrich understanding of the child's strengths and weaknesses, to help develop a comprehensive management plan.

- A person who is clearly presenting as being on the spectrum should only need to see one professional for a diagnosis, followed by a medical check with a paediatrician/ doctor. Hence the need for a tiered system/triage.
- Tier One refers to straightforward assessments with really clear indicators of an autism diagnosis. I certainly think in these cases a single practitioner with the adequate experience should be able to complete these. It doesn't need to be unnecessarily drawn out (and expensive) if the diagnosis is very clear.
- Perhaps a tier one assessment process could be conducted by one professional.
- I think that a tiered approach would allow a single discipline to make an assessment in some circumstances.
- This assumes that one professional group has the skills and knowledge of other professional areas of expertise, which is not the case. This will provide challenges for people who have a more complex presentation or a subtle nuanced presentation of ASD.
- It is unlikely that a single professional has the capacity to extend their practice outside of the clinical setting to gain a full appreciation of the child's function in the natural environment.
- I have seen the result of this in NSW, where a paediatrician diagnosed a child as having ASD and then told the parents after a few years that the child was not ASD, however, they had had the benefit of accessing early intervention services. This was a great injustice to both the child and the family and an abuse of the funding system.
- Assume that the results of up to date speech and language testing and/or cognitive testing are available at the time of the assessment. Also, that (in the case of children) they have been assessed by a Paediatrician and any necessary medical tests have been conducted to rule out medical conditions associated with ASD. In the case of adults, it is important to have a medical practitioner involved in their ongoing care and treatment, especially for any comorbid issues that are present.

Input from another professional(s) from different discipline

- Strong support that professionals should come from different backgrounds with a broad skill set
 - to ensure that all aspects of ASD presentation are considered in the diagnosis
 - and to assist with a differential diagnosis
 - a more objective process.
 - own areas of expertise
 - so that a collaborative approach can be provided for intervention
-

- as some presentations can in fact have a differential diagnosis and expertise in different areas may assist with planning once a diagnosis is received.
 - The single professional will refer for relevant allied health assessments, where needed to clarify either diagnostic or treatment planning issues. They may also refer for multidisciplinary team assessments where these are warranted. To mandate a team assessment risks limiting access for some, and also potentially unnecessary team assessments where the experienced and qualified professional does not believe these would add value.
 - Again, ASD is so broad - who would that professional be?
 - Who is that professional? We need expertise about pragmatic language, (speech pathologist); sensory processing (occupational therapist); specific cognitive /behaviours; reciprocal communication etc. (psychologist, and occupational therapist and speech pathologist). and then with the medical background and oversight!
 - This professional should be either a psychologist or a paediatrician, both of whom specialise in ASD.
 - Can be done by a range of disciplines with adequate training- Nurse practitioners, Paediatricians, psychologists, social workers, speech pathologists and occupational therapists.
 - Input from multidisciplinary team is ideal, though resources to have multiple professionals available to complete assessment at the same time may not be realistic. Consultation between professionals in various settings (e.g. paediatrician, occupational therapist, educator) is important
 - Possibly in the tier 1 of the approach by Missouri model, but not for complex or subtle presentations. I veer towards a multidisciplinary assessment for intervention planning even in this group, but this will increase strain on resources, and thus potentially waiting times and access.
 - It is important that there is a team approach to complex assessment and ASD definitely fits into this box. I see so many children and adults who have been diagnosed incorrectly with long term implications for the individual and their family. There are also implications for the community.
 - Unless symptoms are so mild that no additional supports will be required, or a child is to be enrolled in an educational program in which relevant professionals are employed, it will most likely be important for at least some of the following - SLP, Psych, OT, and Paediatrician - to be involved.
 - At times there needs to be a multidisciplinary approach.
 - We have trialled transdisciplinary assessment which always involves the family being seen by multiple professionals at the same time. This system appears to be more efficient, lead more quickly to you a diagnosis and decreases duplication.
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- There are different components to the assessment and there is also a subjectivity attached to the diagnosis as we are looking for impairment and not absence of certain areas of skills and development. It is also a life-long diagnosis.
- I think there is a risk of false positives and false negatives with this approach. I also believe that relevant comorbid conditions are missed and possible differential diagnoses not considered when a single discipline is involved.
- A range of professionals have a capacity for diagnosis. I like the NSW ASPECT notion that more than one professional with experience agrees.
- Usually more than one 'diagnostician' and the Victorian education department requires a 'multidisciplinary team' to authorise the diagnosis.
- Currently in South Australia, two professionals 'diagnose' - it is an important and lifelong diagnosis, brings better standard to whole process.
- Multiple perspectives from various allied health providers is a great idea.
- Single professional diagnosis is no backed by research as being most appropriate for accurate diagnosis of ASD.
- Multidisciplinary team (4) of:
- Child development paediatrician, a speech pathologist, an occupational therapist, a physiotherapist and a child psychologist.
- A multidiscipline approach would be more comprehensive.
- Given the complexity of ASD presentation across developmental areas it should be a multi-disciplinary assessment.

Viewpoint surveys	The inclusion of more than one health professional or doctor was rated of low importance by one viewpoint. Participant comments supported the inclusion of multiple professionals.
Interviews	'I think it would be overwhelming, to be honest... in my experience just ... that one person.'
Feedback	Not applicable

Evidence Table 41: Single Clinician Diagnostic Evaluation (Information)

Evidence source	Details
Recommendation	It is recommended that information be collected during a Single Clinician Diagnostic Evaluation on the following: <ul style="list-style-type: none"> – overview of topics covered in the Comprehensive Needs Assessment – signs and/or symptoms specified in diagnostic criteria for ASD and potential co-occurring and/or differential conditions – biological, personal and environmental factors relevant to the individual.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of collection information on a comprehensive range of topics, and there was excellent support from experts for these topics.
Scholarly literature	Not identified
Other guidelines	See Evidence Table 23: Assessment of Functioning Information Topics
Online submissions	See Evidence Table 23: Assessment of Functioning Information Topics
Workshops	Not identified
Delphi surveys	<ul style="list-style-type: none"> • See Evidence Table 23: Assessment of Functioning Information Topics • Round 1 agreement that information should be collected during the ASD assessment process on the topic of ASD specific symptoms (i.e. social communication and restricted, repetitive patterns of behaviour) and other relevant symptoms (e.g. symptoms that indicate that further investigations are required, a co-morbid condition may be present, a differential diagnosis should be considered or functional limitations are present).
Viewpoint surveys	Assessing ASD symptoms was of neutral importance to all viewpoints.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 42: Single Clinician Diagnostic Evaluation (Information)

Evidence source	Details
Recommendation	<p>It is recommended that information be collected during a Single Clinician Diagnostic Evaluation through a variety of means, including:</p> <ul style="list-style-type: none"> – review of documentation from the Comprehensive Needs Assessment – communication with clinicians who conducted the Comprehensive Needs Assessment – file review of any additional assessment reports – interview with the client; – observation of the individual undergoing assessment – communication with other professional(s) as required.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of collection information through a wide range of means, and there was excellent support from experts for these approaches.
Scholarly literature	<ul style="list-style-type: none"> • ‘Parents possess a key piece of the diagnosis and their experiences with their child with Asperger Syndrome needs to be consulted.’ (p111, Level III, Quality 95%, [18]). • ‘The primary healthcare providers, school teachers, and all practitioners need to be involved in identifying the early signs of Asperger Syndrome. These are the professionals in the forefront of hearing the concerns of parents and in working with children’ (p112, Level III, Quality 95%, [18]).
Other guidelines	<p><i>File Review</i></p> <ul style="list-style-type: none"> • All relevant records should be reviewed [27]. • Topics to be considered in file review: <ul style="list-style-type: none"> ○ should be ASD specific and include any background information that may aid in differential diagnosis [27] and [4]. ○ child family/ caregiver history including 3 generations [4, 5, 35]. ○ medical history including well child developmental records (including milestones) and birth records and newborn vision / hearing screening ○ whether the individual has had previous / receives current services and relevant assessments / reports from these [35]. ○ previous screenings and diagnoses / medical evaluations / specialist evaluations, results and reasons for these [4] ○ medication history ○ school assessments / reports / education progress / behavioural reports ○ documented observations ○ previous and current behaviour and functioning

- records of early development (e.g., videos or notes) [4, 29].
 - evidence or parent report of physical or sexual abuse or other traumatic experiences [4].
- A file review can prevent duplicate testing.
- File review should ideally be completed prior to the child's evaluation to allow for more focused questioning / assessment when face-to-face.
- The amount of prior information often is dependent on the age and functioning of the individual
 - younger children typically having had fewer encounters with professionals [27].
 - children who have significant impairments (e.g., motor, sensory, etc.), including those with risk factors for a developmental disability (e.g., premature birth, birth complications, substance exposure) are more likely to have extensive records [27].
 - older individuals may not have a developmental history, but similar information could be sought from a parent, sibling, or any person who knew the individual well as a child [4].
- Parents can facilitate clinician access to information by maintaining a file of documents relevant to their child's development to eliminate the turnaround time required to obtain records from third parties.

Observation

- Observation of an individual to directly assess the presence of behaviours consistent with ASD is a core component of ASD evaluation [5, 27, 28, 35].
 - Necessary to:
 - to identify deficits that parents may not report because of their unknowing compensation [27].
 - allow observation of patterns of interaction with family and unfamiliar adults [3].
 - Considerations for direct observations:
 - should evaluate the individual's behaviour in structured and unstructured situations (and may or may not include standardised tools) [3, 4, 27, 28].
 - should involve situations aimed purposefully to observe specific behaviours relating to ASD descriptors [27, 28, 30, 35].
 - Assessors should ascertain whether the observed behaviour is representative of the individual's typical behaviour. If observational assessment in the structured clinic setting is not representative of the child's typical behaviour, input from others and/or observation in the individual's typical environments is necessary [5, 27, 30].
 - Ideally, observations should be taken across multiple familiar settings [3, 4, 30].
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	<ul style="list-style-type: none"> ○ Structured observations may be limited by noncompliance and elicit atypical behaviours because of unfamiliarity with materials and difficulty with changes in activity and interactive partners [27]. ○ Ample assessment time and potentially multiple assessment sessions should be allowed for direct observation and interaction [4, 27]. ○ Motor stereotypies or other repetitive behaviours or unusual interests may not be observed in the course of a single evaluation and hence information regarding this may rather be reported from parents / caregivers [27]. ○ If appropriate, direct behavioural observation includes an interview with the individual [3, 27]. ○ Direct observation still involves interpretation in the context of age, developmental level, level of engagement and cooperation [27]. ○ The interview setting should include a selection of toys for children at a range of developmental levels – sensory, functional, symbolic and so on [3]. ○ Eliciting clinical evidence of ASD requires the professional to have substantial clinical experience but may be completed by a range of disciplines with necessary training and expertise [4].
Online submissions	<ul style="list-style-type: none"> ● Careful consideration should be given to ensuring that there is a gold standard of assessment with flexibility for variation on the discretion of trained experienced clinicians (dependent on presentation, parent/carer report etc.). <p><i>File Review</i></p> <ul style="list-style-type: none"> ● The assessment should include blood tests to identify genes, maternal health, child's health, tests regarding communication, sociability, habits and behaviours, eye tracking & constipation information. ● Diagnosis decisions should also consider family presentations of ASD, history of other family members. ● Diagnosis should take into account family history of behavioural and neurological characteristics. ● Prior developmental assessment should be provided. ● Historical evidence of criteria met/not met. <p><i>Interview with client</i></p> <ul style="list-style-type: none"> ● Assessment should include interview and observation of behaviours; and participation in conversational interaction, not just formal testing of language/ cognition. ● Interview with parent/guardian or individual to gather ASD history and observations/ play/ social session with individual. ● So, personal I feel the best way diagnose a child is with personal interaction with child by professional diagnosing child and with three professional agreeing in a multidisciplinary team. <p><i>Communication with other clinician(s) and/or professional(s)</i></p>

	<ul style="list-style-type: none"> Consider trauma history. ADOS may be used to gather information, but diagnosis decision to be made through discussion by the clinicians who have observed the child, against DSMV criteria. Collecting extensive history (esp. for adults). 'assessment' should be in consultation with the school teacher, psychologist and the paediatrician to get a whole view of the child. Assessments should include information from teachers, social workers from / School/ General practitioner/other medical specialist. Background information collected via questionnaire from school/childcare/other 3rd party. preschool/day care feedback Paediatricians/psychologists who have verbal conversations with educators will gain superior insight into the individual. history from multiple sources to ensure symptoms pervasive. Information should be collected from ALL the team – parents, educators, Speechies, OT, colleagues and be considered of equal importance. A second source i.e. other than a parent should provide information too.
Workshops	Multiple sources of information.
Delphi surveys	<ul style="list-style-type: none"> Round 1 agreement that information should be collected during the ASD assessment process through: <ul style="list-style-type: none"> File review of existing documents written by other professionals An interview with the carer of the individual being assessed for ASD An interview with the individual being assessed for ASD Observation of the individual being assessed for ASD Medical evaluation of the individual being assessed for ASD. The structure should not rely entirely on parent report or self-report. <p><i>File Review</i></p> <ul style="list-style-type: none"> I do think that professionals should consult other sources of information (e.g. past reports, therapists working with the individual etc.) so that they have a comprehensive picture of the client's presentation. I think that it is essential that clinicians review all past information prior to conducting an assessment- means that they have a more complete picture of the individual, gain information about the individual in multiple settings, and avoids repeating assessments etc. that have already been done. It is important to have face to face (or telephone) discussion with all professionals involved (where consent is given). The diagnosis may already be confirmed in the practitioner's head before seeing the client. It would be more objective to see

the client, complete the assessment and then consult the other documents.

- Assessment without this would be fraught.
- Usually essential but may not be necessary in obvious cases.
- Can prejudice the assessment.
- This assumes that all families and individuals are happy for this to occur, which is not necessarily the case.
- This is not my area of expertise however it seems common sense to collect all relevant data.
- In my experience, so much of the previous record collecting and assessment information often fails to correctly identify the issues that are most pertinent to ASD. (For example, 'red flags' are often missed). Or, the most appropriate assessments to answer questions related to ASD have not been undertaken.
- File review ensures that assessments can be more efficient and don't double up on assessments or observations that have already been conducted.
- There are some who are obvious and do not require multiple informants, but sensory deprivation can make even this group tricky.
- If needed and relevant. No different to other conditions - simply a case of good professional communication to prevent medical mishaps
- Clients should not have to recall details of history multiple times. this information should be shared by professionals.
- This is helpful to establish symptom presence and severity over time and in multiple settings.
- This should never be used without viewing the person and their parent or carer for a child.
- For adults, it may be these which provide vital information about the earlier years particularly those in the developmental period.
- Mandatory yearly paediatrician reviews.

Observation

- Functional, non-standardised assessing and observations are an essential component. many people with ASD may perform well on standardised testing, however, it is their functional qualitative performance which is impaired

Interview with client

- The individual being assessed MUST be seen by the assessor(s). Interview is not possible in some circumstances such as very young children and not when the individual does not have the cognitive and/or language capacity for such interview. However, for all others interview should be attempted. The amount of information gathered from the individual will increase as their age increases.
 - it is helpful to include older children (usually 14 plus) in the assessment of criteria as they have a very important current and past perspective. Adults are almost always included in the
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interview. Adult and older adolescent assessments take a different form and the provision for this is very important.

- I think that it is essential that the clinician spends time with the person being assessed. Exactly what this looks like, and the types of questions asked, would depend on the individual's age and developmental level.
- Depends on the age and intellectual capacity of the child. Talking to the child is very important because it gives you a firsthand experience of the child's verbal social and pragmatic functioning.
- This would depend on the age of the individual. Agree for adolescents and adults although this is not my area of expertise.
- Especially important for adolescents and adults suspected of having an ASD.
- 'Interview' tailored to age / communicative ability. Combination of standardised and unstructured interaction.
- Where possible (given age, communication ability).
- Even when the person has limited communication abilities an attempt should be made.
- Unless it would be traumatic for the individual or of no benefit.
- Don't normally 'interview' children, though interaction with them (verbal, play) is an important part of assessment.
- It may be observational rather than interview.
- Where appropriate I think here. I am thinking about the interview components of the ADOS for all ages. More comprehensive case history interview should also be conducted with adults if possible.
- This depends on several factors such as the age and level of functioning of the individual, communication skills etc.
- If it is adult and capable of providing information.
- Presumably this is dependent on the age of the individual as well. e.g. it is not relevant to 'interview' a 3-year-old, but observational assessment would be.
- It is essential that some time is spent observing the individual, either in a structured way or during informal observations. Not all individuals would be able to complete an interview, but it should be conducted when possible.
- Only if age and communication allow.
- Depends on person being assessed and level of communication.
- If it is adult and capable of providing information.
- An interview could only help.
- I have been horrified mainly in the NT but also in rural and remote WA that children and adults who need services which are not available in their locality, but which could be provided effectively (at say 75% value of face to face in person) are not eligible for the services because of bureaucracy which requires ALL treatments to be in person.

Communication with other clinician(s) and/or professional(s)

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- Medical information is very important if the assessment is simple then past reports may be adequate to inform the assessment. For complex assessments, which include neurological and physical issues this input is very important. Medical input is required for complex assessments.
 - The assessment should include blood tests to identify genes, maternal health, child's health, tests regarding communication, sociability, habits and behaviours, eye tracking & constipation information.
 - The diagnostic process should include written reports, video footage and coming from strengths as well as areas of challenge - physical considerations such as asthma, muscle tone, psoriasis, eczema, ticks and sensory profiling as well as rigidity of thought, speech delay (social context and appropriate social reciprocal speech should also be considered) and fixated interests.
 - I believe that this is helpful, but not essential. However, if the child/individual is presenting with specific medical or genetic related concerns then I think that it would be very important to consult a doctor. In other words, it would be important in some cases but not others.
 - I believe that a medical assessment be conducted prior to structured ASD assessment.
 - This should be done by the paediatrician before referral for full ASD Assessment at their discretion.
 - Surely this is part of the paediatrician's assessment and would be done as a part of their process and at their discretion.
 - To rule out other diagnoses.
 - Needs to be done before the assessment is even scheduled to rule out the presence of a neurological or physical disorder.
 - Clinical observations for posture, motor planning, righting reactions, sensory modulation (e.g. gravitational insecurity) can be identified in these assessments. This helps to identify triggers for behavioural avoidance.
 - A critical component in ASD assessment is how the individual functions in a peer group setting - hence input is required from professionals/carers who have experience of the individual in this setting.
 - Fundamental information.
 - I don't think this necessarily must be done at the time of the assessment, could be done before.
 - I typically recommend genetic testing to rule out/identify the presence of any possible genetic conditions.
 - When relevant or needed.
 - We should be quite sophisticated about the diagnosis now using iPhone eye-motion apps and genetic testing.
 - This could be collected by someone who was not an expert using a standardised collection tool. To speed assessment process.
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	<ul style="list-style-type: none"> In the case of Adults, this type of exam may be indicated but is best recommended on a case by case basis.
Viewpoint surveys	Observation of the person being assessed was rated highly by one viewpoint and interviewing both the person being assessed and interviewing parent/caregivers were both rated of high importance by two viewpoints.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 43: Single Clinician Diagnostic Evaluation (Information)

Evidence source	Details
Recommendation	It is suggested that ASD-specific assessments not be used as a substitute for clinical judgement in diagnostic decision-making, nor as the sole investigation on which an ASD diagnosis is based, though they may provide considerable assistance in the direct observation of ASD symptoms. Their use in an assessment of ASD concerns is at the discretion of the Single Clinician.
Grade	Consensus-based Recommendation, Grade 2
Rationale	Numerous evidence sources suggest ASD-specific assessments are helpful, with most of the evidence consistently supporting this approach and good support from experts.
Scholarly literature	<ul style="list-style-type: none"> Many medical practitioners in the Australian context, did not have qualifications to use standardized assessment tools but referred consumers to other healthcare professionals (Level III, Quality 68%, [61]). This team includes a medical professional (such as a paediatrician or a psychiatrist) and allied health practitioners (such as psychologists, speech pathologists, and occupational therapists; Level III, Quality 68%, [61]). Previous systematic review findings [62][63] have revealed that there is inadequate or inconsistent diagnostic accuracy evidence to support the use of any ASD-specific assessments (including ADOS) in relation to the previous DSM-IV diagnostic criteria, and very few studies included in the more recent paper refer to DSM-5 criteria. Falkmer and colleagues [62] suggested that the ADI-R and ADOS had strong psychometric properties in relation to the previous DSM-IV diagnostic criteria, with high levels of sensitivity and specificity, particularly when these two instruments are used in combination. The CARS also had a strong evidence base and high diagnostic accuracy, however this instrument was not recommended as administration relies on utilizing other instruments to collect the information to complete the rating scale [62]. Although not recommended in the conclusions of this systematic review for use at this stage due to the limited evidence base, the 3di had the highest diagnostic accuracy in the one study reported [62]. The DISCO and Gilliam Autism Rating Scale (GARS) diagnostic instruments were mentioned in relation to concerning diagnostic accuracy results [62]. Wigham and colleagues [63] group found mixed results in relation to the diagnostic accuracy of the ADOS / ADOS-2, with only some studies demonstrating adequate sensitivity and specificity. The AMSE showed good diagnostic accuracy in the two studies featured, whereas the ADI-R did not demonstrate adequate or consistent diagnostic accuracy in the study reviewed.

- The systemic database search conducted as part of the Guideline development process revealed a very limited number of ASD specific diagnostic accuracy studies using a gold standard multidisciplinary DSM-5 diagnosis as the reference standard. The only two ASD-specific assessments that had an adequate evidence base (two or more studies) were the ADOS and AMSE. Despite the ADOS being considered “gold standard” instruments, it did not consistently demonstrate the pre-specified level for ‘adequate’ diagnostic accuracy against the DSM-5 (at least 0.80 for both sensitivity and specificity) [64][65]. The AMSE was advocated by the authors as a tool to guide the clinical judgment of those with expertise in ASD diagnosis. The accuracy of AMSE with reference to the DSM 5 criteria, showed high levels of specificity and sensitivity in adults at risk of ASD (Level III, [66]) and young children with no fluent language (Level III, [67]).

Diagnostic accuracy for ASD diagnostic instruments:

Instrument	Sensitivity	Specificity	Population
Caregiver Interview			
ADI-R	0.62	0.83	Adults [65]
Direct Observation			
ADEC			Toddlers [64]
(cut off = 10)	0.98	0.52	
(cut off = 11)	0.93 - 0.94	0.63 – 0.64	
(cut off = 14)	0.85 – 0.87	0.79 – 0.82	
ADOS-G	0.64	0.64	Adults [65]
ADOS-2 Mod 1&2	1.00	0.50	Toddlers [64]
ADOS-T clinical	0.96	0.54	
ADOS-2 All Mod.	0.98	0.52	
AMSE (cut off = 6)	0.94	1.00	Toddlers to young children [67]
AMSE (cut off = 5)	0.91	0.93	Adults [66]
CARS2-ST	0.84	1.00	Toddlers to
CARS2-HF	0.84 – 1.00	0.71 – 0.82	adults [68]
CASD	0.98	1.00	Toddlers to adolescents [69]
NODA	0.85	0.86 - 0.94	Toddlers to young children [44]

Other guidelines

- Standardised tools for evaluating ASD behaviours are beneficial for a range of reasons (Connecticut, New York, Canada, Missouri, New York) [5, 27, 30, 31]:
 - can aid in heightening validity of ASD assessment
 - can increase diagnostic accuracy in clinical settings, particularly when presentation is mild or complex
 - can increase diagnostic confidence for the community, clinicians, families and individuals
 - can help provide evidence of eligibility for support (such as school-based support)
 - can aid in communication and mutual understanding between team members and teams.
 - Gathering evidence when other methods of data collection are less fruitful / available (e.g., record reviews, family history)
 - can support more standardised documentation of ASD behaviours with reference to diagnostic criteria (DSM-5/ICD-10) by operationalising the criteria.
 - If standardized instruments are not used for the data collection of ASD behaviours or the intellectual, adaptive and cognitive skills of the individual prior to or during the initial diagnostic evaluation, the diagnostician should refer to a qualified professional who can complete standardised testing as part of the assessment for intervention planning or to contribute to intervention planning [5, 27, 30].
 - The use of standardised tools (for data collection of ASD behaviours) is desirable/preferable but not essential for a diagnosis of ASD in all cases, such as when a clinician with expertise in the area of ASD documents atypical behaviours strongly indicative of an ASD in addition to delays in communication and social skills [4, 5, 27, 28, 30, 31].
 - The use of standardised tools is not a replacement for clinical experience and judgement and information gathered through standardised tools should be interpreted in light of all the available data (medical history, interview, informal observations etc.) [3, 27, 28, 35].
 - No single autism assessment instrument or source of information should be used as the sole basis for diagnosing ASD or excluding an ASD diagnosis [3, 28, 29].
 - If standardised tools are to be used it is important to use those with good sensitivity (correctly identifying children who have ASD) and good specificity (correctly identifying children who do not have ASD) and that it be appropriate to the child's age [48].
 - The ADOS and ADI-R should be advanced as the standard assessment protocol in assessment clinics across Canada, however, a lack of ADI-R, and/or ADOS data should not prevent a child from receiving much needed services if a diagnostician with sufficient expertise conducts the assessment [30].
 - The users of standardised tools should ensure that they are well informed about their chosen tool and are aware of the appropriateness for the individuals age and ability, the tool's
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	<p>validity, reliability, limitations and proper use (in accordance with the publisher's instructions and the training requirements set forth by the publisher) [3, 5, 27].</p> <ul style="list-style-type: none"> • The use of standardised tools can have considerable resource implications for clinical service providers including training time (initially and to maintain reliability), protected assessment times to complete administration, time for scoring and reporting results and purchase of test equipment [28, 29]. • The diagnosis of ASD should involve the use of at least one diagnostic instrument with good sensitivity and specificity for autism [48].
Online submissions	<ul style="list-style-type: none"> • Objective measures and behavioural observations in clinical and educational settings. Past and current functional impact in school and ameliorating or enhancing environmental factors. • Assessment information should be collected from a battery of standardised assessments and clinical, home, school observations. • Using standardised tools, there is currently no agreed method of diagnosis. Some diagnosis based on observations, some others based on verbal information without observing child. There should be a required (appropriate) mixture of interview for information, assessment tools (ADI-R, ADOS-2) and observations. • A standard assessment would give parents a clear starting point at diagnosis, it's too subjective and reliant on parental feedback. • Assessment information should be collected through standardised assessments measuring communication and regulation skills, as well as psychological health and informal observations, as well as parent report. • And one of the diagnostic instruments e.g. ADOS Assessment should be used as part of the diagnostic process. • Careful consideration should be given to ensuring that there is a gold standard of assessment (e.g. ADOS, ADIR). • Careful consideration should be given to ensuring that there is a gold standard of assessment (e.g. ADOS, ADIR, observation in other settings) with flexibility for variation on the discretion of trained experienced clinicians (dependent on presentation, parent/carer report etc.). • Further careful thought must be given to clear guidelines regarding differential diagnosis regarding trauma, attachment disruption. • There should be a screening procedure using a tool that can be administered by a Medical Practitioner, Early Childhood Nurse, Clinical Psychologist. • Info collected by observation, checklists (parent/teacher/professionals) including SPD. • Specific GPs should be upskilled in the assessment and diagnosis of ASD using the Project ECHO framework.

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- Suggested ASD-specific assessments to be used by trained clinicians: ADOS, ADI-R, CARS, AMSE, DISCO, ADEC, SCQ, AQ.
 - What standardized, criterion referenced and/or informal assessment tools are accepted?
 - Encouragement to use a predetermined set of tools would be useful, so that the process isn't an ad hoc one as it can sometimes be.
 - The assessment itself needs to have a wider range of questions in regards to determining ASD.
 - Reinvent diagnosis criteria - move away from behaviours (they are too narrow, stereotypical, are only presentations of underlying issues) and instead develop tools that look at the underlying causes of behaviours - emotional regulation, sensory processing, other processing, social and communication issues.
 - The diagnostic process should include written reports, video footage and coming from strengths as well as areas of challenge - physical considerations such as asthma, muscle tone, psoriasis, excimer, ticks and sensory profiling as well as rigidity of thought, speech delay (social context and appropriate social reciprocal speech should also be considered) and fixated interests.
 - It would be helpful to have a questionnaire before, so parents can add things as they come up.
 - Diagnosis should include a self-assessment component to be completed by carer/families.
 - Flexibility of diagnostic tools and process, for example diagnosis conducted over several sessions.
 - Doctors need to remember that ASD is different for everyone the ADOS test is too overall its designed for one type of ASD the low functioning.
 - Standardised and non-standardised assessment. Important of behavioural observations in the client's natural environment.
 - I do not see the need to have this at all. We currently have DSM 5 as the accepted diagnostic tool. The other alternative is ICD 10.
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Workshops

- Diagnosis is delayed if the tool used does not indicate diagnosis, but the specialist/diagnostician believes the patient has ASD.
 - Gathering of information should be advised/facilitated by a qualified professional e.g. GP, SEN, Autism consultant, Allied Health.
 - Department of Education, Department of Health, NDIS – should all use similar (if not same) functional assessment tool.
 - Gold standard tools to be developed that balance 'strengths' and 'deficits'.
 - Using the best tools available.
 - Standardised assessments are good, but clinical judgement is the most important.
-

Delphi surveys

- Agreement was not reached that ASD diagnostic instruments should be used in all cases.
 - Interview, observation, standardised ASD tools and other standardised tools are necessary in diagnosis and intervention but not everything for everyone. Decisions need to be made initially and then doing the assessment and intervention to use what is needed. Use of all tools would be insanely expensive. The cohort is so broad that expert knowledge and decisions need to be made on a case by case basis. There are some guidelines that can be drawn up to assist but these need to be flexible.
 - Should not replace expert knowledge and experience, which is the gold standard for diagnostic assessment. I have come across professionals who place too much emphasis on the ADOS score alone, without drawing in all the other available information.
 - I consider these tools are useful and important aids, but they should never form the basis of the assessment. They are aids to the clinical diagnosis not a substitute which is increasingly happening with very poor results. These tools are time consuming and expensive and should be used when indicated only in complex assessments where maximum information is required.
 - Standardised tools are essential to ensure assessments are reliable and valid.
 - These assessments can be very helpful but are not always required in clinical practice. They are particularly useful in teaching settings.
 - This would improve consistency of diagnosis
 - For children under 5 years, a developmental test is needed to see if the social communication disorder is consistent with the overall level of development. Autism specific testing may be needed but not necessarily.
 - I think these are good to use but the emphasis should be placed on differential diagnosis using tools most appropriate for achieving this with each client.
 - Clinical judgement should be exercised to determine whether this is appropriate or not. Individual with unambiguous presentation who clearly meets DSM5 criteria, would not necessarily need to have an ADOS-2 administered.
 - They should not replace expert knowledge and experience, which is the gold standard for diagnostic assessment. I have come across professionals who place too much emphasis on the ADOS score alone, without drawing in all the other available information.
 - We need to accept that in most cases using clinical instruments are not as good as an assessment by an expert or experts.
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- There are some broad principles in ASD assessment, but the presentations vary so much over gender groups, age groups, ability groups, ethnic groups etc. that care must be taken.
- In a perfectly resourced (professionals, time, tools, clinic and natural setting observations) world these things would be useful for the assessment process and resulting intervention (and to gather data for research, understanding of presentation, protective factors, best indicators of response to what types of intervention), but I do not feel that they are all necessary for a diagnostic assessment.
- This may include the use of innovative techniques such as on-line assessments by trained assessors from cities and continue to service provision also online.
- These tools vary in cost and time to administer, with the 'gold standard' ADOS-2 still only has a 70% concordance rate with specialist opinion. Given the expense of training and kits, accessibility is an issue for many families, especially given more complex assessment may require costs associated with OT, Speech, and Psychology observation assessments. I personally use the cheaper and easier Autistic Spectrum Rating Scale (ASRS) electronically as a quantitative tool and prefer less structured school observations by an experienced psychologist.
- There must be a further clinical indication to use such costly resources. in relevant cases.
- ADOS and ADI-R may be less sensitive to needs of adults with ASD.
- Only if required. For 'barn door' ASD this would be a waste of time and resources.
- Criteria should be addressed, rather than mandating specific tools, that have varying degrees of imperfect standardisation.
- Far too much weight by clinician using the ADOS for higher functioning/milder presentations.
- There is currently an over-reliance on these tools that are not meant to provide an 'official diagnosis' on their own. (Unfortunately, all too often the results are misinterpreted by inexperienced clinicians across all groups). Rather they are valuable tools that can be used to aid the assessment process. In the case of the ADOS, there has been some research that is now not recommending its use for groups (e.g. high functioning adults).
- Training is required for use of this assessment.
- Difficult to validate for adults.

