Screening for Autism Spectrum Disorder in young children through Telepractice

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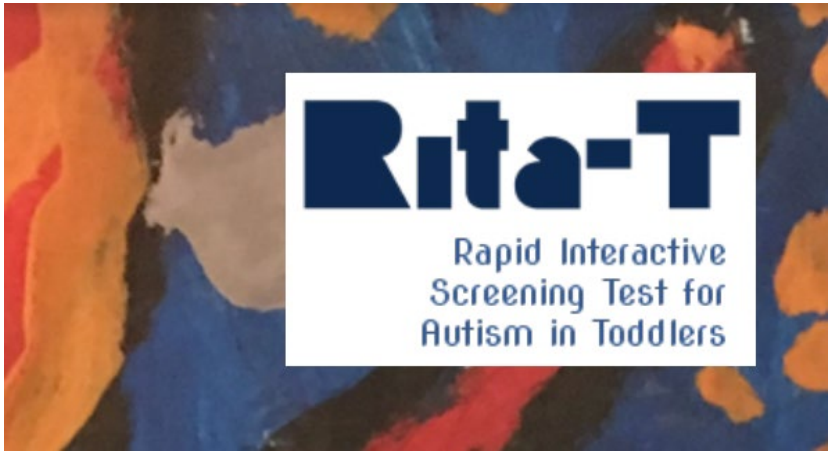


- **I have no conflict of interest**

- **I do not receive royalties from the RITA-T online training**

ASD Screening by Telehealth?

- COVID Pandemic:
  - Need to think about new models
  - Young children referred with concerns
  - No clear end
  - INSURERS: Coverage

What about developmental and ASD screening…. And evaluations in Telepractice/Telehealth time

- Definitions
- Early ASD signs
- Screening measures
- Focus on ages <3y
  - Level 1
  - Level 2
- DSM-5 criteria
- Putting it together

ASD

Autism Spectrum Disorder is a Neurodevelopmental disorder affecting the functioning of the brain, and language development, social interactions and certain repetitive behaviors

ASD is thought to start prenatally but can be clinically observed - in *some* cases - starting 6 months of age.

Background: Important numbers

Prevalence of Autism: 1/54 (CDC, 2020- period covered is 2016)

Age of diagnosis still close to 4 years

Access to diagnosis still difficult for African American and Latinos

Access disparity increased with COVID

EARLY DIAGNOSIS KEY FOR EARLY SERVICES

Early Signs of ASD

Joint Attention/Sustained Social Engagement

- Orientation to Social stimuli:
  - Response to name by 8-10 months

<u>Development in JA (joint Attention):</u>

- Starting at 8m (following gaze)
- Following a point: 10-12 months
- 12-14 months: protoimperative pointing (to request an object)
- 14-16m: protodeclarative pointing: to share an interest
- Mastery of JA: essential for functional language

Social development:
Joint Attention

- **Sharing attention with others through pointing, showing and coordinating looks between objects and people**

- **Ability to engage others non-verbally (with eye contact, smiles and gestures)**
- **mutually sustained joint engagement with others**

Children with autism: joint attention/sustained joint engagement are impaired

- **One of the earliest signs of ASD**

Joint Attention

Child follows a point

Child initiates to show

Early Development

- **Babies start communicating and relating to other people at birth**

3 months

- **Begin to develop a social smile**
- **Imitate some movements and facial expressions**
- **Enjoys and seeks interaction**

Early Concerns
6-9 months

- **Decreased warm, joyful interaction with parent or caregiver**
- **Decreased alternating to-and-fro vocalizations infant/parent**
- **Decreased recognition of mother's voice**
- **Disregard for vocalizations**

(i.e., lack of response to name)
but awareness for environmental sounds

Early Concerns
9-12 months

- **Delayed onset of babbling past 9 months of age**
- **Decreased or absent use of prespeech gestures (waving, pointing, showing)**
- **Lack of expressions such as "oh oh" or "huh"**
- **Lack of interest or response of any kind to neutral statements**
- **Start to see impairments in JA (Social)**

