

An Overview of Intervention Programs for Young Autistic Children:

What are they? What do they target? Where can I access these?



AutismONTARIO

Tracie L. Lindblad

M.Sc., Reg. SLP, M.Ed., BCBA

Autism Ontario: Who We Are

OUR MISSION

Creating a supportive and inclusive Ontario for autism

OUR VISION

Best Life, Better World, Making Autism Matter!

OUR CARE VALUES

COLLABORATION

We believe in the power of working side by side with individuals, families, and communities to make informed choices about autism.

ACCOUNTABILITY

We hold ourselves and others responsible for achieving successful outcomes through high standards of integrity and fiscal responsibility.

RESPECT

We value equity, diversity, and inclusion, and we listen to understand.

EVIDENCE-INFORMED

We use and create knowledge to guide our decisions and work.

Introduction



TRACIE LINDBLAD

Speech-Language Pathologist

Masters of Education (Curriculum)

Board Certified Behavior Analyst (BCBA®)

Trained/Certified in:

- Assistive Devices Program (AAC)
- The Picture Exchange Communication System (PECS)
- Paediatric Feeding Disorders



Statements

Conflict of Interest

- Disclosure of financial conflicts
- Disclosure of non-financial conflicts

Language

- Identity-first (e.g., autistic person)
- Person-first (e.g., person with autism)

Disclaimers

General Disclaimer

- Opinions are of the presenters
- Make informed decisions

Professional Disclaimer

- Specific questions
- Additional Resources

Learning Objectives

1. You will be able to recognize several commercially available treatments and programs for young autistic children.
2. You will be able to identify specific skills and goal areas for each treatment or programs.
3. You will learn where you can obtain these types of services in the province and the funding currently available.

Agenda

- Important skills for children at an early developmental stage
- Empirical support and Evidence-Based Practice
- Treatments and Programs by Type
 - Treatment/Program Description
 - Specific Skills Targeted
 - Current Level of Evidence
 - Access to the Treatment/Program
- Making Decisions



Newly Diagnosed Children and Skills for Early Learners

What Skills Are Important?

Early Years / Preschool skills:

| | | | |
|---|---|--------------------------------------|-------------------------------|
| Joint Attention, Attending, & Social Responding | Requesting skills | Labelling skills | Receptive language |
| Visual and cognitive skills | Play skills | Imitation skills | Echoic/speech sound skills |
| Expressive language | Communication and basic conversation | Motor skills | Activities of Daily Living |
| Small group skills | Pre-Academic (reading, writing, math) | Social Skills and self-regulation | Behaviour |



Empirical Support and Evidence-Based Practice

What is Empirical Support?

Empirical Support means:

research studies

of the highest quality

across various places

with many individuals that match your child

Evidence-Based Practice in Clinical Services

ABA, OT, and SLP

Evidence Based Practice
includes the equal integration of:

(a) external scientific evidence
(EST), and

(b) clinical expertise/expert
opinion, and

**(c) *client/patient/caregiver
perspectives/values, and***

(d) Internal evidence (data)

