York ASD Partnership
Evidence Based Practice Guide
to Screening and Assessment

June 2015

Assessment is a multi-domain process beginning with early screening. Assessment should serve multiple purposes including diagnosis, treatment planning/programming and program/service eligibility.

The diagnosis of Autism Spectrum Disorder (ASD) cannot be made by medical tests or procedures. Therefore, diagnosis is made on the basis of a comprehensive understanding of the child, from various perspectives and environments. The diagnosis of ASD must be made by a physician/ pediatrician or psychologist/ psychological associate with training and expertise in diagnosis and assessment of ASD, using current recognized criteria.

- Assessments should build on all sources of available information to ensure that it is comprehensive. This will increase the quality of the assessment and help to avoid unnecessary duplication of assessments.

- The assessment process is appropriate to the age and cultural background of the person. The complexity of the person's needs (e.g. mental health, medical) and presentation (behaviour) determine the type of assessment process needed.

- An inter-disciplinary team is ideal for the diagnosis of ASD, particularly for the process of differential diagnosis. Complex assessments benefit from the collaborative approach of a multi-disciplinary team and should include:
    - Developmental history
    - Strengths and needs, associated conditions and concerns
    - School /Child Care program information / observations
    - Speech & Language assessment
    - Occupational Therapy assessment where indicated for concerns related to:
        - Motor function
        - Sensory function
        - Adaptive functioning
    - Medical exam / history / investigations – scans, blood work
    - Standardized, norm-referenced assessment instruments (such as ADOS-2 and/or CARS-2)

- As a general rule, cognitive testing is not needed for the diagnosis of ASD. However, indicators of cognitive ability may be needed for programming or access to services.

Cognitive testing may not be practical or reliable for all assessments, and should be repeated for young children.

- Neurological or neuropsychological testing may be indicated if there are concerns such as regression or seizures.

- Assessment reports should be as clear and comprehensive as possible to set the stage for future intervention and assessment.

- Re-assessment may or may not be indicated, depending on the child/youth/person. Key indicators for re-assessment may include a provisional or inconclusive finding at a previous assessment, substantive change in the child/youth/person's presentation or new program eligibility requirements.

In conclusion, a systemic community approach to assessment

- Builds onto existing screening, observation and assessment processes to identify assessment and treatment needs as soon as possible
- Focuses on the purpose and guidelines for the assessment rather than specific tools
- Has a long term vision including transition to adulthood
- Meets all anticipated assessment needs to avoid duplication or fragmented experience for families, but adheres to the principle of least sufficiency
- Uses a common tool or framework such as the CANS as a framework for a comprehensive approach to assessment – identifying needs in all relevant domains*, whether the assessment is simple or complex
- Guides the assessor(s) to report the assessment in a format that provides the family with the appropriate next steps for service planning and delivery

SCREENING AND ASSESSMENT PROCESS

NOTE: This chart reflects publically funded services. Families may wish to access private services in addition to or instead of the following. These private services can be integrated into the process at any point.

	PRESCHOOL	SCHOOL AGED	ADULT
SURVEILLANCE 	• Parent/ Caregiver observations • Childcare staff observations • Primary care physician 18 month well baby check up	• Parent/ Caregiver observations • Teacher observations • Primary care physician • Youth Justice System	• Self (including web based resources) • Family members • Justice system • EAP providers
SCREENING 	• Physician use of M-CHAT or ERIK • EIS observations and use of M-CHAT and ERIK • YRPSLP observations and formal language assessment tools	• Physician informal interview with parent, review of information from school • Use of Red Flags for School-Aged children • School Board psychology/ SLP	• Self (including web based resources) • Primary care physician discussion of concerns • Psychiatrist • Community Service providers (if there is another primary diagnosis) • Post-secondary education student services • Hospitals
ASSESSMENT FOR DIAGNOSIS /ACCESS TO SERVICES 	• CTN DACS interdisciplinary team assessment • 0-6 Children's Mental Health Services Psychiatric Consultation	• School board psychologist • CTN DACS interdisciplinary assessment • Mental Health providers psychiatrist • Pediatrician • Psychiatrist	• Mental Health providers Psychiatrist • Private practice psychiatrist
ASSESSMENT FOR INTERVENTION, PROGRAM PLANNING AND TRANSISTIONS	• EIS • YRPSLP	• School board staff including Psychology staff, SLP, OT/PT, teachers and other support staff as necessary	• ASD Service Providers • Mental Health Adult Service Providers

