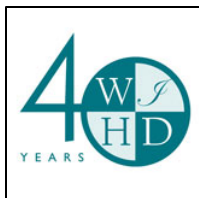


Updating the New York State Clinical Practice Guidelines for ASD, Birth-to-Three: A State-LEND Partnership.* Part 1: Screening Instruments



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New York , New York**



Introduction

- Part C of the IDEA provides for an early intervention program throughout the states and territories.
- 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 *Clinical Practice Guideline, Autism/Pervasive Developmental Disorders, Assessment and Intervention for Young Children (Age 0-3 Years)*.

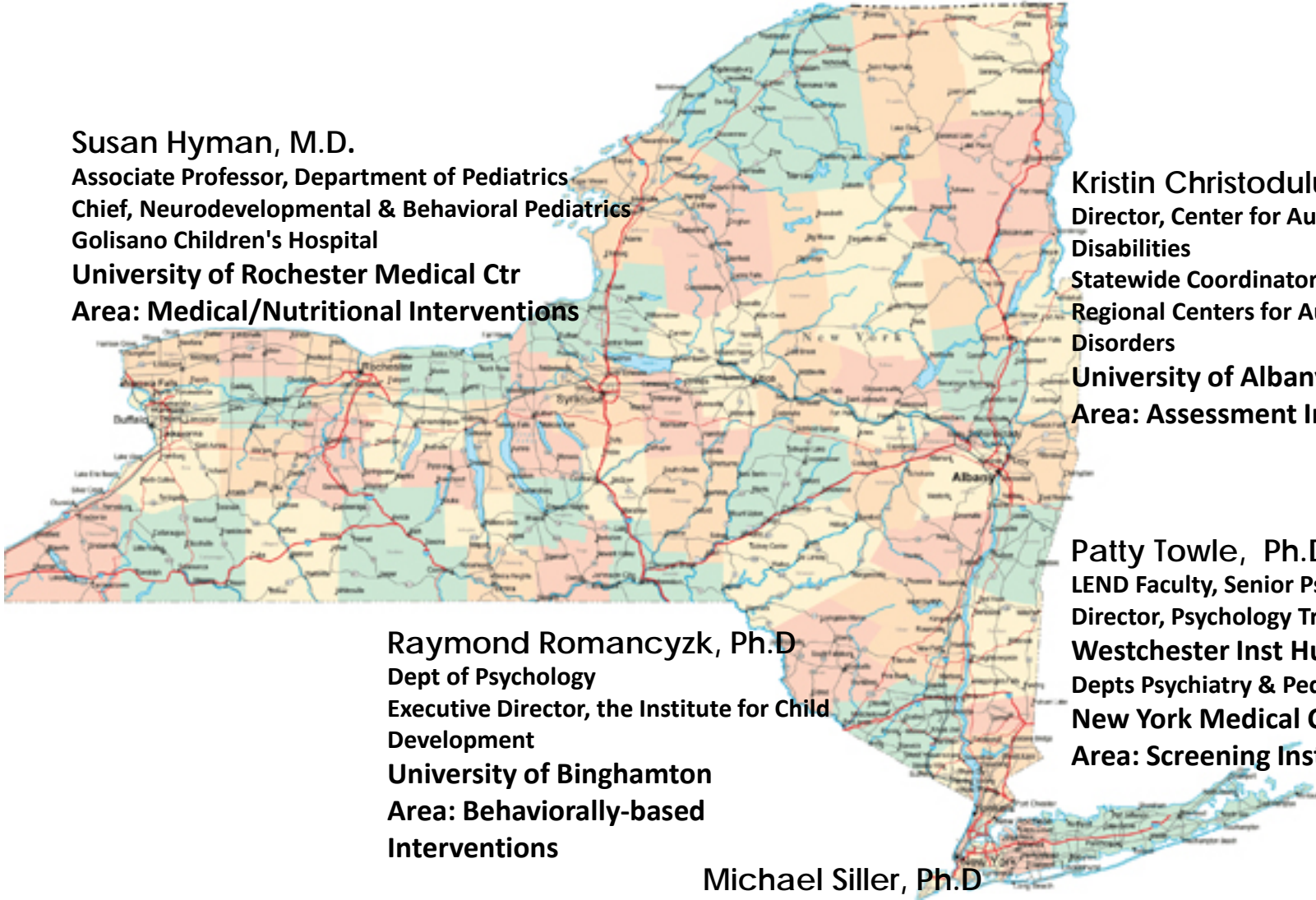


Introduction

- Since tremendous progress has been made in this area over the years, the NYS DOH EI program is collaborating with experts throughout New York State and nationally to **update the guidelines through evidence-based literature reviews.**
- **Supported by the Far Fund**, a private grant-making fund established in 2001 and located in New York City. The Fund awards grants to a diverse range of non-profit organizations that are working toward far-reaching goals in their efforts to support the social and emotional well-being of the people they serve.



Experts Engaged for First-Phase Literature Review



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Area: Medical/Nutritional Interventions

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Area: Developmentally-based Interventions

Introduction

- This poster describes current findings for early ASD screening measures – not completed yet
- Work done by faculty and trainees of the *Leadership Education in Neurodevelopmental Disabilities* (LEND) program at Westchester Institute for Human Development/UCEDD.