Early Concerns
12 months

- **Decreased back-and-forth gestures, such as pointing, showing, reaching, or waving bye**
- **IMPAIRED JOINT ATTENTION - Clear**
- **Not answering to name when called**
- **No babbling – mama, dada, baba**

Early Concerns
18 months

- **No single words by 18 months**
- **No simple pretend play**
- **No response to name**
- **Impaired joint attention**

Early Concerns
24 months

- **No two-word combinations (e.g., “mommy car”, “daddy bye-bye”)**
- **Delayed socio-dramatic play with objects (e.g., dolls)**
- **Decreased positive reaction to other children**
- **Decreased showing or initiation of joint attention**

Early Concerns
36 months

- **No phrase speech**
  - **Language limited to requests**
- **No keen interest in other children**
- **Weak joint-attention skills**
- **No complex socio-dramatic play**
- **Stereotypic behaviors and interests greater than interest in people**

- **Remember: Parents may report that they were concerned earlier on about language delays but were told: "he is boy" "he is first born" or "they speak another language at home": NONE CAUSES LANGUAGE DELAY.**

Concerns for ASD

No babbling by 12 months

No gesturing by 12 months (pointing, waving bye bye)

No single words by 16 months

No 2-word spontaneous by 24months

LOSS of ANY LANGUAGE or SOCIAL skills at ANY age

Early Signs of ASD

4 behavioral characteristics at 12m:

- no pointing
- not showing objects to others
- not looking frequently at faces
- no response to name

Most consistent finding from home videos:

No reliable response to name

Recognizing Early Signs

- **Lack of Spontaneous Gestures**
- High Risk infants who eventually received an ASD diagnosis were reported to have both fewer early gestures (12 months) including:
  - **Showing**
  - **Pointing**
  - **Waving**

- And fewer late gestures (18-24 months)
  - Play gestures such as pounding with a hammer
  - Feeding, dressing, and bathing a doll

Spontaneous initiation of communication in infants at low and heightened risk for autism spectrum disorders. Winder, Breanna M.; Wozniak, Robert H.; Parladé, Meaghan V.; Iverson, Jana M.; Developmental Psychology, Vol 49(10), Oct 2013, 1931-1942.

Recognizing Early Signs

- **Hypersensitivity to Stimuli**
- Young children with ASD often have tactile and taste/smell sensitivities and difficulties with auditory filtering

- **Ask Parents**
- Does your child seem oversensitive to noise? (e.g., plugging ears)
- Does your child react in a normal way to sensory stimulation, such as smells, food textures, clothing/shoes, sound, or pain?

1. Wiggins, L.D., Robins, D.L., Bakeman, R. et al. J Autism Dev Disord (2009) 39: 1087. doi:10.1007/s10803-009-0711-x
2. Pediatr Nurs. 2014;40(1):33-37.

Other Concerns

- **Atypical toy exploration at <u>12m:</u> predictor of subsequent ASD diagnosis: rolling, spinning, rotating, unusually prolonged visual inspection**
- **Repetitive signs may not start until after age 2y**
- **Duration of visual orienting towards and away from mothers' faces: high risk infants shift gaze to and from parents faces less frequently than control group**