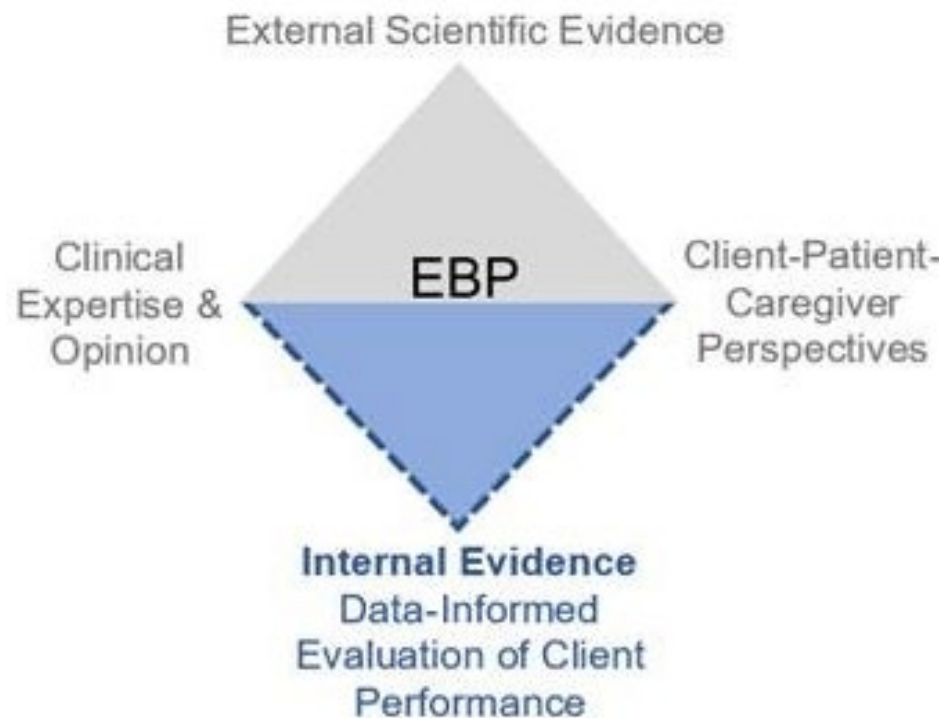


Figure 1: Evidence-Based Practice: Triangle to Diamond



Treatments and Commercially Available Programs for Parent/Caregiver Mediated, Core Services, and Privately-funded

Parent Involvement

- Parent training and parent-mediated models have been shown to significantly increase both the child's and parent's skills and confidence.

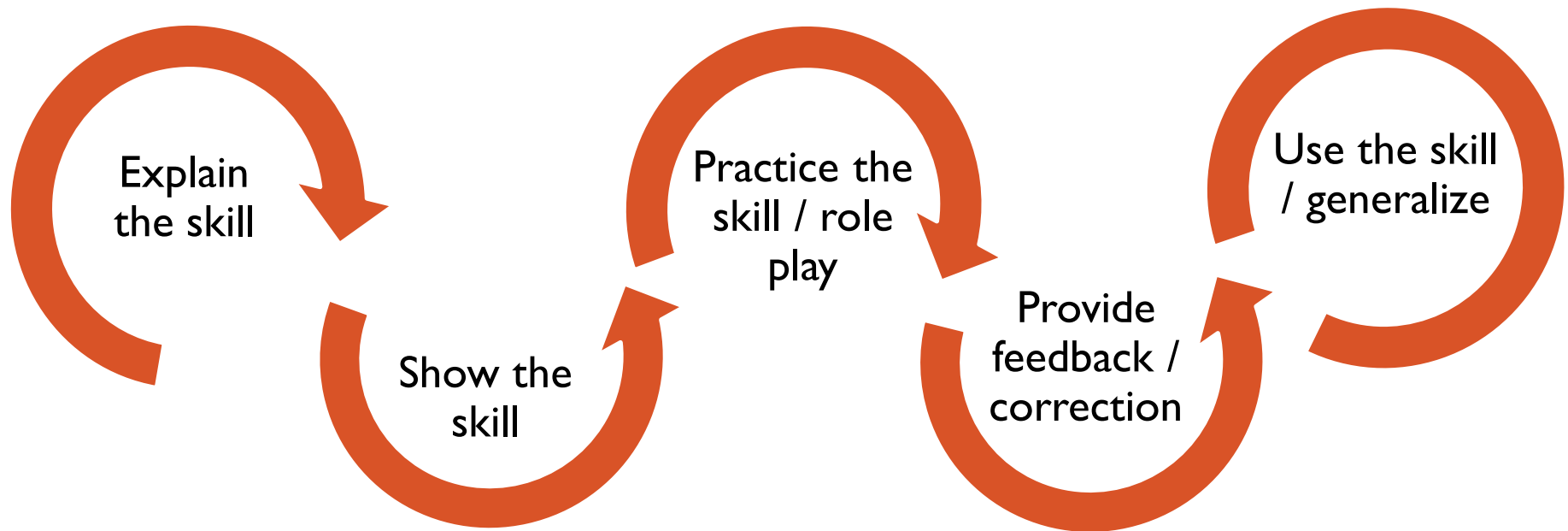


Parent Training

- For families of newly diagnosed children generally
- An introduction to autism and your child's unique strengths and challenges
- Sets you up for success within the home environment
- Can be accessed:
 - Prior to direct services
 - At the same time as direct services
 - After direct services (for generalization and maintenance of skills)
- OAP – can be found under Foundational Family Services, Caregiver-Mediated Early Years programs, or as a Core Services