Conclusions and Recommendations

Summarized below are the goals, ongoing gaps, and the steps taken by the Assessment and Screening Workgroup. The screening, assessment and diagnosis of ASD continues to be a complex and challenging process. The work achieved to date is summarized below.

Goals	Ongoing Gaps	Steps Taken
1. **All children have access to universal screening** with consistently used, age-appropriate screening tools	• Consistent implementation of Enhanced 18-month Well Baby Visit • No formal, universal, and systematic screening opportunities after the Well Baby Visit exist for ASD • Continued gap in identifying appropriate, reliable tools that can be used to screen children for ASD and varied clinical capacity of screeners • Inconsistent follow-up on screening results	• Create Evidence Based Practice Guide • Create Red Flags for School Age
2. **All children have access to a coordinated assessment process and strategy.** **All assessors use a range of standard assessment tools and practices** (*see below) **that meet the eligibility**	• Limited availability and access to multi-disciplinary assessments when needed • Difficulties coordinating among multiple agencies and environments for information/observations • Lack of universal electronic record for children • Approaches to assessment and tools may not be culturally sensitive	• Create Evidence Based Practice Guide • Continue to develop culturally sensitive processes and practices

Goals	Ongoing Gaps	Steps Taken
determination for various program mandates. * transdisciplinary; multi-dimensional; comprehensive information-gathering; use of shared electronic record (portable); no duplication	• Missed diagnoses for kids whose presentation is complex and/or difficult to identify (higher functioning, dual diagnosis)	
3. Screening and assessment lead to the appropriate next steps, such as an individualized plan, pathway, access to services	• Lack of coordinated and collaborative follow up between organizations • Insufficient resources that cause long waitlist for services	• Recommend that York ASD Partnership continue the efforts at collaborative and coordinated service planning and delivery for people with ASD throughout their lifespan.

APPENDIX B

Red Flags for School Age Children

Screening for

Autism Spectrum Disorder

in

School-Aged Children and Youth

(June 2012)

Introduction

Autism Spectrum Disorder is characterized by a wide range of features. Some school-aged children and youth with characteristics of Autism Spectrum Disorder are not identified earlier because their features have not been recognized as being related to this disorder due to the subtle and wide-ranging nature of the features.

This document is **NOT** a diagnostic tool but may be used by parents or professionals to help them to explore if a child should be referred for follow-up. This document can be used to provide a focus for discussion by highlighting specific behaviours of concern. Follow-up may include assessment and/or intervention which may be obtained through Community Service Providers and/or In-School Teams.

The following list of characteristics and/or behaviours should be considered as Red Flags for a possible Autism Spectrum Disorder. Every child with ASD is unique and may show some or many of these features. Some of these characteristics are not unique to ASD and may be exhibited by children who do not have the disorder.

The features associated with ASD are typically grouped into the areas of Social, Communication and Behaviour.

Check the applicable features.