Viewpoint surveys	The use of standardised assessments was rated of low importance by one viewpoint.
Interviews	Not identified
Feedback	Competing feedback was received regarding whether ASD-specific assessments (e.g., ADOS-2, ADI-R) should be a requirement for an ASD diagnostic assessment, with a roughly equal split of individuals and organisations advocating for and against their inclusion. It was

the decision of the committee to not make these assessments mandatory for several reasons:

1. While these tools can be a helpful adjunct to clinical decision making, the feedback from the consultation period indicated that the use of these tools in clinical practice is often impractical.
 2. Currently, there is a shortage of clinicians trained on these assessments in Australia and making their administration a requirement of assessments will substantially increase waiting lists (and likely, costs of assessments), which may deprive many families of promptly accessing diagnostic services.
 3. However, given evidence indicating that these assessments can be helpful in guiding clinical decision making, the revised Guideline retains the listing of these assessments as a recommendation for use in assessments.
- ‘Why is an ADOS-2 not recommended as a step in Tier 1 as a structured way to do an observation?’
 - ‘During many assessments of autism spectrum disorders diagnostic tools are used to collect information in order to help to decide whether someone has a profile that is on the spectrum. The ADOS (Autism Diagnostic Observation Schedule) and the ADI-R (Autism Diagnostic Interview-Revised) are examples, both of which are based on the diagnostic manuals. The DISCO (Diagnostic Interview for Social and Communication Disorders) uses a more dimensional approach and gives an understanding of an individual's profile and needs, as well as a diagnostic formulation. An advantage of these diagnostic tools is that they can help to provide some consistency in the assessment process followed in a particular region, or within a service. They are not, though, intended to be screening instruments or stand-alone tools. They are there to gather information, or structure the observations, that professionals make as part of their assessment. They have to be used with some flexibility and are still reliant on an individual clinician's experience, judgement and interpretation. This is especially the case when picking up less typical presentations of autism (such as PDA), where some of the difficulties in social understanding and social communication can be more subtle and are less apparent at first.’
 - ‘The ADOS-2 should be administered, in addition to a developmental or IQ assessment when necessary.’
 - ‘There is evidence that commonly used ASD screening and diagnostic tools (such as the Autism Diagnostic Observation Schedule [ADOS] and the Autism Diagnostic Interview-Revised [ADI-R]), reflect a presentation more commonly found in males than females, and may lack the sensitivity and specificity required to identify autistic characteristics in females.’
 - ‘The ADOS is a helpful tool, however it is not a standardised measure in the way that we typically think of standardisation. It has no normative data and it would be preferable to not refer to it as a standardised tool.’
 - ‘There is a lack of research evidence for the use the ADOS in adults (particularly those without intellectual impairment).’
-

- '[Organisation] has particular concerns about the use of the ADOS-2 (Module 4). The ability of this tool to discriminate between ASD and other presentations is currently not supported in the assessment of adults with average and above average intelligence and is even more problematic for females who have learned reciprocal conversation and gestures. Thus, it is recommended that Module 4, if used at all with adults, should only be used in conjunction with other assessment tools.'
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Evidence Table 44: Single Clinician Diagnostic Evaluation (Setting)

Evidence source	Details
Recommendation	It is recommended that the Single Clinician Diagnostic Evaluation take place in a setting that allows the clinician to make direct observation of symptoms. This may be in a clinic or community setting and may be supplemented by telehealth. Information is to be collected about the client's level of functioning in all relevant community settings, though it is not essential for the clinician to make direct observations within these locations.
Grade	Consensus-based Recommendation, Grade 1.
Rationale	Numerous evidence sources consistently state the importance of collecting information about a range of contexts, and there was excellent support from experts for this flexible process.
Scholarly literature	<ul style="list-style-type: none"> • A systematic review investigating reliability, validity and utility of ASD diagnostic tools in Western Australia recommend an approach to ASD assessment data-collection where both direct observation and parental interviews are used (Level III, Quality 55%, [62]). • Involve the patients in their own diagnostic experience and incorporate their personal understanding of their life experience (Level III, Quality 60%, [11]). • 'Parents have been shown by this study to be a reliable source of information about their children's development and behaviour' (p. 83, Level III, Quality 77%, [19]). • Parents, whose children undergo an ASD diagnostic/assessment process, are an important resource to diagnosticians and clinicians (Level III, Quality 64%, [23]).
Other guidelines	<ul style="list-style-type: none"> • Essential elements of a diagnostic assessment include assessment of the core features of ASD [5]. Observation of the child should focus on broad areas of social interaction [5, 28, 35] and restricted, repetitive behaviours [35]. • Direct observation allows the lead diagnostic clinician to use his or her expertise to evaluate the individual's behaviour in structured and unstructured situations. Although parents may have difficulty interpreting items on questionnaires or recalling information to answer interview questions, direct observation allows the clinician to structure situations to observe specific behaviours and ascertain whether these behaviours are typical [27]. • The experience of interacting with an individual, in order to elicit clinical evidence of ASD that is compatible with ICD-10 or DSM-5, is a significant professional task, which cannot be undertaken without a substantial amount of clinical experience [4]. • Carry out direct observation in social situations [28]. • Face-to-face behavioural observation and interaction are essential components of diagnostic evaluation [27].

- Wherever possible this assessment should be supported by direct observation of the person's behaviour [28, 30].
 - Multiple setting observation is not necessary for every individual being assessed but should be considered if there is diagnostic uncertainty or inconsistency in behaviour [28]. Information about the individual's behaviour in multiple settings may be obtained through interview with caregivers and significant others rather than direct observation [4].
 - If the observational assessment in the diagnostician's office is not representative of the child's typical behaviour, collection input from others from child's typical environments well may become critical [5].
 - Some guidelines suggest that the controlled clinical environment is essential to ASD diagnosis [30] and many guidelines suggest it is best to carry out observations across multiple environments to heighten validity [3–5, 27, 28, 30].
 - Focused observations should be taken across more than one setting [3, 5, 30].
 - Familiarity of the setting often has significant impact on the skills and behaviours demonstrated by the child [3].
 - There is a lack of sufficient evidence in one session [30].
 - Through discussion with the parent or caregiver and consulting collateral information, the lead diagnostic clinician determines the extent to which the individual's observed behaviours are consistent with his or her behaviour in other settings [27].
 - Some guidelines suggest that the controlled clinical environment is essential to ASD diagnosis [30] and many guidelines suggest it is best to carry out observations across multiple environments to heighten validity [3–5, 27, 28, 30].
 - Even when adequate time for observation and interaction is allotted, motor stereotypies or other repetitive behaviours or unusual interests may not be observed in the course of a single evaluation. Therefore, behavioural reports from parents and other collateral informants are essential in documenting the presence of behaviours in this area [27].
 - If the observational assessment in the diagnostician's office is not representative of the child's typical behaviour, collection input from others from child's typical environments well may become critical [5].
 - Face-to-face behavioural observation and interaction are essential components of diagnostic evaluation [27].
 - Multiple setting observation is not necessary for every individual being assessed but should be considered if there is diagnostic uncertainty or inconsistency in behaviour [28]. Information about the individual's behaviour in multiple settings may be obtained through interview with caregivers and significant others rather than direct observation [4].
 - Focused observations should be taken across more than one setting as the familiarity of the setting often has significant impact on the skills and behaviours demonstrated by the child. [3].
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	<ul style="list-style-type: none"> • Wherever possible this assessment should be supported by direct observation of the person's behaviour [28, 30]. • Carry out direct observation of core autism signs and symptoms especially in social situations [28]. • A number of international guidelines recognise the expertise of parents about their children and assert their critical importance to the ASD diagnostic process and recognised them as 'partners' in the diagnostic evaluation [5, 27, 30]. • Consultation with individuals (other than parents) who care for or who have regular contact with the child undergoing evaluation is also recommended [30]. • The diagnostician should attempt to involve a family member, partner, carer or other individual as an informant or seek documentary evidence of childhood development such as school reports [29].
Online submissions	<p><i>Observation in clinic setting</i></p> <ul style="list-style-type: none"> • Assessment should include interview and observation of behaviours; and participation in conversational interaction, not just formal testing of language/ cognition. • What assessment should involve to ensure there is direct/indirect observation of social/peer interaction not just details of interaction with adults. • An assessment should take place with one team member interviewing the parents/carers whilst another plays with and observes the child. • Assessments need several observations, formal and informal (i.e. child playing, interacting with family and peers) and reassessed after period of early intervention when there is base for comparison. • The assessment should include blood tests to identify genes, maternal health, child's health, tests regarding communication, sociability, habits and behaviours, eye tracking & constipation information. • Info collected by observation, checklists (parent/teacher/professionals) including SPD. • Feedback from external agencies involved with the child or family and just based on feedback from parents or caregivers and clinical observations. <p><i>Observation in community setting</i></p> <ul style="list-style-type: none"> • Settings requiring social participation, including observations from key people (parents/grandparents/teachers/allied health). • Observation of the child in a relevant social situation. • Provision for school observation if further information required. • Naturalistic observation should occur alongside formal assessment. • Direct observation of the individual in home/school as needed. • As well as direct testing/observation should form part of the diagnosis. • Both the Social Worker and Child Psychologist should do a Home/Day Care/School Observation of the Child and one of the

diagnostic instruments e.g. ADOS Assessment should be used as part of the diagnostic process.

- Get history of behaviours and traits from parents/caregivers.
- Direct observation of a person on the spectrum trying to negotiate the social, educational and employment environment in authentic settings is the only accurate assessment tool.
- As much as possible being diagnosed should be observed in their classroom/ day care environments, especially in playground. Many children present fine one on one with an adult, but their ASD is far more obvious when with their peers.
- Assessment information should be collected prior to appointment so that professional has good understanding of the child in a variety of situations, and in their natural environment.
- Assessors should do a Home/Day Care/School Observation of the Child.
- Assessment should occur in a combination of settings for example, the clinic, office, home, day care, school (e.g. observations, parent/carer/teacher interview), local centre (team assessment session).
- As much as possible children being diagnosed should be observed in their classroom/ day-care environments, especially in the playground.
- Greater awareness that children can present differently in appointments opposed to more natural environments.
- Autism assessments should not just be completed in a clinical setting and it is important that the child be observed by the clinician in a preschool, playgroup or school setting where peer interactions can be observed.

Supplement by telehealth

- The info should be collected in both written and by video to show other professionals.
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Workshops

- Multiple locations for information gathering.
 - Assessment across multiple settings and gathering information from multiple settings leads to a more rigorous diagnostic process.
 - If in clinical setting: need to gather information from across a range of environments e.g. school; work; TAFE/university; home (two or three settings).
 - Observation is key (diagnostic questions only form a part of the diagnosis process).
 - Assessment should also include observations at school and home environment.
 - Naturalistic setting information collection (observation).
 - A second source i.e. other than a parent should provide information too.
 - Assessment within several functional locations/settings.
 - Assessments commence with family/individual stating their needs.
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	<ul style="list-style-type: none"> • Recognition and person centeredness of individual perspective in assessments.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that information should be collected during the ASD assessment process through observation of the individual being assessed for ASD. • Observation is important when it is hard to gather information directly from the individual. It is also important to see the individual in one and sometimes two natural environments. This is not necessary in simple assessments or where there is a large amount of information. Direct observation helps enormously with the more complex assessments. • Observations can give insight into behaviours and sometimes causes of behaviour. • Observation of function in the individual's natural environment in addition to observation in the clinical setting. • Observation is too relied upon due to the ability of many people with ASD to present very well in a clinician's office. • An observation is essential, either at school or a social situation where the individual is familiar or if not possible with a parent or family member. • A diagnostic assessment needs to address all the diagnostic criteria, regardless of whether they are an area of concern for the family or whether they would be a focus of intervention. • Assessments require multiple sources of information and observation due to the increasing complexity of reporting biases of symptoms due to high levels of awareness of ASD symptoms.
Viewpoint surveys	Collection of information in more than one setting or location was rated to be of neutral or moderate importance by all viewpoints. Collection of information in the clinic setting was rated to be of very low importance by all viewpoints, but collection in the home setting was rated high by one viewpoint, and collection in other settings such as the childcare centre, school, or workplace was given neutral importance by all viewpoints.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 45: Single Clinician Diagnostic Evaluation (Outcome)

Evidence source	Details
Recommendation	<p>It is recommended that the clinician conducting the Single Clinician Diagnostic Evaluation use their clinical judgement to reach their diagnostic decision by:</p> <ul style="list-style-type: none"> – taking into account all information collected in the Comprehensive Needs Assessment and Single Clinician Diagnostic Evaluation, in the context of a biopsychosocial framework – integrating and weighing the available evidence against each diagnostic criterion (according to the current version of the DSM or ICD) – testing alternative explanations for symptoms that may warrant co-occurring or differential diagnosis or alternative clinical pathways – considering whether sufficient information is available to make a diagnostic decision with high confidence without progressing to a Consensus Team Diagnostic Evaluation.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of a robust process for making a diagnostic decision, and there was excellent support from experts for this process.
Scholarly literature	<ul style="list-style-type: none"> • Informed clinical judgement by professionals with ASD specific experience and training contributes significantly to reliable diagnosis [4, 27, 30, 48]. • Sufficient data relating to ASD diagnostic criteria to meet or rule diagnosis must be collected [27]. • A number of guidelines mention the DSM-V (or IV if the guideline was published prior to the publication of the DSM-V) ASD diagnostic criteria and the ICD-10 criteria and that 'gold standard' decision making involves the collection of data based on the criteria presented in these documents [5, 27–31]. • Very young children with possible ASD may not yet show the full range of symptoms detailed in the DSM-IV-TR / ICD-10 [30]. • A diagnostic decision involves some level of interpretation of evaluation data (such as consideration of presenting behaviours in light of developmental level, environment etc.) [27, 28, 48]. • Assessment information should be integrated systematically with consideration of differential diagnosis to develop a clear outcome [3]. • Standardised tools can be used to structure clinical judgement but should not be used alone (without clinical judgement) [4, 30, 48].
Other guidelines	Not identified
Online submissions	<ul style="list-style-type: none"> • Diagnostic decisions should be reached by registered psychologists (with specialist training) using a combination of evidence based diagnostic tools (ADOS and ADIR), impressions

	<p>from school/child care/play group observations, impressions from allied health professionals (with training and experience in ASD presentations) and solid clinical formulation that includes differential diagnosis.</p> <ul style="list-style-type: none"> • Accurate diagnosis is crucial, however, social policy for differential diagnosis is equally important. I believe there is an unfair situation in which some individuals who meet criteria for ASD present with age-appropriate language, academics, IQ, and daily living skills and receive NDIS funding support; while some children who do not meet criteria for ASD, present with severe language delays, learning difficulties, and behavioural problems, and are given little to no NDIS support. This leads to 'fudged' diagnoses to give help to children who genuinely need it but dilutes the already nebulous definition of ASD even further. • We need more specific and objective guidelines in this area. Can it be based on history? Does the behaviour impact current functioning? Does a child need to show several behaviours within each criterion or is one significant behaviour (e.g. eye contact) sufficient, for example?
Workshops	<ul style="list-style-type: none"> • Diagnosis needs to be accurate o Translation of concepts into a reliable system that leads to consistent and reliable diagnosis. • Precision is required
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that the final decision regarding an ASD diagnosis should be made by integrating and weighing the available evidence against each diagnostic criteria. • Round 2 agreement that an ASD diagnosis should be made by testing alternative explanations for symptoms that may warrant alternative or comorbid diagnosis or other clinical pathways. • Round 2 agreement that the final decision regarding an ASD diagnosis should be made by taking into account all available information from informant. <p><i>Considering all information</i></p> <ul style="list-style-type: none"> • Probably best if it's the doctor, to ensure all medical causes and complications have been considered. • Single Professional • If the presentation is clear, one professional should be sufficient. • In many cases one professional can quite confidently make the diagnosis. • Only in clear cases, but this would be very rare and would not recommend as the standard. • If the presentation is complex, more than one professional is required. • As reiterated throughout this report, the knowledge, skills and expertise of the individuals is critical regarding diagnostic decisions - whether this is a single professional or several professionals working within a multidisciplinary team. • Can be individual or team. • Single after team discussion

- In some rural and remote areas, there may only be one professional available.
- With this approach, it gives too much power to one person who may not understand the whole picture.

Integrating and weighing evidence

- The individual making the diagnosis needs to have met the individual and undergone an assessment process with them to help inform their own conclusions.
- Certain criteria should be met for a diagnosis. The 1-3 rating system has a large gap between the levels.
- Attention /reflection needs to be given to the criteria. Just because a checklist puts the person within a significant range doesn't mean that they do meet the criteria.
- That reporting is based on one set of agreed criteria - namely the DSM5.
- This can become limiting for the females with ASD who are not always perfectly described by the DSM.

Testing alternative explanations

- When making a diagnosis of ASD, it is important to make sure that enough evidence is collected to support the diagnosis (or non-diagnosis). However, exactly what is required does depend on the individual presenting for assessment. That said, I do believe that there should be some minimum standards that should be included in all assessments (e.g. ADOS +/- ADI-R)- it is just that other assessment components should be added/removed as appropriate depending on presentation (e.g. no need to assess for anxiety as a differential diagnosis if there are no symptoms of anxiety present)
- Rather than having a diagnosis followed by an 'ASD assessment' that will be ignored by the treating clinician, it would be better to have ASD diagnosis combined with comprehensive diagnosis and screening for other conditions.

Viewpoint surveys	Not identified
Interviews	'Trust and understanding of what the process is and being able to pick up quirks in people's behaviour that may indicate Autism. I think that's probably one of the most important things.'
Feedback	Not applicable

Evidence Table 46: Single Clinician Diagnostic Evaluation (Outcome)

Evidence source	Details
Recommendation	It is recommended that any new support needs identified at the Single Clinician Diagnostic Evaluation be documented, communicated to the client and, if appropriate, communicated to the client's current support services (with the client's permission). If the client is not receiving any support services, it is recommended that they be connected to appropriate services based on support needs, without the requirement for a clinical diagnosis of ASD.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of identifying and addressing support needs, and there was excellent support from experts for this process.
Scholarly literature	Not identified
Other guidelines	Not identified
Online submissions	Not identified
Workshops	<ul style="list-style-type: none"> • 'I-CAN support needs/functional assessment can be used.' • 'Inform support needs.' • 'For high functioning individuals who may develop strategies to mask their difficulties from the public eye and may not meet the criteria in the diagnostic assessment, they may still receive benefits from the identification of their support needs.' • 'As ASD is such a wide spectrum, every individual on the spectrum may have very different presentation and a diagnosis might not present those unique differences, an assessment identifying support needs can lead to individualised support.' • 'Support needs must be individualised and separate to diagnosis.' • 'Support needs not deficits.'
Delphi surveys	<ul style="list-style-type: none"> • '[Support needs are] the most important aspect to parents and the child/adult.' • 'I think that [support needs are] more relevant to intervention planning than diagnostic assessment.' • '[Support need] information (to some degree) will be highly valuable for individuals and parents/caregivers to take to their NDIS planning meeting. Currently, we identify the 'level of support' required as per the DSM-5 and provide a few examples, and some recommendations based on best available evidence.' • 'This should be done at a later stage post diagnosis. Families need some time to process the information regarding the diagnosis.' • '[Support needs identification is] part of wider information gathering and intervention planning process.'

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- '[Support needs identification] would be ideal but not essential if there is a local service already involved.'
 - 'Helpful for families and schools.'
 - 'This would be relevant for intervention planning and consideration of goals for application for funding through the NDIS. A focus on support needs recognises the daily and ongoing role of family members and the level of support they are required to give. This is probably underestimated or not openly discussed when there is a focus on therapy goals for early intervention. In reality the day to day challenges for families of children with autism may relate to limitations to parent employment, running a household, adequate rest for carers, particularly if there are overnight support needs, and enjoying time as a family outside of the home environment and therapy sessions.'
 - 'Functional ability is independent of intellectual ability, especially in older people.'
 - 'What if there is no funding and no way of meeting these needs. Is it for research or to bludgeon government departments?'
 - 'Even those with high IQ, often have high dependency needs.'
 - 'I feel that this should come later and not necessarily as part of the diagnostic process.'
 - 'May not be necessary at point of diagnosis - should be considered as part of planning with appropriate providers.'
 - 'The extent of this process and whether it is formally undertaken will depend on the severity of the child's needs. It should be a routine component of paediatric assessment and management planning.'
 - 'This should be part of the overall assessment in determining first what the nature of the support needs are and secondly what needs to be provided to improve or maintain the life and prognosis for the individual moving forward.'
 - 'Support needs assessment should also focus on determining the early priorities for intervention, so that the child can move from this assessment into treatment.'
 - 'I cannot imagine a situation where assessing for whether or not someone has an ASD does not involve evaluating their current strengths, challenges and support needs moving forward. Again, the fact that this question has arisen at all only further highlights the lack of adequate training of professionals to date.'
 - 'The support needs should be individualized and be in the same report.'
 - 'It needs to be left to the professional's discretion as to the needs/readiness of the individual /family/carer as to the timing and degree of the support needs - not all will be able to deal with this at the same time as a diagnosis.'
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Viewpoint surveys

Focusing on the needs of the individual was ranked as important to one viewpoint and focusing on the needs of the whole family was ranked as important to another viewpoint. Assessing available supports and talking about goals were ranked as neutral or not important by all viewpoints.

Interviews	<p>‘And I guess it’s easier for people on the spectrum, who tend to have an average, or high IQ, to be adopting masking strategies, and there will be autistic individuals who really struggle with that, because their intellect is not at a point at which they can learn and adopt these strategies as well, so their support needs will be very different, as they grow as well.’</p>
Feedback	<ul style="list-style-type: none"> • ‘I applaud your inclusion of a Support Needs Assessment. When our daughter was diagnosed, scant information was provided on how to meet her support needs. While struggling with our own stress levels, it was indescribably difficult to access services when we didn’t know where to start.’ • ‘Congratulations on including [Comprehensive] Needs Assessment in order to identify support needs, establish goals and link to the most appropriate support services. This is an excellent addition to the existing diagnostic process. Our own diagnostic process was isolating, depressing and unsupported. The [clinician] gave us our daughter’s diagnosis at 6pm on a Friday night over the phone, with no offer of help or support or where to go next. This led to a long period of depression for me (primary caregiver) and a feeling of being lost, not knowing what services were available, which we needed to use, and subsequently our daughter missed invaluable early intervention and our family missed essential support, respite and funding that we could otherwise have accessed.’ • ‘The [Comprehensive] Needs Assessor can provide guidance on the type of supports that will assist the individual and/or their caregivers to address these prioritized support needs and goals through overcoming limitations / barriers and optimizing strengths / facilitators. Where required to access a service, the [Comprehensive] Needs Assessor can make a referral to appropriate service providers to ensure these supports are implemented.’ • ‘Over all, [organisation] believes this section of the guidelines has been very well thought through and developed. The guidelines also seem to suggest that it is up to the relevant professional to set specific goals. The [Comprehensive] Needs Assessment might indicate that a certain type of professional assessment is needed (e.g. speech assessment) but the speech therapist is given the flexibility to further identifying and prioritise specific goals for intervention. This flexibility is helpful as [organisation] would argue that the relevant professionals are well able to determine their own intervention goals in collaboration with their clients.’ • ‘[Organisation] thinks that the suggestion that the [Comprehensive] Needs Assessment should identify whether the client needs to maintain current supports, increase supports, or have further supports added is praiseworthy.’ • ‘[Organisation] strongly supports access to support based on function and support needs, rather than access based on specific diagnostic labels such as ASD.’ • ‘A comprehensive formulation should be developed, including details and outcomes of the ... [Comprehensive] Needs Assessment. This can then be used for multiple purposes,

including development of a child and family centred management plan and determination of the level of support.'

- '[Organisation] welcomes the recognition of this key aspect of assessment in relation to any diagnostic process. Function and support needs should drive resource allocation in any service or model of care, as opposed to a specific diagnosis. A ... functional approach is essential for all who seek to provide important information about an individual's profile and/or need for specific services.'
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Evidence Table 47: Consensus Team Diagnostic Evaluation (Professionals)

Evidence source	Details
Recommendation	It is suggested that the clinician who conducted the Single Clinician Diagnostic Evaluation invite additional clinician(s) as required to participate in the Consensus Team Diagnostic Evaluation, based on the match between professional expertise and the area(s) of diagnostic uncertainty identified during the Single Clinician Diagnostic Evaluation. This should involve at least one other professional from a different discipline or specialty to the clinician who conducted the Single Clinician Diagnostic Evaluation.
Grade	Consensus-based Recommendation, Grade 2
Rationale	Numerous evidence sources suggest a tailored approach to including clinicians, with most of the evidence consistently supporting this approach and excellent support from experts.
Scholarly literature	<ul style="list-style-type: none"> • There is little consistency between autism diagnostic guidelines internationally, in regards to whether a multidisciplinary approach must be undertaken for an ASD diagnosis [9]. • Fewer professionals involved in the diagnostic process, was predictive of higher overall satisfaction with the diagnostic process (Level III, Quality 82%, [46]). • Some studies recommend a comprehensive multidisciplinary assessment should be used (Level III, Quality 68-90%, [38, 40, 61]) Many medical practitioners in the Australian context, did not have qualifications to use standardized assessment tools but referred consumers to other healthcare professionals (Level III, Quality 68%, [61]). This team includes a medical professional (such as a paediatrician or a psychiatrist) and allied health practitioners (such as psychologists, speech pathologists, and occupational therapists; Level III, Quality 68%, [61]).
Other guidelines	<ul style="list-style-type: none"> • When seeking a clinician or team to undertake diagnostic assessments, the choice of health care professionals should be based on: post-qualification education, areas of specialisation, recommendations from within the ASD community [3]. • If the observational assessment in the diagnostician's office is not representative of the child's typical behaviour, collection input from others from child's typical environments well may become critical [5]. • The skills necessary to elicit clinical evidence of ASD is not exclusive to a particular discipline but is still a significant task requiring clinical experience and training [4]. • The GDG felt that the complexity of autism meant that a team-based approach with a range of skills and, where appropriate, direct observation was required to ensure a comprehensive assessment [28]. • Consultation with individuals (other than parents) who care for or who have regular contact with the child undergoing evaluation is also recommended [30].

- A number of guidelines suggest that, in some cases, accurate diagnosis can be completed independently by a lone clinician (if that clinician is trained and highly experienced in ASD). Data may be enriched by obtaining information from other professionals but is not essential [3, 5, 27].
 - A number of guidelines suggest that the preferred approach is to utilise a multidisciplinary/ interdisciplinary team in ASD diagnosis in order for the assessment to be comprehensive, confident and promote better understanding and acceptance for parents [3, 4, 27–31, 35].
 - When ASD diagnosis is completed by only one clinician, this is usually a physician or psychologist [30].
 - Some guidelines state that a clinician should not undertake a ASD diagnosis single-handedly [28, 29].
 - Profiling the skills, strengths, impairments and support needs of a child or young person requires a multidisciplinary approach. [28, 30].
 - Further research regarding the contribution of specific disciplines to the ASD evaluation and diagnostic accuracy, is needed [4, 30].
 - Some guidelines differentiate between interdisciplinary teams (where professionals are closely integrated, findings of one professional are interpreted in light of another and diagnosis is made through interactive group process) and multidisciplinary teams (where professionals are more separate and draw their own conclusions before bringing their findings together), while other guidelines use these terms interchangeably for team based assessments [3, 30].
 - The ASD diagnostic team may include: primary physicians, paediatricians, psychiatrists, neurologist, nurses, psychologists, speech-language professionals, audiologists, occupational therapists, social workers, behavioural and educational specialists, teachers, dietician, social workers [27, 30].
 - It may be beneficial to have a recognised local dedicated multi-professional ASD evaluation team (not every professional in this team needs to be involved in every diagnostic assessment but should be chosen on an as-needs basis) [28].
 - Multidisciplinary teams are suggested as most appropriate/helpful when: an individual's presentation is mild or complex, specific symptoms are beyond the expertise of the lead diagnostician [27].
 - Multidisciplinary teams should work concurrently and avoid repetition within the diagnostic process (redundancy of assessments/ interviews) [3, 30].
 - The initial assessment of an individual may be undertaken by a single practitioner who determines whether further ASD evaluation is warranted in which case, the child will continue to the multidisciplinary team [3].
 - Multidisciplinary teams may be multiagency or single agency [3].
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	<ul style="list-style-type: none"> Each member of the professional team should have expertise in their own field as well as training and experience specific to ASD [27]. A specialist team is beneficial to seek advice and advise other health professionals on the management of co-existing physical and mental health [29].
Online submissions	<p><i>Input from other professional(s)</i></p> <ul style="list-style-type: none"> A multidisciplinary approach involving allied health and medical professionals looking at a range situations (home, school/day-care, clinic), taking into account formal assessment (eg ADOS, language assessment) in conjunction with observation and parent/teacher/other report. Assessments should be conducted by teams at different times, on different days, in different locations, to ensure the most holistic view of the person is taken in to consideration before a decision is made. The diagnostic assessment should ideally be done by a team of 2 or 3 health professionals Initial assessment by paediatrician only and referral to a team specialising in ASD who are accredited. I believe an allied health team including speech therapists, occupational therapists and psychologists is the best option to make the diagnosis It's vital that diagnosis is made by a multidisciplinary team, including developmental paediatrician, speech pathologist/occupational therapist/psychologist. Some diagnoses can be clearly made in a clinical setting, in one appointment. I believe it should be a standard assessment across Australia by utilizing multiple fields i.e. paediatrician, speech therapist, psychiatrist etc. Assessment must be completed by at least two professionals; clinicians must ensure they collaborate with their information & acknowledge other sources (i.e. teachers/health professionals); involvement of teams of professionals ('in conducting assessments for autism'). Combination of professionals that should conduct assessments for the child to be diagnosed. In most of the ASD guidelines, the involvement of several different health professionals is recommended. There is a conspicuous absence of a statement about expertise/competence. A blanket statement about the need for multiple professionals could conceivably, in certain instances, have a deleterious effect on the quality of assessment. For example, if some/all team members do not have the required competence, diagnostic consensus may not be forthcoming I think that it is beneficial to have 2 professionals OR a collaborative team giving a diagnosis to avoid misdiagnosis.

- The diagnostic assessment should ideally be done by a team of 2 or 3 health professionals.
- The number & composition of professionals in part need to reflect the complexity of the case.
- Mandating the number of professionals for straight forward cases is likely to lead to unnecessary and redundant assessment which would be an onerous burden both on the families and health services. Health services are already struggling to meet the demand for services as is.
- Mandating a number is likely to lead to over-servicing in some cases and a waste of resources in others.
- More related to the qualifications and expertise of the people involved, rather than the number of professionals involved in the assessment
- More professionals does not automatically equate to a better assessment.
- The cost of arranging assessment and the long process can mean that families aren't making choice to have 3 professionals involved and additionally at times paediatrician not willing to give assessment for diagnosis of ASD without other professionals. Thus, no diagnosis given and family/child not eligible for services when child commences school.
- The Gold Standard of Autism assessment should be adhered to i.e. three professionals - Paediatrician/Psychiatrist, Psychologist and Speech Pathologist.
- Assessments need to be conducted by highly qualified people in conjunction with information from family members.
- Information should be collected from everyone (school teacher, parent, psychologist and the paediatrician).
- 2 ASD assessor is also important, as is taking into consideration past trauma, family and developmental issues.
- If the two-person team is made up of two allied health professionals, it would be preferable to include this third clinician. This reflects my observation of the current level of expertise and confidence of allied health clinicians to settle on an Autism diagnosis.

