Tier 2 Diagnostic Evaluation (ASD Not Diagnosed)

REFERRAL INFORMATION

Ryan is a 10-year-old boy who is struggling with his school work and having difficulties in maintaining friendships. He has told his parents that he hates school. Ryan lives with his parents in a remote Aboriginal community. His parents mention Ryan's difficulties to the Community Nurse (**Referrer**). The Community Nurse obtains consent to discuss the issue with his school teacher who agrees in a phone call that further investigation is warranted. His teacher has noticed that Ryan's level of enthusiasm for school work has been decreasing and that Ryan has been isolating himself during group class activities. His school attendance has also decreased over the past three months.

The Community Nurse schedules a meeting with Ryan's parents to discuss these recent concerns, as well as what may be involved in further assessment. The Community Nurse ensures an Aboriginal Health Worker is present to help support the needs of the family. During the meeting, Ryan's parents express their own concerns about Ryan, reporting that he often has tantrums prior to going to school in the morning, and this provides them with significant difficulty in getting Ryan to school. Ryan's parents report that he has never excelled at school work, but his difficulty in completing some tasks has only started to bother him recently. They are also worried that he doesn't seem to be seeking out his friends as much as he once did, reporting that he is increasingly seen to be by himself and particularly avoidant of larger groups of peers.

The Child Nurse knows that social difficulties are a key feature of ASD, but isn't sure if Ryan would meet criteria for an ASD diagnosis. The parents and professionals decide together to seek an ASD assessment from the visiting registered psychologist. The Community Nurse (**Referrer**) completes and emails the referral form to the visiting registered psychologist, who has the skills and experience required of a **Diagnostician**. In this instance, the registered psychologist will also serve as the **Coordinator**.

RECEIPT OF REFERRAL

The registered psychologist liaises with the Aboriginal Health Worker to organise suitable appointment times for the family and an appointment setting(s) that is comfortable and appropriate for the family. A key consideration for Ryan's parents is for Ryan's maternal grandmother to also attend appointments. Ryan's maternal grandmother lives with the family and has had a significant role in raising Ryan, and is an important source of support for the family. Ryan's family speak their local language, and it is critical to have translation services available at all meetings.

TIER ONE - FILE REVIEW

With informed consent from Ryan's parents, the registered psychologist review Ryan's medical records through the Community Nurse. Ryan was born preterm at 30 weeks, and needed resuscitation in the regional hospital before being transferred to the capital city. After a 5-week period in hospital, Ryan and his mother were discharged to return to their remote community. Ryan had been reviewed approximately every 12-18 months by the visiting paediatrician until around 3-years of age. Ryan met the majority of his speech/language and fine/gross motor developmental milestones within the expected timeframe, with the exception of a delay in walking independently (approximately 18 months of age). Ryan had recurrent periods of otitis media between 3- and 4-years of age, and received grommets. A later hearing and vision screen prior to entry into kindergarten showed no hearing or vision concerns. Records from Ryan's school were relatively unremarkable, with low-average academic performance and generally positive comments on Ryan's behaviour and socialisation up until this year.

TIER ONE – PARENT INTERVIEW

The registered psychologist met with Ryan's parents, maternal grandmother and the Aboriginal Health Worker in the local community resource centre. The registered psychologist interviewed Ryan's parents and grandmother about his development, family history and any other concerns they had about Ryan.

The family reported that Ryan had been delayed in his walking and that, even now, he had some difficulties keeping up with his peers when running and had an awkward running style. Ryan's family reported no previous or current concerns regarding his language, fine motor development or non-verbal communication, though they couldn't recall him pointing or imitating actions in his early development.

When asked about Ryan's behaviour at home (**Community Setting 1**), the family reported that Ryan can be shy and sometimes prefers his own company but was no less sociable than other children. However, they reported that Ryan's behaviour has deteriorated recently, particularly around the routine of going to school. For example, Ryan would sometimes refuse to get out of bed, get dressed and eat breakfast before school. Ryan's parents reported that when they insist he go to school, the result is often an escalated argument with screaming and crying. When Ryan's parents try to talk to him about what about school is making him not want to attend, he seems to find it hard to talk about, although they report that he's never been one to openly express his thoughts and feelings. At home, Ryan is reported to enjoy playing 'Minecraft' and can sometimes get a bit stuck on playing and talking about it even when it is clear that others aren't as interested in talking about it as he is.

