

REGIONAL AUTISM PROGRAMS OF ONTARIO NETWORK (RAPON)

The Autism Intervention Program (AIP) providers across Ontario operate in accordance with the Ministry of Children and Youth Services (MCYS) Programs Guidelines for the Autism Intervention Program (http://www.gov.on.ca/children/graphics/stel02_179872.pdf) and are responsible for determining each child's eligibility for Intensive Behavioural Intervention (IBI) as well as the settings, intensity and duration most appropriate for each individual child.

Intensive Behavioural Intervention is a time-limited evidence-based early intervention designed to accelerate a child's learning or change his or her developmental trajectory. If goals are met, a child will be ready for transition into community-based programs and school. Research has shown that some children respond well to IBI, some have small gains and others don't respond.

Because it's important to measure the program's effectiveness for each child, the regional program monitors a child's development while he or she receives IBI. Each child is assessed when IBI begins, monitoring is ongoing and progress is measured through a formal evaluation at least every six months. The program's clinical directors and regional program psychologists are responsible for determining whether or not IBI has been effective for each child and therefore whether or not the child will continue. Responsibilities for ongoing assessment, treatment and treatment decision- making are in accordance with the College of Psychologists of Ontario Code of Ethics (Canadian Psychological Association, 2000).

Using a variety of objective tools to collect information, the clinical directors and regional program psychologists interpret the clinical evidence and use their clinical judgment to make a determination based on each child's individual response to the intervention. IBI programming information, assessment findings and other observations, which may include the attached continuation criteria, are used together to inform the clinical decision as to whether or not a child is benefitting from and should continue with IBI. No one single source of information in isolation from other relevant findings is used to determine when a child will be discharged from IBI.

Attached is a draft copy of the RAPON-endorsed clinical continuation criteria for the IBI program. The clinical directors developed these criteria in 2006 to serve as best practice for clinical decision-making for IBI programming and continuation. To create the document, the clinical directors reviewed relevant literature, other IBI decision-making

criteria and consulted with an external clinical expert. Once created, the criteria were considered best evidence and the clinical directors recommended their use across the province for consistency in decision-making. The criteria served as a resource and were available as a guide to assist in clinical decision making. However, they were not formally implemented across the province.

Clinical directors and regional program psychologists use various sources of information to assist in the decision making process and this criteria document, while not consistently used across the province, is one of these sources. The document is not meant to provide a complete list of all treatment targets specific to individual children.

As the range and types of services for children with autism continue to evolve, many steps are being taken to ensure current best practices will be available for consistent application across Ontario. RAPON and its clinical directors have continually advocated for the highest ethical standards for sharing information in an open, fair and clear manner.

The clinical continuation criteria document is a draft because when it was created the Ministry of Children and Youth Services had just established an expert clinical panel for the Autism Intervention Program to review available research evidence and best practices regarding assessment and decision-making process for the provision of IBI. Therefore, further development and release of the clinical continuation criteria was discontinued to prevent confusion and overlap with MCYS panel process.

The Ministry then established a second expert panel to develop benchmarks which have been endorsed by all regional autism providers as the most current evidence-based markers to determine children's benefit from IBI. Until benchmark implementation decisions have been carried out at the MCYS provincial level, the continuation criteria document continues to be used by some regions.

As you read and refer to the document, please keep in mind that various sources of information and test results are used to best serve individual children and will be discussed and shared fully with parents throughout the process.

CLINICAL CONTINUATION CRITERIA

AIM OF THE INTENSIVE BEHAVIOURAL INTERVENTION PROGRAM

- To change the child's rate of learning based on clinical markers
- To achieve clinically significant changes according to regular timelines
- To increase readiness for participation in an educational program

IBI is a comprehensive program in all developmental domains. IBI is a time-limited intervention (2-3 years) program designed to jump-start the child's development to be able to function and take better advantage of the resources available in community settings. Completion of the markers to a maximum of thirty-six months duration would indicate that goals were met and thus the child should benefit significantly for integration/transition into community-based programs (e.g. full-time school).