Intervention Pathways

Direct teaching/parent-implemented interventions –
Behaviour Skills Training (BST) approach



Parent Training Programs

Parent Training/Caregiver-Mediated programs may target:

joint
attention

receptive
language

making
requests

play and
social
responding

imitation
skills

visual skills

motor skills

cooperation /
behaviour

eating skills

ESI / SCERTS

- Early Social Interaction/Social Communication Emootional Regulation and Transactional Supports

| | |
|------------------------|---|
| Providers | Speech-language pathologists, speech assistants/communicative disorders assistants (CDA) |
| Type of Service | Caregiver-mediated program (parent coaching) |
| Description | Parent coaching model; activity-based learning in a variety of settings |
| Ages | All ages (throughout the lifespan); all disabilities |
| Outcomes | Social communication, emotional skills, transactional supports (<u>may</u> lead to increased receptive language/understanding) |
| Rating | Emerging evidence; eligible under the OAP |

Hanen: More Than Words

- More Than Words® — The Hanen Program® for Parents of Children with ASD or with Social Communication Difficulties

| | |
|------------------------|---|
| Providers | Speech-language pathologists or speech assistants/CDA supervised by SLPs |
| Type of Service | Structured parent coaching program |
| Description | Pre-program consultation, 8 small group sessions, 3 individual videotaped visits with review and feedback |
| Ages | Not specified |
| Outcomes | Social communication, play skills |
| Rating | Insufficient evidence to show child changes – good evidence for parent outcomes; not eligible under OAP funding |

JASPER

- Joint Attention, Symbolic Play, Emotional Regulation

Providers

Psychologists, behaviour analysts (BCBAs), speech-language pathologists, early intervention specialists, paraprofessionals, parents

Type of Service

Caregiver-mediated program

Description

Blend of developmental and ABA principles; 2-3 sessions per week for 12 – 24 weeks; 1-1.5 hours/session; requires parent involvement

Ages

12 months to 8 years

Outcomes

Increase in types of play; increase in spontaneous play; interaction duration; initiation of communication (gesture-based)

Rating

Good evidence showing effective for children; on the National Standards list; eligible under OAP

Pivotal Response Treatment

- Known commonly as PRT

| | |
|------------------------|---|
| Providers | Behaviour analysts; ABA therapists; SLPs/CDAs |
| Type of Service | Caregiver-mediated program |
| Description | A naturalistic behavioural intervention which uses your child's motivation to teach communication and social engagement |
| Ages | 2 years to 16 years |
| Outcomes | Joint attention, eye contact, requesting, social engagement, communication, turn-taking, play skills |
| Rating | Good evidence showing effectiveness for specific skills; on the National Standards list; eligible under OAP |

Project ImPACT

- Project ImPACT (Improving Parents as Communication Teachers)

| | |
|------------------------|---|
| Providers | Behaviour analysts, speech-language pathologists, early interventionists, early educators |
| Type of Service | Caregiver-mediated intervention |
| Description | NDBI which combines small group sessions and individual coaching over a 12 – 14 week program; schedule can be tailored to your family needs |
| Ages | Infant to 6 years; may be used with older children with developmental delays |
| Outcomes | Social communication, imitation skills, play skills |
| Rating | Good evidence showing effectiveness; on the National Standards list; eligible under the OAP |

Social ABCs

| | |
|------------------------|---|
| Providers | Early childhood educators, psychologists, speech-language pathologists, behaviour analysts |
| Type of Service | Caregiver-mediated intervention |
| Description | NDBI; focuses on improving a toddler's use of vocalizations to communicate and share positive emotions with others |
| Ages | 12 months to 36 months (3 years) |
| Outcomes | Child communication (intentional, directed, functional vocal communication); sharing meaningful, positive emotions with a primary caregiver |
| Rating | Emerging evidence of effectiveness; is eligible under OAP funding |

The PLAY Project

- Play and Language for Autistic Youngsters

Providers

Speech-language pathologists, occupational therapists, early intervention providers, early educators, social workers, counselors, psychologists, physicians

Type of Service

Caregiver-mediated

Description

Naturalistic intensive behaviour intervention to teach play skills

Ages

Not stipulated

Outcomes

Parent-child interactions

Rating

Emerging evidence of effectiveness; eligible under OAP funding

Direct Therapy Services

These are services provided by a regulated or credentialed health professional:

- applied behaviour analysis (BCBA)
- speech-language pathology (SLP)
- occupational therapy (OT)

These may be private therapy services and are also eligible under Core services in the OAP.