Social

May display

- limited ability to develop and maintain friendships with peers over time despite a desire for friendship e.g. engages in solitary activities, seldom joins groups successfully
- easier interactions with adults than with peers
- limited ability to initiate, maintain and end a conversation appropriately e.g. often sustains a conversation on topic of his/her own interest, talks off-topic frequently, difficulty with conversational turn–taking, greetings
- rigid adherence to rules and routines; becomes very upset if rules are not followed e.g. supply teacher, change in schedules/timetables, peer games
- limited ability using and understanding non-verbal skills e.g. appears rude, displays flat affect, difficulty with unspoken social rules, interpreting facial expressions and gestures, may show emotions that are not appropriate to the situation, may violate rules of personal space/stand too close to others
- difficulty understanding that other people have different thoughts and feelings than student (perspective taking) or assumes that others understand their thoughts and feelings
- social naivety; e.g. bullied or bully, rejected, taken advantage of by others

Communication

May display

- use of complex words and phrases (good grammar skills/ strong vocabulary skills) however may not fully understand what they are expressing
- highly verbal skills e.g. may spend more time talking than listening
- peculiarities in speech e.g. jargon, unusual noises, atypical rhythm in speech, odd inflections, monotone pitch, speaking in an overly formal manner, lack the ability to modulate the volume of voice,
- echolalic speech (repeats phrases over and over again) e.g. repeats back words or phrases he/she has heard previously or in other contexts, mimics television, movie, and/or computer phrases,
- excessive or repetitive questioning
- difficulties answering questions, especially open-ended questions or why questions unless related to student's area of special interest
- difficulty understanding jokes, metaphors and sarcasm e.g. interprets speech literally and has difficulty understanding idioms and/or sarcasm
- difficulty expressing complex, feelings, emotions and/or thoughts

Behaviour

May display

- self injurious behaviour or aggression to others e.g. skin picking, nail biting, pinching
- stereotypical and repetitive motor mannerisms e.g. hand or finger movements, posturing, grimacing
- awkward and uncoordinated movements e.g. may overshoot when reaching for materials and drop things on floor; may "touch" others with enough force to hurt; may hold pencil with light grip so that pencil marks are too vague to read or with too much force so that paper tears, poor ball skills
- unusual sensitivities to noise, light, touch, smell, taste, and/or movement
- unusual or limited coping skills e.g. may be quick to run away, and/or hide
- significant or unusual anxieties e.g. greater than expected distress/concern over other people touching their possessions, strong need to arrange, organize, or line up objects,
- unusual and often socially inappropriate personal habits such as picking at body parts, smelling inedible objects, and/or unusual personal hygiene
- poor self-regulation e.g. becomes very angry or frustrated quickly (student goes from calm to meltdown in seconds), difficulty calming him or herself
- highly developed memory e.g. bus routes, sports statistics
- uneven profile of skills e.g. highly advanced in one area and very weak in other areas
- unusual interests relative to peers
- intense interest in a few prescribed topics/activities, often at the exclusion of other topics/activities or more than would be expected in peers

Next Steps

- For parents, take this completed document to your family doctor or paediatrician and request further assessment.
- For professionals and/or community members, review this completed document with parents and suggest consultation with family doctor or pediatrician
- For educators, refer to your In-school Team and consult with Area/Regional Support Staff.

APPENDIX B

APPENDIX 1

A. York ASD Partnership Strategic Directions

The York ASD Partnership's Strategic plan identified 4 main goals to be addressed:

- Create a no wrong door approach to accessing services
- Develop a continuum of services coordinated using a single plan of care
- Increase knowledge and awareness of ASD across the community
- Develop an infrastructure to support ongoing partnership for a system of care

B. Vision: Screening and Assessment Working Group

Every child, youth and adult in York Region has access to timely and effective screening for Autism Spectrum Disorders and assessments as needed.

C. Mission: Screening and Assessment Working Group

The York Region Screening and Assessment working group will create a protocol that will guide professionals and organizations in the consistent and comprehensive process of screening and assessment for Autism Spectrum Disorders. Assessment should promote access to appropriate services for individuals with ASDs and may be conducted for a variety of reasons including to increase understanding of the individual, to clarify initial or subsequent diagnoses, to plan for treatment or placement or to obtain information for the purposes of program evaluation.