Completion of IBI markers include:

- Ability to participate in a group setting without a shadow (circle time or small group activity)
- Complete developmentally appropriate academic assignments independently
- Start to use standard curriculum for math and reading (direct instruction programs)
- Dyad with peer for fifteen to thirty minutes without an adult
- Conversational peer interaction

Research indicates that children maximize their benefits within two to three years (Sallows and Graupner 2005; Cohen, Amerine-Dickens and Smith, 2006) and there is variability in response to IBI for children with autism (Lovaas (1987), Smith et al (2000a) Smith et al (2000b); and Sallows and Graupner (2005). Some children respond quickly to IBI, while some children are partial responders and make some measurable but smaller gains or benefits. Others do not respond after a trial period of IBI of approximately six – twelve months and another approach to ABA services for skill development and intervention would be recommended to capitalize on areas where they can learn. A time-limited and goal-directed discharge plan would be offered over a three – six month period prior to discharge from IBI. IBI is not intended to be primarily a behaviour management, social skills, life skills or academic tutoring program. There are many evidence-based models for delivering ABA programs to train specific skills.

CLINICAL CONTINUATION CRITERIA

BACKGROUND

The clinical criteria were developed by the clinical directors of the Autism Intervention Program, previously the Pre-school Intervention Program for children with Autism, funded by the Ontario Ministry of Children and Youth Services.

The criteria are consistent with the legislation, standards and criteria of the College of Psychologists and the Province of Ontario program guidelines of the Autism Intervention Program.

The criteria are intended to serve as best practice to inform clinical decisions for:

- Children's Intensive Behaviour Intervention (IBI) programming and
- Continuation in IBI

The criteria are intended to provide consistency and transparency by providing clinical markers for use by the clinical directors of the Autism Intervention Program of Ontario.

There is evidence to support providing IBI to children with autism, however, not all children respond to IBI treatment (Lovaas, 1987; Smith et al, 2000). While some children with autism have made impressive gains with IBI, not all children respond as favourably and there is tremendous variability in their outcomes. Lovaas originally reported gains to near-normal functioning in 47% (9/19 children) after 2 years of IBI. While subsequent studies have demonstrated some benefits from IBI, few have been able to replicate the level of gains in Lovaas' research. Unfortunately, a proportion of children make little or no gains in IBI. It can be devastating when parents are told their child with autism is not responding to IBI, even after one or more years of treatment. At this time, in most cases, it is unknown if a child will respond to IBI before providing a course of IBI and monitoring the child's response to treatment over time. Furthermore, there are very few sets of clinical criteria available, thus these criteria were developed as they pertain to the Autism Intervention Program.

Decisions to continue in IBI are made after gathering data from a variety of sources and carefully analyzing the findings from children's progress in IBI programs and assessments. Careful consideration is given ensuring the needs of the child are at the centre of the decision-making.

CLINICAL CONTINUATION CRITERIA

BACKGROUND continued

The process used to develop the criteria included:

- Review of the research literature

Research shows there is no evidence that a child would improve in years two, three or beyond, if there is little or no improvement in year one of IBI treatment. Best references include:

- Lovaas 1987, *Journal of Consulting and Clinical Psychology*
- Smith, Groen & Wynn 2000, *American Journal of Mental Retardation*
- Sallows & Graupner 2005, *American Journal of Mental Retardation*
- Cohen, Amerine-Dickens, Smith 2006, *Journal of Developmental & Behavioral Pediatrics*
- Smith, Buch & Gamby, 2000, *Research in Developmental Disabilities*, Volume 21
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- Review of another program's clinical criteria

Region 6 Autism Connection. *Early Intensive Behavioral Treatment 4-way Agreement*. Stockton, CA: Author; 2004. Accessed on-line March 31, 2006, at <http://www.sjcoe.org/EIBT.doc>

- Development of discharge criteria

- Development of IBI clinical criteria including expert external consultation with Tristram Smith, Ph.D., Assistant Professor of Pediatrics at the University of Rochester Medical Centre. Dr. Smith serves as the research director for the Multi-site Young Autism Project, which is a U.S. federally-funded study on early IBI based on the UCLA/Lovaas model for children with autism.

- Consensus among clinical directors

- Endorsement by RAPON

CLINICAL CONTINUATION CRITERIA

MARKERS

While a child's learning and development depends on a variety of factors, it is important to have markers to determine if IBI is benefiting the child.

The review of a child's IBI progress will be based on a baseline curriculum assessment and independent update curriculum assessment results conducted at entry to the program and updated at least every six months.

The likely outcomes of reviewing the child's progress in relation to the marker variables will be whether a child should continue or discontinue with IBI.

After six months of programming, children are to be making meaningful progress in 75% - 80% of the markers to continue in the IBI stream. If not able to, the focus of programming may be on the development of functional skills and eventual discharge from program.

When IBI is found to be ineffective, a different approach to intervention would better meet the needs of the child, and referrals to other community supports and/or programs will be made.