Direct Therapy Services

There are different types of services, interventions, and/or treatments provided by regulated health professionals.

- Full programs – i.e., Early Years (for young children) Curriculum
- Assessment services
- 1:1 treatment services
- Small group services
- Consultative and/or collaboration services

Direct Therapy Services

The services chosen/provided may vary depending on the individual and the goals. For this presentation we will focus on:

- Services for children who are exhibiting challenges in acquiring early skills and/or foundation skills
- Typically directed at preschool ages (18 months – 5:11 years)
- Can be 1:1 or small group (as appropriate)
- Can be delivered by a BCBA, OT, and/or SLP
- Can involve parent/caregiver training as part of the services*

Direct Therapy Services

There are different types of services, interventions, and/or treatments provided by regulated health professionals.

Early Years (Preschool/young children) Curricula

- Direct treatment for children who are exhibiting challenges in acquiring the foundation skills
- Typically directed at preschool ages (18 months – 60 months)
- Can be 1:1 or small group (as appropriate)
- Can be delivered by a BCBA, OT, and/or SLP

Early Years Treatment

Early Years / Preschool Treatments Target:

| | | | |
|---------------------------------|---------------------------------------|-----------------------------------|----------------------------|
| Attending and Social Responding | Requesting skills | Labelling skills | Receptive language |
| Visual and cognitive skills | Play skills | Imitation skills | Echoic/speech sound skills |
| Expressive language | Communication and basic conversation | Motor skills | Activities of Daily Living |
| Small group skills | Pre-Academic (reading, writing, math) | Social Skills and self-regulation | Behaviour |

ABA

- Delivered by credentialed individuals typically within a tiered model
 - Board Certified Behavior Analysts®
 - Board Certified Assistant Behavior Analysts®
 - Registered Behavior Technician®
- RBTs or ABA therapists deliver the treatment which is supervised by BCaBAs and BCBAAs
- Some overlapping areas with speech-language pathologists and occupational therapists (e.g., AAC, feeding interventions, motor skill development, language skill development, social skills, and others)

ABA

- Services are typically grouped into two different models depending on the intensity of intervention
- Focused ABA
 - 15 – 25 hours
 - Generally, 1 to 2 goals are targeted only
- Comprehensive ABA (EIBI, IBI)
 - 25+ hours
 - 15+ goals are targeted across all domains of functioning

Intensive ABA

- Comprehensive or Intensive Applied Behaviour Analysis (ABA)
 - ABLLSr – Assessment of Basic Language and Learning Skills - Revised
 - EBIC – Early Behavioural Intervention Curriculum
 - EFL – Essentials for Living
 - ESDM – Early Start Denver Model
 - PEAK Relational Training System
 - VB-MAPP – Verbal Behavior Milestones Assessment and Placement Program

Intensive ABA

- Comprehensive ABA – EIBI, IBI

| | |
|------------------------|---|
| Providers | Behaviour analysts (BCBAs), BCaBAs, RBTs/ABA therapists) |
| Type of Service | Intensive and comprehensive application of ABA; target goals must be socially significant for the individual |
| Description | Broad curriculum (15 or more domains/areas) delivered at greater than 21 – 25 hours per week); 1:1, small group as applicable |
| Ages | Any age |
| Outcomes | Significant increase in skill acquisition and/or decrease in interfering behaviours |
| Rating | Good empirical support; on the National Standards report; ABA services are part of Core in the OAP |

Focused ABA

- Fewer goals and fewer hours per week
- Can use the same tools as used in Intensive ABA
 - Outcomes are not often found to be as good (or takes longer for similar outcomes) if tackling multiple goals/domains at the same time
 - Intensity per goal is less
- Often used to increase skills such as Activities of Daily Living (ADLs) – dressing, eating, sleeping, toileting and/or decrease interfering or self-injurious behaviours (SIB)