D. Mandate: Screening and Assessment Working Group

Short Term Goals:

1) Develop vision, principles for a systematic approach to ASD screening and assessment for children, youth and adults with ASDs
2) Develop consensus on definitions
3) Develop consensus on best practice for screening and assessment principles
4) Develop consensus on a range of screening and assessment tools
5) Map current screening and assessment processes (using preschool and school age and adult scenarios)
6) Draft and seek consensus on a common screening protocol
7) Draft and seek consensus on a common assessment protocol
8) Ensure screening and assessment protocols provide information and documentation necessary to facilitate a single plan of care
9) Develop School Age Red Flags for Autism screening tool

Long Term Goals :

1) Develop an Implementation Plan, including the communication and dissemination of the Screening & Assessment Protocol and Tools and an Evaluation Plan

Deliverables:

1) York Region Protocol on ASD Screening
2) York Region Protocol on ASD Assessment
3) School Age Red Flags screening document
4) Summarize and report on the proposed implementation plan including challenges and possible solutions.

E. Guiding Principles for the Evidence Based Practice Guide for Screening and Assessment

- ASD Screenings and/or Assessments are accessible, inclusive, and culturally appropriate/sensitive for individuals in York Region. **When standardized tests are used, cultural and/or socioeconomic bias should be acknowledged.**
- When concerns are noted, diagnostic ASD Screenings and/or Assessments should be completed as early as possible. To ensure consistent quality, Screenings and/or Assessments are completed by knowledgeable assessors using evidence-based practices.
- Assessments are holistic in order to provide a comprehensive understanding of the individual, the family, and the environment. The information obtained should be portable and transferable to other settings in order to avoid duplication of effort.
- The goal of Assessment is to provide as much useful information as possible for short term and long term treatment planning. The need for further assessment should be determined through consultation with the family and care team.
- It is the responsibility of the assessing clinician to ensure that eligibility requirements for community programs are considered and addressed within the assessment.

F. Best Practices Guidelines (from Miriam Foundation, 2008)

a) Developmental Surveillance
   - Developmental surveillance should be a continuous process undertaken by physicians and other professionals in contact with young children, with reference to developmental milestones and with knowledge of the symptoms of atypical or delayed development.
   - Parent reports regarding developmental concerns are to be taken into immediate and serious consideration by clinicians. A “wait and see” approach is not supported.

b) Screening
   - Universal (primary) screening for ASDs is not currently recommended.

- Targeted (secondary) screening for ASDs is recommended and requires the use of empirically validated screening tools.
- The determination that a child is at high-risk for ASD, based on physician observation, family history, parent report and/or screening tools, should result in immediate referral to an experienced diagnostician or an interdisciplinary assessment team. Referral to available intervention services to promote optimal development should also occur at this time.

c) Diagnosis
- The diagnosis of ASDs in very young children requires well-trained and experienced professionals
- An interdisciplinary team approach is ideal for the diagnostic assessment of ASDs.
- The clinical diagnosis must be in accordance with the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) and/or the International Classification of Disabilities and Functioning (ICF – ICD-10) diagnostic criteria.
- The diagnosis should be made on the basis of a thorough developmental history and structured behavioural observation, in conjunction with clinical judgment. The use of at least one standardized, norm-referenced parent report measure and at least one standardized, norm-referenced behavioural observation measure is recommended.
- The assessment of cognitive and developmental level is central to the diagnosis of ASDs.
- A process of differential diagnosis must be undertaken to ensure a comprehensive diagnostic formulation and to rule out other possible causes of the symptoms.

d) Corollary Assessment
- A full assessment of areas of strength and weakness, as well as other associated conditions and corollary concerns, is important for intervention purposes and planning.
- Multiple sources of information (parents, teachers, etc) should be consulted in the assessment and the assessment should take place in varied contexts (home, school, etc.) to heighten validity.
- The delay between the emergence of symptoms, screening, diagnosis, and assessment must be as short as possible to prevent delays in treatment.
- The assessment process must be family-centred, focusing on the uniqueness of each child and family, and providing