Multidisciplinary

- Diagnosis provided by team. During process, client is asked whether they want letter/phone/face to face. Case manager involved in explaining.
 - Assessments should only be conducted by a multidisciplinary team assessing the child together.
 - It's very important to have a multi-disciplinary team involved, in order to provide a developmental assessment as required, and also provide a differential diagnosis to ASD.
 - Multidisciplinary team assessment by qualified practitioners from therapy, education and health.
 - I think that it is beneficial to have 2 professionals OR a collaborative team giving a diagnosis to avoid misdiagnosis
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- Multidisciplinary assessments are beneficial because the assessment is thorough, multi-perspective, developmental, targeting speech, language, communication, social emotional, general development, play, gross and fine motor, cognitive, sensory, as well as targeting the criteria for ASD diagnosis for behaviour, stereotypical/idiosyncratic etc.
 - Assessments should always be conducted by a multidisciplinary team, across a number of settings that the individual lives, works/plays/learns.
 - Diagnosis should be completed by a multi-disciplinary team to ensure nothing is missed.
 - Diagnosis should continue to be conducted by a multidisciplinary team.
 - Assessments conducted by transdisciplinary teams,
 - A multi-disciplinary assessment is what is best as it provides a comprehensive assessment. There are issues with different types of autism assessments and reports provided for eligibility for school funding models.
 - Children at risk should be referred to a multi-disciplinary team
 - Diagnostic assessment. Should be a team and have at least 2 professionals.
 - Input from at least two disciplines should help form diagnosis.
 - A comprehensive interdisciplinary assessment, involving at least 3 clinicians with specialist knowledge of ASD and child development including a medical specialist.
 - Three assessment professionals would make a holistic approach to diagnosis.
 - The person who is best suited to the task. Could vary between individuals. If you specify specific disciplines this could cause barriers when that professional is not available.
 - I believe that the quality of an assessment is related to the expertise, knowledge, and skill of the professional/s involved (and not just more people/more assessments). You can have good, correct, high quality assessments conducted by a single professional and low-quality assessments conducted by a team of professionals; and vice versa. Expertise and experience is more important than having a specific number of people involved in the diagnostic process.
 - The experience and expertise of participants in a multi-disciplinary team - especially experience with high functioning presentation - is vital.
 - Diagnostic assessment should not based on the opinion of one professional
 - Having multiple pathways/diagnosticians to reduce wait times and having a minimum amount of evidence to reach so clear cases progress quickly.
 - Victoria and Queensland offered multiple state government multidisciplinary teams, wait list is huge.
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Workshops

- The gold standard to the assessment is by having a multidisciplinary approach.
 - No one discipline has all the answers.
 - Multidisciplinary teams with established working relationships have benefits but also, sometimes individuals have prior relationships e.g. a child has been working with a speech therapist or an adult has a long-standing relationship with a social worker. By sticking to multidisciplinary teams within a practice, choice is removed. That is happening with the NDIS and it is a very real risk for individuals and families when diagnostic teams are presented as a unit.
 - 'Proposed guidelines are seen positively because:'
 - May increase collaboration.
 - Teams bring discipline together, forming connections.
 - Multidisciplinary teams.
 - May support communication between professionals, particularly if patient presents differently in different settings.
 - 'Proposed guidelines are seen negatively because:'
 - it can be overwhelming with more than 2 people assessing an individual in some cases.
 - 'The national guidelines may positively change':
 - Guidelines likely to facilitate improved communication
 - Clinicians are likely to start using the same 'language' aiding in collaboration and information exchange between each other.
 - Multi-disciplinary involvement: It would relieve some of the pressure on me and give me a guide as to how to diagnose.
 - Formation of a diagnostic Team should be:
 - Based on expertise in ASD (not profession).
 - Up to date education.
 - Skill level required for assessing does not negatively impact/exclude those from disadvantaged backgrounds receiving diagnosis i.e. the professionals that travel to remote areas – what are their skill sets?
 - A process for accreditation, quality assurance, and continuing education for assessors needs to be included in the guideline. E.g. audit reports, peer review, mentoring, standardisation/calibration with diagnostic tools.
 - More than one clinician at tier 1.
 - Team of diagnosticians
 - Having 2 clinicians involved in the diagnostic assessment allows for smooth transition to identifying support needs as part of the diagnostic process.
 - Tier 2: Psychiatrist, social worker, occupational therapist, speech pathologist, paediatrician, behaviour support.
 - Ongoing support provided with a multi-disciplinary team.
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- A consideration for the number of people assessing an individual – it can be overwhelming with more than 2 people in some cases.
 - Multi-disciplinary process: Paediatricians shouldn't be able to see a child for 15 minutes and diagnose. There are many other disorders that can appear to be ASD.
 - For children referred for ASD assessments, the Commission maintains a multidisciplinary assessment approach as recommended by the Western Australian Autism Diagnosticians' Forum as best practice.
 - However, whilst multidisciplinary assessments ensure precision and consistency, it is recognised that individuals with ASD present differently and that some individuals with more clinically unambiguous presentations [40] may not need the same rigour of assessment for a clinical diagnosis to be made. However, the Commission recognises that misdiagnosis may lead to suboptimal outcomes [3] and therefore does not support compromising current practices if a high proportion of individuals are misclassified.
 - Commission clinical data indicates that relying on the Paediatrician referral alone for an authoritative diagnosis of ASD (as could be the case for Tier 1) could lead to an unacceptably high rate of misdiagnosis.
 - For a 'frank' presentation perhaps less professionals could be involved. For cases that are milder/subtle or complex including with possibly co-morbidities more than one professional should be involved. Access to such professionals can be an issue particularly in rural and remote areas.
 - The Tier 2 assessment is where the involvement of external providers, teachers, GP's and biopsychosocial assessments should be made.
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Delphi surveys

- Round 1 did not result in agreement regarding the number of professionals involved in assessment, although a multidisciplinary team was supported to a greater extent.
- Round 2 did not result in agreement that the guideline should recommend a Tier Two ASD diagnostic assessment with at least three assessment professionals.

Multidisciplinary

- Preferable if they come from different backgrounds.
 - Strong support that professionals should come for different backgrounds with a broad skill set
 - to ensure that all aspects of ASD presentation are considered in the diagnosis
 - and to assist with a differential diagnosis
 - a more objective process.
 - own areas of expertise
 - Assessments conducted at the same time, perhaps with professionals working together.
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- A multidisciplinary approach can be of value to clients and families.
 - A collaborative team approach would be beneficial for diagnosis.
 - Perhaps ASD adults would be less likely to be misdiagnosed with other disorders if 2 or more professionals were involved in the assessment process. professionals coming from different backgrounds is ideal.
 - Professionals should seek to do the assessment possible, and so it may be necessary to consult/collaborate with other professionals in order to make the correct diagnostic decision. So, while it could be helpful to have another person involved, I do not believe that it is necessary.
 - 'Borderline' cases would best be served by multidisciplinary assessment but may benefit from a second opinion by another person in the same discipline.
 - Multiple clinical 'lenses' are required to conduct ASD assessments.
 - Two professionals where resources are limited.
 - If it is deemed necessary that three professionals should be part of the diagnostic process, they should be all from different disciplines and bring different expertise to the process.
 - I think a multidisciplinary team should be involved in the assessment process.
 - Having 3 professionals involved in the initial assessment would also be a good idea as there are so many areas involved that require assessment such as social, behavioural and everyday living skills.
 - After the small group of people who can be diagnosed easily because of the reports available, observations of the person and discussion with the person's carers or the person directly in older people then all assessments should involve a team approach.
 - 'Three professionals undertaking assessment' provides more accurate scope for differential diagnosis, particularly with attachment disorder or trauma history or sensory processing disorder.
 - To assess development/IQ, other comorbidities, family functioning, language, in addition to ASD.
 - Don't think that all professionals 'within the team' need to come from the same background.
 - 'Having three professionals undertake assessment' depends on the presentation of the client.
 - Different professionals should be selected based in the clinical presentation.
 - When suitably qualified a single health professional is adept at conducting a diagnostic assessment however it is imperative that this professional has the supervision or support of other
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trained professionals (from the same or different backgrounds/discipline).

- I disagree with 'should' ('in regards to two professionals undertaking ASD assessments'), but this may be very appropriate in some situations.
- In psychiatric practice, frequently there is not that luxury ('luxury of two professionals on the diagnostic team'). Particularly, in presence of severe intellectual disability or major psychiatric disorder, a second person may not be adequately experienced.
- Whilst multidisciplinary assessment is preferred it might not be possible depending on how assessment services are set up.
- Generally, this ('2 professionals for ASD assessment') is not a good idea and should only be done this way if staff are extremely experienced and one of the two has the ability to do at least a developmental assessment.
- The number of people involved in an assessment does not equates to the quality of the assessment.
- Involved might create a bottle neck with people waiting for assessments for even longer periods of time.
- Professionals from different backgrounds can be beneficial but will cost more.
- It may be a recommendation but not mandated.
- The number of people involved in an assessment equates to the quality of the assessment. However, may be necessary to consult/collaborate with other professionals in order to make the correct diagnostic decision.
- Mandating the number of professionals for straight forward cases is likely to lead to unnecessary and redundant assessment which would be an onerous burden both on the families and health services. Health services are already struggling to meet the demand for services as is.
- 'Having three professionals undertake assessment would be' too expensive and access would be an issue.
- Can't find 3 'professionals' rurally:
- This ('ASD assessment undertaken by three professionals') would inhibit the availability of a diagnosis, especially in rural and remote areas.
- It is clinical skill and experience, not a democracy.
- Resources on diagnosis would be better applied to support.
- I am concerned that the rigid application of the guideline may mean that less children can be assessed. I would point to Western Australia where I believe there are considerable waiting list because of the restrictions placed on practitioners who can diagnose ASD.
- Autism is an enormous area which impacts in different times at different stages of a person's life. It is unreasonable to expect clinicians to be able to do everything. Specialisation is often better for the person with autism.

Complexity and subtlety of presentation

	<ul style="list-style-type: none"> • In complex cases I think it is essential for two professionals to conduct the diagnostic assessment. I think they should come from different backgrounds (Psychologist and Paediatrician for example or Psychologist and Speech Pathologist). Having different backgrounds will help with the assessment process and will assist making a differential diagnosis. • Complexity a strong factor to consider, however, all children will require at least a speech pathologist in addition to paediatrician. • I am thinking about the 'unambiguous' ASD presentation here. This can be done by a single practitioner. Cases may need to be triaged to determine the professionals required depending on the complexity. • Depends on severity.
Viewpoint surveys	The inclusion of more than one health professional or doctor was rated of low importance by one viewpoint. Participant comments supported the inclusion of multiple professionals.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 48: Consensus Team Diagnostic Evaluation (Professionals)

Evidence source	Details
Recommendation	<p>It is recommended that a Consensus Team Diagnostic Evaluation include at least one additional clinician who meets at least one of the following eligibility criteria:</p> <ul style="list-style-type: none"> – medical practitioner who holds specialist registration with the Medical Board of Australia in the field of community child health, general paediatrics, psychiatry or neurology – medical practitioner who holds general or specialist registration with the Medical Board of Australia and has at least six years of relevant experience, training or supervision in the assessment of neurodevelopmental disorders – occupational therapist who holds registration with the Occupational Therapy Board of Australia – psychologist who holds general registration, with or without a practice endorsement, with the Psychology Board of Australia – speech pathologist who is eligible to be a Certified Practising Member of Speech Pathology Australia.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of assessing clinicians having appropriate qualifications and registration, and there was excellent support from experts for this set of professional requirements.
Scholarly literature	<p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> • Developmental paediatricians are a resource for an ASD diagnosis (Level III, Quality 75%, [50]). • Paediatricians can be encouraged to let parents know as soon as possible, if the possibility of a disability exists. (p.74, Level III, Quality 75%, [50]). • ‘The types of medical professionals that participants consulted in the course of their child’s ASD diagnosis ranged from neuro-physiotherapists, to assessment inspectors, with the most frequent assistance being sought from paediatricians, closely followed by speech and language therapists and educational psychologists’ (p. 54, Level III, Quality 75%, [55]) • ‘GPs and paediatricians have limited contact with parents of children with ASD, but that contact has the potential to have strong impacts of subsequent psychosocial treatments of the child’ (p. 929, [54]). • In the USA, a study conducted found that most paediatricians felt as if their training in developmental screening was limited (Level III, Quality 79%, [41]). In addition, 48% of paediatricians completing the survey, did not receive any ASD specific training as part of their practical placements (Level III, Quality 79%, [41]). <p><i>Medical Practitioners (Psychiatrists)</i></p> <ul style="list-style-type: none"> • Child psychiatrists generally provide diagnosis (Level 3, Quality 65%, [60]).

	<p><i>Psychologists</i></p> <ul style="list-style-type: none"> Participants frequently consulted educational psychologists in the course of their child's ASD diagnosis (Level III, Quality 75%, [55]). <p><i>Speech Pathologists</i></p> <ul style="list-style-type: none"> Participants frequently consulted speech and language therapists during ASD diagnosis (Level III, Quality 75%, [55]).
Other guidelines	<p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> Diagnostician can be a paediatrician [3, 27, 28, 48]. Paediatrician should be one of two first professionals to conduct ASD assessment [28][60]. <p><i>Medical Practitioners (Psychiatrists)</i></p> <ul style="list-style-type: none"> Lead diagnostician is an physician or mental health professional with ASD expertise [27]. The health care practitioners most likely to be able to diagnose ASD in young people and adults include: child and adolescent psychiatrists and adult mental health psychiatrists [3]. <p><i>Medical Practitioners (Neurologists)</i></p> <ul style="list-style-type: none"> Lead diagnostician should be a licensed physician with ASD expertise [27]. Paediatric neurologist should be one of two first professionals to conduct an ASD assessment [28]. <p><i>Occupational Therapists</i></p> <ul style="list-style-type: none"> Lead diagnostician should be a licensed health professional with ASD specific expertise [27]. Core team members should be complemented by occupational therapists [28]. Occupational therapist is a qualified experienced professional to evaluate sensorimotor skills, including: <ul style="list-style-type: none"> gross and fine motor skills praxis sensory processing abilities unusual or stereotyped mannerisms [48]. Occupational therapist not routinely required as part of all ASD assessments, but may be useful in some cases involving sensory features [48]. <p><i>Psychologists</i></p> <ul style="list-style-type: none"> Lead diagnostician should be a licensed mental health professional with ASD related expertise [27]. Psychologists have special skills as a Diagnostician related to: <ul style="list-style-type: none"> Cognitive assessments [3, 29, 35, 48]. Adaptive skills assessments [35]. Neuropsychological assessments [48]. Behaviour assessments [48]. Identify co-occurring mental health and/or behaviour conditions [3, 30]. Identify differential diagnosis or alternative explanations for symptoms (e.g., abuse, disrupted early attachment, psychiatric disorder [3, 30]. To offer counselling and education as needed [48].

- Psychologist should be a core member of the autism team [28].
- Many psychologists do not necessarily receive any specific training in the diagnosis of ASD despite being permitted by law to do so [30].
- The health care practitioners most likely to be able to diagnose ASD in young people and adults include: clinical psychologists, educational psychologists [3].

Speech Pathologists

- Lead diagnostician should be a licensed health professional with ASD specific expertise [27].
- Speech pathologists play a critical role in early identification of ASD's as speech and language delay is commonly an initial reported area of concern [27].
- Speech pathologists are found within a variety of settings (schools, hospitals, public and private clinics) so they are well placed to detect atypical development as part of their routine observation in these environments [27].
- Observations by a speech pathologist, examining communication skills, receptive, expressive language and pragmatic language skills yields useful data for a diagnostician [27, 35].
- Speech, language and communication assessment should be completed (where needed) during the diagnostic evaluation by a speech pathologist with ASD specific skills and experience [3].
- A speech pathologist should be a core member of the autism team [28].
- Speech pathology assessment may be required to assess for other communication or language disorders [30].
- Individuals diagnosed with ASD should have a comprehensive evaluation of their speech and language and communication skills for appropriate treatment planning [4, 30].
- A comprehensive speech pathology assessment should be completed on all children who fail a developmental language screener and should include assessment of receptive and expressive language and communication, voice, articulation and language sampling [48].
- In children (especially young children) formal tools often do not capture a comprehensive picture of a child's communication skills and informal observations are required (such as those gathered during play) to observe other communication features such as pragmatic and non-verbal skills [3].
- The Canadian guideline recognises the ability of speech pathologists to identify symptoms of ASD in young children but that their 'training and regulatory body' excludes them from diagnosis ASD [30].

Online submissions

Medical Practitioners (Paediatricians)

- Team should include paediatrician (some state required, others state if possible) for ASD assessments with children.
- Initial assessment by paediatrician suggested
- Paediatrician implied to be leader of team

- This includes either a fully qualified developmental paediatrician or paediatrician.
- Specific abilities provided by paediatricians:
- Medical evaluation
- Collate information from all sources
- Exclude other mental health or medical diagnoses that may overlap with ASD and often mimic its presentation
- ADOS assessments (if trained)
- Concern raised that there do not seem to be many paediatricians that diagnose.

Medical Practitioners (Psychiatrists)

- Diagnosis should continue to be conducted by a multidisciplinary team, including a child psychiatrist in some teams.
- Assessments must be conducted by a person able to diagnose via DSM-5 (including a psychiatrist).
- Who should assess - qualified and experienced Psychiatrist.
- Psychiatrist one of only two suitable diagnosticians.
- Assessments should be undertaken by a team of experienced and qualified allied health professionals with a psychiatrist as a suitable inclusion.

Occupational Therapists

- Occupational therapists could be diagnosticians.
- Occupational therapists as part of an interdisciplinary / multidisciplinary team for the diagnosis of ASD.
- Occupational therapists also have valuable skills in the diagnosis of ASD that are currently not acknowledged in South Australia.
- Occupational therapists should be recognised as diagnosticians, so that they can provide assessments on play and sensory processing.
- Assessment with occupational therapists should be considered.
- Occupational therapists assisting in the assessment of:
 - o Fine motor
 - o Play
 - o Sensory processing.

Psychologists

- Team should include neuro-psychologist.
- ADOS assessments should be conducted by a range of professionals, including a psychologist.
- Assessments by Psychologist.
- Assessment should be undertaken by psychologist with specialized training.
- Psychologist is one of key professionals who should undertake assessments I was diagnosed by a Psychologist from Autism SA and I had learned so much from her about having Asperger's Syndrome.
- Qualified and experiences Psychologists.
- Diagnosis should continue to be conducted by a multidisciplinary team, including psychologist.
- Diagnosis should take into consideration the views of multiple health professionals, including psychologist.

	<ul style="list-style-type: none"> Public services must include Psychologist as part of a multidisciplinary team to match up with Victoria DET guidelines. Allied health team / multidisciplinary team, including psychologists, is the best option to make the diagnosis. ASD should only be diagnosed by a psychologist. General psychologist often miss complex cases. Educational Psychologist contribute to full ASD profile. It is crucial to have the right professional to diagnose autism, e.g. psychologists with further training (clinical or educational and developmental psychologist). We have just needed to have our son diagnosed in Queensland because his first diagnosis was in NSW by a clinical psychologist not a paediatrician so it was not valid. Not based on the opinion of one professional <p><i>Speech Pathologists</i></p> <ul style="list-style-type: none"> Speech pathologists should be part of the diagnostic team. Include speech pathologist in observations of social communication.
Workshops	<p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> Improved education on diagnosis for paediatricians e.g. Grad.Dip.ASD. Paediatricians shouldn't be able to see a child for 15 minutes and diagnose. Paediatrician is an appropriate member of a Diagnostic Evaluation team. <p><i>Medical Practitioners (Psychiatrists)</i></p> <ul style="list-style-type: none"> Team of diagnosticians at Tier 2 includes Psychiatrist. Comprehensive ASD assessments take time and require expert judgement by the Psychiatrist and other team members to determine the diagnosis. Need skilled expert clinicians working in the ASD field (e.g. Psychiatrist) to screen with validated tools to determine if Tier 2 is warranted. ALL should be assessed by a one of two medical specialties (including psychiatrist), as a minimum. <p><i>Occupational Therapists</i></p> <ul style="list-style-type: none"> Occupational therapists as part of a multidisciplinary team. Occupational therapists as assessors. Occupational Therapists involved in Tier 2 diagnosis. Occupational therapists involved as part of the diagnostic assessment. Funding jurisdictions exclude occupational therapists. Don't think occupational therapists should be involved unless extremely rigorous training is provided. Occupational therapists should be involved in the diagnostic process as they are holistic professionals who are best equipped to provide information about the child's functioning in all different environments including, home and school. Occupational therapists as part of the team if they have special training in child development and ASD. <p><i>Psychologists</i></p>

	<ul style="list-style-type: none"> • Educational psychologists need more training <p><i>Speech Pathologists</i></p> <ul style="list-style-type: none"> • Speech pathologists as part of a multidisciplinary team (some say all, others say when needed or in Tier 2)
Delphi surveys	<p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> • Round 1 agreement that aspects of ASD assessments should be undertaken by a paediatrician. • Round 2 very strong agreement that a paediatrician should be eligible to be a Diagnostician. • A well-trained paediatrician can take a good well-rounded history and do a detailed medical examination which can often lead to a better outcome for the child because an underlying explanation for the autism description we give children can be made. • Well trained, especially community/developmental paediatricians. Can consider the whole child. Located in most cities/regions. Often has relationship with family and relevant local services. • Paediatricians in the 21st century are mostly well-trained and skilled in conducting developmental assessments, including for ASD and related problems. • Paediatricians are experts in the childhood field. • Would seem to be the most suited clinician for undertaking aspects of ASD assessments but expertise and ability varies. • Paediatricians have the knowledge and expertise to understand all the stages of childhood and what is normal behavioural skills and milestones and what is abnormal. • Paediatrician are skilled in working in a multidisciplinary team. • Complexity a strong factor to consider, however, all children will require a paediatrician. • Paediatricians are an essential component, given training and experience. • I'm probably bias here towards including Paediatrician, as this is current best practice. • Straightforward diagnoses can often be made by a paediatrician. • Families often go to private paediatrician as one-off event to get an ASD diagnosis for funding / Centrelink carer payment. • Specific abilities provided by paediatricians: <ul style="list-style-type: none"> ○ Considering comorbid and differential diagnosis ○ Developmental assessment ○ Medical screening to identify whether there are any genetic/medical factors at play ○ Medical workup ○ Requesting genetic testing ○ Completing observations • There is a need to train paediatricians who did not receive training either in their course or as PD. ASD assessment and diagnosis is very complex and all professionals involved in

assessment and intervention need to retain currency in the area.

- Concerns raised about paediatricians in a Diagnostician role:
- In some areas it is very difficult for families to access a paediatrician and I don't think that not being able to see a paediatrician should hold up the diagnostic process.
- If trained, but sometimes it can be 'hit and miss'.
- Paediatrician not required once child is an adult.
- Depending on the age of the individual the paediatrician could assist the team in the diagnosis.
- Paediatrician may not be essential for all.
- Specialists such as Paediatricians are already in great demand and difficult to access by many families in both private and public settings.
- Assessment of aetiology requires paediatric training and expertise.
- I regard ASD assessments as a specialised area requiring deep knowledge beyond what is provided in the general Postgraduate Paediatric Training programme. This is a Paediatric Specialty area and deserves postgraduate training, supervision, mentoring etc.

Medical Practitioners (Psychiatrists)

- Round 1 agreement that aspects of ASD assessments should be undertaken by an Adult Psychiatrist.
 - Round 2 agreement that a Child Psychiatrist and Adult Psychiatrist were eligible to be a Diagnostician.
 - Psychiatrist are very important in diagnosis and intervention for adults.
 - It may be more appropriate to involve a psychiatrist especially considering the high comorbidity with psychiatric conditions.
 - May also help with parents and parenting skills and behaviour management. Some children look autistic, but it is really a behavioural management issue.
 - Particularly if there is a need to differentiate between mental health conditions and ASD and/or manage mental health conditions in conjunction with ASD.
 - A psychiatrist is the appropriate professional to differentiate ASD related symptoms from differential diagnoses, therefore is appropriately involved.
 - If there are any other underlying psychiatric concerns.
 - In my view, there is a great need for more adult psychiatrists to be able to assist adults with ASD (especially with complex cases, such as those with complex trauma, BPD, etc.).
 - Adult Psychiatrists vary enormously in terms of their helpfulness to adults undergoing ASD assessment. My experience is that there are few adult psychiatrists who are familiar with the complexity of ASD adult presentations to be able to contribute positively to the assessment and diagnostic process.
 - Psychiatrists more appropriate with younger aged children only if comorbid mental health concerns are noted.
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- Some child and adolescent psychiatrists can develop the right skills but not many because of the way they are currently trained in Australia and NZ.
- Psychiatrist skilled in working in a multidisciplinary team.
- I would think that a psychiatrist is essential for all adult assessments.
- Many adult psychiatrists have skills or experience.
- Psychiatrists tend to be very 'medical' focused and I have not always seen the value in including them in diagnostic evaluation.
- Could be a need for medical input to process.
- As a minimum ... there should be a medical professional in all assessments for diagnosis.
- In those cases of people over 45 years who have very low adaptive behaviour and present for diagnosis to obtain support services in the community it is reasonable that either a Psychiatrist or Clinical Psychologist undertakes the diagnosis - not necessarily both.
- Do not think that psychiatrists need to be involved in all ASD diagnostic assessments, however believe that they are necessary where the presentation is complex and/or there are co-morbid mental health concerns.
- Adult psychiatrists have not had the training in ASD or extensive experience needed for a diagnostic assessment. There are rare exceptions.
- Not many psychiatrists are interested in developmental disorders - though of course some are.
- Generally, they do not understand the importance of taking an early developmental history which might help with the diagnostic process.
- Psychiatrists are very difficult to access in regional areas.
- All child assessments should in my opinion involve one of two medical professionals, including a psychiatrist.
- Child Psychiatrists would be available to coordinate all tiers of assessment, although this is not realistic with the current demand for their services.
- May be appropriate in addition where mental health related differentials remain, and the situation is unclear.
- Child psychiatrists seem most helpful with complexity and uncertainty of diagnosis.
- Child psychiatrists are skilled in understanding developmental pathology. Furthermore, children and adolescents with ASD often have significant associated mental health problems.
- Child psychiatrist could be an invaluable part of the diagnostic team, but workforce availability is likely to be limited.
- Child psychiatrists are critical in complex mental health comorbidity, but there are too few adequately trained.
- Do not think that psychiatrists need to be involved in all ASD diagnostic assessments, however believe that they are necessary where the presentation is complex and/or there are co-morbid mental health concerns.
- Child psychiatry is valuable for children with complex presentations.

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- In children where there is potential alternate psychiatric diagnoses or comorbidities such as anxiety, PTSD, attachment disorder a psychiatry opinion is important in formulation and management planning.
 - If there is a complex case or if the different professionals have different opinions as to the correct diagnosis, or if there is social complexity.
 - Only in some cases, where there is significantly compromised mental health.
 - Only if there is a need to differentiate between mental health conditions and ASD and/or manage mental health conditions in conjunction with ASD - this is a possibility but should not be a requirement.
 - Psychiatrists are usually not involved until 12 plus years.
 - Wouldn't like to see roles in the diagnostic assessment process limited to child psychiatrist, as these professionals seem so light on the ground that this would result in delays to diagnosis.
 - Child psychiatrists are rare, and their training is inadequate in the diagnosis of ASD. The value would be in treatment, not diagnosis.

Medical Practitioners (Neurologists)

- Round 1 disagreement that aspects of ASD assessments should be undertaken by a neurologist.
 - Round 2 findings suggest that a Neurologist is not eligible to be a Diagnostician.
 - A neurologist was generally considered unnecessary, except under specific circumstances in which additional neurological concerns are indicated and their involvement as a Professional Informant is recommended by an assessing paediatrician or psychiatrist.
 - There should be a medical professional in all assessments for diagnosis.
 - Most Australian or American trained paediatric neurologists have no training in developmental paediatrics. This is different in the UK where they are all obliged to spend at least 6 months in a developmental service.
 - The neurologist will not necessarily have a developmental view.
 - Not sure what a neurologist would add as an assessor.
 - Neurologists may be able to provide useful information in some cases however, I do not believe that they should routinely be involved in ASD diagnosis.
 - Neurologists are time poor, and I think allied health professionals can do assessments.
 - If they are interested, they can provide similar role to a paediatrician.
 - This would be an acceptable medical representative in a multidisciplinary team, again if this was a major part of the individuals practice with accumulated experience of seeing many children with variable presentations of ASD.
 - They might be helpful if the person has epilepsy and there is a differential diagnosis needed.
 - Only in complex cases where there are other factors, such as multiple disabilities and confusion over whether the issue is
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ASD or not, or where it is possible that other treatable conditions may be missed, such as absence seizures etc.

- I don't see this as being essential, so long as appropriate medical review is completed and referrals made as necessary.
- Unless the neurologist has special training in child development.
- Disagree that Neurologists should assess individuals generally unless they have expertise in the area.
- Neurologists will be trained in developmental disabilities, including ASD, so are in a position to diagnose ASD.
- If indicated by symptomatology, complex diagnoses
- Neurologists are hard to access in regional areas and generally beyond the means of many who need diagnosis.
- This depends on the differential diagnoses being considered, but may also be clinically appropriate, and could be referred for.
- I think having to see a neurologist as part of an autism diagnosis would be very restrictive and would increase wait times incredibly. I'm not sure at this stage that a neurologist would be necessary although the information would be helpful.
- To rule out any other sort of pathology which may be contributing to the child's behaviour.
- I think neurologists have a broad way of reflecting on a child's development but also being able to rule out particular conditions etc. But depends whether they focus on this type of area.

Occupational Therapists

- Round 1 agreement that aspects of ASD assessments should be undertaken by an occupational therapist.
 - Round 2 agreement not reached that an occupational therapist should be eligible to be a Diagnostician.
 - We also find occupational therapists to be extremely useful perhaps with input from an occupational therapist involved as part of a multidisciplinary team.
 - Occupational therapists are an important in assessment and diagnosis.
 - Occupational therapists involvement depends on transdisciplinary skills.
 - Occupational therapists should be part of the diagnostic process if deemed necessary/ appropriate (e.g. involvement is dependent on the sensory and adaptive functioning of the individual).
 - Occupational therapist provides supportive information but not found essential for diagnosis.
 - It is generally recognized that occupational therapists have an important role in ASD assessment of:
 - o sensory concerns / sensory profiling
 - o gross and fine motor skills
 - o development
 - o emotional regulation
 - o social skills
 - o play
 - o executive function
 - Able to assess if they have expertise in development, life skills and work skills
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- Occupational therapists could be trained in vital assessment tools for diagnosis (e.g. ADOS and ADI).
 - If trained as an assessor, occupational therapists could be involved.
 - Observations about sensory differences on DSM-5 could be done by other disciplines.
 - Occupational therapists are a valued member, but not necessary for every diagnosis.
 - Rare to find occupational therapists with the skills required for diagnosis of ASD.
 - Could be a need for occupational therapist input to process.
 - Not required for all assessments for diagnosis.
 - Occupational therapists should not be the only member within a diagnosis.
 - Occupational therapist not essential.
 - Occupational therapists not necessarily needed for diagnosis and should not be a mandatory requirement.
 - Occupational therapists may be necessary to meet the B4 criteria in DSM-5.