Focused ABA

- Focused ABA – ADLS, Functional Communication Training, challenging behaviour

| | |
|------------------|--|
| Providers | Behaviour analysts (BCBAs), BCaBAs, RBTs/ABA therapists) |
|------------------|--|

| | |
|------------------------|--|
| Type of Service | Short term, infrequent, or less intense application of ABA; target goals must be socially significant for the individual |
|------------------------|--|

| | |
|--------------------|---|
| Description | Assessment and application of ABA principles for specific purposes (e.g., challenging behaviour, ADLs treatment, AAC, and FCT); 1:1, small and/or large group |
|--------------------|---|

| | |
|-------------|----------|
| Ages | All ages |
|-------------|----------|

| | |
|-----------------|--|
| Outcomes | Significant change to the specific goal/target |
|-----------------|--|

| | |
|---------------|---|
| Rating | Good empirical support; on the National Standards report; within Urgent Response Services and Core in the OAP |
|---------------|---|

Speech-Language Pathology

- SLP has a body of research support in very specific areas for the treatment of autistic children
- SLP is a discipline that focuses on assessing and treating speech, language, communication delays and/or disorders, as well as swallowing, voice, and dysfluency/stuttering
 - ESDM – Early Start Denver Model
 - Hanen – More Than Words
 - 1:1 direct therapy

SLP Services

- articulation/intelligibility, expressive/receptive language skills, social skills, communication, swallowing, fluency

Providers

Speech-language pathologists, speech assistants/communicative disorders assistants (CDAs) under supervision of an SLP

Type of Service

Direct and/or consultative assessment and treatment of speech, language, communication and related skill development

Description

1:1, small and/or large group

Ages

All ages

Outcomes

An increase in speech, language, and related skills

Rating

Mixed evidence - depending on the specific goal and area of assessment/treatment

PROMPT Therapy

PPROMPTs for **R**estructuring **O**ral **M**uscular **P**honetic **T**argets

| | |
|------------------|------------------------------|
| Providers | Speech-language pathologists |
|------------------|------------------------------|

| | |
|------------------------|--|
| Type of Service | Direct 1:1 treatment for increasing articulation and intelligibility of speech |
|------------------------|--|

| | |
|--------------------|--|
| Description | A tactile-kinesthetic approach that uses touch cues to a patient's articulators (jaw, tongue, lips) to manually guide them through a targeted word, phrase or sentence |
|--------------------|--|

| | |
|-------------|----------|
| Ages | All ages |
|-------------|----------|

| | |
|-----------------|--|
| Outcomes | Increase in accurate speech sound production |
|-----------------|--|

| | |
|---------------|--|
| Rating | Unestablished evidence (1 study to date for individuals with autism); not named in the national standards report |
|---------------|--|

Occupational Therapy

- OT has research support for the treatment of Autism with respect to specific motor skill acquisition
- Occupational therapists help people to:
 - learn new ways of doing things
 - regain skills and develop new ones
 - use materials or equipment that makes life easier, or
 - adapt their environment to work better for them

Occupational Therapy

- Services are typically:
- 1:1 or group OT services
 - 1 – 3 hours per week
 - Generally, 1 to 2 goals are targeted only
 - Specific skill building small groups (e.g., handwriting/printing, activities of daily living, bike riding, etc.)
- Sensory Diets
- Sensory Integration (SI – Ayres specifically)
- SOS Feeding – Sequential-Oral-Stimulation

OT Services

Providers

Occupational therapists, Occupational therapy assistants under the supervision of an OT

Type of Service

Direct and/or consultative assessment and treatment of motor and movements required for daily life tasks and/or a job/occupation

Description

1:1

Ages

All ages

Outcomes

An increase in the skills required to perform daily life tasks

Rating

Mixed evidence - depending on the specific goal and area of assessment/treatment

Ayres Sensory Integration

Providers Occupational therapists

Type of Service Direct assessment and treatment, 1:1, consultative

Description Interventions that target a person's ability to integrate sensory information (visual, auditory, tactile, proprioceptive, and vestibular) from their body and environment in order to respond using organized and adaptive behaviour

