

## Tier 1 Diagnostic Evaluation (ASD Diagnosed)

### REFERRAL INFORMATION

Cody is a young boy, aged 3 years and 7 months. He was referred to a speech pathologist by his child health nurse for assessment and evaluation following parental concerns about his lack of expressive language and apparent delays in social development. Cody did not say any recognisable words until he was 2 years and 6 months old, and his language is currently limited to single-word utterances. Cody's mother reports that he often appears calm and happy, but recently there has been an increase in screaming and crying behaviours. When given the opportunity to play with other children or adults, Cody will be in the general proximity of these people, but play 'in his own world' rather than interactively. He rarely makes eye contact, rarely volunteers speech, and often fails to respond when his name is called.

After working with Cody on a fortnightly basis for two months, the speech pathologist believed that Cody required assessment for possible ASD, but she does not currently have the skills and experience required for an ASD Diagnostician. The speech pathologist advised Cody's mother to seek a referral from their family general practitioner (**Referrer**) to a paediatrician who does have these expertise (**Diagnostician**).

### RECEIPT OF THE REFERRAL

Cody's mother telephones the paediatrician's office and makes contact with the administrative assistant, who acts as the assessment **Coordinator**. A suitable date is found for an appointment with the paediatrician, and the administrative assistant then provides further information about what to expect during an ASD assessment, and that she will be the primary contact throughout the process. In the lead up to the appointment (and with parental informed consent) the coordinator organises the collection of relevant information from Cody's parents for a file review by the Diagnostician, including a previous report on Cody provided by the speech pathologist.

### TIER ONE - FILE REVIEW

The paediatrician first reviews information that has already been collected, including the referral from the speech pathologist (**Professional Informant 1**) and medical records supplied by Cody's mother. Cody's hearing and vision have been assessed previously in the community and found to be within normal limits, and his developmental milestones for motor skills have so far occurred according to typical timeframes. Cody was born at full term after an uneventful pregnancy with no complications surrounding his birth.

## TIER ONE – PARENT INTERVIEW

In the first session with Cody's parents, the paediatrician conducts a parent interview that focuses on Cody's developmental and medical history and current parent concerns. Cody was present during this session but the focus was on the parent interview.

Cody has no significant medical history, including no major illnesses or injuries or experiences of trauma or abuse. He is not taking any regular prescription medication. When Cody was an infant, his parents were aware that he was not speaking or interacting as early as other children his age, but assumed he was a 'late bloomer' and were reassured by his frequent smiles and ability to play happily by himself. They were concerned again after he turned 2 years of age when he still wasn't speaking, but were again reassured when he started saying words at around 2 years 6 months. They are now concerned that this hasn't progressed to more complete communication, and are worried about the recent increase in screaming/crying behaviours, which they believe is more common than in other children his age.

When asked about Cody's preferences in things he likes to play with, his parents reported that at home he especially gravitates towards wheels, or objects that have wheels as components of them, which he likes to spin with his finger (**Community Setting 1**). They also reported that Cody can communicate when he wants something by pulling a parent by the hand towards that thing (e.g., towards a door or towards the fridge). Socially, Cody's parents described him as being happy when other people were around. However, when they were asked about any particular games he might play with others or activities he might enjoy with friends of the same age, it was reported he did not play interactively, but rather appear to prefer playing independently while staying near other people. His parents reported that he does have opportunities to interact with other children – with his sister and cousins, and at daycare – but did not seek out any particular children as friends. While taking Cody's medical and developmental history, the paediatrician also identified that Cody had a very selective diet mainly consisting of oven chips, and if foods were not of this or a similar consistency, he would start screaming or crying and would generally refuse to eat.

Cody's parents reported that one paternal uncle was diagnosed with Asperger Syndrome as a teenager. Neither parent reported any personal history of diagnosis or treatment for any mental health condition. Cody has one younger sister, currently 10 months old, who has so far reached all of her developmental milestones within expected timeframes.

Cody did not initially make eye contact or respond to his name being spoken by the paediatrician. Early in the parent interview, Cody began to be agitated. He stood up and bounced on the balls of his feet, and appeared to be soothed into sitting down again when his mother presented him with a favourite toy car she had brought with them. His mother explained that she had brought the car along because she was worried he would 'make a fuss' at the interview given that this was the time of day when they usually had morning tea. When asked to elaborate, Cody's mother confirmed that he got upset if his usual daily routine was disrupted, and that this routine

included a regularity of timing for particular activities as well as what was involved in the activity. For example, Cody's mother often took him for a walk in the pram after breakfast. On days when she wouldn't do this, Cody would get very upset and spend up to an hour screaming and crying. Cody's mother now takes him for a walk every day to avoid these challenges.

Cody attends daycare two days per week, and his mother explained that the behaviours she has observed at home have also been reported in this setting (**Community Setting 2**). The daycare staff reported to Cody's mother that Cody rarely plays with other children, and will only rarely participate in the activities the class, such as story time and painting. He has a favourite toy car at the daycare, and he also spins the wheels of this car, rarely putting it down. After several weeks, Cody adapted to the different meal times of the daycare, but would often refuse to eat.