Psychologists

- Round 1 agreement that aspects of ASD assessments should be undertaken by a psychologist.
 - Round 2 agreement that a psychologist should be eligible to be a Diagnostician.
 - A clinical psychologist can implement the standard diagnostic assessments and analyse information provided by other professionals to complete objective behavioural assessments.
 - There should be a psychologist in all assessments for diagnosis.
 - Dependent on training and experience
 - With appropriate training, are ideal for the assessment of social and behavioural features of the diagnostic criteria
 - Central to assessment
 - Vital / critical / key role in all assessments for diagnosis.
 - There could be a need for psychological input to process.
 - Those clinical psychologists who have the necessary training and experience in working in the area of ASD across all the developmental groups are well placed to undertake ASD assessments (taking the complexity of presentations into account)
 - Clinical psychologists also have a supervision process that helps them to extend their skills and expertise in becoming familiar with the diversity of ASD presentations and to obtain ongoing supervision around complex cases with a more experienced mentor.
 - As one component of the two clinicians carrying out the assessment.
 - Psychologist are capable of diagnosis
 - Important for developmental / IQ testing, comorbidity and differential diagnose in relation to mental and attention
 - Play a role in cognitive assessments
 - Assessment s could be undertaken by Clinical Psychologist
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- If appropriately trained, psychologists can administer assessments (such as ADOS or ADI-R) and assess co-morbid mental health conditions.
 - If appropriately trained developmental/educational psychologists can administer assessments (such as ADOS or ADIR) and assess co-morbid mental health conditions.
 - Subgroup of developmental/educational psychologists who have necessary training and experience to conduct ASD assessment.
 - Cognitive and educational testing/ assessment can be extremely helpful in many cases.
 - Conduct relevant cognitive assessments if warranted.
 - Developmental/educational psychologists are well able to complete the cognitive, learning, educational assessments to assist with issues to do with differential diagnosis, such as cognitive impairment.
 - Cognitive evaluation is an important component of ASD assessment formulation and consideration of comorbid / alternate diagnoses.
 - Important in developmental / IQ testing, discriminating between ASD and other mental, +/- attention and other conditions
 - Be wary if developmental/educational psychologists only do assessments for eligibility for funding for school - this could be a conflict of interest.
 - Developmental/educational psychologists undertake aspects of ASD assessment in selected cases may help, though clinical psychologist more appropriate where the differential diagnoses are thought to relate to mental health.
 - Developmental/educational psychologists may be more relevant when assessing primary and secondary school aged children, therefore less relevant to preschool or adulthood.
 - Useful for diagnosis
 - Useful for treatment planning
 - May help clarify differential diagnosis, where a greater level of information is required than can be gained from parents, child, and questionnaires/reports from school or pre-school setting
 - Clinical Psychologists should be the preferred Psychologist because they are trained to consider all neurodevelopment disorders. General Psychologists do not have this training in their courses. Clinical Psychologists have the training to consider in complex cases the role of known trauma, attachment issues, cognitive and learning issues and more when considering an autism diagnosis. This is very important for the person but also in terms of financial resources.
 - Clinical Psychologist
 - One of the two most appropriate clinicians for diagnosis
 - Contribute to multidisciplinary team
 - Psychologists (Clinical / Educational and Developmental) were considered one of the most appropriate clinicians to make an autism diagnosis, due to their expertise with social, cognitive, behavioural and mental health features.
 - Educational and Developmental Psychologists are very useful in diagnostics assessment.
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- Educational psychologists who have appropriate training in ASD can provide useful input in more complex presentations or where there are concerns that learning and other educational aspects may be impacting the child/individual.
 - Suitable experienced developmental/educational psychologists can play a critical role in the diagnostic process.
 - If problem identified by diagnostic team
 - Well placed as diagnostician
 - Clinical Psychologists do not all have a good idea about sensory issues, vestibular system, motor skills and neurology.
 - Not all Clinical Psychologists have appropriate credentials for autism diagnosis.
 - Developmental/educational psychologists do not have a role in diagnosis.
 - Developmental/educational psychologists if clinical psychologist is unavailable.
 - Developmental/educational psychologists may not be essential.

Speech Pathologists

- Round 1 agreement that aspects of ASD assessments should be undertaken by a speech pathologist.
- Round 2 agreement not reached that a speech pathologist should be eligible to be a Diagnostician.
- There should be a speech pathologist in all assessments for diagnosis.
- Could be a need for speech pathology input to process.
- Speech pathologists are used for diagnostic clarification:
- When speech and language issues present
- When pragmatics needs to be assessed
- Speech pathologists should not be mandatory to diagnosis
- Speech pathologists should be central in most cases
- Important for earlier years (up to 12 years), and outside of younger years, should be involved in a case to case basis
- Speech pathologists involved in complex cases
- Within a multidisciplinary context
- Speciality with:
 - Communication issues
 - Pragmatic language skills
 - Social communication
 - Developmental assessments
- Can be involved if they have the right ASD specific training

Viewpoint surveys *Medical Practitioners (Paediatricians)*

- The inclusion of at least one medical or specialist medical professional was given neutral to low importance by all viewpoints. Participant comments supported the inclusion of medical professionals.

Medical Practitioners (Psychiatrists)

- The inclusion of at least one medical or specialist medical professional was given neutral to low importance by all viewpoints. Participant comments supported the inclusion of medical professionals.

Medical Practitioners (Neurologists)

	<ul style="list-style-type: none"> The inclusion of at least one medical or specialist medical professional was given neutral to low importance by all viewpoints. Participant comments supported the inclusion of medical professionals. <p><i>Occupational Therapists</i></p> <ul style="list-style-type: none"> The involvement of at least one allied health professional was given high importance by one viewpoint. Participant comments supported the inclusion of allied health professionals. <p><i>Psychologists</i></p> <ul style="list-style-type: none"> The involvement of at least one allied health professional was given high importance by one viewpoint. Participant comments supported the inclusion of allied health professionals. <p><i>Speech Pathologists</i></p> <ul style="list-style-type: none"> The involvement of at least one allied health professional was given high importance by one viewpoint. Participant comments supported the inclusion of allied health professionals.
Interviews	<p><i>Medical Practitioners (Paediatricians)</i></p> <ul style="list-style-type: none"> Paediatrician listed as an appropriate member of a multidisciplinary team. <p><i>Medical Practitioners (Psychiatrists)</i></p> <ul style="list-style-type: none"> Psychiatrist listed as an appropriate member of a multidisciplinary team.
Feedback	Not applicable

Evidence Table 49: Consensus Team Diagnostic Evaluation (Professionals)

Evidence source	Details
Recommendation	<p>It is recommended that a Consensus Team Diagnostic Evaluation be conducted by clinicians who, in addition to the relevant training and expertise required by all members of the Assessment Team, have relevant training and expertise in all the following areas:</p> <ul style="list-style-type: none"> – clinical reasoning in weighing evidence, performing diagnostic formulations and making diagnostic decisions – signs and symptoms associated with common co-occurring or differential diagnosis conditions – the criteria for ASD and co-occurring or differential diagnosis conditions described by the current version of international diagnostic manuals (e.g. DSM and/or ICD).
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of assessing clinicians having appropriate expertise, and there was excellent support from experts for this set of expertise required.
Scholarly literature	Not identified
Other guidelines	<p><i>Clinical reasoning and formulation</i></p> <ul style="list-style-type: none"> • Informed clinical judgement by professionals with ASD specific experience and training contributes significantly to reliable diagnosis [4, 27, 30, 48]. • Standardised tools can be used to structure clinical judgement but should not be used alone (without clinical judgement) [4, 30, 48]. • A diagnostic decision involves some level of interpretation of evaluation data (such as consideration of presenting behaviours in light of developmental level, environment etc.) [27, 28, 48]. <p><i>Co-occurring and differential diagnosis</i></p> <ul style="list-style-type: none"> • Assessment information should be integrated systematically with consideration of differential diagnosis to develop a clear outcome [3]. <p><i>Diagnostic criteria</i></p> <ul style="list-style-type: none"> • Sufficient data relating to ASD diagnostic criteria to meet or rule diagnosis must be collected [27]. • A number of guidelines mention the DSM-V (or IV if the guideline was published prior to the publication of the DSM-V) ASD diagnostic criteria and the ICD-10 criteria and that 'gold standard' decision making involves the collection of data based on the criteria presented in these documents [5, 27–31]. • Very young children with possible ASD may not yet show the full range of symptoms detailed in the DSM-IV-TR / ICD-10 [30].
Online submissions	<ul style="list-style-type: none"> • We need more specific and objective guidelines in this area. Can it be based on history? Does the behaviour impact current functioning? Does a child need to show several behaviours

	<p>within each criterion or is one significant behaviour (e.g. eye contact) sufficient, for example?</p> <ul style="list-style-type: none"> • Accurate diagnosis is crucial, however, social policy for differential diagnosis is equally important. I believe there is an unfair situation in which some individuals who meet criteria for ASD present with age-appropriate language, academics, IQ, and daily living skills and receive NDIS funding support; while some children who do not meet criteria for ASD, present with severe language delays, learning difficulties, and behavioural problems, and are given little to no NDIS support. This leads to 'fudged' diagnoses to give help to children who genuinely need it but dilutes the already nebulous definition of ASD even further. • Diagnostic decisions should be reached by registered psychologists (with specialist training) using a combination of evidence based diagnostic tools (ADOS and ADIR), impressions from school/child care/play group observations, impressions from allied health professionals (with training and experience in ASD presentations) and solid clinical formulation that includes differential diagnosis.
Workshops	<ul style="list-style-type: none"> • Diagnosis needs to be accurate o Translation of concepts into a reliable system that leads to consistent and reliable diagnosis. • Precision is required
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that the final decision regarding an ASD diagnosis should be made by integrating and weighing the available evidence against each diagnostic criteria. • Round 2 agreement that an ASD diagnosis should be made by testing alternative explanations for symptoms that may warrant alternative or comorbid diagnosis or other clinical pathways. • Round 2 agreement that the final decision regarding an ASD diagnosis should be made by taking into account all available information from informant. <p><i>Diagnostic criteria</i></p> <ul style="list-style-type: none"> • Certain criteria should be met for a diagnosis. The 1-3 rating system has a large gap between the levels. • Attention /reflection needs to be given to the criteria. Just because a checklist puts the person within a significant range doesn't mean that they do meet the criteria. • That reporting is based on one set of agreed criteria - namely the DSM5. • This can become limiting for the females with ASD who are not always perfectly described by the DSM. • When making a diagnosis of ASD, it is important to make sure that enough evidence is collected to support the diagnosis (or non-diagnosis). However, exactly what is required does depend on the individual presenting for assessment. That said, I do believe that there should be some minimum standards that should be included in all assessments (e.g. ADOS +/- ADI-R)- it is just that other assessment components should be

	<p>added/removed as appropriate depending on presentation (e.g. no need to assess for anxiety as a differential diagnosis if there are no symptoms of anxiety present)</p> <ul style="list-style-type: none"> • Rather than having a diagnosis followed by an 'ASD assessment' that will be ignored by the treating clinician, it would be better to have ASD diagnosis combined with comprehensive diagnosis and screening for other conditions.
Viewpoint surveys	Not identified
Interviews	'Trust and understanding of what the process is and being able to pick up quirks in people's behaviour that may indicate Autism. I think that's probably one of the most important things.'
Feedback	Not applicable

Evidence Table 50: Consensus Team Diagnostic Evaluation (Professionals)

Evidence source	Details
Recommendation	It is recommended that members of the Consensus Diagnosis Team obtain and maintain the additional skills and expertise listed in Recommendation 49 through peer observation, peer supervision and peer mentoring. Formal training courses and/or further qualifications may supplement these peer learning approaches.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of assessing clinicians having appropriate training, and there was excellent support from experts for this set of training requirements.
Scholarly literature	Not identified
Other guidelines	<ul style="list-style-type: none"> • Ongoing professional education is essential to remain current with research and best practice evidence [5, 27, 30]. • Professional education plays an important role in updating clinical skills [30]. • Ongoing, periodic training is necessary for diagnosticians as knowledge of ASD increases and evolves [27]. • Professionals involved in sharing of an ASD diagnosis and information provision should receive ongoing education and training [4].
Online submissions	<ul style="list-style-type: none"> • Diagnosticians should be required to complete ASD relevant professional development to maintain standards. • Have a follow up component to keep up to date and informed of changes.
Workshops	<ul style="list-style-type: none"> • Mentoring; for future diagnosticians to be able to work in remote/regional areas. • Need to ensure not just initial training is provided but ongoing skill development regarding advances in the field. • Training; a rigorous and continuous professional development process needs to be established. • Improved education on diagnosis for doctors e.g. Grad.Dip.ASD.
Delphi surveys	<ul style="list-style-type: none"> • Round 1 agreement that a professional who conducts autism assessments should have observed peers conducting ASD assessments and making diagnostic decisions and received peer mentoring in ASD assessment and diagnosis. • Round 1 partial agreement that a professional who conducts ASD assessments should have received peer supervision in ASD assessment and diagnosis. <p><i>Peer observation</i></p> <ul style="list-style-type: none"> • Peer observation provides opportunity for discussion and reflection about clinical inconsistencies, and observation of the variable presentation of people with Autism.

- Considering differential diagnosis and comorbidities is also part of the process and observing peers go through this process is part of the learning.
- ASD assessment should involve multidisciplinary team, or at least professional liaison among professionals involved.
- Not just their professional peers but other professions e.g. speech pathology, occupational therapist, psychologist.
- Studying and training alone is not enough to gather the requisite skills. Peer training/observation is crucial.
- Very helpful learning strategy, and vital for gaining experiencing in conducting ASD assessments.
- Usually and should be part of training and certification for these skills.
- The best way to learn in this process
- Absolutely.
- This can be done via video / online.
- Helpful but not mandatory. Most helpful for those in the early stages of their careers.
- May be beneficial but now sure if an advantage or not.
- Do not think that every diagnostic assessment should be observed by peers.
- Difficult in rural areas.

Peer supervision

- It is important to impart the standards and because so much information needs to be gathered in particular by the Clinical Psychologist - competence cannot be achieved without mentoring and mentored supervision.
 - Supervision needs to be ongoing and linked to new developments in research and practice. It should also be possible to insist that the trainee continue training until they understand.
 - There are a small number of trainees who seem to grapple with understanding how to fit the complex picture together. Peer supervision in my experience expands skills and knowledge.
 - This knowledge needs to be pooled and brought together for discussion.
 - It is a complex area and needs complex supervision from a more experienced peer to develop the diagnostic skills.
 - Important to put the observations into context and see whether there may be other comorbidities.
 - Useful to develop a truly reflective practice and to encourage personal professional growth.
 - Multidisciplinary team assessment provides this opportunity without formalising it.
 - Mentoring and peer supervision may be more applicable to those in independent private practice needing support.
 - If someone has been formally assessed following training, then peer supervision may not be required.
 - During training.
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- Supervision is vitally important.
- On a continuous basis.
- Helpful but not mandatory for established clinicians. It is particularly valuable for new clinicians.
- It would be preferable, but not sure it's essential.
- Where possible.
- This is not necessarily available or feasible and may be helpful in reflecting on an individual's approach but not essential to being involved in the process.

Peer mentoring

- Mentored supervision and thorough knowledge and understanding of the criteria which can be applied by the assessor without a standardised tool to measure is essential to good practice in ASD diagnosis.
 - Learning the knowledge is part of the process and often the role of undergraduate and postgraduate institutions this is a logical path forward. However, the second part of assessment is the understanding of the different presentations and issues to be considered in the actual assessment is best learnt through mentoring after knowledge acquisition. This is the harder of the components to set in place but is vital.
 - This is mentoring and is vital. They need mentoring which provides feedback on the process and the trainee assessors own performance.
 - Mentoring may be more applicable to those in independent private practice needing support.
 - All clinicians conducting ASD assessments should have access to peers who they can consult for support, advice, training, and input.
 - Peer mentoring is a proven method to assist learning.
 - The assessments are very complex, and mentoring emphasises this.
 - Mentoring provides a direct link between knowledge and use of that knowledge in diagnosis.
 - This is fundamentally the most important aspect of the training at least equal to the knowledge base.
 - The less secure members of the group tend to be mentored unconsciously by the old hands. Often shared rooms provide options for tea room discussions of what to try.
 - Part of certification.
 - More applicable for preschool and school age children
 - Would be nice.
 - This is helpful but not essential for established clinicians. It is particularly valuable for new clinicians.
 - Where possible, peer mentoring is really helpful to ensure support is always available.
 - As per comments above, good general knowledge with opportunity to focus on one age group / structure.
 - The logistics will be a problem.
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- This is not necessarily, available or feasible and may be helpful in reflecting on an individual's approach but not essential to being involved in the process.
 - Don't think all the points above are necessary - it can be a combination of training/ mentoring/ observations.
 - Post university training they need to maintain skills by attending professional development on ASD and other associated conditions which add to that knowledge on a regular basis.
 - This should be supported by continuing professional education
 - Part of maintenance of professional standards processes, but it must not be a pay for a yearly ticket type process. It needs not to be a for-profit empire building exercise.
 - There is a need to train those who did not receive training either in their course or as PD. ASD assessment and diagnosis is very complex and all professionals involved in assessment and intervention need to retain currency in the area.
 - In brief, there is often a lack of clinical experience as well as up to date skills and training in the complexities of how individuals with ASD present.

Viewpoint surveys	Not identified
Interviews	Not identified
Feedback	Not applicable

Evidence Table 51: Consensus Team Diagnostic Evaluation (Information)

Evidence source	Details
Recommendation	It is recommended that information be collected during a Consensus Team Diagnostic Evaluation on the following: <ul style="list-style-type: none"> – overview of topics covered in the Comprehensive Needs Assessment and Single Clinician Diagnostic Evaluation – additional information to further appraise behavioural symptoms specified in diagnostic criteria for ASD and potential co-occurring and/or differential diagnosis conditions – further exploration of biological, personal and environmental factors relevant to the individual.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of collection information on a comprehensive range of topics, and there was excellent support from experts for these topics.
Scholarly literature	Not identified
Other guidelines	See Evidence Table 23: Assessment of Functioning Information Topics
Online submissions	See Evidence Table 23: Assessment of Functioning Information Topics
Workshops	Not identified
Delphi surveys	<ul style="list-style-type: none"> • See Evidence Table 23: Assessment of Functioning Information Topics • Round 1 agreement that information should be collected during the ASD assessment process on the topic of ASD specific symptoms (i.e. social communication and restricted, repetitive patterns of behaviour) and other relevant symptoms (e.g. symptoms that indicate that further investigations are required, a co-morbid condition may be present, a differential diagnosis should be considered or functional limitations are present).
Viewpoint surveys	Assessing ASD symptoms was of neutral importance to all viewpoints.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 52: Consensus Team Diagnostic Evaluation (Information)

Evidence source	Details
Recommendation	<p>It is recommended that information be collected during a Consensus Team Diagnostic Evaluation through a variety of means, including:</p> <ul style="list-style-type: none"> – review of documentation from the Comprehensive Needs Assessment and Single Clinician Diagnostic Evaluation – communication with clinicians who conducted the Comprehensive Needs Assessment and Single Clinician Diagnostic Evaluation – file review of any additional assessment reports – interview with the client as required – observation of the individual undergoing assessment – administration of standardised and non-standardised assessments as required – communication with other professional(s) as required.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of collection information through a wide range of means, and there was excellent support from experts for these approaches.
Scholarly literature	<p><i>Interview with client</i></p> <ul style="list-style-type: none"> • ‘Parents possess a key piece of the diagnosis and their experiences with their child with Asperger Syndrome needs to be consulted.’ (p111, Level III, Quality 95%, [18]). • ‘The primary healthcare providers, school teachers, and all practitioners need to be involved in identifying the early signs of Asperger Syndrome. These are the professionals in the forefront of hearing the concerns of parents and in working with children’ (p112, Level III, Quality 95%, [18]). <p><i>Standardised assessments</i></p> <ul style="list-style-type: none"> • ‘Professionals perceived the use of standardised tools as very helpful’ (p. 300, Level III, Quality 73%, [16]).
Other guidelines	<p><i>File Review</i></p> <ul style="list-style-type: none"> • All relevant records should be reviewed [27]. • Topics to be considered in file review: <ul style="list-style-type: none"> ○ should be ASD specific and include any background information that may aid in differential diagnosis [27] and [4]. ○ child family/ caregiver history including 3 generations [4, 5, 35]. ○ medical history including well child developmental records (including milestones) and birth records and newborn vision / hearing screening ○ whether the individual has had previous / receives current services and relevant assessments / reports from these [35].

- previous screenings and diagnoses / medical evaluations / specialist evaluations, results and reasons for these [4]
 - medication history
 - school assessments / reports / education progress / behavioural reports
 - documented observations
 - previous and current behaviour and functioning
 - records of early development (e.g., videos or notes) [4, 29].
 - evidence or parent report of physical or sexual abuse or other traumatic experiences [4].
- A file review can prevent duplicate testing.
- File review should ideally be completed prior to the child's evaluation to allow for more focused questioning / assessment when face-to-face.
- The amount of prior information often is dependent on the age and functioning of the individual
 - younger children typically having had fewer encounters with professionals [27].
 - children who have significant impairments (e.g., motor, sensory, etc.), including those with risk factors for a developmental disability (e.g., premature birth, birth complications, substance exposure) are more likely to have extensive records [27].
 - older individuals may not have a developmental history, but similar information could be sought from a parent, sibling, or any person who knew the individual well as a child [4].
- Parents can facilitate clinician access to information by maintaining a file of documents relevant to their child's development to eliminate the turnaround time required to obtain records from third parties.

Observation

- Observation of an individual to directly assess the presence of behaviours consistent with ASD is a core component of ASD evaluation [5, 27, 28, 35].
 - Necessary to:
 - to identify deficits that parents may not report because of their unknowing compensation [27].
 - allow observation of patterns of interaction with family and unfamiliar adults [3].
 - Considerations for direct observations:
 - should evaluate the individual's behaviour in structured and unstructured situations (and may or may not include standardised tools) [3, 4, 27, 28].
 - should involve situations aimed purposefully to observe specific behaviours relating to ASD descriptors [27, 28, 30, 35].
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- Assessors should ascertain whether the observed behaviour is representative of the individual's typical behaviour. If observational assessment in the structured clinic setting is not representative of the child's typical behaviour, input from others and/or observation in the individual's typical environments is necessary [5, 27, 30].
- Ideally, observations should be taken across multiple familiar settings [3, 4, 30].
- Structured observations may be limited by noncompliance and elicit atypical behaviours because of unfamiliarity with materials and difficulty with changes in activity and interactive partners [27].
- Ample assessment time and potentially multiple assessment sessions should be allowed for direct observation and interaction [4, 27].
- Motor stereotypies or other repetitive behaviours or unusual interests may not be observed in the course of a single evaluation and hence information regarding this may rather be reported from parents / caregivers [27].
- If appropriate, direct behavioural observation includes an interview with the individual [3, 27].
- Direct observation still involves interpretation in the context of age, developmental level, level of engagement and cooperation [27].
- The interview setting should include a selection of toys for children at a range of developmental levels – sensory, functional, symbolic and so on [3].
- Eliciting clinical evidence of ASD requires the professional to have substantial clinical experience but may be completed by a range of disciplines with necessary training and expertise [4]].

Standardised and non-standardised assessments

- Modifications to assessment procedures are needed, so that adults with autism could receive the most effective care [18].
 - Clinical assessment, standardised measure use and consultation need varies depending on individual presentation and the lead diagnostician's clinical competence/judgement [16],
 - The use of standardised tools (whether for data collection of ASD behaviours or the intellectual, adaptive and cognitive skills of the individual) is desirable/preferable but not essential for a diagnosis of ASD in all cases, such as when a clinician with expertise in the area of ASD documents atypical behaviours strongly indicative of an ASD in addition to delays in communication and social skills [4, 5, 16, 27, 35, 53, 59].
 - It is the responsibility of the lead diagnostician to determine the complexity of the individual's presentation and hence to determine the level of evaluation required to provide sufficient evidence to support a diagnosis of ASD (methods, instruments and level of consultation with others) [16].
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	<ul style="list-style-type: none"> • Diagnosticians should consider the individual's and family's perception of completeness of evaluation and hence confidence in the diagnosis. The tier of evaluation should be elevated if concerns are raised regarding the thoroughness by the individual and/or family [16]. • At Tier 2, Diagnostic evaluation completed with the use of at least one standardised tool • Research has shown that using standardized behavioural observation instruments increases diagnostic accuracy in clinical settings [16, 59] particularly when the individual's presentation is mild or complex [16].
Online submissions	<p><i>File Review</i></p> <ul style="list-style-type: none"> • The assessment should include blood tests to identify genes, maternal health, child's health, tests regarding communication, sociability, habits and behaviours, eye tracking & constipation information. • Diagnosis decisions should also consider family presentations of ASD, history of other family members. • Diagnosis should take into account family history of behavioural and neurological characteristics. • Prior developmental assessment should be provided. • Historical evidence of criteria met/not met. <p><i>Interview with client</i></p> <ul style="list-style-type: none"> • Assessment should include interview and observation of behaviours; and participation in conversational interaction, not just formal testing of language/ cognition. • Interview with parent/guardian or individual to gather ASD history and observations/ play/ social session with individual. • So, personal I feel the best way diagnose a child is with personal interaction with child by professional diagnosing child and with three professional agreeing in a multidisciplinary team. <p><i>Standardised and non-standardised assessments</i></p> <ul style="list-style-type: none"> • Careful consideration should be given to ensuring that there is a gold standard of assessment with flexibility for variation on the discretion of trained experienced clinicians (dependent on presentation, parent/carer report etc.). • Flexibility of diagnostic tools and process, for example diagnosis conducted over several sessions • There should be a required (appropriate) mixture of interview for information, assessment tools (ADI-R, ADOS-2) and observations. • Assessment should include social, developmental, educational, and cognitive assessment if possible. The diagnosis is guided by DSM5 criteria and ADOS or play session. • This includes: <ul style="list-style-type: none"> ○ Medical, family, developmental and behavioural history of child, specifically relevant to DSM-5 criteria ○ Medical examination, vision and hearing screening

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- Information gathered from playgroup, early childhood setting, school or other professionals known to the child
 - Structured behavioural observation in naturalistic setting (home, school)
 - Assessment of overall development, language, cognition and adaptive functioning
 - Family assessment to identify parental knowledge of child development and behaviour, family's strengths, systemic stresses and available resources and supports
 - Examples of assessments used: 1) ASD: ADOS-2, ADI-R, DISCO; ADEC; SCQ; AQ. 2) Cognitive: Mullen Scales, Bayley Scales, WPPSI-IV, WISC-V, WAIS-IV; 3) Adaptive: VABS-3.
 - It is noted that a 'tiered' response is being considered but, in relation to 'complex cases' there are concerns regarding how this is identified, what it means for families/individuals who undergo a different assessment process (with possibly different costs) because an individual is 'complex' compared to another individual.

Communication with other clinician(s) and/or professional(s)

- Consider trauma history. ADOS may be used to gather information, but diagnosis decision to be made through discussion by the clinicians who have observed the child, against DSMV criteria.
- Collecting extensive history (esp. for adults).
- 'assessment' should be in consultation with the school teacher, psychologist and the paediatrician to get a whole view of the child.
- Assessments should include information from teachers, social workers
- from / School/ General practitioner/ other medical specialist.
- Background information collected via questionnaire from school/childcare/other 3rd party.
- preschool/day care feedback
- Paediatricians/psychologists who have verbal conversations with educators will gain superior insight into the individual.
- history from multiple sources to ensure symptoms pervasive.
- Information should be collected from ALL the team – parents, educators, Speechies, OT, colleagues and be considered of equal importance.
- A second source i.e. other than a parent should provide information too.

Workshops

- Multiple sources of information.
 - Understanding the family/individual perspective is a challenge, however, they must be recognised when completing the ASD assessments. These assessments should be tailored to suit the individual's needs, however must be kept evidence based.
 - Person centred assessments.
 - The clinical skills are needed to tease out the symptoms of autism from co-occurring or related conditions.
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Delphi surveys

- Round 1 agreement that information should be collected during the ASD assessment process through:
 - File review of existing documents written by other professionals
 - An interview with the carer of the individual being assessed for ASD
 - An interview with the individual being assessed for ASD
 - Observation of the individual being assessed for ASD
 - Medical evaluation of the individual being assessed for ASD.
- The structure should not rely entirely on parent report or self-report.

File Review

- I do think that professionals should consult other sources of information (e.g. past reports, therapists working with the individual etc.) so that they have a comprehensive picture of the client's presentation.
- I think that it is essential that clinicians review all past information prior to conducting an assessment- means that they have a more complete picture of the individual, gain information about the individual in multiple settings, and avoids repeating assessments etc. that have already been done.
- It is important to have face to face (or telephone) discussion with all professionals involved (where consent is given).
- The diagnosis may already be confirmed in the practitioner's head before seeing the client. It would be more objective to see the client, complete the assessment and then consult the other documents.
- Assessment without this would be fraught.
- Usually essential but may not be necessary in obvious cases.
- Can prejudice the assessment.
- This assumes that all families and individuals are happy for this to occur, which is not necessarily the case.
- This is not my area of expertise however it seems common sense to collect all relevant data.
- In my experience, so much of the previous record collecting and assessment information often fails to correctly identify the issues that are most pertinent to ASD. (For example, 'red flags' are often missed). Or, the most appropriate assessments to answer questions related to ASD have not been undertaken.
- File review ensures that assessments can be more efficient and don't double up on assessments or observations that have already been conducted.
- There are some who are obvious and do not require multiple informants but sensory deprivation can make even this group tricky.
- If needed and relevant. No different to other conditions - simply a case of good professional communication to prevent medical mishaps

- Clients should not have to recall details of history multiple times. this information should be shared by professionals.
- This is helpful to establish symptom presence and severity over time and in multiple settings.
- This should never be used without viewing the person and their parent or carer for a child.
- For adults, it may be these which provide vital information about the earlier years particularly those in the developmental period.
- Mandatory yearly paediatrician reviews.

Observation

- Functional, non-standardised assessing and observations are an essential component. many people with ASD may perform well on standardised testing, however, it is their functional qualitative performance which is impaired

Interview with client

- The individual being assessed MUST be seen by the assessor(s). Interview is not possible in some circumstances such as very young children and not when the individual does not have the cognitive and/or language capacity for such interview. However, for all others interview should be attempted. The amount of information gathered from the individual will increase as their age increases.
 - it is helpful to include older children (usually 14 plus) in the assessment of criteria as they have a very important current and past perspective. Adults are almost always included in the interview. Adult and older adolescent assessments take a different form and the provision for this is very important.
 - I think that it is essential that the clinician spends time with the person being assessed. Exactly what this looks like, and the types of questions asked, would depend on the individual's age and developmental level.
 - Depends on the age and intellectual capacity of the child. Talking to the child is very important because it gives you a firsthand experience of the child's verbal social and pragmatic functioning.
 - This would depend on the age of the individual. Agree for adolescents and adults although this is not my area of expertise.
 - Especially important for adolescents and adults suspected of having an ASD.
 - 'Interview' tailored to age / communicative ability. Combination of standardised and unstructured interaction.
 - Where possible (given age, communication ability).
 - Even when the person has limited communication abilities an attempt should be made.
 - Unless it would be traumatic for the individual or of no benefit.
 - Don't normally 'interview' children, though interaction with them (verbal, play) is an important part of assessment.
 - It may be observational rather than interview.
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- Where appropriate I think here. I am thinking about the interview components of the ADOS for all ages. More comprehensive case history interview should also be conducted with adults if possible.
 - This depends on several factors such as the age and level of functioning of the individual, communication skills etc.
 - If it is adult and capable of providing information.
 - Presumably this is dependent on the age of the individual as well. e.g. it is not relevant to 'interview' a 3-year-old but observational assessment would be.
 - It is essential that some time is spent observing the individual, either in a structured way or during informal observations. Not all individuals would be able to complete an interview but it should be conducted when possible.
 - Only if age and communication allow.
 - Depends on person being assessed and level of communication.
 - If it is adult and capable of providing information.
 - An interview could only help.
 - I have been horrified mainly in the NT but also in rural and remote WA that children and adults who need services which are not available in their locality but which could be provided effectively (at say 75% value of face to face in person) are not eligible for the services because of bureaucracy which requires ALL treatments to be in person.