Ages All Ages

Outcomes Increased adaptive behaviour and decreased interfering behaviour

Rating Emerging evidence of effectiveness; 3 studies to date; included in the National Standards report

Sensory Diets

| | |
|------------------------|---|
| Providers | Occupational therapists |
| Type of Service | Direct 1:1, consultative |
| Description | A group of activities that are specifically scheduled into a child's day to assist with attention, arousal and adaptive responses – based on sensory integration theory |
| Ages | All ages |
| Outcomes | Increased adaptive behaviours |
| Rating | Mixed evidence with some emerging evidence & some studies which showed negative effects |

SOS Feeding

- SOS – Sequential-Oral-Sensory feeding protocol

| | |
|------------------------|---|
| Providers | Occupational therapists, speech-language pathologists |
| Type of Service | Direct 1:1, consultative |
| Description | SOS Approach focuses on increasing a child's comfort level by exploring and learning about the different properties of food; allows a child to interact with food in a playful, non-stressful way; using a graduated process called the Steps to Eating |
| Ages | All ages |
| Outcomes | Increased food intake |
| Rating | Unestablished as an effective practice for children with autism; not on the National Standards report |



Making Decisions:

What do I do?

How do I evaluate and
problem-solve?

Where Can I Access More Information?

- Parents face a difficult task in choosing treatment(s) for children with autism.
- A wide range of techniques are routinely used by speech-language pathologists, occupational therapists, and behaviour analysts with varying degrees of success and evidence.



What to Look for in a Provider

- Credentials
- Contracts and fees
- Informed consent
- Scope of practice
- Competency
- Insurance
- Assessment
- Goal-setting
- Research-based
- Data review
- Open door policy
- Collaboration
- Family involvement
- Continuing education
- Supervision

See our Provider Checklist

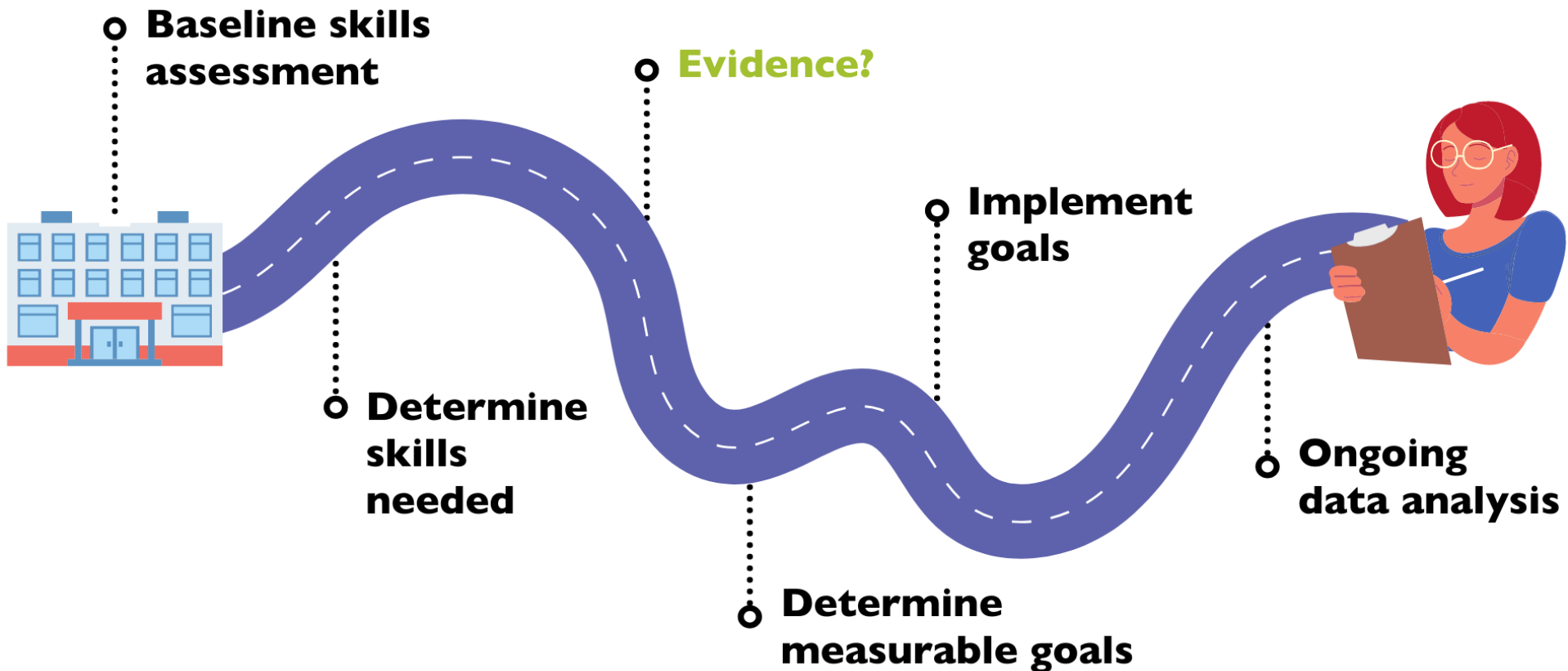
How Do I Know if it's Working?