Screening for ASD

Principles of Screening Tests

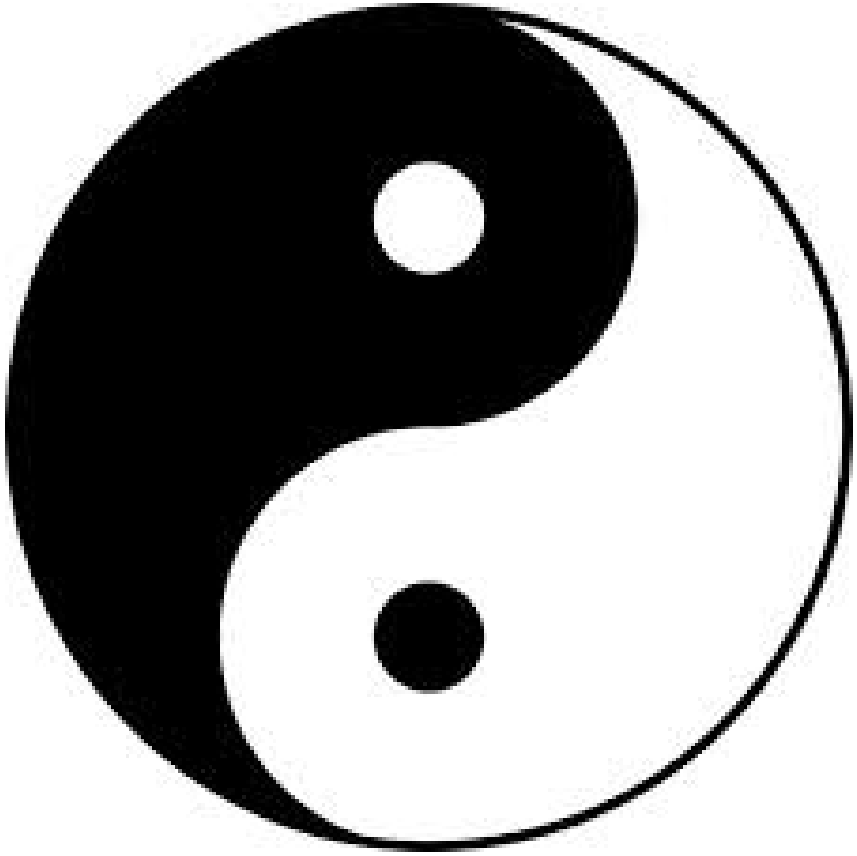
- **Sensitivity: Positives are true positives**

- **Specificity: Negatives are truly negatives**

- **PPV: Positive Predictive Value**
- **Proportion of patients with positive test results who are correctly diagnosed**

- **NPV: Negative Predictive Value**

Proportion of patients with negative test results who are correctly excluded



Level 1 Screening Tools

Screening tools for ASD

ASD Screening tools not yet fully validated for < 18 months

For children > 18 months

Most frequently used is the Modified Checklist for Autism in Toddlers

MCHAT R/F Revised with Follow-up Interview

Free & translated into several languages :

www.mchatscreen.com

DOWNLOAD THE M-CHAT R/F

www.mchatscreen.com

M-CHAT-R™

Please answer these questions about your child. Keep in mind how your child usually behaves. If you have seen your child do the behavior a few times, but he or she does not usually do it, then please answer no. Please circle **yes** or **no** for every question. Thank you very much.

1. If you point at something across the room, does your child look at it? (FOR EXAMPLE, if you point at a toy or an animal, does your child look at the toy or animal?)	Yes	No
2. Have you ever wondered if your child might be deaf?	Yes	No
3. Does your child play pretend or make-believe? (FOR EXAMPLE, pretend to drink from an empty cup, pretend to talk on a phone, or pretend to feed a doll or stuffed animal?)	Yes	No
4. Does your child like climbing on things? (FOR EXAMPLE, furniture, playground equipment, or stairs)	Yes	No
5. Does your child make unusual finger movements near his or her eyes? (FOR EXAMPLE, does your child wiggle his or her fingers close to his or her eyes?)	Yes	No
6. Does your child point with one finger to ask for something or to get help? (FOR EXAMPLE, pointing to a snack or toy that is out of reach)	Yes	No
7. Does your child point with one finger to show you something interesting? (FOR EXAMPLE, pointing to an airplane in the sky or a big truck in the road)	Yes	No
8. Is your child interested in other children? (FOR EXAMPLE, does your child watch other children, smile at them, or go to them?)	Yes	No
9. Does your child show you things by bringing them to you or holding them up for you to see – not to get help, but just to share? (FOR EXAMPLE, showing you a flower, a stuffed animal, or a toy truck)	Yes	No
10. Does your child respond when you call his or her name? (FOR EXAMPLE, does he or she look up, talk or babble, or stop what he or she is doing when you call his or her name?)	Yes	No
11. When you smile at your child, does he or she smile back at you?	Yes	No
12. Does your child get upset by everyday noises? (FOR EXAMPLE, does your child scream or cry to noise such as a vacuum cleaner or loud music?)	Yes	No
13. Does your child walk?	Yes	No
14. Does your child look you in the eye when you are talking to him or her, playing with him or her, or dressing him or her?	Yes	No
15. Does your child try to copy what you do? (FOR EXAMPLE, wave bye-bye, clap, or make a funny noise when you do)	Yes	No
16. If you turn your head to look at something, does your child look around to see what you are looking at?	Yes	No
17. Does your child try to get you to watch him or her? (FOR EXAMPLE, does your child look at you for praise, or say "look" or "watch me"?)	Yes	No
18. Does your child understand when you tell him or her to do something? (FOR EXAMPLE, if you don't point, can your child understand "put the book on the chair" or "bring me the blanket"?)	Yes	No
19. If something new happens, does your child look at your face to see how you feel about it? (FOR EXAMPLE, if he or she hears a strange or funny noise, or sees a new toy, will he or she look at your face?)	Yes	No
20. Does your child like movement activities? (FOR EXAMPLE, being swung or bounced on your knee)	Yes	No

