



# Updating the New York State Clinical Practice Guidelines for ASD Birth-to-Three: A State-LEND Partnership. Part 1: Screening Instruments

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## BACKGROUND

Activities of the Part C Early Intervention Program should be evidence-based. In 1999, the New York State Department of Health (NYS DOH) Early Intervention (EI) program published the first state-funded *Birth-to-Three Clinical Practice Guidelines for Assessment and Intervention for ASD*. Since tremendous progress has been made in this area over the years, the NYS DOH EI program is collaborating with experts throughout NY to update the guidelines through evidence-based literature reviews. This poster describes current findings for early ASD screening measures in partnership with the Leadership Education in Neurodevelopmental Disabilities (LEND) program at Westchester Institute for Human Development/UCEDD.

## METHOD

### Literature Search

- Search major data bases using key words and MESH terms
- Review abstracts for articles meeting inclusion criteria:
  - Published since 1999, peer-reviewed, in English
  - Available for U.S. use
  - For birth – three population
  - Report on sensitivity and specificity of the measure

### Abstract Articles

- Create a standardized report of each article to describe:
  - Sample characteristics
  - Administration and scoring procedure of the measure
  - The “gold standard” measure for ASD outcome dx
  - Sensitivity, specificity (and positive predictive value)

## RESULTS

*EARLIER AND EARLIER:* These measures in part grew out of the “Baby Sibs” studies that enroll newborn siblings of children already diagnosed with ASD, and document the emergence of early symptoms.

Measure	Authors	Administration	Description	Rel & Val Articles	Sensitivity & Specificity
First Year Inventory (FYI)	Reznik, Baranek et al.	Parent-rated at 12 mos	14 questions, yes/no, cut off score	4	2
Early Screen for Autistic Traits (ESAT)	Dietz & Swinkels	Parent-rated at 14-15 mos	14 questions, yes/no, cut off score	1	3
Infant-Toddler Checklist (ITC)	Wetherby & Prizant	Parent-rated at 8 – 24 mos	24 questions, scored 0-2, choice of cut-off or standard score from manual	4	3
Autism Observation Scale for Infants (AOSI)	Bryson, & Zweigenbaum	Clinician semi-structured direct observation at 6-18 mos	19 items, scored 0 – 2/3 20 min	2	1

### THE CHAT AND M-CHAT EVOLVE:

Year	Measure	Authors	Description	PPV
1992	CHAT (Checklist for Autism in Toddlers)	Baron-Cohen, Allen & Gillberg	9 parent-report items & 5 clinical interaction/ observation items, for more severe autism , 18-mo-olds; 2000 expanded to PDD-NOS	low
2001	M-CHAT (Modified CHAT)	Robins et al.	23 items w/ 6 Critical Items, parent report only, 18 - 30 mos, 24 key age; over time emphasized that Follow-Up Interview was required for adequate predictn	.68
2000 2012	Q-CHAT (Quantitative CHAT) Q-CHAT-10 (shortened)	Allison & Baron-Cohen	Parallel attempt in the UK to modify the CHAT, 25 items scored on a 5-point Likert-type scale, parent-report 10 items, 0-1 scoring, parent-report	-- .58
2014	M-CHAT-R/F (M-CHAT/Revised w/ Follow-up Interview)	Robins, Fein, Barton	23 items w/ 6 Critical Items, refined cut-off scores, created risk categories, and formalized the follow-up phase , parent-report w/ F/U clinician interview	.49

### CURRENT LEADING MEASURES for the 18 - 36 MONTH age range:

Measure	Authors	Administration	Description	Rel, Val	Sens, Spec
Screening Test for Autism in Toddlers (STAT)	Stone et al.	Clinician semi-structured direct observation 24 – 36 mos	8 tasks, each rated pass or fail (2 or more subtasks tasks and several trials for each).	3	3
Baby and Infant Screen for Children with aUtistic Traits (BISCUIT)	Matson et al.	Parent-interview checklist at 17 – 37 mos	Three Parts 1-ASD symptoms (71 items) ; 2- Other neurodevelopmental symptoms; (84 items); 3-Challenging Behaviors (20 items)	5	1
M- CHAT Revised, with Follow-up Interview (M-CHAT-R/F)	Robins, Fein, Barton	Parent-rated checklist at 18 - 30 mos	23 items w/ 6 Critical Items, Follow-Up Interview w/positive screen	1	1