- Intended outcomes
- Data or feedback
- Program components

Is this the right fit for my family?

- Child response
- Family response
- Benefits and risks

How Do I Know if it's Working?



What Are My Next Steps?

- Problem-solving
 - Is this treatment or program supported by research and matched to my child's areas of need?
 - Can it be changed to better meet my child's needs?
 - Is there a different treatment that might be better?
 - Are there different providers that may be a better match?

Is it the Right Intervention Pathway?

Child A

- Age: 18 months
- Diagnosis: ASD
- Brief Profile: Delayed social communication; emerging play skills
- Considerations: Father at home with child during the day; keen to be involved
- **Recommendations:**
 - Parent-mediated NDBI program
 - Community play group (drop-in)

Child C

- Age: 6 ½ years
- Diagnosis: ASD, ADHD
- Brief Profile: several skill-deficits across multiple domains (communication, behaviour, adaptive skills); high rates of property destruction across environments, and self injurious behaviour
- Considerations: Two younger siblings at home, parents worried about safety of siblings
- **Recommendations:**
 - Comprehensive ABA 25-30 hours weekly: initially 1:1 in clinic → with plan to move towards small group and in-home ABA
 - Parent training

Child B

- Age: 4 ½ years
- Diagnosis: ASD
- Brief Profile: Displays a limited range of needs –play, group routines, toileting
- Considerations: Parents and child want to continue with full-time school
- **Recommendations:**
 - Focused ABA/Parent Training: 10 hours per week, in home
 - School collaboration
 - Group-based community play group