At each additional review (interval), the child should be making meaningful progress in 75%-80% of markers for continuation.

The use of marker variables will be used by the Clinical Director or Regional Program Psychologist and will be based on profiles. (profiles to be developed for implementation purposes)

The review of indicators at each time period is based on direct observation and data review by an evaluator who is not part of the child's direct treatment team

The following markers provide the criteria for continuation in IBI

CLINICAL CONTINUATION CRITERIA

MARKERS continued

AFTER SIX MONTHS OF PROGRAMMING

Foundation Skills

Motor Imitation – imitates 10 familiar actions with objects and 10 familiar gross motor actions

Imitation - imitates 10 sounds/phonemes or 10 ASL signs

Manding – 5 impure mands (with objects present)

Receptive - 5 one-step instructions

Matching – generalized identity matching of 10 novel stimuli (either picture to picture 2D-2D or object to object 3D-3D)

Labeling – 5 receptive tacts (i.e. identification) in any communication system (e.g. PECS, Sign)

Attention to Task – can tolerate and demonstrate compliance for 4-5 minutes of intensive teaching at a table

AFTER TWELVE MONTHS OF PROGRAMMING

Functional Communication

Functional Communication – 20 each of expressive tacts and spontaneous mands in the absence of prompts but with the items present

Function Independent Living Skills at Child's Developmental Level – example: dressing on own (pants and shirt), self-feeding, toileting training

Schedules – independent use of daily visual schedules or play/activity schedules

Receptive – can follow 5 two-step related and 5 two-step unrelated directions

Receptively discriminates in each of the following areas: body parts, locations, and actions

Manding/Tacting – functional use of phrases (e.g. noun-noun; noun-adjective; or noun-verb) in any system (directly taught or novel phrases)

Sequenced imitation - 10 imitations of at least 2-3 steps

CLINICAL CONTINUATION CRITERIA

MARKERS continued

AFTER TWENTY-FOUR MONTHS OF PROGRAMMING

Start of Social Communication

Joint attention – initiating eye contact

Expressive Communication – daily evidence of contextually-appropriate communication beyond carrier phrases or rote communication

Relational Language Concepts – multiple samples of relational language concepts such as opposites, prepositions, time markers, pronouns, plurals, tenses

Toilet Trained – on a schedule and/or self-initiated

Reciprocal Peer Interaction Skills – evidence of engagement with peers including initiation, turn-taking, and responding in activities with peers (games, conversation, etc.)

Functional Toy Play – A range of self-initiated toy play

Small Group Activities – can tolerate and participate in small group activities for a period of ten minutes (such as singing and performing action songs, turn taking, initiating a question or comment, etc.)

Identify Basic Emotions – can identify basic emotions (happy, sad, anger, fear) on pictures and on people's facial expressions

Shared Attention – use of non-verbal communication to share an activity (pointing or eye contact or other gestures)

Manding – 20 pure mands (in absence of items and prompts)

CONTINUATION CRITERIA

DISCHARGE CRITERIA

A child's ongoing eligibility for IBI is based on continuous assessment including the six, twelve and twenty-four month markers outlined as well as the following:

Child's progress is consistent with the markers

- Child Autism Rating Scale (CARS) total score under thirty (or ADOS)
- Skill achievement level consistent with child's curriculum data in most developmental domains
- IQ>85
- VABS composite score > 85
- Decreased incidence of self-injurious behaviours, aggression and ritualistic behaviours
- Achievement of goals for completion of IBI program

Child's progress is not consistent with the markers

- Achievement less than defined markers (i.e. <75 – 80% of markers) within the specified time period
- Lack of achievement in goals defined by staff and parents based on data collected throughout programming and the curriculum assessment (child is maxed out on gains based on cumulative data since inception, on ABLLS and/or other curriculum measures)

Other factors

- Attendance as outlined in the service agreement and/or other family issues
- Unable to tolerate a minimum of 20 hours/week at a time beneficial for the child's learning by determining if:
 - The child learns better in the morning hours
 - The child is too young for so many awake hours
 - The child gets the best learning at night

References:

- Cohen, H., Amerine-Dickens, M., & Smith, T. (2006). Early intensive behavioral treatment: Replication of the UCLA model in a community setting. *Developmental and Behavioral Pediatrics, 27*, S145- S155.
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- Smith, T., Buch, G.A., & Gamby, T.E. (2000a). Parent-directed, intensive early intervention for children with pervasive developmental disorder. *Research in Developmental Disabilities, 21*, 297-309.
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