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MCHAT-R scoring

LOW-RISK:
Total Score is 0-2

- If child is younger than 24 months, screen again after 2y
- No further action required unless surveillance indicates risk for ASD.

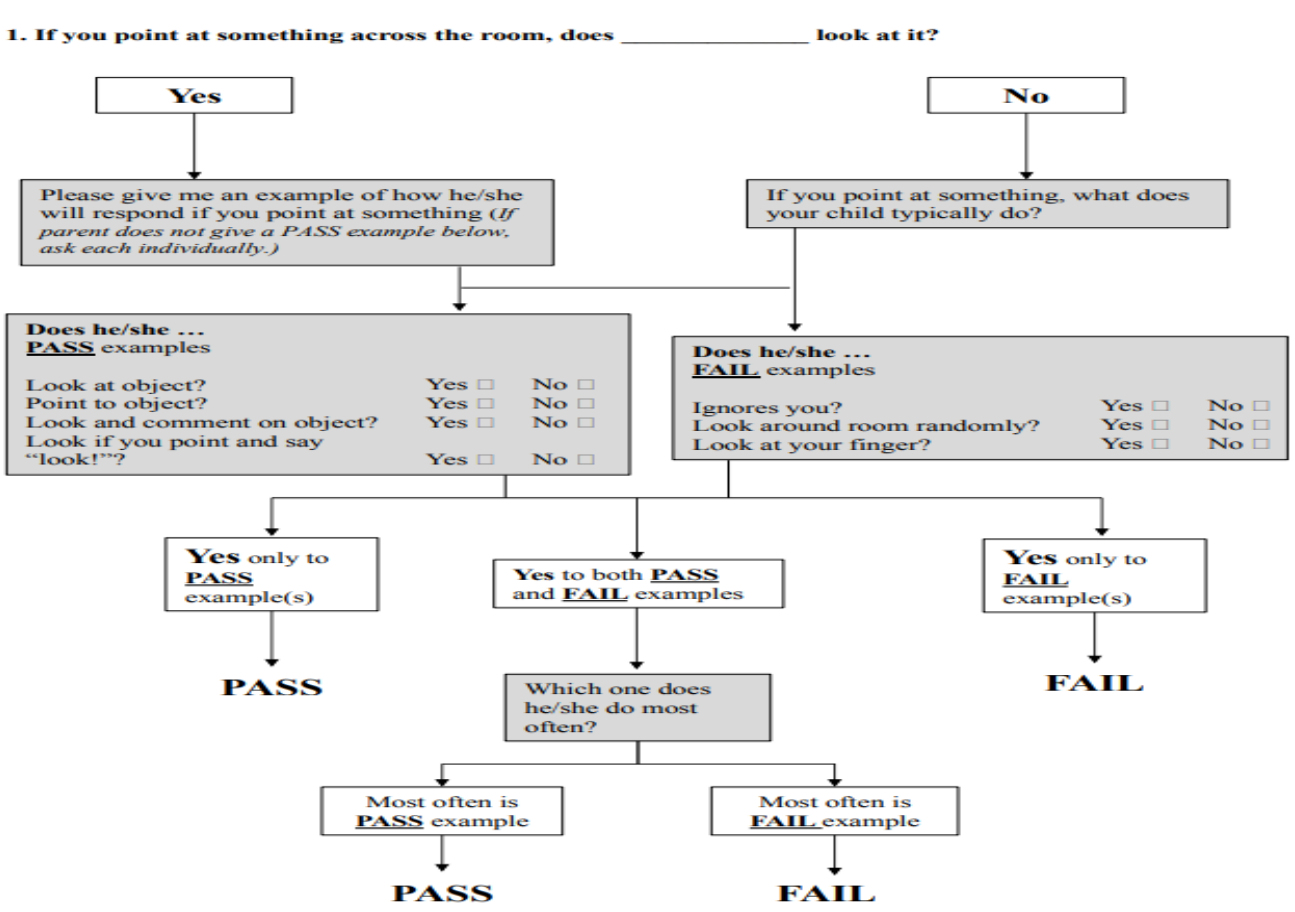
MEDIUM-RISK:
Total Score is 3-7

- Administer the Follow-Up (second stage of M-CHAT-R/F)

HIGH-RISK:
Total Score is 8-20

- It is acceptable to bypass the Follow-Up
- Refer immediately for diagnostic evaluation and eligibility evaluation for early intervention.

MCHAT R/F Follow up Interview www.mchatscreen.com



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MCHAT R/F

IN A PRIMARY CARE OFFICE or LOW RISK group:

- **Low Positive Predictive Value (PPV) for ASD (0.54)**
- **High PPV for Developmental Delay (0.98)**

→ Over-referral for ASD evaluations

And longer wait delaying those who really need a diagnosis