Standardised and non-standardised assessments

- Round 1 agreement that the guideline should include:
 - Hearing assessment (e.g. screening test or full auditory evaluation)
 - Developmental assessment (e.g. ability to meet expected developmental milestones related to motor and social-emotional domains)
 - Communication assessment (e.g. speech, language, social communication and social interaction)
 - Adaptive functioning assessment (e.g. extent of independence and functional capacities of the individual to perform everyday tasks)
 - Behavioural assessment (e.g. challenging behaviour which falls outside the range of expected age-appropriate behaviour).
 - Round 1 partial agreement that that the autism assessment process should include a:
 - Neurological and physical examination (e.g. measurements, abnormalities, dysmorphic features, neural function)
 - Cognitive assessment (e.g. intelligence tests, learning capability, cognitive strengths / weaknesses)
 - Mental health assessment (e.g. psychiatric screening or diagnostic tool to identify the presence of a range of mental health symptoms or conditions).
 - Client and family centred approach is key, for any assessment and clinical work, not just ASD assessments.
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- Each ASD case is individual and the client will have their own requirements, therefore, should be diagnosed accordingly.
 - Referrals to psychologists, speech pathologists +/- other allied health and educational professionals for assessments in respective areas of expertise are required in more subtle or complex cases.
 - All developmental and psychiatric assessment of behavioural concerns in children should have an appropriately tiered assessment process to reduce time and money wasted on unnecessary assessment for cases who are simple and clear-cut (either ASD easy to diagnose or rule out), to reduce the already long waiting times for those with sufficient expertise to perform such assessments.
 - These tools are time consuming and expensive and should be used when indicated only in complex assessments where maximum information is required.
 - Given the expense of training and kits, accessibility is an issue for many families, especially given more complex assessment may require costs associated with OT, Speech, and Psychology observation assessments.
 - Standardised tools are essential to ensure assessments are reliable and valid.
 - Standardised tools can be very helpful but are not always required in clinical practice.
 - Clinical skill is the paramount measure. Other measures are not necessarily reliable but can be used to bolster clinical judgement
 - As determined by the clinical judgement of the professional involved upon the presentation of the individual being assessed - may not all be able to participate in a standardised assessment.
 - There is currently an over-reliance on these tools that are not meant to provide an 'official diagnosis' on their own. (Unfortunately, all too often the results are misinterpreted by inexperienced clinicians across all groups). Rather they are valuable tools that can be used to aid the assessment process.
 - When making a diagnosis of ASD, it is important to make sure that enough evidence is collected to support the diagnosis (or non-diagnosis). However, exactly what is required does depend on the individual presenting for assessment. That said, I do believe that there should be some minimum standards that should be included in all assessments (e.g. ADOS +/- ADI-R)- it is just that other assessment components should be added/removed as appropriate depending on presentation (e.g. no need to assess for anxiety as a differential diagnosis if there are no symptoms of anxiety present).
 - These tools would include speech assessment tools, sensory assessment tools, cognitive assessment tools, adaptive behaviour assessment tools, tools which assess mood (Depression, Anxiety, Stress) - these are needed to differentiate and understand the individual's mental health and how that interacts with other aspects of the individual, and personality
-

tools - these are important also for differentiation in adolescents and adults in some cases.

Communication with other clinician(s) and/or professional(s)

- Medical information is very important if the assessment is simple then past reports may be adequate to inform the assessment. For complex assessments, which include neurological and physical issues this input is very important. Medical input is required for complex assessments.
 - The assessment should include blood tests to identify genes, maternal health, child's health, tests regarding communication, sociability, habits and behaviours, eye tracking & constipation information.
 - The diagnostic process should include written reports, video footage and coming from strengths as well as areas of challenge - physical considerations such as asthma, muscle tone, psoriasis, eczema, ticks and sensory profiling as well as rigidity of thought, speech delay (social context and appropriate social reciprocal speech should also be considered) and fixated interests.
 - I believe that this is helpful, but not essential. However, if the child/individual is presenting with specific medical or genetic related concerns then I think that it would be very important to consult a doctor. In other words, it would be important in some cases but not others.
 - I believe that a medical assessment be conducted prior to structured ASD assessment.
 - This should be done by the paediatrician before referral for full ASD Assessment at their discretion.
 - Surely this is part of the paediatrician's assessment and would be done as a part of their process and at their discretion.
 - To rule out other diagnoses.
 - Needs to be done before the assessment is even scheduled to rule out the presence of a neurological or physical disorder.
 - Clinical observations for posture, motor planning, righting reactions, sensory modulation (e.g. gravitational insecurity) can be identified in these assessments. This helps to identify triggers for behavioural avoidance.
 - A critical component in ASD assessment is how the individual functions in a peer group setting - hence input is required from professionals/carers who have experience of the individual in this setting.
 - Fundamental information.
 - I don't think this necessarily must be done at the time of the assessment, could be done before.
 - I typically recommend genetic testing to rule out/identify the presence of any possible genetic conditions.
 - When relevant or needed.
 - We should be quite sophisticated about the diagnosis now using iPhone eye-motion apps and genetic testing.
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- This could be collected by someone who was not an expert using a standardised collection tool. To speed assessment process.

Viewpoint surveys	Observation of the person being assessed was rated highly by one viewpoint and interviewing both the person being assessed and interviewing parent/caregivers were both rated of high importance by two viewpoints.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 53: Consensus Team Diagnostic Evaluation (Information)

Evidence source	Details
Recommendation	It is suggested that ASD-specific assessments not be used as a substitute for clinical judgement in diagnostic decision-making, though they may provide considerable assistance in the direct observation of ASD symptoms, and their use in an assessment of ASD concerns be at the discretion of the Consensus Diagnosis Team.
Grade	Consensus-based Recommendation, Grade 2
Rationale	Numerous evidence sources suggest ASD-specific assessments are helpful, with most of the evidence consistently supporting this approach and good support from experts.
Scholarly literature	See Evidence Table 43: Single Clinician Diagnostic Evaluation (Information)
Other guidelines	See Evidence Table 43: Single Clinician Diagnostic Evaluation (Information)
Online submissions	See Evidence Table 43: Single Clinician Diagnostic Evaluation (Information)
Workshops	See Evidence Table 43: Single Clinician Diagnostic Evaluation (Information)
Delphi surveys	See Evidence Table 43: Single Clinician Diagnostic Evaluation (Information)
Viewpoint surveys	The use of standardised assessments was rated of low importance by one viewpoint.
Interviews	Not identified
Feedback	See Evidence Table 43: Single Clinician Diagnostic Evaluation (Information)

Evidence Table 54: Consensus Team Diagnostic Evaluation (Setting)

Evidence source	Details
Recommendation	It is recommended that the Consensus Team Diagnostic Evaluation take place in a setting that allows the clinician to assess how symptoms manifest in a variety of contexts relevant to the client. This may be in a combination of clinic and community settings, which may be supplemented by information collected in a telehealth setting. This information may be obtained through communication with the client and/or other professionals, but direct observations by member(s) of the Consensus Diagnosis Team within some of these community settings is suggested where possible.
Grade	Consensus-based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of collecting information about a range of contexts, and there was excellent support from experts for this flexible process.
Scholarly literature	<ul style="list-style-type: none"> Involve the patients in their own diagnostic experience and incorporate their personal understanding of their life experience (Level III, Quality 60%, [11]). A systematic review investigating reliability, validity and utility of ASD diagnostic tools in Western Australia recommend an approach to ASD assessment data-collection where both direct observation and parental interviews are used (Level III, [62]). 'Parents have been shown by this study to be a reliable source of information about their children's development and behaviour' (p. 83, Level III, Quality 77%, [19]). Parents, whose children undergo an ASD diagnostic/assessment process, are an important resource to diagnosticians and clinicians (Level III, Quality 64%, [23]).
Other guidelines	<ul style="list-style-type: none"> Essential elements of a diagnostic assessment include assessment of the core features of ASD [5]. Observation of the child should focus on broad areas of social interaction [5, 28, 35] and restricted, repetitive behaviours [35]. Direct observation allows the lead diagnostic clinician to use his or her expertise to evaluate the individual's behaviour in structured and unstructured situations. Although parents may have difficulty interpreting items on questionnaires or recalling information to answer interview questions, direct observation allows the clinician to structure situations to observe specific behaviours and ascertain whether these behaviours are typical [27]. The experience of interacting with an individual, in order to elicit clinical evidence of ASD that is compatible with ICD-10 or DSM-5, is a significant professional task, which cannot be undertaken without a substantial amount of clinical experience [4]. Diagnostician should consider whether co-occurring disorders exist [5]. Carry out direct observation in social situations [28].

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- Face-to-face behavioural observation and interaction are essential components of diagnostic evaluation [27].
 - Wherever possible this assessment should be supported by direct observation of the person's behaviour [28, 30].
 - Multiple setting observation is not necessary for every individual being assessed but should be considered if there is diagnostic uncertainty or inconsistency in behaviour [28]. Information about the individual's behaviour in multiple settings may be obtained through interview with caregivers and significant others rather than direct observation [4].
 - If the observational assessment in the diagnostician's office is not representative of the child's typical behaviour, collection input from others from child's typical environments well may become critical [5].
 - Some guidelines suggest that the controlled clinical environment is essential to ASD diagnosis [30] and many guidelines suggest it is best to carry out observations across multiple environments to heighten validity [3–5, 27, 28, 30].
 - Focused observations should be taken across more than one setting [3, 5, 30].
 - Familiarity of the setting often has significant impact on the skills and behaviours demonstrated by the child [3].
 - There is a lack of sufficient evidence in one session [30].

Communication with client and/or other professionals

- Through discussion with the parent or caregiver and consulting collateral information, the lead diagnostic clinician determines the extent to which the individual's observed behaviours are consistent with his or her behaviour in other settings [27].
- Even when adequate time for observation and interaction is allotted, motor stereotypies or other repetitive behaviours or unusual interests may not be observed in the course of a single evaluation. Therefore, behavioural reports from parents and other collateral informants are essential in documenting the presence of behaviours in this area [27].
- A number of international guidelines recognise the expertise of parents about their children and assert their critical importance to the ASD diagnostic process and recognised them as 'partners' in the diagnostic evaluation [5, 27, 30].
- Consultation with individuals (other than parents) who care for or who have regular contact with the child undergoing evaluation is also recommended [30].
- The diagnostician should attempt to involve a family member, partner, carer or other individual as an informant or seek documentary evidence of childhood development such as school reports [29].

Online submissions

- Settings requiring social participation, including observations from key people (parents/grandparents/teachers/allied health).
 - Observation of the child in a relevant social situation.
 - Provision for school observation if further information required.
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- Naturalistic observation should occur alongside formal assessment.
 - Assessments need several observations, formal and informal (i.e. child playing, interacting with family and peers) and reassessed after period of early intervention when there is base for comparison.
 - Direct observation of the individual in home/school as needed.
 - Assessment should include interview and observation of behaviours; and participation in conversational interaction, not just formal testing of language/ cognition.
 - What assessment should involve to ensure there is direct/indirect observation of social/peer interaction not just details of interaction with adults.
 - As well as direct testing/observation should form part of the diagnosis.
 - An assessment should take place with one team member interviewing the parents/carers whilst another plays with and observes the child.
 - Both the Social Worker and Child Psychologist should do a Home/Day Care/School Observation of the Child and one of the diagnostic instruments e.g. ADOS Assessment should be used as part of the diagnostic process.
 - Get history of behaviours and traits from parents/caregivers.
 - The assessment should include blood tests to identify genes, maternal health, child's health, tests regarding communication, sociability, habits and behaviours, eye tracking & constipation information.
 - Direct observation of a person on the spectrum trying to negotiate the social, educational and employment environment in authentic settings is the only accurate assessment tool.
 - The info should be collected in both written and by video to show others professionals.
 - Info collected by observation, checklists (parent/teacher/professionals) including SPD.
 - Feedback from external agencies involved with the child or family and just based on feedback from parents or caregivers and clinical observations.
 - As much as possible being diagnosed should be observed in their classroom/ day care environments, especially in playground. Many children present fine one on one with an adult, but their ASD is far more obvious when with their peers.
 - Assessment information should be collected prior to appointment so that professional has good understanding of the child in a variety of situations, and in their natural environment.
 - Assessment should occur in a combination of settings for example, the clinic, office, home, day care, school (e.g. observations, parent/carer/teacher interview), local centre (team assessment session).
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	<ul style="list-style-type: none"> Assessors should do a Home/Day Care/School Observation of the Child. As much as possible children being diagnosed should be observed in their classroom/ day-care environments, especially in the playground. Greater awareness that children can present differently in appointments opposed to more natural environments. Autism assessments should not just be completed in a clinical setting and it is important that the child be observed by the clinician in a preschool, playgroup or school setting where peer interactions can be observed.
Workshops	<ul style="list-style-type: none"> Assessment should also include observations at school and home environment. Multiple locations for information gathering. Naturalistic setting information collection (observation). A second source i.e. other than a parent should provide information too. If in clinical setting: need to gather information from across a range of environments e.g. school; work; TAFE/uni; home (two or three settings). Assessment across multiple settings and gathering information from multiple settings leads to a more rigorous diagnostic process. Observation is key (diagnostic questions only form a part of the diagnosis process). Assessment should also include observations at school and home environment. Assessment within several functional locations/settings. Observation is key (diagnostic questions only form a part of the diagnosis process).
Delphi surveys	<ul style="list-style-type: none"> Observations can give insight into behaviours and sometimes causes of behaviour. Observation of function in the individual's natural environment in addition to observation in the clinical setting. Observation is too relied upon due to the ability of many people with ASD to present very well in a clinician's office. An observation is essential, either at school or a social situation where the individual is familiar or if not possible with a parent or family member. Observation is important when it is hard to gather information directly from the individual. It is also important to see the individual in one and sometimes two natural environments. This is not necessary in simple assessments or where there is a large amount of information. Direct observation helps enormously with the more complex assessments. Assessments require multiple sources of information and observation due to the increasing complexity of reporting biases of symptoms due to high levels of awareness of ASD symptoms.

Viewpoint surveys	Collection of information in more than one setting or location was rated to be of neutral or moderate importance by all viewpoints. Collection of information in the clinic setting was rated to be of very low importance by all viewpoints, but collection in the home setting was rated high by one viewpoint, and collection in other settings such as the childcare centre, school, or workplace was given neutral importance by all viewpoints.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 55: Consensus Team Diagnostic Evaluation (Outcome)

Evidence Source	Details
Recommendation	<p>It is recommended that clinicians conducting the Consensus Team Diagnostic Evaluation use their clinical judgement to reach a consensus diagnostic decision by:</p> <ul style="list-style-type: none"> – taking into account all information collected during all stages of assessments, in the context of a biopsychosocial framework – integrating and weighing the available evidence against each diagnostic criterion (according to the current version of the DSM or ICD) – testing alternative explanations for signs and/or symptoms that may warrant co-occurring or differential diagnosis or alternative clinical pathways – considering if sufficient information is available to make a diagnostic decision with high confidence – discussing the evidence until each member of the Consensus Diagnosis Team agrees on the same diagnostic outcome.
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of a robust process for making a diagnostic decision, and there was excellent support from experts for this process.
Scholarly Literature	<ul style="list-style-type: none"> • Informed clinical judgement by professionals with ASD specific experience and training contributes significantly to reliable diagnosis [4, 27, 30, 48]. • Sufficient data relating to ASD diagnostic criteria to meet or rule diagnosis must be collected [27]. • A number of guidelines mention the DSM-V (or IV if the guideline was published prior to the publication of the DSM-V) ASD diagnostic criteria and the ICD-10 criteria and that 'gold standard' decision making involves the collection of data based on the criteria presented in these documents [5, 27–31]. • Very young children with possible ASD may not yet show the full range of symptoms detailed in the DSM-IV-TR / ICD-10 [30]. • A diagnostic decision involves some level of interpretation of evaluation data (such as consideration of presenting behaviours in light of developmental level, environment etc.) [27, 28, 48]. • Assessment information should be integrated systematically with consideration of differential diagnosis to develop a clear outcome [3]. • Standardised tools can be used to structure clinical judgement but should not be used alone (without clinical judgement) [4, 30, 48].
Other Guidelines	Not identified
Online Submissions	<ul style="list-style-type: none"> • Diagnostic decisions should be reached by registered psychologists (with specialist training) using a combination of evidence based diagnostic tools (ADOS and ADIR), impressions from school/child care/play group observations, impressions from allied health professionals (with training and experience in

	<p>ASD presentations) and solid clinical formulation that includes differential diagnosis.</p> <ul style="list-style-type: none"> • Accurate diagnosis is crucial, however, social policy for differential diagnosis is equally important. I believe there is an unfair situation in which some individuals who meet criteria for ASD present with age-appropriate language, academics, IQ, and daily living skills and receive NDIS funding support; while some children who do not meet criteria for ASD, present with severe language delays, learning difficulties, and behavioural problems, and are given little to no NDIS support. This leads to "fudged" diagnoses to give help to children who genuinely need it but dilutes the already nebulous definition of ASD even further. • We need more specific and objective guidelines in this area. Can it be based on history? Does the behaviour impact current functioning? Does a child need to show several behaviours within each criterion or is one significant behaviour (e.g. eye contact) sufficient, for example?
Workshops	<ul style="list-style-type: none"> • Diagnosis needs to be accurate o Translation of concepts into a reliable system that leads to consistent and reliable diagnosis. • Precision is required
Delphi Surveys	<ul style="list-style-type: none"> • Round 1 agreement that the final decision regarding an ASD diagnosis should be made by integrating and weighing the available evidence against each diagnostic criteria. • Round 2 agreement that an ASD diagnosis should be made by testing alternative explanations for symptoms that may warrant alternative or comorbid diagnosis or other clinical pathways. • Round 2 agreement that the final decision regarding an ASD diagnosis should be made by taking into account all available information from informant. <p><i>Considering all information</i></p> <ul style="list-style-type: none"> • Probably best if it's the doctor, to ensure all medical causes and complications have been considered. • Only in clear cases, but this would be very rare and would not recommend as the standard. • If the presentation is complex, more than one professional is required. • As reiterated throughout this report, the knowledge, skills and expertise of the individuals is critical regarding diagnostic decisions - whether this is a single professional or several professionals working within a multidisciplinary team. • Can be individual or team. • Single after team discussion • In some rural and remote areas, there may only be one professional available. • With this approach, it gives too much power to one person who may not understand the whole picture. <p><i>Integrating and weighing evidence</i></p> <ul style="list-style-type: none"> • The individual making the diagnosis needs to have met the individual and undergone an assessment process with them to help inform their own conclusions.

- Certain criteria should be met for a diagnosis. The 1-3 rating system has a large gap between the levels.
- Attention /reflection needs to be given to the criteria. Just because a checklist puts the person within a significant range doesn't mean that they do meet the criteria.
- That reporting is based on one set of agreed criteria - namely the DSM5.
- This can become limiting for the females with ASD who are not always perfectly described by the DSM.

Testing alternative explanations

- When making a diagnosis of ASD, it is important to make sure that enough evidence is collected to support the diagnosis (or non-diagnosis). However, exactly what is required does depend on the individual presenting for assessment. That said, I do believe that there should be some minimum standards that should be included in all assessments (e.g. ADOS +/- ADI-R)- it is just that other assessment components should be added/removed as appropriate depending on presentation (e.g. no need to assess for anxiety as a differential diagnosis if there are no symptoms of anxiety present)
- Rather than having a diagnosis followed by an "ASD assessment" that will be ignored by the treating clinician, it would be better to have ASD diagnosis combined with comprehensive diagnosis and screening for other conditions.

Viewpoint Surveys	Not identified
Interviews	"Trust and understanding of what the process is and being able to pick up quirks in people's behaviour that may indicate Autism. I think that's probably one of the most important things."
Feedback	Not applicable

Evidence Table 56: Consensus Team Diagnostic Evaluation (Outcome)

Evidence Source	Details
Recommendation	It is recommended that any new support needs identified at the Consensus Team Diagnostic Evaluation be documented, communicated to the client and, if appropriate, communicated to the client's current support services (with the client's permission). If the client is not receiving any support services, it is recommended that they be connected to appropriate services based on support needs, without the requirement for a clinical diagnosis of ASD.
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of identifying and addressing support needs, and there was excellent support from experts for this process.
Scholarly Literature	Not identified
Other Guidelines	Not identified
Online Submissions	Not identified
Workshops	<ul style="list-style-type: none"> • 'I-CAN support needs/functional assessment can be used.' • 'Inform support needs.' • 'For high functioning individuals who may develop strategies to mask their difficulties from the public eye and may not meet the criteria in the diagnostic assessment, they may still receive benefits from the identification of their support needs.' • 'As ASD is such a wide spectrum, every individual on the spectrum may have very different presentation and a diagnosis might not present those unique differences, an assessment identifying support needs can lead to individualised support.' • 'Support needs must be individualised and separate to diagnosis.' • 'Support needs not deficits.'
Delphi Surveys	<ul style="list-style-type: none"> • '[Support needs are] the most important aspect to parents and the child/adult.' • 'I think that [support needs are] more relevant to intervention planning than diagnostic assessment.' • '[Support need] information (to some degree) will be highly valuable for individuals and parents/caregivers to take to their NDIS planning meeting. Currently, we identify the 'level of support' required as per the DSM-5 and provide a few examples, and some recommendations based on best available evidence.' • 'This should be done at a later stage post diagnosis. Families need some time to process the information regarding the diagnosis.' • '[Support needs identification is] part of wider information gathering and intervention planning process.'

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- '[Support needs identification] would be ideal but not essential if there is a local service already involved.'
 - 'Helpful for families and schools.'
 - 'This would be relevant for intervention planning and consideration of goals for application for funding through the NDIS. A focus on support needs recognises the daily and ongoing role of family members and the level of support they are required to give. This is probably underestimated or not openly discussed when there is a focus on therapy goals for early intervention. In reality the day to day challenges for families of children with autism may relate to limitations to parent employment, running a household, adequate rest for carers, particularly if there are overnight support needs, and enjoying time as a family outside of the home environment and therapy sessions.'
 - 'Functional ability is independent of intellectual ability, especially in older people.'
 - 'What if there is no funding and no way of meeting these needs. Is it for research or to bludgeon government departments?'
 - 'Even those with high IQ, often have high dependency needs.'
 - 'I feel that this should come later and not necessarily as part of the diagnostic process.'
 - 'May not be necessary at point of diagnosis - should be considered as part of planning with appropriate providers.'
 - 'The extent of this process and whether it is formally undertaken will depend on the severity of the child's needs. It should be a routine component of paediatric assessment and management planning.'
 - 'This should be part of the overall assessment in determining first what the nature of the support needs are and secondly what needs to be provided to improve or maintain the life and prognosis for the individual moving forward.'
 - 'Support needs assessment should also focus on determining the early priorities for intervention, so that the child can move from this assessment into treatment.'
 - 'I cannot imagine a situation where assessing for whether or not someone has an ASD does not involve evaluating their current strengths, challenges and support needs moving forward. Again, the fact that this question has arisen at all only further highlights the lack of adequate training of professionals to date.'
 - 'The support needs should be individualized and be in the same report.'
 - 'It needs to be left to the professionals discretion as to the needs/readiness of the individual /family/carer as to the timing and degree of the support needs - not all will be able to deal with this at the same time as a diagnosis.'
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Viewpoint Surveys Focusing on the needs of the individual was ranked as important to one viewpoint, and focusing on the needs of the whole family was ranked as important to another viewpoint. Assessing available supports and talking about goals were ranked as neutral or not important by all viewpoints.

Interviews	<p>‘And I guess it’s easier for people on the spectrum, who tend to have an average, or high IQ, to be adopting masking strategies, and there will be autistic individuals who really struggle with that, because their intellect is not at a point at which they can learn and adopt these strategies as well, so their support needs will be very different, as they grow as well.’</p>
Feedback	<ul style="list-style-type: none"> • ‘I applaud your inclusion of a Support Needs Assessment. When our daughter was diagnosed, scant information was provided on how to meet her support needs. While struggling with our own stress levels, it was indescribably difficult to access services when we didn’t know where to start.’ • ‘Congratulations on including [Comprehensive] Needs Assessment in order to identify support needs, establish goals and link to the most appropriate support services. This is an excellent addition to the existing diagnostic process. Our own diagnostic process was isolating, depressing and unsupported. The [clinician] gave us our daughter’s diagnosis at 6pm on a Friday night over the phone, with no offer of help or support or where to go next. This led to a long period of depression for me (primary caregiver) and a feeling of being lost, not knowing what services were available, which we needed to use, and subsequently our daughter missed invaluable early intervention and our family missed essential support, respite and funding that we could otherwise have accessed.’ • ‘The [Comprehensive] Needs Assessor can provide guidance on the type of supports that will assist the individual and/or their caregivers to address these prioritized support needs and goals through overcoming limitations / barriers and optimizing strengths / facilitators. Where required to access a service, the [Comprehensive] Needs Assessor can make a referral to appropriate service providers to ensure these supports are implemented.’ • ‘Over all, [organisation] believes this section of the guidelines has been very well thought through and developed. The guidelines also seem to suggest that it is up to the relevant professional to set specific goals. The [Comprehensive] Needs Assessment might indicate that a certain type of professional assessment is needed (e.g. speech assessment) but the speech therapist is given the flexibility to further identifying and prioritise specific goals for intervention. This flexibility is helpful as [organisation] would argue that the relevant professionals are well able to determine their own intervention goals in collaboration with their clients.’ • ‘[Organisation] thinks that the suggestion that the [Comprehensive] Needs Assessment should identify whether the client needs to maintain current supports, increase supports, or have further supports added is praiseworthy.’ • ‘[Organisation] strongly supports access to support based on function and support needs, rather than access based on specific diagnostic labels such as ASD.’ • ‘A comprehensive formulation should be developed, including details and outcomes of the ... [Comprehensive] Needs Assessment. This can then be used for multiple purposes,

including development of a child and family centred management plan and determination of the level of support.'

- '[Organisation] welcomes the recognition of this key aspect of assessment in relation to any diagnostic process. Function and support needs should drive resource allocation in any service or model of care, as opposed to a specific diagnosis. A ... functional approach is essential for all who seek to provide important information about an individual's profile and/or need for specific services.'
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Evidence Table 57: Sharing Findings (Style)

Evidence Source	Details
Recommendation	It is recommended that findings of the assessment of ASD concerns be communicated to the client by the Single Clinician and/or at least one member of the Consensus Diagnosis Team in a comprehensive and understandable way through a face-to-face meeting (or via a telehealth setting) and written report. This will ideally occur within three months of the first assessment appointment, or earlier in line with the clinician's existing professional standards. Findings of the assessment of ASD concerns should only be shared only with relevant stakeholders, such as the referrer, caregivers / support people, service providers or funding agencies, with the expressed consent of the client.
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of sharing assessment findings appropriately, and there was excellent support from experts for this process.
Scholarly Literature	<p><i>Layperson Language</i></p> <ul style="list-style-type: none"> • The quality of information provided and professional manner at the time of disclosing a diagnosis can predict overall satisfaction with the ASD assessment (Level III, Quality 82%, [70]; Level III, Quality 64%, [71]; Level III, Quality 93%, [72]) although the impact of professional manner is not as influential when the consumer is an individual diagnosed with ASD in adulthood (Level III, Quality 64%, [71]). • Parents were more satisfied with ASD diagnostic disclosure when there was a higher perceived quality of information and a perceived positive professional manner (Level III, Quality 93%, [72]). • "Those parents who were emotion-focused in their lack of resolution (angry or emotionally overwhelmed) were significantly related to the lowest level of child initiated, purposeful, and reciprocal communication." (p.96, Level III, Quality 82%, [33]). • Health care professionals and diagnosticians who are familiar with evidence-based interventions for ASD can effectively guide families into the right treatment for their child. raise awareness to health professionals and diagnosticians to provide a through explanation of the diagnosis of autism and provide ample information to guide parents regarding their treatment options (Level Ib, Quantitative Quality 95%, [24]). • Parents felt more able to accept a diagnosis when information was repeated, clarified, and explained in straightforward language (Level III, Quality 70%, [60]). • The diagnosis process can be very stressful for the families and at the same time can build on their resilience. Therefore, the professionals in medical, clinical, and educational fields should seek out effective methods to provide support and encourage growth within these families. (p.97-8, Level III, Quality 82%, [33]).

Meeting

- Parents seemed to welcome a future appointment where more information could be discussed (Level III, Quality 90%, [14]).
- “Effective two-way communication between clinicians and parents during the feedback session was facilitated by an open and trusting relationship between them” (p.380, Level III, Quality 90%, [14]).
- Communication should be open: allowing parents to be prepared for when/if a diagnosis is made and allowing them to think of questions to ask. (Level III, Quality 70%, [15]; p. 71, Level III, Quality 60%, [34]).
- The communication of an ASD diagnosis is recommended to be structured with an opportunity to ask questions, for clinicians to listen to individuals/caregivers and give them time to absorb information Parents reported difficulty with processing the amount of information given and understanding its complexity (Level III, Quality 85%, [14]).
- Separate summary meetings to discuss the next steps and to allow parents to ask more questions after being able to/begin to process the diagnosis. (Level III, Quality 85%, [25]).
- The ideal mode of information delivery was face-to-face (Level III, Quality 83%, [26]).
- There is a need for clinicians to meet all parents with respect and be aware of their right to full disclosure and information. (p. 3400, Level 1b, Quality 68%, [32]).

Written report

- Parents sometimes felt confused and overwhelmed with the information given in the disclosure of information (Level III, Quality 90%, [14]; Level III, Quality 70%, [15]), and so it was suggested that diagnosticians should “provide written information regarding the diagnosis and any treatment plans or referrals discussed” (p. 71, Level III, Quality 60%, [34]).
- Diagnostic clinicians, report template as a solution to the waiting time associated with writing and communicating assessment findings to consumers (Level III, Quality 100%, [38]).
- Parents found written information a helpful resource, particularly in regards to explaining ASD (Level III, Quality 90%, [14]).

Timely manner

- Waiting time (from first seeking help, to receiving diagnosis) is a significant predictor in the parental satisfaction of the ASD assessment process (Level III, Quality 82%, [70]). Parents reported waiting times to be the most stressful and least satisfying aspect of the diagnostic process (Level III, Quality 73%, [16]).
 - The length of diagnostic process did not predict parental satisfaction (Level III, Quality 82%, [46]).
 - Despite the availability and accessibility of tools for early diagnosis, participants in this study felt that professionals had been unwilling to make a diagnosis too early. (p. 54, Level III, Quality 75%, [55]).
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Other Guidelines

Individual

- Consider the child's level of understanding, family preferences, privacy and appropriateness when sharing diagnostic results [5, 27, 28].
 - whether it is appropriate to have the child in the room at the time of disclosure
 - whether a separate discussion should be arranged.
 - adolescents or adults may want to be involved in the discussion
- Multiple sessions may be needed to share a diagnosis with families and individuals [4, 5].
- Individual preferences and privacy issues, and support needs need to be taken into consideration when disclosing the diagnosis of teens and adults [3].
- It may support families to have childcare arrangements available during disclosure of diagnosis discussions [4].

Caregiver

- The results of the child's clinical diagnostic evaluation are then shared with the family/caregiver(s), including a discussion of next steps [5].
- With consent of the caregiver (and if appropriate the individual), diagnosis should be disclosed with the written report to other relevant services / primary care provider [5, 27, 28].

Layperson Language

- The statement of diagnosis should be clear, using direct and understandable language (no sugar-coating or glossing over) [4, 5, 31].
- Overly technical language should be avoided [4, 28, 31]
- Parents may obtain information from a variety of sources and not these will be credible and professionals should be prepared for this [30].

Interpreter/Translator

- The family's primary language should be used [5, 30].
- If required, a neutral party and someone other than a family member serve as the interpreter [5].