- all communications – both written and verbal, in a manner that is clear, understandable, useful and respectful

G. Definitions (Adapted from Miriam Foundation's Best Practices for the Early Screening, Assessment and Diagnosis of ASDs in Young Children)

- **Developmental Surveillance**

  A flexible, longitudinal, continuous process in which knowledgeable professionals, working in partnership with parents, perform skilled observations during child encounters, with the goal of detecting developmental problems in young children. Surveillance requires knowledge of typical and atypical development as well as clinical experience and specific training in early childhood development. May include the use of normative development standards such as the Rourke, Insert full title) or Red Flags.

- **Screening**

  Screening utilizes standardized measures on a specific or defined population in order to assess for possible or probable cases by comparing achieved scores to normative standards. Screening tests do not result in diagnoses but suggest the need for further investigation.

  - First Level (Universal) Screening

    Universal screening involves application of a standardized screening tool to a large population by a broad range of knowledgeable professionals, with the goal of identifying individuals with a high likelihood of having a specific disease or disorder, leading to a referral for a more in-depth assessment or treatment. This could occur, for example, during a well-baby check up, regardless of whether parents have raised concerns.

  - Second Level Screening

    Second level screening also employs standardized measures, but is employed with a subgroup of individuals considered to be at an elevated risk for a disease or disorder. Qualified professionals review the score to determine the appropriate referral. A positive score on a screening test should lead to a referral for a more in-depth assessment. Knowledgeable clinicians may notice symptoms without the use of standardized measures. In regard to ASDs, a second level screening would be employed with children who had demonstrated signs of the disorder (such as missed developmental milestones, delays in communication and social development) or who are at elevated genetic risk (children with a sibling or parent with an ASD, or other related disorder)

- **Assessment**

  Assessment typically involves the administration of a combination of standardized tests, behavioural observations, review of past and current functioning and other clinical information from a variety of settings, in order to achieve a specific pre-determined goal

- **Diagnosis**

  Despite evidence suggesting that ASDs have a biological basis and genetic origin, there is currently no known biological marker for ASDs. ASDs cannot be diagnosed using medical procedures such as blood tests or brain scans, although these evaluations may be useful corollary investigations in children with medical or neurological indications. A diagnosis of an ASD is made by an expert diagnostician or inter-professional team, based on the child's developmental history and direct behavioural observation. A process of differential diagnosis must be undertaken to rule out other disorders with overlapping symptoms, and corollary investigations may be needed to determine the presence of commonly co-occurring disorders and/or to identify strengths and weaknesses for intervention purposes. This type of assessment diagnosis of an ASD is typically made by physicians (child psychiatrists and paediatricians) and/or psychologists.

- **Continuum of Team Approaches**
  - Transdisciplinary

    In the transdiciplinary team model, responsibility for the educational process is shared by all team members. Specialists may work directly with the student when assessing, when diagnostic teaching, and when helping direct implementers of instruction learn specific procedures. Teachers, EAs, and parents are the primary direct implementers of instruction (Smith & Levack, 1996).

    Members of the team commit to teach, learn and work across disciplines in planning and proving integrated services. Teams meet regularly for information sharing, learning across disciplines, consultation, and team building. Team members collaborate in assessment practices, observations and recording across disciplines. Team members plan together based on concerns, priorities and resources. Members share responsibility and accountability for how the plan is implemented by the team.

- Inter-disciplinary approach to assessment and diagnosis involves the integration and synthesis of information gathered by professionals of different disciplines, through an interactive group process. In the interdisciplinary team, team members are located in close proximity and communicate frequently to inform each other and ensure that there is no duplication of effort. Findings of one team member are considered in light of findings from other members. This approach is more coordinated and holistically-oriented than the multi-disciplinary team.
- Multi-disciplinary teams involve multiple types of professionals, but lacks the integration and coordination of the interdisciplinary approach. In the MD team, each professionals acts separately from the others and draws conclusions without input from the other team members.