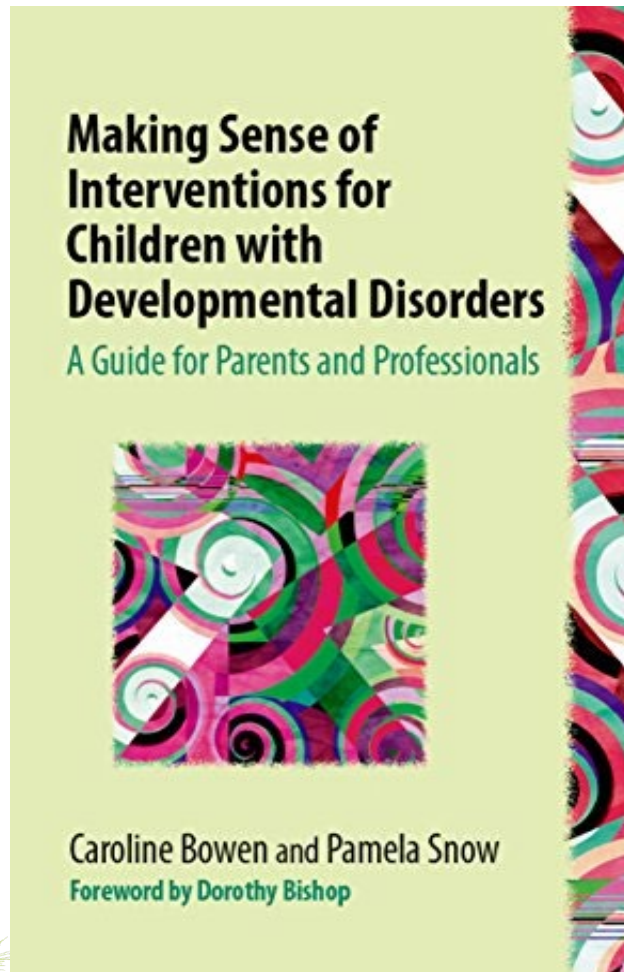


**Making
Decisions:**
Where can I find
additional
information?

Resources for Autism Services

- Association for Science in Autism Treatment [[ASAT](#)] – website with treatment summaries, ratings, and article reviews
- Holland Bloorview Kids Rehabilitation Hospital, ECHO Ontario Autism program [ECHO] – [YouTube presentation](#)
- Ontario Association for Behaviour Analysis [OSETT-ASD] ([2017](#)). Evidenced-based practices for individuals with autism spectrum disorder: Recommendations for caregivers, practitioners, and policy makers.

Resources for Autism Services



- <https://www.amazon.ca/Making-Interventions-Children-Developmental-Disorders-ebook/dp/B06XYRNCBP>

Resources for Autism Services

- Steinbrenner, J. R., Hume, K., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yücesoy-Özkan, S., & Savage, M. N. [NCAEP] ([2020](#)). Evidence-based practices for children, youth, and young adults with Autism. The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, National Clearinghouse on Autism Evidence and Practice Review Team.
- Hume, K., Steinbrenner, J. R., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., ... & Savage, M. N. [NCAEP] ([2021](#)). Evidence-based practices for children, youth, and young adults with autism: Third generation review. *Journal of Autism and Developmental Disorders*, 51(11), 4013-4032.

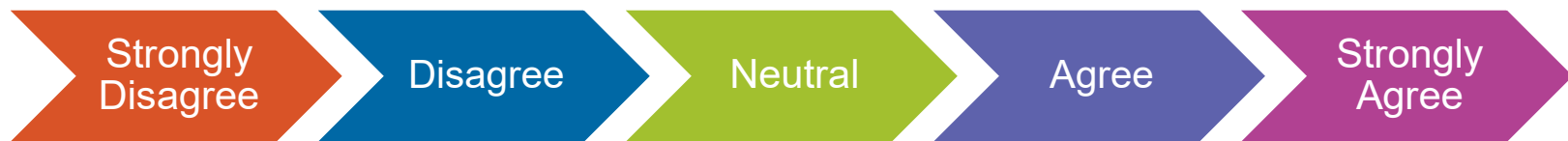


Agencies, Ministry, & Professional Bodies

- Autism Ontario Provider Listing
<https://www.autismontario.com/find-provider>
- Behavior Analysis Certification Board
<https://www.bacb.com/>
- College of Audiologists and Speech-Language Pathologists of Ontario
<https://www.caslpo.com/>
- College of Occupational Therapists of Ontario
<https://www.coto.org/>
- Ministry of Children, Community and Social Services, Ontario Autism Program (OAP)
<https://www.ontario.ca/page/autism-ontario>

Feedback Survey

- Please answer each question in the survey
- The questions include items with:
 - A Likert scale (i.e., a 5-point scale with a range of responses)



- Selecting only one answer (single answer)
- Selecting all answers that might apply (multiple selections)
- Text boxes where you type your answer

References

Higginbotham, J., & Satchidanand, A. (2019). From triangle to diamond: Recognizing and using data to inform our evidence-based practice. *ASHA Journals: Academy*.

<https://academy.pubs.asha.org/2019/04/from-triangle-to-diamond-recognizing-and-using-data-to-inform-our-evidence-based-practice>.

Hyman, S. L., Levy, S. E., Myers, S. M., Kuo, D. Z., Apkon, S., Davidson, L. F., ... & Bridgemohan, C. (2020). Identification, evaluation, and management of children with autism spectrum disorder. *Pediatrics*, 145(1).

https://publications.aap.org/pediatrics/article-pdf/145/1/e20193447/1078920/peds_20193447.pdf



Thank You for Attending

“ No family or person on the spectrum in Ontario should ever feel alone, experience autism as a barrier to inclusion, or be without meaningful resources and opportunities. ”

MARG SPOELSTRA
Executive Director, Autism Ontario

Contact Us

Phone: 416-246-9592

Toll Free: 1-800-472-7789

www.autismontario.com



@autismontarioprovincial



@autismONT



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