Sensitive and Emotionally Supportive

- Word choice, common language, concrete terms and emphasising individuality is important when communicating a diagnosis [5].
 - Use 'people first' language (e.g., "child with ASD", not "autistic child") [5].
 - Avoid words with negative connotations, e.g., "deficit" [5].
 - Reassure parents that their child's difficulties are not their fault [5].
 - Clinician should be mindful to use positive cues in their nonverbal communication [5, 27].
 - Clinicians should use reflective listening [5].
 - Families deserve the undivided attention of the diagnostician [5].
 - Oral feedback should [3–5, 27–31]:
-

- Be conveyed with professionalism, understanding, empathy, honesty and compassion
 - Be given adequate time for full explanations and the opportunity for families to ask questions / voice concerns
 - Allay fears and promote acceptance
 - Acknowledge families as equals, and follow the lead of families
- Recognise the potential and experienced challenges of parenting a child with ASD [5].
- Some families report that they would have benefitted from the provision or offer of counselling at the time of diagnosis [28].
- It is better that a family be prepared for the diagnosis of ASD [28].
- Diagnosis disclosure may have implications for future family planning [27].

Meeting

- The meeting should be structured as a discussion, giving parents /individuals time to think and respond [27].
- Discuss the range of findings and their basis in person, sensitively and in a timely manner [28].
- It is appropriate to offer a follow-up appointment within 6 weeks [28].

Report

- Several Guidelines [3–5, 27–30] recommend the provision of a written report which should:
 - Be provided to the individual's family and initial referral source
 - Foster collaboration among all stakeholders
 - Be written in a clear manner and accessible and understandable for parents, appropriate to their level of knowledge and understanding (without overuse of jargon or technical wording)
 - Contain explanation that the document constitutes a formal medical diagnosis and eligibility for social/educational support
 - Higher parent satisfaction with diagnosis was found to be linked with higher quality of information given to them (including written reports) and clear, definite diagnosis [3].
 - A 'health passport' (for example, a laminated card) can provide a way of pulling together key aspects of the assessment, care and support needs [29].
 - Even when clinical judgement alone (rather than standardised tools) is used to diagnose ASD, a formal report should still be prepared documenting how the child's presentation is consistent with ASD [5].
 - Families may prefer to receive information in phases or over a period (rather than being overwhelmed with information given all at once) and the diagnosticians should accommodate this [5, 27].
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	<ul style="list-style-type: none"> • Provide adequate time for detailed feedback and answering of questions [27].
Online Submissions	<p><i>Communicate by ASD assessment team</i></p> <ul style="list-style-type: none"> • Diagnosis should be given by a psychologist, as best trained to share sensitive information and support families at a stressful time. • Developmental Paediatrician or Psychiatrist. • The psychologist is likely the most appropriate. • Feedback session with the assessment team. • Communication should be via the initial screening practitioner. • A developmental paediatrician and social worker should disclose the results to parents. Parents should be given a detailed report. • Only disclose with a support person for parent present. Only developmental paediatrician or psychiatrist. • The assessment team should refer the family to relevant and local health professionals which will begin the process of communication. • Email or phone follow-up; provide parent support resources (including support group contacts)/handbooks/Centrelink info, NDIS, funding; written report sent to family to provide assessment findings and recommendations AFTER team meeting with family has occurred. • Disclosure by team meeting with parents at Paed/Psych office. <p><i>Layperson Language</i></p> <ul style="list-style-type: none"> • Case manager involved in explaining. ("Copy from diagnosis-general and who-professions") • Diagnosis to be disclosed sensitively to client and/or family as deemed clinically appropriate. • Diagnosis to be disclosed sensitively to client and/or family as deemed clinically appropriate (consider referral question, impact disclosure of diagnosis will have on client/family etc.) • Explain the severity with more detail with words appropriate for the parents. <p><i>Interpreter/Translator</i></p> <ul style="list-style-type: none"> • The team may need to have interpreters to assist the process. <p><i>Sensitive and Emotionally Supportive</i></p> <ul style="list-style-type: none"> • It is important to empower the parents throughout the process, being honest with families about the behaviours noted that provide evidence for a diagnosis of ASD but in a non-judgemental way (difference rather than just disorder). • Honestly and supportively. Give carer time to process diagnosis then provide follow up. • Be empathetic & explain as what that individual's ASD is & what their areas of strengths/difficulties not provide just assessment reports. <p><i>Meeting</i></p> <ul style="list-style-type: none"> • The whole team should also meet with the individual/family to discuss the results of the assessments and post diagnostic

	<p>support should always be provided, including counselling and access to free information about ASD.</p> <ul style="list-style-type: none"> • Positive experiences providing face-to-face feedback with both parents and no child present, with paediatrician and one allied health clinician. • Should be communicated in a supportive round table discussion (disclosed to parents and teachers). • Outcome to be provided to parents in a face-to-face meeting. • To be given in person rather than by a letter. • Parents should be informed in a final meeting. • Feedback must be direct to individual and family (not just written report). • Post-assessment meetings should be arranged for the outcome to be disclosed, with parents immediately provided with a 'what next'. • Disclosure by team meeting with parents at Paed/Psych office (face to face) NOT by phone/email. <p><i>Written report</i></p> <ul style="list-style-type: none"> • Comprehensive reports and recommendations are generated. • Disclosed to parents and teachers, communicated in a supportive round table discussion face to face. • 'Diagnosis only disclosed to third party with consent'. • 'Information should be disclosed only with written consent.'
Workshops	<ul style="list-style-type: none"> • Layperson Language • Adjust language for individuals because there are different needs for families. • Accessing reports e.g. translations so family have clear understanding. • Information sheet for parents/individuals both adult and adolescent where appropriate. • Simple language • Brief e.g. flow chart showing process and choices. • Illustrate diagnostic process. • Feedback and lay person/family understanding.
Delphi Surveys	<ul style="list-style-type: none"> • Round 1 agreement achieved that a meeting / report to share the autism assessment outcomes should: <ul style="list-style-type: none"> ○ Be comprehensive and informative ○ Be sensitive and emotionally supportive in nature ○ Use language suitable for a layperson audience (i.e. jargon is excluded or clearly defined) ○ Involve the assistance of an interpreter and/or translator if appropriate ○ Be as soon as possible after the last assessment appointment • Round 2 agreement the diagnostic decision and assessment outcomes should be disclosed to the individual who underwent assessment in a way they understand and is meaningful (if appropriate based on age and communication abilities - this would usually be appropriate for adolescents and adults)

Individual

- Care should be taken when an initial diagnosis is provided to adolescents who are at the stage of not wanting to be different from their peers.
- Not just the individual.
- With children, information should be given to parents.
- It is important to discuss the diagnosis with the individual, so long as this is appropriate for their developmental/cognitive level.
- Individuals should receive an explanation of why they are different in a positive, strengths-focused way that is developmentally appropriate to help them understand past experiences and understand themselves better.
- Earlier years, maybe, but I think this decision needs to occur in discussion with child's parents/caregivers.
- Not appropriate for young child.
- Not always appropriate or possible.
- This depends on the individual's age and capacity to understand the implications at the time of assessment.
- Depends on the age of the individual assessed.

Caregiver

- Adults, if they still require care.
- Adults permission should be sought from individual who had the assessment.
- Important so that appropriate supports can be given.
- In most cases, the carer is taking the individual to be assessed.
- It is highly unlikely that individuals in these age groups would be presenting for assessment without the carer taking the initiative. Adults are separate to this.
- Unless, in the case of an adult, the individual did not give consent to the information being shared. (I have had this experience).
- Adult would have to give permission.
- Adults are tricky...they have a right not to share with family of origin, but often therapy is easier if the family understand, especially if there are mental health issues to be addressed.
- Dependent on the individual's ability to understand.

Comprehensive and Informative

- To show how the decision was made and what factors were considered.
 - The discussion with the family with the complexity of the diagnosis needs to be had.
 - Report needs to be comprehensive and informative.
 - Important for others who see the child later in life to know what was used and what the findings were.
 - Occasionally a child has an underlying neurogenerative condition which is not apparent at first so documenting what was found at a point in time can be very helpful to see if there is a need for further investigation or not.
-

- Some families may wish all information to help them to understand the process.
- Details depending on individual cases.

Layperson Language

- Professional jargon should not be excluded but clearly defined or at least a simple summary should be included.
- Interpreter/Translator
- There are times when the skills of the interpreter (even a professional one) can be lacking. Checking with the interpreter to be sure they are just interpreting and not putting a spin on your words is important because they are feeling uncomfortable with the news you are giving the family.
- For families with English as a second language or where carers have difficulties with reading.
- This is usually not possible in private practice.
- Not practical for written report but certainly can involve interpreter during discussion with parents at assessment.

Sensitive and Emotionally Supportive

- Facing facts of a diagnosis could be extremely upsetting for some.
- But without being too 'wordy'/overwhelming for the individual, parent/caregiver.
- May not be appropriate for all families.
- Not in too much details as it may be too much information for the lay person/family/carers - maybe in an addendum.

Meeting

- Best option – if it is possible.
- This would allow discussion and questions to be answered by the family and individual.
- This is important, as the news may distraught the family and individual.

Teleconference Meeting / Video Conference

- Telehealth may be an option if it is appropriate and the family are okay with it.
 - A support person should be present such as a nurse or GP.
 - Only in extenuating circumstances.
 - Not ideal, but supportive if it is done this way to facilitate access to assessment services.
 - Only if there is no option for a face-to-face meeting.
 - An effective medium for families who live too far away.
 - If necessary.
 - If access is an issue (i.e. remote areas).
 - Preferably not, only if necessary to use telephone or video conference.
 - My practice is to ensure there is a local health care professional in the room with the patient and family on the video link when the decision is given to the family.
 - This opinion may change depending on circumstances such as where family may live in a remote area.
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- If there is no opportunity for a face-to-face meeting, then this may be the most accessible way of speaking with the family.
- Only if required due to access of a face to face
- If there are service limitations, then a video conference or telephone call might be the only option.
- If circumstances dictate.
- If there are support people present at the parents' end, and you knew that the parents were expecting the diagnosis.
- If face to face is not practical.

Written Report

- To compliment a meeting.
- This is important so that other people working with the client know the results and recommendations.
- As part of the face-to-face meeting.
- After there was a face-to-face discussion or video feedback.
- Not the way to disclose news to family/carer and/or individual.
- Sometimes all information cannot be taken in at the meeting, and a report offers the opportunity to review the assessment outcome after the meeting.
- The outcome should always be discussed in person, but followed up with a written report.
- In addition to a face to face.
- Only after discussion with family or individual at interview following assessment.
- It is often needed by schools, funding bodies, etc.

Timely manner

- Timing is an area that needs to be addressed as many parents and individuals (and professionals) are waiting for a considerable time for the written report which increase stress and can delay the start of interventions.

Viewpoint Surveys	Writing a report in a style that non-professionals can understand was rated highly by one viewpoint.
Interviews	Not identified
Feedback	<ul style="list-style-type: none"> • 'The communication style is clear and sets out the timeline. Stating the assessment process should be communicated in a 'compressive and understandable way through face-to-face meeting and report over a 3-month period is music to our ears.' • 'Unfortunately, due to resource restrictions in the public setting, our allied health colleagues have long waiting lists for initial assessment, which then further delays diagnosis. This means that it will be mostly impossible to complete a full evaluation of a child within the recommended 3-month period. This is particularly an issue in low socio-economic areas- such as our own.' • 'Clarifying why a 3-month period for provision of report is supported as the professional standards require a shorter timeframe.' • 'It is important that outcomes from the diagnostic process should be communicated with relevant stakeholders including the person, family, referrer and other professionals. This section

should outline the need to obtain consent from the consumer or their family to share assessment findings with other clinicians and health services.'

- 'I note there is no recommended time frame for how long an assessment should take or how long families should have to wait for a report. In light of current pressures on wait times and public services, a decision by the Government will need to be made between complying with the guidelines fully or considering what can be achieved reasonably in light of current budgetary constraints.'
 - '[Organisation] suggests further clarification is provided in the recommendations regarding suitable timeframes for completion of a multidisciplinary assessment. For example, the recommendation that a [Consensus Team] Diagnostic Evaluation be conducted by at least two [clinicians], with input from at least two [other professionals]. [Organisation] is concerned that if there are delays in accessing multiple [clinicians] due to waitlists, costs, access in rural areas etc. this will likely lead to diagnostic delay and disadvantage those in both rural areas and who rely on the public health system.'
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Evidence Table 58: Sharing Findings (Content)

Evidence Source	Details
Recommendation	<p>It is recommended that the findings of the assessment conveyed to a client at a meeting (or meetings) and in a written report (or reports) include the following information:</p> <ul style="list-style-type: none"> – clear confirmation of the diagnostic outcome and a rationale for the diagnostic decision – the diagnostic criteria utilised (e.g. DSM-5 or ICD-11) – evidence that supports the presence or absence of each ASD diagnostic criterion – evidence that supports the current severity level and specifiers (if DSM-5 criteria are utilised) – the assessments conducted, including the name of the instrument, what it measures, the administering professional, the findings and their implications – co-occurring conditions identified, diagnosed or requiring further investigation – alternative conditions identified, diagnosed or requiring further investigation – current developmental status / level of functioning across multiple domains and potential level of functioning with supports – activity-related and character strengths – environmental facilitators and barriers – highest priority support needs of the client and related goals – suggested timeframe for the Comprehensive Needs Assessment to be repeated – recommendations with sufficient details for the client to action: <ul style="list-style-type: none"> ○ further assessments if required ○ informal and formal supports required ○ available funding and services.
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of sharing assessment findings on a comprehensive range of topics, and there was excellent support from experts for these topics.
Scholarly Literature	<p><i>Conveying information in meeting and report(s)</i></p> <ul style="list-style-type: none"> • Face-to-face consultation and written information is considered useful understanding the diagnosis and then explaining it to others (p. 511, Level III, Quality 73%, [73]). • It is good to have the option for implementation of the medical home model of service delivery (p142, Level III, Quality 95%, [51]). • The satisfied families expressed their experience as feeling of being respected because the professionals gave them time, they were open minded, direct, sympathetic and understanding. The unsatisfied parents complained about the lack of information and help (p.92, Level III, Quality 67%, [60]). • “Practitioners should provide written summary letter of the diagnosis before the report is issued which clearly states the outcome of the assessment, who the professionals were on the

diagnostic team, and the date of diagnosis” (p.87, Level Ib, Quality 45%, [52]).

- The contact with professionals during diagnosis may have an impact on the subsequent treatments undertaken by the child. Moreover, parental satisfaction with the diagnosis process can impact the speed of obtaining a diagnosis, which in turn decreases the level of parental stress [54].
 - “The nature of communication with professionals during diagnosis is also a predictor of parental satisfaction: the fewer professionals that parents need to see to obtain a diagnosis the greater their satisfaction; similarly, the perceived professionalism of the person giving the diagnosis is related strongly to satisfaction.” [54]
 - “It is important that the parents are as prepared as possible and well informed about the process in advance.” (p3394, Level Ib, Quality 68%, [32]).
 - “...the delivery should be more carefully crafted with relevant and specific content; avoid ambiguity about who will attend the family meeting by spending more time discussing the specific needs for the diagnosis delivery...” (Level III, Quality 100%, [12]).
 - Diagnostic disclosure should be tailored to specific individual Level III, Quality 100%, [12].
 - Diagnostic disclosure should be to give parents a clear understanding of the diagnosis (Level III, Quality 60%, [34]):
 - Provide a clear and definite diagnostic interpretation whenever possible
 - Explain the autism spectrum and the criteria for diagnosis; how child fits criteria
 - Avoid technical language or jargon
 - Give information in manageable parts; avoid overwhelming with too much at once
 - Give parents the opportunity to ask questions; provide contact information for future or follow-up questions
 - Present basic treatment options and the known efficacy of each
 - Provide written information regarding the diagnosis and any treatment plans or referrals discussed
 - Conduct disclosure in the parents' primary language or use a trained interpreter” (p. 70).
 - Diagnostic disclosure should give parents hope [34]:
 - Focus on the positive
 - Acknowledge the child's strengths
 - Emphasize the plasticity of the brain
 - Discuss the prognosis and plan for treatment
 - Link the disclosure of problems to receipt of support services” (p. 71).
 - Diagnostic disclosure should help parents feel competent and able [34]:
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- Identify the parents as valued members of the treatment team
 - Invite parents to share what they know
 - Convey confidence in parents' ability to cope and manage their child's condition" (p. 71).
- Diagnostic disclosure should help parents feel emotionally supported [34]:
 - Tell parents together whenever possible
 - Encourage and allow parents to share their feelings
 - Acknowledge the difficulty in hearing and accepting this diagnosis
 - Provide written recommendations for sources of additional emotional support" (p. 71).
- Diagnostic disclosure should emphasise the importance of their child [34]:
 - Allow plenty of time for the conversation so as not to be rushed
 - Give news in person, in a private place without interruptions
 - Prepare for the conversation
 - Be personal: address parents by name, give eye contact" (p. 71).

Clear confirmation of diagnostic outcome

- When providing a diagnosis, clarity was valued highly (Level III, Quality 64%, [37]; Level III, Quality 90%, [14]).
- Consumers value a review of the ASD assessment process that led to the diagnostic conclusions and recommendations (Level III, Quality 90%, [14]).
- The diagnosis process was distressing, unclear, difficult to understand for parents and families, and after the diagnosis they did not receive a clear advice on how to proceed after diagnosis. There were problems with the content and parents stated that it did not describe their child's individual needs accurately and provisions were not always appropriate to the child's needs. (p.394, Level Ib, Quality 45%, [52]).
- Adults participants who were diagnosed with Asperger Syndrome explained that being open about their diagnosis, was an ideal (Level III, Quality 60%, [11]). This openness about their diagnosis however, was contingent upon having enough information about their diagnosis, so that the participants could counter inaccurate opinions and information about Asperger Syndrome (Level III, Quality 60%, [11]). Therefore, it is important for diagnosticians to provide information about the diagnosis to the consumer, so that they can be confident in their understanding of their diagnosis.
- Information provision and support for consumer, when diagnosis is disclosed, is important in the communication process (p. 185, Level III, Quality 100%, [12]).

Evidence

- Health professionals and diagnosticians should provide a thorough explanation of the diagnosis of autism and provide ample information to guide parents regarding their evidence based treatment options (including behavioural intervention, speech and language therapy, occupational therapy, medical treatments, and educational placements.) and refer parents for counselling services to monitor their mental health after the diagnosis of ASD (p.86, Level Ib, Quality 45%, [52]).

Assessments conducted

- ASD assessments integrating diagnostic and functional assessments (Level III, Quality 100%, [61]).

Strengths

- It is suggested that when parents are present in the assessment process increased the parent's own insight into the child's strengths/difficulties in different areas (p3400, Level Ib, Quality 68%, [32].)
- Use a strength-based approach in disclosing ASD diagnosis (Level III, Quality 100%, [12].)

Details to Action Recommendations

- "Parents require clear and professional help for the child's behaviours, but do not necessarily regard a simple label of ASD, without corresponding help, as beneficial and, indeed, such labelling without a projected treatment plan can be counterproductive." [54]
- "Provide parent and teacher group training, focusing on knowledge about the diagnosis, educational approach and how to handle everyday situations" (p3400, Level Ib, Quality 68%, [32]).
- Information on resources and support services need to be provided to consumers at the time of diagnostic disclosure (Level III, Quality 85%, [74]; Level III, Quality 82%, [75]), however support to access service is an aspect that is often lacking (Level III, Quality 100%, [76]; Level III, Quality 100%, [57]).
- Important topics to cover from a parent's perspective include information about support services, explanations of their child's difficulties, information about ASD and rationale for the diagnosis (Level III, Quality 73%, [16]; Level III, Quality 100%, [57]; Level III, Quality 85%, [36]) They felt information was empowering; "being given information empowered them" (p. 300, Level III, Quality 85%, [36]).
- Some guidelines for assessment professionals include: Clinicians 1) can help secure valuable services for the families and the individual on the autism spectrum; 2) need to be sensitive to the complicated needs of each family; 3) work separately with the couple, focusing on addressing the strain this diagnosis can put on the marital relationship. 4) encourage mothers to access supports (perhaps developing a group, from within their own practices) for mothers of children diagnosed with an Autism Spectrum Disorder. 5) establish an information

	<p>centre to educate parents about the complicated decisions they must make about their children considering their diagnosis. (p. 75-76, Level III, Quality 75%, [50]).</p> <ul style="list-style-type: none"> • “Parental education should be provided to define the language used in connection with Autism Spectrum Disorder and to explain the potential treatments, interventions, and educational placements. Such a central data resource would provide a real service to parents negotiating these systems as they try to do their best for their children.” (p.75, Level III, Quality 75%, [50]). • Following a diagnosis of autism, physicians should be able to provide basic information about autism and a list of resources. (p.136, Level III, Quality 95%, [51]). • When a list of support services was given, parents felt more able to accept the diagnosis (Level III, Quality 70%, [60]). • “Any support offered to families should be tailored to the specific developmental needs of the individual and family” (p. 69, Level III, Quality 100%, [13]). Craig (2015) also concluded, that information about Asperger Syndrome, needs to be tailored to the specific needs of an individual. • Post-diagnostic services should be discussed when disclosing diagnosis, with the understanding that the consumer/ family have a choice in these services (Level III, Quality 100%, [13]).
Other Guidelines	<ul style="list-style-type: none"> • Start with a basis of what the patient and family already understand about diagnosis and add information as appropriate [4]. • Ensure that the diagnostic criteria used (ICD-10 or DSM-5) is included and how this was used to arrive at a conclusion in the written feedback report [4, 27]. • To be included in diagnostic disclosure [29, 31]: <ul style="list-style-type: none"> ○ The procedure and findings of assessment ○ Comparison of child to typical development ○ Description of core features of autism present ○ Coexisting diagnoses ○ current speech, language, and communication skills ○ the level of personal, social, occupational and educational functioning ○ the risk to self and others including close family members, partners and carers ○ the problems faced and their impact on families’, partners’ and carers’ needs ○ the impact of the social and physical environment <p><i>Severity / Prognosis</i></p> <ul style="list-style-type: none"> • Prognosis is highly variable and this and the factors that impact on this should be explained to families [5, 27]. • Some families may prefer a detailed prognosis [5]. • Prediction of long term future implications may not be appropriate [5]. <p><i>Level of detail</i></p>

- Assess the families level of awareness and knowledge of ASD prior to onset of evaluation to prepare for the level of information the family may need to understand / accept a diagnosis [5].
- There will be individual variability present between families and the level of detail they need and /or prefer [5].
- Should involve clear explanation of the diagnostic criteria and specific behaviours observed and how this impacts on functioning [5, 27].
- Be thorough [27].
- Place emphasis on the individual's assets and relative strength [27].

Developmental Course

- Discuss how autism will likely affect development and functioning [3, 4, 27–29].

Support Needs

- Several guidelines recommend providing information for families about the support services / resources available, during the diagnosis disclosure [3, 4, 27–29, 31].
- Referral to other services should still occur if the individual is diagnosed with no ASD [28].

Details to Action Recommendations

- Discuss the individual's strengths and interventions that can support increasing independence [5].
- Explain and emphasise the importance of early intervention [27].
- Up-to-date referrals to community groups, intervention programs, and other services, resource booklet.
- “After talking with families about the diagnosis of ASD, diagnosticians should provide them with recommendations that can guide their next steps.” [5].
- The clinician should help the family obtain appropriate, evidence-based, and structured educational and behavioural interventions for children with ASD [35].

Further Assessments

- Make referrals for further assessments as appropriate [27].

Online Submissions

Conveying information in meeting and report(s)

- Reports should be provided to families for distribution as they see fit.
- The meeting would be very long for carers if it included all the aspects mentioned here. The meeting with carers should be specific to their stated needs.

Diagnostic criteria utilised

- Diagnoses should state clinically distinctly those who have mild indicators in 2 or more of the 3 areas of deficits currently under DSMV as opposed to those who are 2 standard deviations below the norm for BOTH ABAS III and Autism under DSMV. Everyone can be on the spectrum but not everyone are serious enough to be severely affected and be deemed to have a disability. Diagnoses that qualify under ABAS III AND DSMV should be disclosed to patient and parents.

Clear confirmation of diagnostic outcome

- Educating about diagnosis should be done by a mentoring team from Autism Support Organisations like Amaze, Carer Support.

Severity

- Professionals should be honest about the severity and likely outcomes.
- Explain the severity with more detail with words appropriate for the parents.
- The NDIA expect that a diagnosis will include one severity rating. The DSM-5 is clear there should be 2 (that is two) severity ratings. The NDIA seems to have enormous trouble understanding that 2 (or two) is more than 1 (one): that two and one are distinct; they are not the same, not isomorphic. I just don't know how else to get this fundamental point through to NDIA officials.
- I cannot find a condition in the DSM-5 where someone cannot grasp that "one" and "two" are not the same. I feel like I have a massive communication difficulty in this regard.
- should not offer a prognosis of how the child will develop as this could give false hope/ could limit the opportunities presented to the individual.

Support Needs

- Broader acknowledgement potential impact of lifelong diagnosis of psychiatric/ developmental disorder upon lifetime opportunities (e.g. insurances), personal identity important.
- Assistance for all family members to understand ASD and how this diagnosis effects all members of the family in different ways.

Details to Action Recommendations

- A "Where to from here?" information pack, like the "First 100 days" document used in the US to be mandatory for individuals and carers.
- Post-assessment meetings should be arranged for the outcome to be disclosed, with parents immediately provided with a 'what next'.
- Detailed reports giving recommendations must be compulsory, as is detailed comprehensive feedback to the family/individual.
- It is vital that Diagnosticians present a newly diagnosed autistic, and/or their accompanying carer/s /parents with a specific point of contact and understanding with the autistic community.
- That Diagnosticians present a newly diagnosed autistic, and/or their accompanying carer/s /parents with a specific point of contact and understanding with the autistic community. I'd found this a seemingly impossible task as I was looking for a single, informative, illuminating source that would provide an experientially true and factually valid (neurological difference) account of the autistic disposition.

Available funding and services

- Diagnostic letter should be provided to family explaining diagnosis and impact on child and resources and supports available.
 - Details for services
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- A booklet should be provided with evidence-based therapy options and services
 - Families should be informed where to –regarding appropriate service options & allowed time to consider these options.
 - Support services and interventions should be linked in to end of assessment process to allow smooth transition and beginning help immediately.
 - The final report should include recommendations for further management for the child including recommendations for which services would benefit the child, and information about avenues for accessing funding for these services
 - future outcomes research developments and positive outcomes and examples.
 - Families should be supported in regards to possible services and strategies to support development and understanding.
 - Consideration needs to be taken to support the family through the diagnosis, and appreciate the changes the family must undergo, having a family worker who specialises in Autism would be amazing especially in the early intervention phase to set up correct supports for the family not just the child.
 - Improved health literacy to ensure families can navigate pathways.
 - Support services and interventions should be linked in to end of assessment process to allow smooth transition and beginning help immediately.

Further Assessments

- More detail for this may be given in the intervention planning assessment.
-

Workshops

Conveying information in meeting and report(s)

- A chance for parents to discuss the therapy plan.

Clear confirmation of diagnostic outcome

- Sharing assessment outcome needs to be clear for families and individuals whether a diagnosis has or has not been reached.

Details to Action Recommendations

- Information sheet for parents/individuals both adult and adolescent where appropriate.
- What happens after the diagnosis? Individual/family needs to know what to do next.
- Know what to do next and which service to access.

Further Assessments

- It is important to be sure that people are not just saying they are satisfied with the assessment because they do not know what else is available or because they need time to process.
- Recommendations have a time limit and a review date. They should not be implemented after 12 months without a review.

Available Funding and Services

- At the time of dx it would be helpful to get takeaway information about supports e.g. social groups, employment support.
 - Families need to get broad info of services.
-

	<ul style="list-style-type: none"> Information sheet for parents/individuals both adult and adolescent where appropriate.
Delphi Surveys	<ul style="list-style-type: none"> Round 1 agreement that a meeting / report to share the autism assessment outcomes should: <ul style="list-style-type: none"> Contain a statement clearly confirming the specific diagnosis State the ASD diagnostic criteria utilized Describe the evidence used to support the presence of each ASD diagnostic criteria Describe details for all assessments conducted (e.g. name of instrument, findings, implications) Identify any co-morbid conditions Describe support needs Describe strengths and resources Provide recommendations for further assessments if required State the ASD diagnostic criteria utilized Provide recommendations for services and / or supports if required Provide sufficient details for the individual or their carer to action recommendations <p><i>Conveying information in meeting and report(s)</i></p> <ul style="list-style-type: none"> Depending on what is clear and best suits the family. <p><i>Clear confirmation of diagnostic outcome</i></p> <ul style="list-style-type: none"> To help families understand the diagnosis. <p><i>Diagnostic criteria utilised</i></p> <ul style="list-style-type: none"> State Criteria Used In theory, yes, the wording must be ageless i.e. DMS-IV and CARS are outdated now. Maybe not each criterion, but could group into main areas? I do think this is important, but don't feel the report should be a 10-page checklist of an individual's behaviours but should provide some clear examples. <p><i>Evidence</i></p> <ul style="list-style-type: none"> Some families may wish to know how diagnosis was ascertained. State Evidence Used Detail description of behaviour observed and reported. <p><i>Developmental Course</i></p> <ul style="list-style-type: none"> Still could be problematic if the developmental age at diagnosis is not considered. Not sure if we know about all the different ways ASD develops to provide this information? Not always possible to predict in small children. Preferable but not essential. This is not always appropriate and cannot be prejudged. Not always appropriate and not always accurate. Too difficult to predict the developmental course until after the age of 5 or 6 or when a cognitive assessment is possible. Any information to explain the condition and assessment should be explained.

- More relevant to forming goals and discussing expectations for progress than confirming the presence of the diagnosis.
- Depending on parental level of understanding and questions asked.

Severity

- Severity not all that useful - rather strengths and weaknesses.
- Severity levels can be used informatively but there is also the concern that they may be used as a funding selection point, which might be concerning.
- Should include 'Level of Support' required, rather than severity level.
- This is required for funding purposes and not for diagnosis. This does not consider that severity levels change over time (for better and or worse).
- This is required for funding purposes - there is also the strong possibility that levels can change through intervention over time.
- Great concerns about how the severity levels are being used and interpreted.
- Severity ratings are used by funding bodies to be gate keepers without thinking about the individual child or family - I prefer not to use it.
- Not always possible to define this accurately at diagnosis.
- Care needed here. It may be used against the client if thought not so severe, and assistance withdrawn etc. Also, a high IQ person may still struggle to show initiative or be a reliable employee.

Strengths and Resources

- Re ASD Diagnostic Assessment - I think this information should be brief (e.g., small paragraph with strengths) and some recommendations regarding access to services/funding in the first instance. For example, perhaps details for accessing NDIS and support services?
- To be determined by the team - case by case.
- Resources - where deemed appropriate by the team.
- More detail for this may be given in the intervention planning assessment.
- Helpful for teachers and obviously, families.

Support Needs

- Brief - should clearly identify the level of support required (if using DSM-5).
- In general terms - further details should be provided later by the therapists once intervention has begun.
- More detail for this may be given in the intervention planning assessment.
- Very helpful for teachers.
- Addressing needs of co-morbid condition such as intellectual/physical disability.
- Separate report.