MCHAT R/F

Toddlers in EI have already been identified at risk for delays:

- **Administering the MCHAT-R/F to this group in EI will have higher PPV for an ASD with reported PPV of 61-79%**

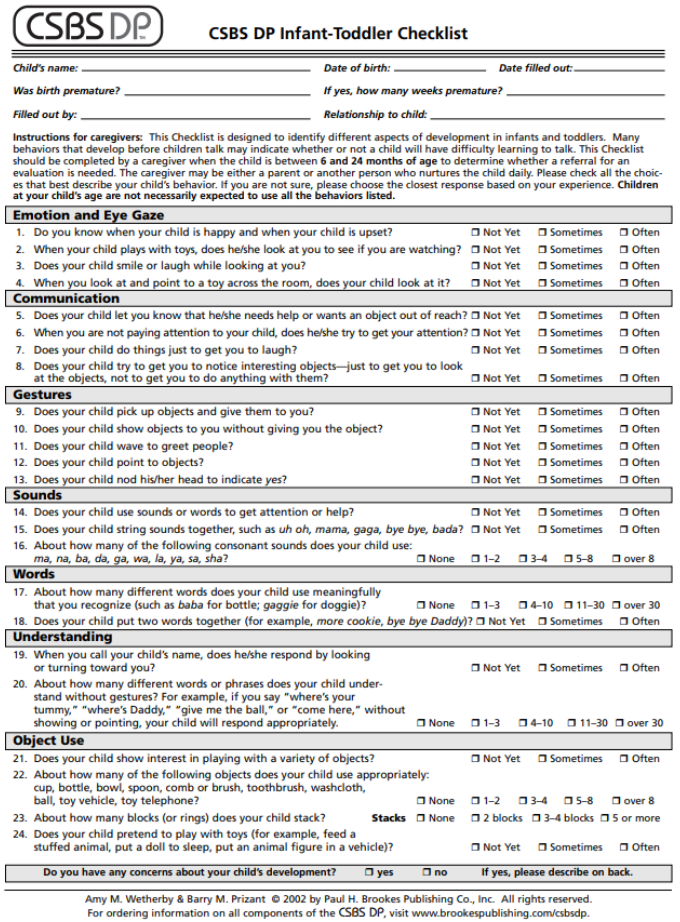
In our study with EI and Level 1 and Level 2 ASD screeners (Rapid Interactive Screening Test for ASD in Toddlers):

PPV of 87.7 % which is much higher than PPV previously reported in a high-risk group of 61-79%

YOU CAN ADMINISTER IT at 18-36 months

The CSBS-ITC
Communication & Symbolic Behavior Scales: Infant Toddler Checklist

- For those <18 months
- Free download http://brookespublishing.com/wp-content/uploads/2012/06/csbs-dp-itc.pdf
- Between 6 to 24 months
- Evaluates gestures, eye contact, facial expressions, vocalizations
- Scorable by anyone but requires clinical interpretation
- NOT AN ASD SCREENER BUT…..