The family are unsure what is triggering Ryan's recent withdrawal from school activities and socialisation. They thought that Ryan wanted to socialise, but seemed to have difficulty in sustaining relationships as he was getting older. There was no history of major routines or repetitive behaviours. Ryan was reported to be somewhat over-

responsive to smells, noticing if the brand or scent of soap changed when others didn't, and sometimes seeming to have exaggerated reactions to strong smells.

Ryan's family reported a cousin was diagnosed with GDD (Global Developmental Delay) but no other family history of Autism or other developmental or mental health condition. Ryan has two older brothers, who have no reported health or developmental problems.

TIER ONE – INDIVIDUAL OBSERVATION

The registered psychologist **directly observed** Ryan in the classroom and in the school yard (**Community Setting 2**). During the time of observation, the registered psychologist did note that Ryan seemed somewhat socially isolated from his peers. Ryan appeared to show some mild difficulties 'keeping up' with his peers both physically (e.g., running around in the playground) and socially (e.g., managing quick topic changes and understanding more elaborate stories and discussion). During a small group activity, Ryan was observed to be sitting beside but not really joining in with the group discussion, showing disinterest in the task and with interacting with his classmates. The registered psychologist noted that Ryan appeared to have quite a flat affect during class activities but showed somewhat more expression at recess in the playground, particularly when interacting one-on-one with his peers (as compared to within larger peer groups).

Ryan was not noted to show any sensory hyper- or hypo-reactivity but did seem at times a bit 'stuck' on a particular topics of interest, namely, 'Minecraft'. During class Ryan would sometimes avoid work, and instead, draw 'Minecraft' characters instead in his notebook. A number of his notebook pages filled with similar drawings rather than classwork.

TIER ONE – MEDICAL EVALUATION

A **medical evaluation** of Ryan is required by the guideline and a review by a visiting paediatrician was arranged. The visiting paediatrician has the skills and experience to be a **Diagnostician** and **Professional Informant**, though it is noted that only one diagnostician is required at Tier 1 level. The visiting paediatrician noted the information obtained so far, and completed a neurological examination as part of her assessment. On neurological examination, the paediatrician noted brisk ankle reflexes that had not been previously observed. Integrating this observation with what the paediatrician knew of Ryan's birth history, she made the clinical decision that there was sufficient evidence to refer Ryan for a MRI scan at the closest hospital with an MRI machine.

Ryan's medical evaluation was otherwise unremarkable with height and weight within normal limits. The paediatrician reported her findings to the registered psychologist in a letter as well as through a telephone conversation. As the assessment Coordinator, the registered psychologist works with the local Aboriginal Health Worker to make arrangements for Ryan to receive the MRI scan at the closest hospital.

TIER ONE – DIAGNOSTIC DECISION

In the telephone call between the registered psychologist and paediatrician, the two professionals discuss that Ryan is showing some difficulties at home and at school, but agree that there could be multiple explanations for these difficulties, including, but not limited to, possible ASD. Because a diagnostic decision cannot be made with certainty after the **Tier 1**, the registered psychologist commences arrangement for a **Tier 2** evaluation, which will involve further assessment of Ryan. The registered psychologist discusses this outcome with Ryan's family and they have the opportunity to ask further questions before agreeing to further assessment.

TIER TWO – STRUCTURED ASD DIAGNOSTIC INSTRUMENT

The registered psychologist visits the remote community again to conduct further assessment with Ryan. He is mindful of language and cultural factors that might influence Ryan's presentation. For example, observations around eye contact, apparent shyness and some non-verbal communicative behaviours might vary in Ryan's assessment due to cultural reasons rather than clinical ones. He is also aware that standardized ASD assessment tools have been developed primarily for an English speaking population of European heritage, and that use of these tools for different population groups must be undertaken with caution. The registered psychologist selects the Autism Mental Status Exam as his **standardised ASD diagnostic tool** but consults with the Aboriginal Health Worker prior to administration, and together they discuss possible adaptations to ensure that the assessment is culturally and linguistically appropriate for Ryan.

The Aboriginal Health Worker assists in arranging with Ryan's school a quiet room in which Ryan can be assessed by the registered psychologist. The registered psychologist conducts his first assessment with Ryan, an interview, during a morning class. The registered psychologist notes that, initially, Ryan has reduced eye-contact, mumbles and does not appear very animated. The school psychologist gives Ryan time to talk about his interests. Ryan appears more expressive and animated after he has been given time to 'warm-up' to the interaction, especially when they talk about the activities that Ryan likes to undertake. Ryan likes to look after and train his dogs, listen to music, draw, and play computer games. The registered psychologist notes that he doesn't appear to have an excessive preoccupation with any of these activities, nor does he display atypical fixation on these topics during the interview.