Details to Action Recommendations

	<ul style="list-style-type: none"> • More detail for this may be given in the intervention planning assessment. • Particularly on cases where diagnosis is not clear and the child is very young with specific language impairment, of sensory defects or developmental delay. • If possible. However, some carers do not have the capacity to 'action recommendations' because of their own challenges and strengths and weaknesses. • It remains the responsibility of the care or individual to then pursue these. • The recommendations are for care providers, educators etc. but the family have it in writing to use if not implemented. • Further Assessments • More detail for this may be given in the intervention planning assessment. • Parents can feel lost and may require information on services available.
Viewpoint Surveys	Confirming the diagnosis of ASD was rated highly by one viewpoint, and the inclusion of assessment results, other diagnoses, the strengths and resources of the person, and the challenges and needs of the person were all rated neutrally by all viewpoints. Including recommended supports was rated as being of low importance.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 59: Important Considerations (Age)

Evidence Source	Details
Recommendation	It is recommended that all members of the Assessment Team consider the individual's behavioural presentation and needs in comparison to other individuals of the same chronological and developmental age.
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of considering age, and there was excellent support from experts for this focus.
Scholarly Literature	Late age of diagnosis of the girls; considerable risk of initial misdiagnosis, resulting in lack of provision of appropriate services or provision of inappropriate interventions (Level III, Quality 65%, [8]). Therefore, a timely and accurate diagnosis for all children with ASD, with appropriate attention to the issue of diagnosing girls with ASD is needed (Level III, Quality 65%, [8]).
Other Guidelines	<ul style="list-style-type: none"> • "Detection of young children with ASDs is complicated due to the behavioural variations within the autism spectrum and the manifestation of symptoms at different ages" [27]. • "As ASD is a developmental disorder, the presentation will vary with age and, in any one individual, vary over time" [3]. • Developmental screening and well-child visits decrease after entry to kindergarten which can create a barrier for those children missed at these assessments [27]. • The lead diagnostic clinician is knowledgeable about the variability in presentation of ASD symptoms that can occur based on the individual's age or developmental level. When selecting diagnostic procedures and formulating conclusions, the individual's specific presentation is taken into consideration [27]. • Evaluation of very young children (less than 24 months old) can be particularly challenging for diagnosticians and families as some features may not be apparent in very young children [5, 27, 28, 31]. • Young children may not yet display restricted patterns of behaviour, repetitive interests or stereotypic motor movements [5, 27, 35]. • In evaluation of very young children "clinical judgment must supersede and inform data gained by instruments, observations, and interviews" [27]. • Presentation in this age group can be more subtle and more difficult to distinguish from other developmental difficulties such as language impairment [5, 30, 35]. • "When giving a diagnosis to a very young child, a follow-up evaluation may be needed, as the stability of early diagnoses have shown some individuals might not meet diagnostic criteria later in life" [5]. • The DSM-5 criteria may present more challenges for the diagnosis of ASD in young children [5, 35].

- “the clinician should be highly cognizant of the limitations of formal diagnostic criteria in young children and familiar with research regarding their developmental expression” [27].
- Research provides evidence that ASDs can be reliably and validly diagnosed by an experienced clinician in children as young as 18 months and that ASD diagnosis is relatively stable over time [27, 30, 31].
- Some children who develop ASD may have experienced a period of developmental regression [3, 27] and in these cases these children should be referred for ASD evaluation [28].
- More research is needed to further clarify the presentation of ASD in early development [27, 30] but previous studies have found that infants who are later diagnosed with ASD can present with less social interest, gaze aversion, less anticipatory posturing, and little if any protodeclarative pointing, atypical eye contact and visual tracking; disengagement of visual attention; lack of orienting to name; and the absence of imitation, social smiling or reactivity [27].
- “In very young children, behavioural observation should include the child’s interactions with both the clinician and the parent/caregiver” [27].
- Children who present for ASD evaluation at a young age (pre 3 y.o.) frequently have significant language delays and behavioural issues [3].
- ‘at risk’ developmental features are able to be identified early (measurable by 18 months old) with some distinguishing features found to be present as early as 8 months of age [48].

Young Children

- “Repetitive and restricted behaviours typically begin increasing around ages four to five years” [5].
- Experienced clinicians are able to make a diagnosis of ASD in children (especially with moderate to severe ASD) by the age of two or three years [3, 4].
- Prior to exposure to the greater social demands of education settings, some children may have presented with only minor (if any) developmental concerns; even being thought of as advanced due to their special interests or precocious vocabulary [3].
- ASD diagnosis can be reliably detected at 3 years of age however, parents often present concerns regarding their children at a much younger age [27].
- ASD diagnosis is often not made until 2-3 years after initial symptoms are recognised due to concerns from clinicians regarding mislabelling children [48].

School Aged Children

- The characteristics of ASD may be more prominent at some ages than others, for example when the child starts school or transitions to secondary school and some children may not be identified until these milestones [3, 27, 28, 35].
 - Milder forms or high functioning ASD (or Asperger’s) may not be identified until school age (or older), particularly if they are performing well academically [3–5, 27].
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- “Compared with younger children, individuals who are age 6 and older are likely to demonstrate difficulties with peer relationships in marked contrast to same-age peers. Opportunities to observe children in the social and learning environment at school may call attention to symptoms of ASDs that were missed or misdiagnosed previously” [27].
- Standardised screening instruments may be beneficial for identification of school aged children with ASD, such as the Social Communication Questionnaire (SCQ), Social Responsiveness Scale (SRS) and the ADI-R parent screen. [27]
- Gathering information from multiple sources is recommended with this age group [27].
- “It is important to examine possible factors that have prompted suspicions of an ASD and ask why this child has either (a) presented at this age or (b) not been identified earlier” [27].
- “Differential diagnosis can be more challenging because of the increasing possibilities for alternative diagnoses and the long-term effects of environmental interactions on behaviour. The clinician must be familiar with ASDs, as well as the range of psychiatric, neurodevelopmental, and behavioural disorders that are either primary or coexisting conditions” [27].
- Early developmental history may be more difficult to gather as an individual gets older, however records can supplement and assist parent recall [27].
- At this age, interviewing of the child directly (formally or informally) increasingly becomes a component of the ASD evaluation in addition to interviewing of the caregivers and educators and can provide information regarding pragmatic skills [27].
- “Clinical expertise in interviewing children is crucial. This includes an understanding of the response style of children at various ages and developmental levels, children with ASDs, and children with non-autistic disorders” [27].
- As a child ages, there are often increasing components to include in a child’s record review [27].
- As a child ages, there is greater opportunity to compare and contrast behaviours over time [27].
- “In children with autism, social and communication skills usually increase by school age; however, problems dealing with change and transitions and various self-stimulatory behaviours (sometimes including self-injury) also may become more prominent during this time” [35].
- “The child is high functioning (i.e., intact language, intellectual abilities, academic performance and adaptive skills) but with increasing age displays marked social impairments and behavioural difficulties relative to peers” [27].

Adolescents

- adolescents “may come to the attention of professionals when they experience significant anxiety or depression related to unsuccessful attempts at social engagement” [5].
- “In adolescence, a small number of individuals with autism make marked developmental gains; another subgroup will

behaviourally deteriorate (e.g., tantrums, self injury, or aggression)” [35].

- “Overt clinical depression is sometimes observed and this may be particularly true for adolescents with Asperger’s disorder” [35].

Adults

- Adolescents and adults may go through childhood undiagnosed with ASD which can add to the complexity of later diagnosis [3, 29].
 - Comorbidity adds to the complexity of adult diagnosis [29].
 - Some adolescents and adults seemingly have managed undiagnosis well, while others endure great stress, experience misunderstanding, are “blamed, teased, bullied, poorly supported and miss out on effective treatment options, or receive inappropriate medical, psychiatric and educational interventions” [3].
 - “The lack of information on early life experiences may be a barrier to diagnostic uncertainty in older teenagers or in looked after children and young people” [28].
 - Accurate diagnosis remains important at every age [3].
 - Mild symptoms of ASD or limited access to health care may lead to individual’s being undiagnosed to adolescence or adulthood. [27].
 - There is poor identification of adults with ASD and limited services available for adults with milder symptoms of ASD [29].
 - Healthcare professionals should be aware of ASD indicators in adults presenting with other conditions [4].
 - Some adults may have reached adulthood without a diagnosis despite good healthcare access, significant symptomology due to lack of previous widespread awareness of ASDs [27].
 - Gathering critical information about an individual’s early development may be more challenging with increasing age, in some case the information may be unavailable [27].
 - Gathering data from early caregivers may be necessary for an ASD diagnosis when the adult being assessed has a moderate to severe intellectual disability [4].
 - Adult diagnosis can be complicated by coexisting mental disorders, such as depression and schizophrenia [29].
 - ASD is likely undiagnosed in a significant number of adults accessing specialist mental health services [29].
 - Adult assessment components should include [4, 27, 29]:
 - Employment history
 - Functional independence
 - History of social interactions, including romantic relationships
 - Current behaviours
 - Adapted evaluation procedures such as modified settings, duration and pacing so that it is appropriate for the adult individual
 - Speech, language and communication assessment (particularly in the presence of ID)
 - Factors that commonly prompt referral for ASD in adults [3, 4, 27, 28]:
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- Difficulties at times of transition/change – such as to college or the workplace
 - Symptom changes with age
 - Diagnostic dilemmas
 - Social deficits – where differences between individual and peers is obvious, reduced awareness of personal space, lack of two-way conversation, unknowing rudeness or inappropriateness, lack of reciprocal relationships or reciprocal relationship skills, lack of social understanding, difficulty losing at games, difficulty turn taking, eye contact / gesture / facial expression / non-verbal differences
 - Speech or language differences – limited use, monotonous tone, repetitive speech, stereotyped language, limited topics
 - Other family, cultural, community or demographic factors that previously were thought to account for behavioural difference no longer seem an appropriate mediator of behaviour
 - Individuals not 'keeping up' with the increasing social demands/ emotional understanding/ behaviours expected of late adolescents and adults especially under the increasing demands of higher education, employment, independence and intimacy.
 - Unusual interests
 - Ridged or repetitive behaviours
 - Literal thinking / lack of thinking flexibility
 - Demand avoidance behaviour
 - Sensory seeking or avoidance
 - Unusual pattern of skill/deficit (advanced in some areas while delayed in others)
 - Gender dysphoria
 - Diagnosis of an eating disorder
 - Adults diagnosed with ASD may have mixed reactions to their diagnosis with some viewing it as positive (with it providing answers and understanding of ones experiences, access to support and connectedness to others with the same diagnosis) and others as a negative (shock, disappointment, loss, anger, suicidal thoughts, avoidance, concerns regarding stigma/exclusion, negative reactions from others, mistrust of services after misdiagnosis) but that this can transition to gradual acceptance [29],
 - The rate of depression and attempted suicide, is higher in adults with ASD [29].
 - Transition of adolescents from paediatric services to adult services should be planned and managed according to best practice guidelines [28].
 - “Studies into the use of AQ-10 to identify adults with autism reported good sensitivity and specificity” [4].
 - AQ-10 is “freely available and only takes a few minutes to complete” [4].
 - “The AQ instrument requires self completion so may not be suitable for people with an intellectual disability. Therefore, it is
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	<p>recommended for use in people with an intelligence quotient (IQ) greater than 70.13” [4].</p> <ul style="list-style-type: none"> • Family-centred diagnosis disclosure is recommended for children with ASD; however, while more dependent adolescents and adults may prefer/require family involvement in the diagnosis disclosure, some more independent adolescents and adults may prefer more privacy with the option of a chosen support person [3]. • Development of formal pathways for diagnostic assessment of young people and adults is recommended [3]. • There is limited access to ASD specialist adult services for individuals without co-occurring physical or learning disabilities or severe mental illness [29].
Online Submissions	<p><i>Adults</i></p> <ul style="list-style-type: none"> • Currently, there is a significant percentage of autistic adult who are ignorant of autism in that they have grown up and established niches and support groups without knowing they may have autism. This indifference to autism in the adult community must be taken down. • Assessor must understand the different ways that autism presents in adults as opposed to children. • Adult ASD population life experiences - Lack of awareness for autistic adults. • Adult woman and misdiagnoses need to be addressed. • Diagnosis needs to be from the autistic perspective. • Training for health professionals required on the different presentations between adults and children.
Workshops	<ul style="list-style-type: none"> • There needs to be different assessments suitable for age. <p><i>Young Children</i></p> <ul style="list-style-type: none"> • May only require 2 tier systems and less extensive assessment that older children and adults where a three-tier system may be more appropriate. <p><i>Adolescents</i></p> <ul style="list-style-type: none"> • Consideration of screening for early adolescents who may just have started presenting with problems e.g. anxiety, OCD, depression. <p><i>Adults</i></p> <ul style="list-style-type: none"> • Many are unable to access diagnosis due to personal cost. • Families often have different priorities and the needs of the adult are still often suppressed in those situations. • Presume competence, support difference. • High functioning adults are missing out – going into mental health sector instead. • The needs assessment should lead to information for selecting appropriate coping strategies. • What if there may be no parents to offer information? • Awareness that adults must learn to mask and hide differences and may not know how to stop doing that or may not want to unlearn it. • All tests need to be approved by an “Adult Autistic Body” • A focus on relationships, gender, and sexuality • GPs and mental health services need further education

	<ul style="list-style-type: none"> • Address underdiagnoses/late diagnoses. • Autism versus mental health issues and comorbidity • Tier 2 is not suitable as it is stressful for clients to go through this stage. Clarification of disorder present and its characteristics/expression in the individual. • Professional understanding is still very focused on children whereas there are so many adults unable to access diagnosis, at a personal cost and a cost to the community. • High Functioning – adults missing out and then go into mental health sector. • Adults in the diagnostic process shouldn't be forgotten. • For adults - presume competence, support difference. • Should lead to information for selecting appropriate coping strategies.
Delphi Surveys	<p><i>Adolescents</i></p> <ul style="list-style-type: none"> • Often have significant mental health problems. • Adult psychiatrist would be helpful in excluding other psychopathologies. <p><i>Adult</i></p> <ul style="list-style-type: none"> • With older adults, there may be no one around who knew the person in childhood. • Medical practitioner needs to be involved in the ongoing care, as it is likely that comorbid issues are present. • Often have significant mental health problems. • Need to address anxiety, and social misfit if adult is going to be able to function in society. • Generally, adult psychiatrists have not had the training in ASD or extensive experience needed for a diagnostic assessment. There are rare exceptions • Psychiatrists are very important in diagnosis and intervention. • In the case of adults it is important to have a medical practitioner involved in their ongoing care and treatment, especially for any comorbid issues that are present. • Adults with ASD are often bereft of specialist service with appropriate experience in this area. In my experience not many psychiatrists are interested in developmental disorders - though of course some are. Adults (and children/adolescents) with ASD often have significant mental health problems. • Anxiety, social misfit, and mental health problems need to be addressed for the adult to function in society. • Adult psychiatrist would be helpful in excluding other psychopathology in the young adults who are at an age to be developing more complex adult psychiatric diagnoses.
Viewpoint Surveys	Not identified
Interviews	<ul style="list-style-type: none"> • "I started searching, and I saw a large number of psychologists and counsellors, but I found most of them to be useless as tits on a bull. They were not aware and they didn't see it. And it wasn't until my current doctor got suspicious and he'd known me for a number of years by then." • "I think with better training, with more awareness of Autism, especially in adults, then I think a lot of the healthcare sector

can better understand how adults need support in various ways, be that with allied health, or with psychiatric care, or even something like the emergency department. For a lot of us the emergency department is so sensory overwhelming, that we can't cope in such an environment, yet there's no real understanding."

- "And look, my parents did seek assistance for me in my mid teen years, 15 to 17, they did take me to a paediatrician and adolescent psychologist, and then to an adolescent psychiatrist, but after half a dozen sessions with each of them, they found they weren't really getting any answers. And maybe 25 years ago the professionals back then weren't so attuned or aware of Autism Spectrum Disorders, as they are now.
- Other topics discussed:
 - Diagnosis of participant's children was often their first conscious experience with ASD
 - Inconsistent information held by health professionals (minimal training for recognising ASD in adult women and training to be able to recognise coping mechanisms)
 - Concerns about diagnostic tools
 - Mental health care prior to diagnosis
 - Inclusive child and adult diagnostic system
 - Need for cohesive systems
 - Self-diagnosis of ASD
 - Important to develop trust with health professionals. Often will only have one or two doctors that they feel comfortable opening up with. Important to train diagnostic professionals to be able to facilitate trust.
 - Varied opinion regarding the number of health professionals involved
 - Expense is significant - Medicare subsidization required
 - Little to no post-diagnostic support
 - Minimal public information regarding adult autism
 - Highly varied diagnostic experiences based on location, including inconsistent length of diagnostic process (ranges from two hours to several months)
 - Most interview participants stated that dealing with more than one health professional would be overwhelming.

Feedback

Not applicable

Evidence Table 60: Important Considerations (Intellectual and/or Communication Capacity)

Evidence Source	Details
Recommendation	It is suggested that all members of the Assessment Team consider the individual's cognitive/intellectual abilities and verbal language level when choosing standardised assessments and determining the individual's ability to provide valid consent.
Grade	Consensus Based Recommendation, Grade 2
Rationale	A number of evidence sources consistently state the importance of considering intellectual and communication capacity, and there was excellent support from experts for this focus.
Scholarly Literature	The literature suggests, that to match children with appropriate treatments, differentiation between intellectual disability and ASD is required. The use of DSM-5 criteria may be useful in this regard by improving differentiation (with decreased emphasis on language-related behaviours) [77].
Other Guidelines	Severe learning disability can make diagnosis more challenging [29].
Online Submissions	<ul style="list-style-type: none"> • Special care should be taken to examine the impacts of intellectual and language factors on the overall presentation. • Per level of disability i.e. standardised tests not appropriate for severe disability sometimes i.e. speech required for non-verbal kids.
Workshops	Not identified
Delphi Surveys	<ul style="list-style-type: none"> • I do believe that the clinician needs to have an understanding of the child's developmental level or intellectual potential in order to decide if the child's presentation is out of keeping with expectations and then likely to be attributed to Autism. • Decision to interview a child would depend on the intellectual capacity of the child. • Having too rigid a criteria [in a diagnostic guideline] can be problematic particularly if the patient has an intellectual disability.
Viewpoint Surveys	Not identified
Interviews	Not identified
Feedback	Not applicable

Evidence Table 61: Important Considerations (Gender)

Evidence Source	Details
Recommendation	It is recommended that all members of the Assessment Team consider the individual's behavioural presentation and needs in comparison to other individuals of the same gender, and be aware of how ASD may manifest differently in males and females.
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of considering gender, and there was excellent support from experts for this focus.
Scholarly Literature	<ul style="list-style-type: none"> The ASD profiles in females need to be understood by referrers and diagnosticians. In Scotland, the delay in diagnosis for females relative to males, was associated with the delay of referring females to specialist assessment teams (Level III, Quality 85%, [78]). Mothers of girls with ASD found that red-flags were often dismissed by health-professionals, leading to later diagnosis (Level III, Quality 70%, [79]). Mothers with daughters diagnosed with ASD, often felt a sense of incompetency, encouraged by the lack of information and resources available about females with ASD (Level III, Quality 70%, [79]). Mothers of girls with ASD often felt isolated, not only by the neurotypical community, but also isolated from the male-dominated ASD community (Level III, Quality 70%, [79]). However, gender does not significantly predict the age of diagnosis (Level III, Quality 82%, [80]). There needs to be greater recognition of the female autism phenotype, including the increased tendency to internalise mental health issues (Level III, Quality 80%, [42]). Females with ASD are commonly quite adept at camouflaging, which can make detection more difficult, and often causes consumers to doubt themselves (Level III, Quality 80%, [42]). Additional training needs to be emphasised for health professionals to avoid missed diagnoses and misdiagnoses. Diagnosing professionals also need training to be more sensitive and receptive to consumers' concerns. Parents, of girls diagnosed with ASD, describe the diagnosis as being a catalyst for positive change (Level III, Quality 65%, [79]). The increased understanding of their child's needs led to decreased stress and positive outcomes for family harmony (Level III, Quality 65%, [79]). Therefore, health care professionals need to be aware of the needs of females on the autism spectrum.
Other Guidelines	<ul style="list-style-type: none"> Diagnosticians need to be knowledgeable about how presentation of ASD symptoms vary with an individual's gender – need to be sensitive to the potential differences and not too quick to rule out ASD [4, 5, 27].

	<ul style="list-style-type: none"> • Equal symptom severity leads to higher ASD diagnosis among males [5]. • Autistic males may exhibit more social and communication impairments during early childhood, whereas Autistic females social difficulties often become apparent in adolescence [27]. • Gender difference in prevalence of ASD may be due to under diagnosed and misdiagnosed in females [4, 5, 28, 29]. • Girls are diagnosed later than boys (under 8 years) [5, 27]. • ASD diagnostic criteria and instruments do not sufficiently identify female ASD presentation [4, 27]. • ASD presentation is different between males and females, possibly due to a different phenotype [4, 5, 27, 29]. • Females tend to have: <ul style="list-style-type: none"> ○ fewer restrictive and repetitive behaviours [4, 27] ○ lower parent rating of social skills (this may reflect higher social expectations for girls) [27] ○ less inappropriate special interests (horses, dolls or pop stars) and play topics therefore seeming less impaired [4, 29] ○ higher incidence of disordered eating [4, 29] ○ less aggressive/hyperactive behaviours [29] ○ masking of impairment through imitation [4] • Females tend to have better: <ul style="list-style-type: none"> ○ imaginative play [27] ○ attention [27] ○ concentration [27] ○ coping / adaptation / compensation skills [4, 29] ○ play skills [4] ○ theory of mind [4] ○ language/communication [4, 29] ○ executive function [4] • Females may show more of a desire to have friends and fit in with their peer group than males, and may mask social play deficits by imitating their typically developing peers [4]. • Females who have difficulty maintaining eye contact and seem to be socially withdrawn may be thought to be 'shy' rather than having a symptom of autism [29].
Online Submissions	<ul style="list-style-type: none"> • Improve assessments in female population. • There are differences in high-functioning girls. • Assessor must understand the different ways that autism present in adults versus children and males versus females. • Adult women and misdiagnosis needs to be addressed. • Assessment criteria is currently based on how autism presents in males – leads to females being diagnosed later in life or not at all.
Workshops	<ul style="list-style-type: none"> • Complex presentations in females. • Criteria with a female bias need to be developed. • Increase awareness/training across the board. • Research into ratios – is the lower percentage of females diagnosed real? • There is currently a male bias in the criteria needed for autism diagnosis.

	<ul style="list-style-type: none"> • There needs to be different assessments suitable for sex.
Delphi Surveys	<ul style="list-style-type: none"> • Many females on the spectrum mask their difficulties. • A tiered assessment process would allow further testing and information gathering to prevent from a true diagnosis being overlooked for a female. • One thing that I come across very frequently is the lack of awareness in professionals (even some professionals who consider themselves knowledgeable in ASD) about the different profile of ASD for females.
Viewpoint Surveys	Comments strongly supported professionals having a greater understanding of ASD presentation differences across gender and highlighted the harm caused when females were ignored due to presenting differently.
Interviews	<ul style="list-style-type: none"> • “I think, if we want to go back to the actual level of difference, that we can make, is the training that clinicians get, you know, psychiatrists, psychologists, they really need that newer research to be embedded in their training, in their academic work, so that they better understand how men and women present differently on the spectrum.” • “It would be helpful if clinicians in other areas of female psychological issues (particularly anorexia / ED’s) knew the signs to look for to also make autism diagnosis, and be non-judgemental. More knowledge of how women and girls are affected in general should be focused on, and support/counselling to families of adults.” • “So then the health professional would just be going by how you present now, and we know from research a lot of women, do learn masking, so they’ve learnt to mas all their autistic traits. They learn to struggle through life, basically trying to be who they’re not.”
Feedback	Not applicable

Evidence Table 62: Important Considerations (Gender)

Evidence Source	Details
Recommendation	It is suggested that all members of the Assessment Team have a good understanding of gender diversity and its potential impact on the individual's behavioural presentation and needs.
Grade	Consensus Based Recommendation, Grade 2
Rationale	A number of evidence sources state the importance of considering gender diversity, with most of the evidence consistently supporting this approach and good support from experts.
Scholarly Literature	Not identified
Other Guidelines	The National Collaborating Centre for Mental Health [29] guideline was the only highly rated international guideline to mention ASD diagnosis with reference to transgender individuals. It stated that female to-male transsexuals reported elevated autistic traits, and the prevalence for autism in children and young people with gender dysphoria was around 6% - a rate significantly higher than the general population.
Online Submissions	Tier 1 requires check gender diversity = trigger immediate involvement relevant specialists.
Workshops	LGBTIQ (Lesbian, Gay, Bisexual, Transgender, Intersex and Questioning) populations – have they been considered?
Delphi Surveys	Not identified
Viewpoint Surveys	Not identified
Interviews	Not identified
Feedback	Not applicable

Evidence Table 63: Important Considerations (Culturally and Linguistically Diverse Backgrounds)

Evidence Source	Details
Recommendation	It is recommended that all members of the Assessment Team consider the racial or ethnic background of the individual, including Aboriginal people, and how cultural factors relevant to the individual and their caregiver(s) may guide or influence the process of assessing ASD concerns. For Aboriginal people in particular, it is recommended that the role of the family, extended family and community be acknowledged and empowered by identifying attitudes and beliefs that the individual and family have surrounding ASD.
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of considering culture and language, and there was excellent support from experts for this focus.
Scholarly Literature	<p><i>Cultural understanding</i></p> <ul style="list-style-type: none"> • Cultural factors play a major role in determining how people understand and treat Asperger's (p114, Level III, Quality 95% [18]). • Clinicians need to demonstrate sensitivity, empathy, and aid in rapport building to create a positive alliance between the family and diagnosticians. The lived experience of Mexican mothers in America was studied, it was recommended by the mothers that "clinicians should be aware of their verbal and body language and seek to maintain a healthy therapeutic relationship that assists this specific population" (p. 30, Level III, Quality 100% [81]). <p><i>Family importance</i></p> <ul style="list-style-type: none"> • A limiting factor of the diagnostic process, as expressed by parents with limited English proficiency, was poor access to and/ or poor quality of interpreters. This led to perceived difficulties in expressing their concerns within the diagnostic process (Level III, Quality 100% [82]).
Other Guidelines	<p><i>Cultural understanding</i></p> <ul style="list-style-type: none"> • It is critical that all those involved in the care of children remain vigilant in making accurate diagnosis' for children regardless of race, ethnicity or socioeconomic status and not dismiss ASD due to these biases [5, 29]. • Assessors should consider the individual's and family's cultural background. [28, 30, 35]. • Much of the research into ASD diagnosis and resources available for ASD diagnosis is focused on Anglo-Saxon families and cultural norms which may impact on identification of ASD in other cultural groups [30]. • More research is needed to examine cultural variations that may influence ASD diagnosis and the use of current resources and tools for culturally diverse populations [30].

	<ul style="list-style-type: none"> • The support structures available for families undergoing an ASD diagnosis may vary due to cultural difference (such as the family, community, religious support availability) [30]. • Cultural factors may impact on the likelihood of families to seek professional support and how comfortable/ confident some families may feel to express developmental concerns [30]. <p><i>Family importance</i></p> <ul style="list-style-type: none"> • Individuals and families should have access to professional interpreter services if they speak a language other than English – this can help avoid inequities in accessing medical care [5, 30] • Avoid assumptions about an individual's communication abilities if English is a second language - information should be gathered about the child's abilities in first language [5, 28].
Online Submissions	<p><i>Cultural understanding</i></p> <ul style="list-style-type: none"> • Address cultural factors of child and/or parents <p><i>Family importance</i></p> <ul style="list-style-type: none"> • The team may need to have interpreters to assist the process. • Access to interpreters needs to be available in the private setting • Only paediatricians can request for interpreters for free, not allied health – this needs to change • The practitioner needs to make sure they communicate information clearly, but also with understanding that this can be emotional for many families.
Workshops	<p><i>Cultural understanding</i></p> <ul style="list-style-type: none"> • Aboriginal and Torres Strait Islander cultural consultants should be present throughout the process. • Aboriginal and Torres Strait Islander • Cultural awareness training. Cultural training is mandatory • Cultural awareness. • Standardised tools to be transferable. Should be culturally relevant. • Support planning • Needs to be customised and consider cultural aspects. • Presentation • Appreciate that it may be different. • Culture based social and emotional skills. <p><i>Migrant and/or Refugee</i></p> <ul style="list-style-type: none"> • Cultural interpreter • Characteristics and differences in culture/communities – more acknowledgments required • Standardised tools accounting for cultural differences and language barriers • Awareness that diagnosis may obstruct their pathway to immigration • Cultural background and past trauma to be recognised and considered • Disability can be stigmatising – understanding this stigma of diagnosis in various cultures. • Understanding and appreciation of cultural differences • Gender-based cultural differences • High stress time for families

	<ul style="list-style-type: none"> • Culturally relevant assessments • Obtaining information and enabling access • Jargon to be eliminated • Cultural fear can be addressed using a strength based approach • Continue professional development models for health worker • Understanding and appreciation of cultural differences <p><i>Family importance</i></p> <ul style="list-style-type: none"> • Utilising interpreters • Assessments in first language • Training for designated interpreters • Better access to interpreters for non-English speaking background families • Assessments can try to focus on non-verbal aspect.
Delphi Surveys	<p><i>Culture understanding</i></p> <ul style="list-style-type: none"> • Are assessments and the assessor appropriate for Aboriginal and Torres Strait Islander people? • Consistent guidelines should allow flexibility for racial/cultural variations. • Family and cultural circumstances may mean that there will be some exceptions and need for flexibility determined by the clinician' experience and skilful judgement. • The office is a calm neutral space and useful for many. However, if it involves excessive travel or provokes extreme anxiety as it does for some ethnic and cultural groups an alternative location should be considered. <p><i>Family importance</i></p> <ul style="list-style-type: none"> • Round 1 agreement that a meeting / report to share the autism assessment outcomes should involve the assistance of an interpreter and/or translator if appropriate. • Round 2 agreement that ideally, government funding for the ASD assessment process should cover interpreter and/or translator services to allow people from non-English backgrounds to participate in the assessment. • Two separate assessments may be time intensive for carers and patients, especially for minorities who may need an interpreter of extra support during an assessment. • Additional support for interpreters or support in literacy to be provided. • The team may need to have interpreters to assist the process. • May require an interpreter or support person. • There are times when the skills of the interpreter (even a professional one) can be lacking. So taking time and checking with the interpreter to be sure they are just interpreting and not putting a spin on your words is important because they are feeling uncomfortable with the news you are giving the family. • Not practical for written report but certainly can involve interpreter during discussion with parents at assessment
Viewpoint Surveys	Not identified
Interviews	Not identified
Feedback	Not applicable

Evidence Table 64: Important Considerations (Culturally and Linguistically Diverse Backgrounds)

Evidence Source	Details
Recommendation	It is recommended that a client receive cultural support from a community member or appropriate professional (e.g. Aboriginal health worker) if this is requested or identified as potentially beneficial during the assessment of ASD concerns. It is suggested that this support be available from the receipt of referral through to the communication of assessment findings and connection to support services.
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of considering culture and language, and there was excellent support from experts for this focus.
Scholarly Literature	<p><i>Cultural support</i></p> <ul style="list-style-type: none"> • “Latino children and children with lower SES were diagnosed at later ages and experienced greater delays between the time mothers reported first being concerned about their child and the time of diagnosis and higher levels of acculturation to Latino culture were associated with later ages at first concern” (p.33, Level III, Quality 86% [83]) • “mothers’ perception of ASD symptoms is invariant across cultures” (p.37, Level III, Quality 86%, [83]) • Clinicians need to demonstrate sensitivity, empathy, and aid in rapport building creating a positive alliance between the family and diagnostician. The lived experience of Mexican mothers of children with ASD in America was studied, the mothers recommended that “clinicians should be aware of their verbal and body language and seek to maintain a healthy therapeutic relationship that assists this specific population” (p. 30, Level III, Quality 100%, [81]) • Where English is not the first language or parents come from culturally diverse backgrounds, translator services are an important consideration during the diagnostic process and in planning for intervention services. In addition to providing relevant information forms in native languages (Level III, Quality 100%, [81]). • Diagnostic disclosure should be given in the consumers first language or by using trained interpreter (Level III, Quality 60%, [34]).
Other Guidelines	Assessors should consider the individual’s and family’s cultural background. [28, 30, 35]
Online Submissions	<p><i>Cultural support</i></p> <ul style="list-style-type: none"> • The team may need to have multicultural advisors to assist the process. • Services that provide assessments must be connected to communities and include a local workforce to enhance access and trust for community members.