CSBS DP

CSBS DP Infant-Toddler Checklist

Child's name: _____ *Date of birth:* _____ *Date filled out:* _____

Was birth premature? _____ *If yes, how many weeks premature?* _____

Filled out by: _____ *Relationship to child:* _____

Instructions for caregivers: This Checklist is designed to identify different aspects of development in infants and toddlers. Many behaviors that develop before children talk may indicate whether or not a child will have difficulty learning to talk. This Checklist should be completed by a caregiver when the child is between **6 and 24 months of age** to determine whether a referral for an evaluation is needed. The caregiver may be either a parent or another person who nurtures the child daily. Please check all the choices that best describe your child's behavior. If you are not sure, please choose the closest response based on your experience. **Children at your child's age are not necessarily expected to use all the behaviors listed.**

Emotion and Eye Gaze

1. Do you know when your child is happy and when your child is upset? ❒ Not Yet ❒ Sometimes ❒ Often
2. When your child plays with toys, does he/she look at you to see if you are watching? ❒ Not Yet ❒ Sometimes ❒ Often
3. Does your child smile or laugh while looking at you? ❒ Not Yet ❒ Sometimes ❒ Often
4. When you look at and point to a toy across the room, does your child look at it? ❒ Not Yet ❒ Sometimes ❒ Often

Communication

5. Does your child let you know that he/she needs help or wants an object out of reach? ❒ Not Yet ❒ Sometimes ❒ Often
6. When you are not paying attention to your child, does he/she try to get your attention? ❒ Not Yet ❒ Sometimes ❒ Often
7. Does your child do things just to get you to laugh? ❒ Not Yet ❒ Sometimes ❒ Often
8. Does your child try to get you to notice interesting objects—just to get you to look at the objects, not to get you to do anything with them? ❒ Not Yet ❒ Sometimes ❒ Often

Gestures

9. Does your child pick up objects and give them to you? ❒ Not Yet ❒ Sometimes ❒ Often
10. Does your child show objects to you without giving you the object? ❒ Not Yet ❒ Sometimes ❒ Often
11. Does your child wave to greet people? ❒ Not Yet ❒ Sometimes ❒ Often
12. Does your child point to objects? ❒ Not Yet ❒ Sometimes ❒ Often
13. Does your child nod his/her head to indicate *yes*? ❒ Not Yet ❒ Sometimes ❒ Often

Sounds

14. Does your child use sounds or words to get attention or help? ❒ Not Yet ❒ Sometimes ❒ Often
15. Does your child string sounds together, such as *uh oh, mama, gaga, bye bye, bada*? ❒ Not Yet ❒ Sometimes ❒ Often
16. About how many of the following consonant sounds does your child use: *ma, na, ba, da, ga, wa, la, ya, sa, sha*? ❒ None ❒ 1–2 ❒ 3–4 ❒ 5–8 ❒ over 8

Words

17. About how many different words does your child use meaningfully that you recognize (such as *baba* for bottle; *gaggie* for doggie)? ❒ None ❒ 1–3 ❒ 4–10 ❒ 11–30 ❒ over 30
18. Does your child put two words together (for example, *more cookie, bye bye Daddy*)? ❒ Not Yet ❒ Sometimes ❒ Often

Understanding

19. When you call your child's name, does he/she respond by looking or turning toward you? ❒ Not Yet ❒ Sometimes ❒ Often
20. About how many different words or phrases does your child understand without gestures? For example, if you say "where's your tummy," "where's Daddy," "give me the ball," or "come here," without showing or pointing, your child will respond appropriately. ❒ None ❒ 1–3 ❒ 4–10 ❒ 11–30 ❒ over 30