Ryan spontaneously asks the registered psychologist if he has a dog, and appears to show interest in the answer and engage in back-and-forth conversation. Ryan uses language and gesture appropriately when sharing a new trick he has been trying to teach one of the family dogs. When asking about school and classwork he notes that Ryan is aware that he is falling behind and reports disliking most subjects except music and art. The registered psychologist considered that Ryan had some signs of poor self-esteem that largely seem related to his difficulties with school schoolwork, which has increased over the past six months.

After the interview, the registered psychologist scores Ryan on the Autism Mental Status Exam (AMSE) and notes that his score falls below the clinical cut-off score, indicating that Ryan's difficulties may likely be attributed to a condition other than ASD.

TIER TWO – FURTHER SPECIALIST ASSESSMENT

The registered psychologist meets with Ryan for a second appointment during an afternoon class to conduct IQ testing using the Wechsler Intelligence Scale for Children – 4th edition. It is difficult for the registered psychologist to do comprehensive IQ testing as Ryan shows marked reluctance to complete some of the subtest, stating that he doesn't think he will be good at it and sometimes does not respond to some of the test items. Some subtests are completed, which enable a partial picture of Ryan's intellectual capacity, and he scores lower than the normal range on Perceptual Reasoning and Processing Speed indices.

Ryan receives his MRI scan and the results are interpreted by the Radiologist (**Professional Informant 2)**. The MRI scan showed mild periventricular leukomalacia (coagulation in the white matter near the lateral ventricles in the brain), which is compatible with brain injury in the early developmental period. The radiologist shares these results with the registered psychologist, paediatrician and family in a report.

TIER TWO – DIAGNOSTIC DECISION

The registered psychologist and the paediatrician (**Diagnostician 2**) discuss the results from the Autism Mental Stats Exam, the IQ assessment and the MRI. They agree that the evidence indicates that Ryan does not meet the diagnostic criteria for ASD. Rather, they attribute Ryan's recent school avoidance and social withdrawal to increased awareness of his academic and physical challenges and subsequent low self-esteem. Ryan's learning and physical difficulties are most likely explained by brain injury during the early developmental period and a diagnosis of mild cerebral palsy with spastic diplegia.

FUNCTIONAL ASSESSMENT

The registered psychologist completed a Functional Assessment with Ryan and his family through a semi-structured interview based on the ICF Core-sets for Cerebral Palsy. To ensure that this assessment took place as soon after the diagnostic decisions possible, the interview was conducted via telehealth, with the registered psychologist in the capital city, and the family in the local community. The local Aboriginal Health Worker was present with Ryan's family in the local community

Ryan's strengths were identified as attention to detail, particularly within his areas of interest such as music and art, age appropriate language skills and maintaining and building strong relationships within his nuclear and extended family. Ryan was reported to be a generally an independent boy, who enjoyed exploring the local town

with his dogs. Ryan was identified as having strong family support in his home environment.

SUPPORT NEEDS ASSESSMENT

The Support Needs Assessment was completed by the registered psychologist at the same time as the Functional Needs Assessment via telehealth. Ryan's family expressed strong concern that he didn't have adequate support for his learning difficulties in the classroom, and that without this, he will fall further behind his classmates. They also expressed a desire to assist with Ryan's physical difficulties, because this has become a source of anxiety for Ryan when interacting with his school peers.

COMMUNICATION OF ASSESSMENT FINDINGS

As the Coordinator, the registered psychologist collates all of the information collected during the assessment. A written report was collated in consultation with the paediatrician, and the information was shared with the family during a telehealth meeting. An Aboriginal Health Worker was present with the family in the local community, which was valuable in terms of explaining the assessment findings to the family in their local language. Several priority support needs were identified, and were included in the written report, along with associated recommendations:

1. Assistance to support Ryan's learning difficulties in the classroom. It was recommended that an application for educational assistance was lodged with the local school.
2. Strategies to support Ryan's learning difficulties and school avoidance at home. It was recommended that Ryan and his family engage a registered psychologist (either via telehealth or visiting services) to assist with these strategies.
3. Improve Ryan's mobility, particularly within the school setting. It was recommended that a referral is made to a physiotherapist with expertise in this area.

The family had the opportunity to ask any questions they may have, and received appropriate verbal and written information to support them. The Aboriginal Health Worker made an appointment for the family to see the paediatrician at her next visit to the community in 6- months' time, during which Ryan's clinical symptoms and support needs will be reviewed.