Towards the end of the parent interview, Cody noticed a handle for the adjustment of height on the desk in the consultation room, which he approached and began to spin. When attempts were made to interactively play with the handle or offer words about the activity (e.g., "wheel" and "round"), Cody was able to repeat the words but without eye contact, and then to continue repeating the words as he continued spinning the handle by himself.

## TIER ONE – INDIVIDUAL OBSERVATION

A second appointment was made for Cody and his parents to see the paediatrician (**Clinic Setting**), during which the focus was on the **direct observation** of Cody's behaviour. The paediatrician first completed a standardised developmental assessment (Mullens Scale of Early Learning), which indicated that Cody was meeting age-expectations for gross and fine motor development, but significantly below age-expectations for receptive and expressive language.

The paediatrician then conducted a play assessment, where Cody was provided with age-appropriate toys and given opportunities to interact with the paediatrician. Cody initially showed interest in a cause-and-effect pop up toy, but his attention became focused on a toy wand that had glitter floating in it. Cody shook and stared the wand for approximately 2 minutes, and it was difficult to redirect his attention to something else. When his mother interjected to redirect his attention back to the cause-and-effect toy, Cody started crying and screaming.

Cody's mother suggested introducing a toy car to the play setting, and this was successful in redirecting his attention. The paediatrician played with a second car alongside Cody, making noises as if the car was driving along the carpet. Cody did not acknowledge the paediatrician, and instead started spinning the wheels with his finger, similar to the behaviour his parents reported in the previous assessment session.

Cody's eye-contact with the paediatrician was fleeting, and the several overtures made by the paediatrician to interact with him were not reciprocated (either through verbal or nonverbal communication). No complex hand mannerisms were observed.

## TIER ONE – MEDICAL EVALUATION

The paediatrician also conducted a physical examination and confirmed that Cody's height and weight were within normal limits, and that he had no congenital abnormalities. The paediatrician requested Cody to be tested for Fragile X mutation, and this test came back negative, indicating no Fragile X mutation.

## TIER ONE – DIAGNOSTIC DECISION

Cody's inability to engage in reciprocal or shared play, both in the observed setting or by parent report in other settings, together with his restricted expressive and receptive language, his paucity of eye contact, and lack of back-and-forth communication were striking. These characteristics present in combination with observations of his repetition of recently heard words, his intense preoccupation with spinning objects, and his reportedly rigid routine and intolerance of changes. Cody's clinical features are strongly indicative of ASD, and there is no alternative diagnosis that would better suit Cody's overall clinical picture.

Based on evidence from the file review, parent interview, and direct observation, the paediatrician confirmed that there was sufficient evidence to make a diagnosis of ASD without consulting with a further professional.

## FUNCTIONAL ASSESSMENT

In a third appointment, the paediatrician conducted a Functional Assessment with Cody using the PEDI-CAT (**Functional and Support Needs Assessor**). Cody's parents indicated that they felt comfortable in the clinical rooms of the paediatrician, so the Functional Assessment was conducted in this setting.

The findings of the PEDI-CAT indicated that Cody had particular functional challenges in the communication and interaction items of the Social/Cognition domain, and the eating / mealtimes of the Daily Living domain. The paediatrician also telephoned the referring speech pathologist (**Professional Informant 1**) to ascertain further information about Cody's functional communication abilities. Relative strengths were identified in the Mobility domain and the getting dressed and keeping clean items of the Responsibility domain. Cody's parents also indicated that Cody has a cheeky sense of humour and is often very affectionate towards them. Further strengths identified by the paediatrician included a supportive and financially-secure family unit (including highly involved grandparents), a safe home environment, and parents who are engaged in his clinical management.

## SUPPORT NEEDS ASSESSMENT

The Support Needs Assessment was conducted by the paediatrician at the same time as the Functional Assessment. Information was collected through a semi-structured interview with Cody's parents, during which they expressed a desire to focus on

developing Cody's language and communication. The believed that the increase in the frequency and severity of Cody's tantrums is related to his frustration at not being able to communicate his needs adequately. In conversations the paediatrician had with the speech pathologist, she agreed with this view, and recommended an initial focus on Cody developing simple requests that would help him better function his daily life.

Cody's parents also conveyed a strong desire for help in increasing the range of food that Cody eats at mealtimes. They are concerned that he may not be receiving the adequate nutritional intake, and also believe that his behaviour may improve if he had a broader diet.

## COMMUNICATION OF ASSESSMENT FINDINGS

The findings from the assessment was communicated to Cody's parents through both a face-to-face appointment and a comprehensive written report, with a focus on providing detailed, lay information about the Diagnostic Evaluation and the Functional and Support Needs Assessment. Several priority support needs were identified, along with associated recommendations:

1. Improving Cody's verbal communication function. It was recommended that Cody continue speech pathology;
2. Increase the range of foods Cody will eat. It was recommended that Cody receives a referral to a dietician with expertise in this area; and
3. Enhancing Cody's parents' understanding of ASD. It was recommended that Cody's parents attend parent information workshops run by local services.

During the meeting, Cody's parents were provided with an opportunity to ask any further questions about the ASD assessment and the diagnostic outcome. They were then provided with the written report, the appropriate referrals, and information about resources that may help further support the family (the Autism Advisor program, National Disability Insurance Scheme, Raising Children's Network website).

A further appointment was made with the paediatrician for 3 months' time for ongoing review of clinical symptoms and support needs.