Object Use

21. Does your child show interest in playing with a variety of objects? ❒ Not Yet ❒ Sometimes ❒ Often
22. About how many of the following objects does your child use appropriately: cup, bottle, bowl, spoon, comb or brush, toothbrush, washcloth, ball, toy vehicle, toy telephone? ❒ None ❒ 1–2 ❒ 3–4 ❒ 5–8 ❒ over 8
23. About how many blocks (or rings) does your child stack? **Stacks** ❒ None ❒ 2 blocks ❒ 3–4 blocks ❒ 5 or more
24. Does your child pretend to play with toys (for example, feed a stuffed animal, put a doll to sleep, put an animal figure in a vehicle)? ❒ Not Yet ❒ Sometimes ❒ Often

Do you have any concerns about your child's development? ❒ yes ❒ no **If yes, please describe on back.**

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For ordering information on all components of the CSBS DP, visit www.brookespublishing.com/csbsdp.

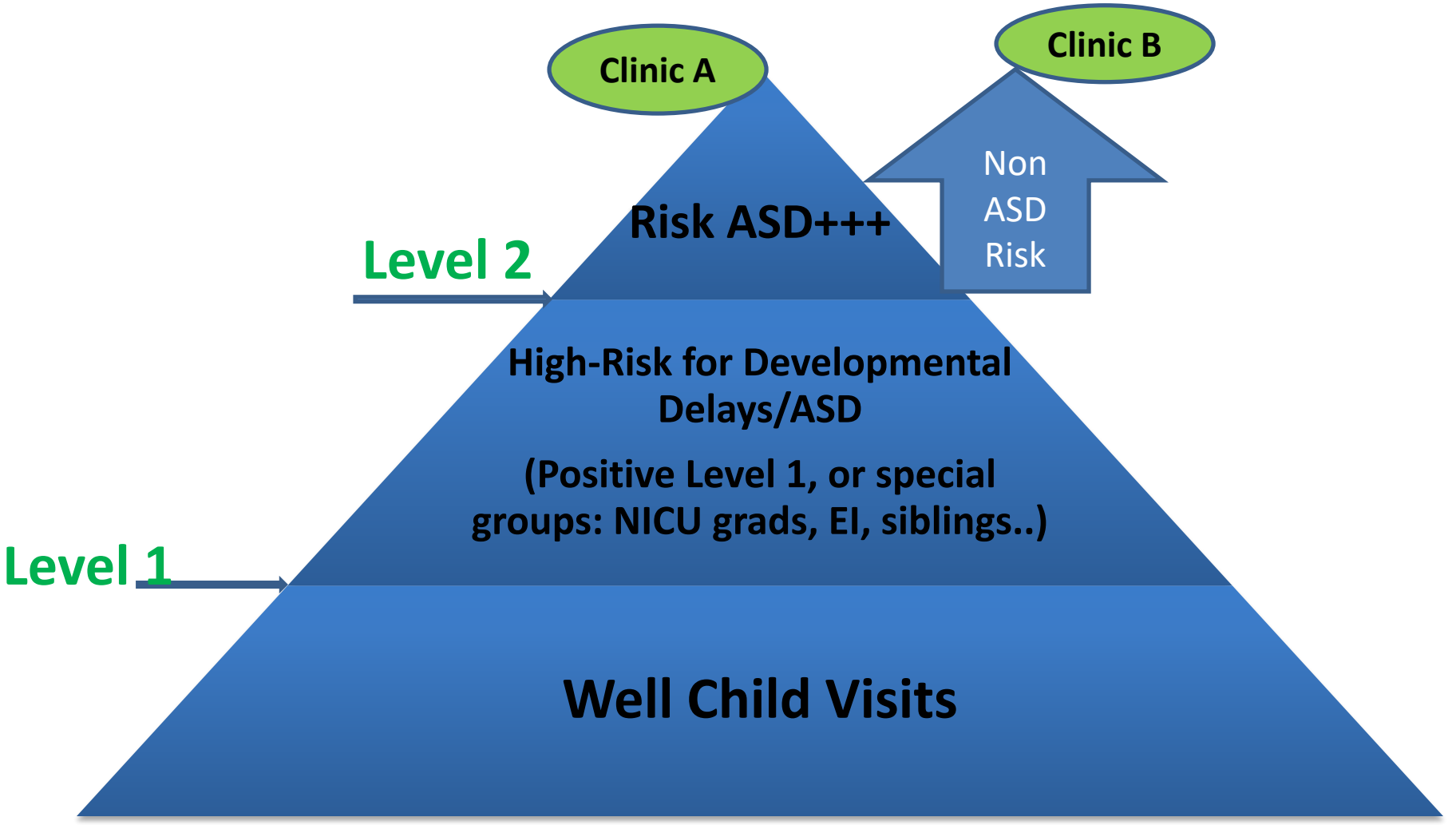
The CSBS-ITC
Communication & Symbolic Behavior Scales: Infant Toddler Checklist