Method

Literature Search

- Searched major data bases using key words and MESH terms
- Also read literature reviews, searched reference lists, and conducted literature searches for specific instruments

Inclusion Criteria For Each Article

- Published in English, peer-reviewed scientific journal
- Provide original data about efficacy of the assessment method
- Instrument currently available and practical to obtain and administer
- Provide adequate description or reference to full description
- Evaluate subjects of targeted age



Method

AHRQ* Strength of Evidence

*Agency for Healthcare Research and Quality,
Institute of Medicine

[Adapted by NYS DOH as applied to research with young
children with disabilities]

STEP 1 – For Each Article- Definition of ADEQUATE EFFICACY

- **Uses appropriate reference standard – Clinical judgment vis-a-vis DSM IV-TR or DSM-5 and/or ADOS**
- **Gives sensitivity and specificity or enough data to calculate, ideally also Positive Predictive Value (PPV)**



Method

Abstract Articles

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



Results

EXPANSION OF LITERATURE:

Number of Measures	
1999	2014
1	22



Results

TARGETING CHILDREN EARLIER AND EARLIER:

<i>Measure</i>	<i>Child Age In Months</i>	<i>Description</i>
First Year Inventory (FYI)	12	Parent-rated, 14 questions, yes/no, cut off score
Early Screen for Autistic Traits (ESAT)	14-15	Parent-rated, 14 questions, yes/no, cut off score
Infant-Toddler Checklist (ITC)	8 – 24	Parent-rated, 24 questions, scored 0-2, choice of cut-off or standard score from manual
Autism Observation Scale for Infants (AOSI)	6-18	Clinician interaction, 19 items, scored 0 – 2/3 20 min



Results

THE CHAT AND M-CHAT EVOLVE:

Year	Measure	Authors	Description	PPV
1992	CHAT (Checklist for Autism in Toddlers)	Baron-Cohen, Allen & Gillberg	Parent checklist and some clinician interactions items	low
2001	M-CHAT (Modified CHAT)	Robins, Fein, Barton	Parent Checklist with Follow-up Interview	.68
2000	Q-CHAT (Quantitative CHAT)	Allison & Baron-Cohen	Parent Checklist	--
2012	Q-CHAT-10 (shortened)			.58
2014	M-CHAT-R/F (M-CHAT/Revised w/ Follow-up Interview)	Robins, Fein, Barton	Parent Checklist with Follow-up Interview	.49



Results

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

<i>Measure</i>	<i>Authors</i>	<i>Administration</i>	<i>Description</i>	<i>Rel & Val</i>	<i>Sens & Spec</i>
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 17 - 37 mos	Three Parts 1-ASD symptoms (62 items); 2-Other neurodvpmtl 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 18 - 30 mos	23 items w/ 6 Critical Items, Follow-Up Interview w/positive screen	1	1



Results

Other Measures Found:

<i>Measure</i>	<i>Authors</i>	<i>Ages</i>	<i>Description</i>	<i>Rel & Val</i>	<i>Sens & Spec</i>
Autism Detection in Early Childhood (ADEC)	Young 2007	15 - 70	Parent checklist		1
Childhood Evaluation of Symptoms of Development Disabilities (CESDD)	Dereu et al. 2008	5 - 48	Daycare worker checklist		1
Developmental Behaviour Checklist (DBC-P and Y)	Gray & Tonge 2008	18 - 48	Parent checklist		1
Infant Behavior Summarized Evaluation scale (IBSE)	DeSombre et al. 2006	< 24	Clinician structured interaction	2	1
Joint Attention Observation (Ja-Obs)	Nygren et al. 2007		Clinical interaction		1
Pervasive Developmental Disorder Screening Test (PDDST)	Siegel 2004	12 - 48	Parent checklist		1



Results

Other Measures Found:

<i>Measure</i>	<i>Authors</i>	<i>Ages</i>	<i>Description</i>	<i>Rel & Val</i>	<i>Sens & Spec</i>
Parent Observation of Early Markers (POEMS)	Feldman et al. 2012	1 - 24	Parent checklist		1
Parent Observation of Social Interaction (POSI)	Smith et al. 2013	18 - 48	Parent Checklist (7 items)		1
Social Communication Questionnaire (SCQ) applied to younger children	Allen et al. 2007	2 - 6 years	Parent checklist		2
Screen for Social Interaction – (SSI-Y)	Ghurman et al. 2011	24 - 42	Parent checklist		1
Three-item Direct Observation Screen (TIDOS)	Oner et al. 2014	18 - 60	Clinician observation		1
Visual Impairment and Social Communication Schedule (VISS)	Absoud et 2011 al.	21 mo - 7 yrs	Clinician observation		1



Next Steps

Panel Review

- Panel of experts will be assembled over two meetings in Albany (state capital, at the Department of Health)
- Panelists will receive standardized abstractions of all articles in a given area
- They will apply (the adapted) Association for Health Research Quality (AHRQ) standards for evaluating the strength of evidence for these practice areas



AHRQ Strength of Evidence

[Adapted by NYS DOH as applied to research with young children with disabilities]

STEP 2 – Body of Evidence for Each *Measure*

[A] = Strong Evidence: *Two or more peer-reviewed journal studies meeting adequate criteria for efficacy * At least moderate applicability to topic * Evidence consistently strong in support of using measure

[B] = Moderate Evidence: * At least one study (in peer-reviewed journal) meeting adequate criteria * At least moderate applicability to topic * Evidence supports use of measure

[C] = Limited Evidence: * At least one study (in peer-reviewed journal) meeting adequate criteria for efficacy * At least minimal applicability to topic * Evidence supports use of measure

[D] = Panel consensus



Conclusions

- A significant amount of literature is now available (in the area of early childhood ASD) upon which to conduct evidence-based reviews (*although firm conclusions may not be abundant*).
- The evidence for practice in publicly-funded programs should be available to practitioners and should guide practice in funded programs.

→ Thank You ←