	<ul style="list-style-type: none"> • Access to interpreters needs to be available in the private setting • Only paediatricians can request for interpreters for free, not Allied Health – this needs to change • The practitioner needs to make sure they communicate information clearly. <p><i>Support available throughout assessment</i></p> <ul style="list-style-type: none"> • Access to timely diagnosis in rural and remote communities and for Indigenous people is not available. Services that provide assessments must be connected to communities and include a local workforce to enhance access and trust for community members. Follow up supports immediately post diagnosis is an essential part of the diagnosis process for rural and remote community members and Indigenous community members, as existing support structures are inadequate if available at all. A system navigation support as part of diagnosis is essential.
Workshops	<p><i>Cultural support</i></p> <ul style="list-style-type: none"> • Cultural consultants present throughout entire process. • Utilising interpreters • Assessments in first language • Understanding and appreciation of cultural differences • Better access to interpreters for non-English speaking background families • Assessments can try to focus on non-verbal aspects <p><i>Support available through assessment</i></p> <ul style="list-style-type: none"> • Advocate from an Aboriginal workplace / cultural advisor. • Partnership with organisations who work with these communities (Aboriginal Liaison Officers). • Involve Aboriginal Health Workers and medical services. • Aboriginal health workers could be trained in autism to assist with cross-culture competency during assessments. • Education in the various communities in regional and remote Australia about ASD assessments. • Aboriginal Health workers - training at university health level/education disciplines and across culture competency
Delphi Surveys	<p><i>Cultural support</i></p> <ul style="list-style-type: none"> • Round 2 agreement that ideally, government funding for the ASD assessment process should cover cultural advocate services to allow people from culturally diverse backgrounds to participate in the assessment. • Are assessments and the assessor appropriate for Aboriginal and Torres Strait Islander people? • Consistent guidelines should allow flexibility for racial/cultural variations. <p><i>Support available through assessment</i></p> <ul style="list-style-type: none"> • Some teams will need Aboriginal Liaison Officers to facilitate the process.
Viewpoint Surveys	Not identified
Interviews	Not identified
Feedback	Not applicable

Evidence Table 65: Important Considerations (Culturally and Linguistically Diverse Backgrounds)

Evidence Source	Details
Recommendation	It is recommended that interpreter services and translated educational materials be made available for all clients from a non-English speaking background (including those who speak an Aboriginal language).
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of considering language, and there was excellent support from experts for this focus.
Scholarly Literature	<ul style="list-style-type: none"> Clinicians need to demonstrate sensitivity, empathy, and aid in rapport building creating a positive alliance between the family and diagnostician. The lived experience of Mexican mothers of children with ASD in America was studied, the mothers recommended that “clinicians should be aware of their verbal and body language and seek to maintain a healthy therapeutic relationship that assists this specific population” (p. 30, Level III, Quality 100%, [81]) Where English is not the first language or parents come from culturally diverse backgrounds, translator services are an important consideration during the diagnostic process and in planning for intervention services. In addition to providing relevant information forms in native languages (Level III, Quality 100% [81]). Diagnostic disclosure should be given in the consumers first language or by using trained interpreter (Level III, Quality 60%, [34]).
Other Guidelines	Assessors should consider the individual’s and family’s cultural background. [28, 30, 35]
Online Submissions	<ul style="list-style-type: none"> Access to interpreters needs to be available in the private setting Only paediatricians can request for interpreters for free, not Allied Health – this needs to change The practitioner needs to make sure they communicate information clearly.
Workshops	<ul style="list-style-type: none"> A member from the community to be a guide/interpreter (e.g. Elder) to explain the diagnosis in words they will understand. Assessments in first language Utilising interpreters Better access to interpreters for non-English speaking background families Assessments can try to focus on non-verbal aspects
Delphi Surveys	May require a support person.
Viewpoint Surveys	Not identified
Interviews	Not identified

Feedback	Not applicable
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Evidence Table 66: Important Considerations (Regional and Remote Location)

Evidence Source	Details
Recommendation	It is recommended that in circumstances where a clinician with the professional background and assessment expertise prerequisite to being a member of a Consensus Diagnosis Team is not present in the local community, a partnership between local clinicians and an assessment team in another location be facilitated through telehealth or other methods.
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of considering geographical location, and there was excellent support from experts for this focus.
Scholarly Literature	Geographical proximity to assessment locations made the diagnosis process easier Level III, Quality 85% [25].
Other Guidelines	<ul style="list-style-type: none"> • Diagnosis is often delayed for individuals living in rural and remote communities [27]. • Rural and remote practitioners with limited experience/specialised knowledge of ASD should consult with experts or an interdisciplinary team in order to formulate their diagnosis [30]. • A list of professionals with ASD knowledge and expertise, willing to support rural and remote clinicians in ASD evaluation, should be created to support practitioners working in rural and remote areas. These professionals should be from a range of disciplines [30]. • Further research is required to support the reliability of telehealth to diagnose ASD and to investigate the best systems and processes for providing telehealth support [30].
Online Submissions	<ul style="list-style-type: none"> • Access to adequate diagnostic services in rural and remote areas • The need for country assessment facilities should be more accessible. • Access to timely diagnosis in rural and remote communities is not available. • Access to timely diagnosis in rural and remote communities, with large Indigenous populations, is not available. • Services that provide assessments must be connected to communities and include a local workforce to enhance access and trust for community members.
Workshops	<ul style="list-style-type: none"> • Train clinicians in remote areas as opposed to clinicians travelling from metro areas. • Logistic, distance and cost in regards to sending teams for a referral. • System that can be used via videoconferencing for diagnosis. • Telehealth and regional service provision.

	<ul style="list-style-type: none"> • Video assessment acceptable for Tier 1, and Tier 2 – not Tier 3 (i.e. greatest level of complexity in presentation). • Video recordings become substantive evidence. • Bridging gaps in services.
Delphi Surveys	<ul style="list-style-type: none"> • Round 1 partial agreement that information for the ASD assessment process should be collected through tele-health technology if necessary as a substitute or to supplement other information sources (e.g. video recordings or videoconferencing). • Round 2 agreement that information for the autism assessment process should be collected through video conferencing and/or recordings where regional / remote location or travel restrictions makes face-to-face assessment very difficult: • Round 2 agreement that the diagnostic decision and assessment outcomes should be disclosed during a telephone or videoconferencing meeting only if regional / remote location or travel restrictions makes a face-to-face meeting very difficult. • Round 2 agreement that If the diagnostic decision and assessment outcomes are disclosed during a telephone or videoconferencing meeting, this should only occur if a suitable professional from the local community is present in a face-to-face meeting with the individual / caregiver at the same time: <ul style="list-style-type: none"> • Use of telehealth technology may increase access to services for those who are rural and remote in particular. • In country areas three professionals may not always be available. Written or teleconference participation should be allowed. • Current diagnostic process in these regions is very different. • An inner-city model will not work in rural and may discriminate against rural and indigenous children. • Nurse practitioners would be useful resources in rural and remote assessments and possibly in assessments where conducting the assessment outside of the home is difficult. When trained, they may well be able to contribute.
Viewpoint Surveys	In one viewpoint, collecting information in a way that made it easier for those living in rural or remote areas was given the highest rating of all statements. Diagnostic services visiting regional and remote areas was greatly valued according to participant comments.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 67: Important Considerations (Regional and Remote Location)

Evidence Source	Details
Recommendation	It is recommended that before conducting an assessment of ASD concerns, professionals within the Assessment Team have a good understanding of the support services available for individuals in the local regional or remote community.
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of considering geographical location, and there was excellent support from experts for this focus.
Scholarly Literature	A sample of parents in the UK, whose children underwent an ASD assessment process, were particularly concerned about the lack of appropriate support given to parent's post diagnosis (Level III, Quality 82% [70]).
Other Guidelines	<ul style="list-style-type: none"> It is recommended that clinicians provide individuals and families with information regarding local supports, with consideration for organisations that allow individuals and families to connect with others with similar experiences, courses for caregivers, welfare support advisors, educational advisors and transition services [28]. Local clinicians and clinical groups are expected to implement and translate national guidelines to local service models, including resource identification and management with consideration to local existing services and resource and training needs [29]. Local care pathways should be flexible, accessible, responsive, integrated and outcome focused [29].
Online Submissions	<ul style="list-style-type: none"> Teams accessible through community health and hospitals. Local area needs more people that can help families of people in the spectrum Follow up supports immediately post diagnosis is an essential part of the diagnosis process for rural and remote community members, as existing support structures are inadequate if available at all. A system navigation support as part of diagnosis is essential.
Workshops	<ul style="list-style-type: none"> Partnership with organisations who work with these communities (liaison officers). Support structures For families in rural and remote regions. Need for better community engagement.
Delphi Surveys	<ul style="list-style-type: none"> Round 1 agreement that a professional who conducts ASD assessments should have knowledge of local services and supports for individuals with ASD and their families. Local services that can assist the intervention is important. Very important as families need this support to give their child the best possible future. They need to be aware of the most appropriate local services to assist the child and family.

	<ul style="list-style-type: none"> • This knowledge is useful. • It is vital knowledge for planning intervention but not for diagnosis. So there would need to be a team member with good knowledge of local services and also how to access required services which are not local. • Need to be able to help the individual to access resources. • Helpful if the diagnosing clinician can point individuals/families in the direction of where they can go to get help/information/services. • This is so important but local information often changes and it can be hard to be up to date with all situations. • At least some knowledge on how to find services. • Not always possible if they have travelled to a larger city for assessment.
Viewpoint Surveys	In one viewpoint, collecting information in a way that made it easier for those living in rural or remote areas was given the highest rating of all statements. Diagnostic services visiting regional and remote areas was greatly valued according to participant comments.
Interviews	Not identified
Feedback	Not applicable

Evidence Table 68: Important Considerations (Complex Psychosocial Factors)

Evidence Source	Details
Recommendation	It is recommended that all members of the Assessment Team have a good understanding of complex psychosocial factors and their potential impact on the individual's behavioural presentation and needs.
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of considering psychosocial factors, and there was excellent support from experts for this focus.
Scholarly Literature	Not identified
Other Guidelines	Not identified
Online Submissions	<ul style="list-style-type: none"> • "Thorough investigation of developmental influences in person's life e.g. trauma, neglect, maltreatment, parenting / behaviour support." • "Assessment process should ensure that other diagnoses are screened for and considers factors such as trauma and environmental impacts." • "Further careful thought must be given to clear guidelines regarding differential diagnosis regarding trauma, attachment disruption." • "A consideration that should be made in developing a national guideline include the importance of careful differential diagnosis given the lifelong implications of a diagnostic label, and the similar profiles of children presenting with anxiety or a history of trauma." • "[Clinicians] who have a strong understanding of child development (trauma, attachment disorder, use of the Coventry grid)." • "Developmental assessment incorporating broad and ASD-specific developmental domains..., with family psychosocial assessment."
Workshops	<ul style="list-style-type: none"> • Multiple settings allows exploration of "ASD versus Trauma." • "Diagnostic Dilemmas should be considered i.e. trauma background." • "Concerns that there is a group of children with trauma that may get more readily diagnosed but not have their needs met." • Needs to address "what happens next for ... complex needs." • "Do no further harm to people who have trauma." • "Trauma informed practice." • "Needs to be able to address dual-diagnosis e.g. trauma." • "Complex cases - Trauma background [and] complex family background." • "Trauma considerations - Not discounting autism because of trauma, refugee, family violence/breakdown." • "Past trauma to be recognised and taken into account."

	<ul style="list-style-type: none"> • “Understanding and appreciating complexity that may be present.”
Delphi Surveys	<ul style="list-style-type: none"> • “A major issue that needs to be decided is the issue of early developmental trauma and attachment disorder and the diagnostic overlap with ASD. While ASD diagnosis can be helpful in certain cases, in cases with childhood trauma it can be potentially invalidating for the children. There needs to be national guidelines about how to differential between the two.” • “Now younger children can be seen by a trained clinical psychologist assessor who is able to assess for ... other potential problems such as early trauma., social problems. This enables the clarification of which children meet what diagnoses with much better outcomes for children.” • “Detailed developmental history including attachment and trauma history.” • “Thus added additional dimensions including ASD and where relevant a history of abuse, trauma., attachment issues... These dimensions will increase the complexity of the assessment.” • “[Three clinicians] provides more accurate scope for differential diagnosis, particularly with attachment disorder or trauma history.” • “[Child Psychiatrist aspects -] If appropriate for differential diagnosis in case of trauma or attachment history or mental health concerns.” • “Clinical Psychologists have the training to consider in complex cases the role of known trauma, attachment issues ... and more when considering an autism diagnosis.” • “If trauma is a feature of history, impact of this requires assessment, as profile of person may mimic ASD.” • “All of this information is required to understand the individual presentation in the context of their life experience [including] social history, experience of traumatic events ...” • “Impact of trauma needs to be considered - particularly in pre-school or primary school aged children.”
Viewpoint Surveys	Not identified
Interviews	Not identified
Feedback	<ul style="list-style-type: none"> • “Professionals involved need to know enough not only about ASD but about ... trauma” • “DSM V section E involves assessing the child for another condition that may be a better fit. However you have only indicated the assessors need to be trained in ASD. Many assessors, including myself, are concerned about children with emotional trauma being assessed incorrectly as ASD. The assessments to not ask about trauma background and do not look at the Coventry Grid to distinguish when known trauma has occurred. Some assessors and referrers have said 'well at least the child gets funding' to justify the misdiagnosis. The already traumatised child also gets a label that effectively confirms they are the cause of the problem not child abuse or child trauma.”

- “the description of the diagnostic evaluation does not adequately highlight the potential diagnostic blurring of ASD vs severe trauma. There is particular risk that the tier one diagnostic process, as described, will continue to miss this important differential unless there is more rigour around defining and regulating the skills of both diagnosticians and professional informants. In particular -Pg 36 re- information collection - 'Other relevant behaviours and / or symptoms' - should be a priority to screen instead of being optional.”
- “Whether an individual's endorsement program specifically covers training in the assessment of ... trauma or deprivation ... will however vary.”
- “It is suggested that the particular issues involved in the assessment of children in Out of Home Care, with the associated difficulty in obtaining a reliable history and the likely contribution of exposure to developmental trauma, also be included.”
- “There are many factors that can account for symptomology other than ASD and an appropriate assessment involves considering ... complex trauma ... or environmental (family) factors that could better account for symptoms.”
- “Trauma wasn't listed in the guide as a co-morbidity. Just curious regarding other clinicians viewpoint on trauma and ASD as its quite the focus in the region I work – not so much elsewhere.”
- “Only trained diagnosticians experienced in child development, and able to distinguish between ASD and other developmental disorders that can present similar to ASD (e.g. ... Attachment/ Trauma disorders, impact of psychosocial factors ... etc.) should be able to conduct single diagnostician assessments.”
- “There is a push to formally diagnose very young children with complicated family and psychosocial factors. Often the pattern and diagnosis becomes clearer over time e.g. changed family situation, preschool experience, engaging with therapists, increasing developmental skills.”
- “Whether a child can be categorised as clearly meeting criteria is likely to differ between assessors. For instance, a child considered straightforward by one clinician may be considered more complex by another more aware of underlying psychosocial issues in the family.”
- “There are individuals in institutional settings (e.g., prisons, forensic mental health hospitals) who would also meet the diagnostic criteria for ASD, if they were given the opportunity for a comprehensive assessment. Of note, the existing literature suggests that ASD is under-diagnosed in prison settings and clinically, we do see a number of prisoners with strong ASD features who were never diagnosed previously, at times due to difficulty assessing them properly in the community. For example, many prisoners might have led a chaotic lifestyle in the community and some may even spend the vast majority of their life in custody.”
- “I work with people in an adult custodial environment, and I wondered whether some considerations could be made about

prisoners' and forensic patients' need for ASD assessment and interventions that are appropriate for this unique setting."

- "Within our service, we see a proportion of children from vulnerable backgrounds, including those in out-of-home care arrangements, with complex family and social circumstances. Many present with attachment issues, which often overlap with ASD presentations. Many of them are assessed by our multidisciplinary team, which has the skillset and expertise to tease out the needs of these children."
 - "Kids in out of home care are at the mercy of the state, [with barriers to] sharing of information ... necessary for progress through the stages."
 - "If the child moves from region to region, or interstate, a child may have attended 4 or 5 schools in a year or two, and never stayed long enough to complete assessments."
 - "It may be worth recommending that each regional Education Office employ a designated clerical person, who is not too busy doing clinical assessments, to collate and send on data, to the next school they attend."
 - "Almost without exception, both foster carers and biological parents are ignorant of what assessment has or has not been done. Since these are the very children who may struggle to find a birth certificate, they may be excluded from funding."
 - "Children in out of home care ... are very likely to be the ones who fall through the cracks and miss out on help... I think this is a special group, who deserve special recommendation."
 - "Many families with D&A or criminal histories, choose to live in remoter places and if there is only one or no vehicle or registered driver in the household, that is an issue in its self."
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Evidence Table 69: Important Considerations (Co-occurring Conditions)

Evidence Source	Details
Recommendation	It is recommended that, at each stage of the Diagnostic Evaluation, the clinicians collect and evaluate information to consider the full range of clinical explanations for the presentation of signs and/or symptoms and test these possible explanations against the evidence for an ASD diagnosis in the context of other differential and co-occurring diagnoses.
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of considering co-occurring conditions, and there was excellent support from experts for this focus.
Scholarly Literature	<ul style="list-style-type: none"> It is important that co-morbid diagnoses are considered during the ASD diagnostic process, particularly regarding mental health. The literature demonstrates that more than half of parents report concerns about the mental health of their autistic child, with anxiety being a common concern (Level III, Quality 64% [37]). Many individuals are mistrusting of health professionals. Those with an understanding of autism, who suspected they had autism themselves, were afraid health professionals would not take their concerns about a suspected ASD diagnosis seriously. On this matter, the literature suggests; “regardless of whether or not they are formally diagnosed, healthcare professionals must recognize the critical need to screen these individuals for comorbidities and situational grief” (p. 579) (Level III, Quality 85% [10]).
Other Guidelines	<ul style="list-style-type: none"> ASD is often associated with co-occurring physical and mental health conditions [3–5, 27, 29–31, 35, 48], including: <ul style="list-style-type: none"> Seizure disorders Sleep disturbances Gastrointestinal disorders Feeding/ eating disorders ADHD ID Speech / language disorder Tourette’s disorder Genetic disorders Vision impairment Hearing impairment Mitochondrial disorders Anxiety Depression Dysexecutive syndrome Catatonia Gender identity disorder Personality disorder Psychosis OCD

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- Selective mutism
 - conduct disorder
 - bipolar disorder
 - attachment disorder
 - global developmental delay
 - muscular dystrophy
 - incontinence
 - developmental dyspraxia
 - developmental coordination disorder
 - nutritional deficiencies secondary to restricted diet
 - traumatic brain injury
 - childhood onset dementia
 - Medical Conditions and Syndromes Seen More Frequently in Children with Autism than in the General Population:
 - Cytomegalovirus infection
 - Duchenne muscular dystrophy
 - Encephalitis
 - Fragile X syndrome
 - Haemophilus influenza meningitis
 - Herpes simplex encephalitis
 - Hypomelanosis of Ito
 - Hypothyroidism
 - Lactic acidosis
 - Maternal rubella
 - Multiple congenital abnormalities / Mental retardation syndrome, Moebius syndrome
 - Mucopolysaccharidosis
 - Neurofibromatosis
 - Other autosomal chromosome abnormalities
 - Other sex chromosome abnormalities
 - Partial tetrasomy 15 syndrome
 - Phenylketonuria
 - Purine disorders
 - Rett's disorder
 - Seizures
 - Sotos syndrome,
 - Tuberous sclerosis
 - West syndrome
 - Williams syndrome.
 - Specific co-occurring conditions [5]:
 - Seizure disorders,
 - Sleep disturbances,
 - Gastrointestinal disorders,
 - Feeding/Eating disorders,
 - Attention-Deficit/Hyperactivity Disorder (ADHD),
 - Intellectual Disability (ID)
 - Language Disorder
 - Tourette's disorder
 - Mental/Behavioral Disorders
 - Genetic Etiologic Factors of ASD
 - Blind or visual impairment
 - Mitochondrial disorders
 - Stereotypic Movement Disorder
 - Oppositional Defiant Disorder (ODD) and Conduct Disorders (CD)
 - Personality disorders
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- Reactive Attachment Disorder
 - Tuberous sclerosis complex
 - Williams syndrome
 - Foetal alcohol spectrum disorder
 - Phenylketonuria
 - Regulation disorders of sensory processing
 - Childhood disintegrative disorder
 - Deaf or hard of hearing [5, 31]
 - See the National Collaborating Centre for Women's and Children's Health [28] tables of "Differential Diagnostic Pitfalls / Observations with specific detailed behaviours".
 - "Many of the parents expressed frustration with the variety of diagnoses that their children received from different health professionals ... parents who reported receiving multiple diagnoses reported reduced trust of medical professionals [30].
 - Comorbid conditions can cause symptoms of ASD to be overlooked or masked and vice versa in both children and adults [3, 4, 27–30, 35].
 - Comorbid conditions may contribute to extended periods of time elapsing before an ASD diagnosis is confirmed [28].
 - Co-occurring communication impairments associated with ASD may cause it to be more difficult to identify functional problems or mental health problems [28].
 - It is often unclear the interaction between comorbid conditions and whether some presentations are primary or secondary (e.g., an individual who experiences depression due to lack of social success, or an individual who withdraws from social experience due to depression) and hence what should be the focus of intervention [27, 29].
 - "Some of the health conditions associated with autism may benefit from early identification and appropriate treatment. For example, seizure disorders, hypothyroidism and some metabolic disorders are important to diagnose and treat as early as possible. In other cases, there may be no specific treatment for a condition, but identifying the condition may still be beneficial. For example, for some genetic conditions associated with autism (such as Fragile X syndrome), the primary benefit of early identification may be to provide appropriate genetic counselling to the parents." [31].
 - "Identification of other disorders in a child with suspected or confirmed autism contributes to an understanding of the individual's profile of strengths and weaknesses and informs intervention. Some conditions require specific medical intervention or modification of the overall treatment strategy. It might also lead to the identification of other family members with the condition and have implications for genetic counselling." [28].
 - "Recent studies have shown that approximately 70% of people with autism also meet diagnostic criteria for at least one other (often unrecognised) psychiatric disorder that is further impairing their psychosocial functioning." [28].
 - Systematic assessment for conditions that may coexist with autism should always occur and is of clinical benefit [4, 28, 35].
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	<ul style="list-style-type: none"> • “Looking for coexisting conditions in addition to autism could cause distress to the child or young person and to their parents or carers. In all stages of the autism pathway, the risk of such difficulties can be alleviated by good communication and close involvement of the child or young person and their parents or carers in the process. The GDG considered that, overall, the potential benefits of early identification of coexisting conditions outweigh the possible harms.” [28] • “The reasons why some disorders co-occur more commonly in people with autism is not well understood.” [28] • “Coexisting conditions may either be treatable in their own right or may influence the long-term outcome for the child or young person.” [28] • “Research has shown that children with ASDs have more outpatient visits, physician visits, and medications prescribed than children in general” [30]. • “Neuropsychological, Psychiatric and Behavioural Functioning Filipek and colleagues¹⁴⁹ reviewed research on neuropsychological differences in children with ASDs, and suggested that these children tend to have deficiencies in performance on tasks requiring higher-order conceptual processes, reasoning, interpretation, integration, or abstraction. Additionally, deficiencies in the form of dissociations between simple and complex processing in the areas of language, memory, executive function, motor function, reading, mathematics, and perspective-taking have also been noted. Children with ASDs have been found to have difficulties with selective attention, problems in attending to multiple aspects of stimuli and, in particular, auditory stimuli” [28]. • “Particularly, parents asserted that, just because their child had an ASD, it did not mean that their child couldn’t be sick or have other emotional or behavioural problems unrelated to the ASD.” [28] • “The GDG considered that attention should also be paid to coexisting physical health problems (including those that commonly coexist, such as epilepsy and gastrointestinal problems) that may be unrecognised or not treated, in part because the person with autism had not complained of any such problems or had not been able to communicate their concerns in a way that had been understood.” [29] • “Other important issues relating to physical health problems in adults with autism include compliance with medication and the recognition of side effects.” [29] • Given the under-reporting and under-recognition of physical disorders in adults with ASD, as well as the frequency of coexisting physical conditions, the National Collaborating Centre for Mental Health [29] guideline recommended the routine interview of individuals/caregivers regarding physical factors, such as food intake and exercise.
Online Submissions	<ul style="list-style-type: none"> • Diagnostic assessment should reflect any cross over diagnosis (ADHD, OCD etc.) • Process needs to consider other possible diagnosis, and if necessary establish a comorbid relationship.

	<ul style="list-style-type: none"> • Providing coexisting diagnoses is important. • Too often, comorbid conditions go undiagnosed. • Must consider whether setting likely to elicit or mask ASD behaviours and potential influence of comorbidities. • Comorbid assessment as part of a child's one diagnostic assessment so family and service providers get the fuller picture of needs/issues.
Workshops	Also needs to be able to address dual-diagnosis e.g. trauma, ADHD, etc.
Delphi Surveys	<ul style="list-style-type: none"> • Round 1 agreement that Diagnosticians should have knowledge of potential differential diagnosis conditions and should collect information to explore if these are present. • You cannot make a call on whether ASD is the most appropriate diagnosis unless you also know about other conditions that may present in a similar way or present alongside ASD. • This knowledge base should exist within the team of professionals. • Co-morbid conditions are what makes diagnosing ASD so difficult, an understanding of other conditions will ensure that misdiagnosis is not made. • Comorbid diagnosis conditions across ages and sex are important and knowledge should be possessed by any one conducting ASD diagnoses. • This would allow parents, carers, teachers, and healthcare providers to better assist and care for the child in a more appropriate way.
Viewpoint Surveys	<ul style="list-style-type: none"> • All viewpoints rated having diagnosticians with both experience in diagnosing autism and the right training highly. • Comments advocated for an awareness of conditions commonly presented with ASD, particularly Pathological Demand Avoidance.
Interviews	<ul style="list-style-type: none"> • "Reports must detail how other conditions have been ruled out, particularly attachment disorder – not about if problems exist, but what is causing them" • "This is an issue I've found across the board – ASD specialists don't have experience in treating severe mental illness which is often present in autistic adults, and psychologists who do have experience in this area don't tend to understand autism and how it impacts on the effectiveness of their treatments." • "So I know in health care there's a lot of focus now on trauma informed care, so everybody who walks through your doors, they could have gone through trauma in their past that you do not know of, so you need to be sensitive to how they provide you with their personal information, and how they might want to be hiding some of their past from you, because they don't yet trust you." • "I think maybe... the professional thinking is ... to look for Asperger's. Rather than ... another possibility."
Feedback	Not applicable

Evidence Table 70: Important Considerations (Differential Diagnosis)

Evidence Source	Details
Recommendation	It is recommended that members of the Assessment Team be highly familiar with the range of differential diagnoses for ASD. Clinicians without the clinical qualifications or expertise to adequately evaluate potential differential diagnoses for a given individual should not undertake the assessment of ASD concerns.
Grade	Consensus Based Recommendation, Grade 1
Rationale	Numerous evidence sources consistently state the importance of considering differential diagnosis, and there was excellent support from experts for this focus.
Scholarly Literature	<ul style="list-style-type: none"> In order that differential diagnosis is explored, it was recommended that "...the assessment and diagnosis of ASC should be extended to other behavioural/ developmental conditions" (p. 128, Level III, Quality 95% [70]). "Diagnostic criteria and screening measures for ASD may need to reflect the overlapping symptomatology between ASD and ADHD." And "Receiving a diagnosis of ADHD before ASD may delay the diagnosis of ASD, and that this delay persists across age and severity of the ASD." (p. e835, Level III, Quality 85% [84]). Many individuals are mistrusting of health professionals. Those with an understanding of autism, who suspected they had autism themselves, were afraid health professionals would not take their concerns about a suspected ASD diagnosis seriously. On this matter, the literature suggests; "regardless of whether or not they are formally diagnosed, healthcare professionals must recognize the critical need to screen these individuals for comorbidities and situational grief" (p. 579, Level III, Quality 85% [10]).
Other Guidelines	<ul style="list-style-type: none"> It is an essential aspect of the diagnostic process to distinguish ASD from other potential differential diagnosis' that may have a similar symptom presentation [3, 5, 27–30, 35]. "An inaccurate diagnosis of autism may result in the use of an inappropriate treatment strategy and may cause anxiety and distress to the child or young person and their parents/carers." [28]. When appropriate, clinicians must consult with specialists when differential diagnostic issues are unclear [3, 28]. "The process of differential diagnosis speaks to the need for interdisciplinary cooperation as no single discipline is equipped to assess all possible disorders." [30]. Social (Pragmatic) Communication Disorder (SCD) is a potential differential diagnosis for ASD, when social communication deficits occur in the absence of restricted or repetitive patterns of behaviour [5]. The National Collaborating Centre for Women's and Children's Health [28] has a set of tables of "Differential Diagnostic Pitfalls /

	Observations with specific detailed behaviours (Overlapping and distinct)
Online Submissions	<ul style="list-style-type: none"> • Consideration should always be given for differential diagnosis, not just addressing the question of ASD. • Further careful thought must be given to clear guidelines regarding differential diagnosis regarding trauma, attachment disruption, RAD etc. • A main consideration is to rule out other disorders that may present similarly, e.g. PTSD, reactive attachment disorder and foetal alcohol syndrome disorder. • Differential/comorbid assessment as part of a child's one diagnostic assessment so family and service providers get the fuller picture of needs/issues. • The importance of careful differential diagnosis given the lifelong implications of a diagnostic label • Similar profiles of children presenting with anxiety of a history of trauma. • Process needs to consider other possible diagnosis. • Providing differential diagnoses is important. • May be less pressure from concerned parents if diagnosis services could say 'we do not think it is ASD', we think it is XXX instead' rather than saying 'it is not ASD.' • Differential assessment as part of one diagnostic assessment so family and service providers get the fuller picture of needs/issues.
Workshops	<ul style="list-style-type: none"> • Many children with additional needs (e.g. FASD or developmental trauma) may not fulfil the ASD diagnostic criteria but still have significant functional difficulties and need NDIS support. There needs to be a pathway for people who go through the assessment process and come out with 'no ASD' as the outcome. • Differential diagnosis is needed.
Delphi Surveys	<ul style="list-style-type: none"> • Round 1 agreement that Diagnosticians should have knowledge of potential differential diagnosis conditions and should collect information to explore if these are present. • There are many children who have differential diagnoses who would benefit from a more comprehensive assessment system. • The ASD assessment should be framed from the beginning in terms of differential diagnosis of ASD, so that assessment always accounts for the multitude of explanations for presenting symptoms. • The national guidelines should make it incumbent on teams to undertake differential diagnosis. • After a comprehensive autism assessment, the diagnosticians have a detailed picture of an individual and it is a massive waste of resources if the team do not conduct any additional assessments to provide a differential diagnosis instead requiring a different team / professional to undertake further comprehensive assessments for other conditions. • Many people including some diagnosticians get confused by the strength of symptoms and assume that a person with an

	<p>extreme sensitivity to sound and who is preoccupied with their interests is ASD because of the strength of these.</p> <ul style="list-style-type: none"> • Different diagnosis conditions across ages and sex are important and knowledge should be possessed by any one conducting ASD diagnoses.
Viewpoint Surveys	<p>All viewpoints rated having diagnosticians with both experience in diagnosing autism and the right training highly. Comments advocated for an awareness of conditions commonly presented with ASD, particularly Pathological Demand Avoidance.</p>
Interviews	<ul style="list-style-type: none"> • “And I was glad to hear from the psychiatrist I had no comorbid psychiatric conditions.” • “The psychologist also suggested I had co-morbid ADHD and this has since been diagnosed along with Bipolar II, so I now have (hopefully) all the information that I need to understand myself and my challenges more.” • “After a particularly bad period of my life where things went horribly wrong ... I fell into depression to a far greater extent than I had been for many, many years.... I was picked up with an autoimmune illness prior to diagnosis ... ten years later I'm actually in the process of coming off the medication.... Because of all the other health issues I've got, he now regularly wants to see me at least every three months under the critical care plan because there's a number of birth defects inside me ... and I'm wondering if [the environmental factors I've faced] has exacerbated the problem.” • “I have very severe anxiety issues including agoraphobia and I am unable to take part in most ordinary parts of life. I avoid most social contact as it's too overwhelming.”
Feedback	Not applicable

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