- Although not an autism screener, it is validated for use in those younger than 18 months and a study published in 2010 did find a correlation between the CSBSDP-IT score at 12 months and a diagnosis of ASD at 3 years of age

Level 2 screening for ASD

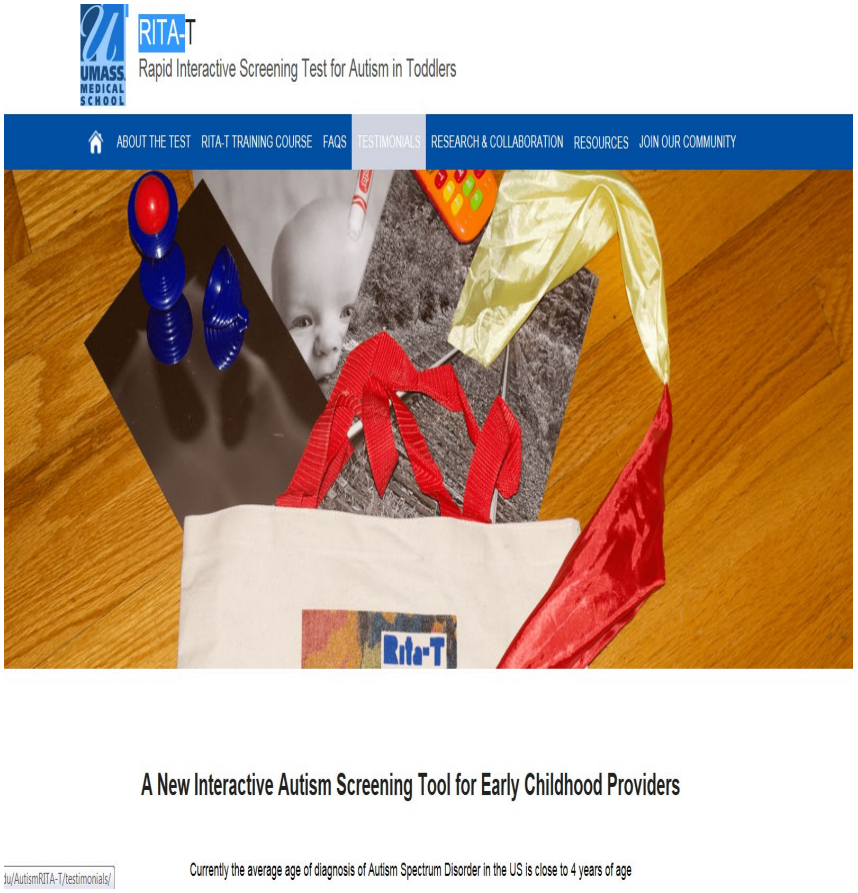
- Rapid Interactive Screening Test for ASD in toddlers (RITA-T) validated for 18-36 months
- There is no validated telehealth ASD screening measure for those 12-36 months YET
- In addition, a Level-2 screening test for ASD needs to be interactive, easy to learn, have a low cost and is generalizable to a range of clinical and early childhood settings.

Two-Level ASD Screening Model:



RITA-T: Rapid Interactive Screening Test for Autism in Toddlers

- **Nine interactive presses assess developmental constructs delayed in early ASD**
  - ***Joint Attention (JA)***
  - ***Reaction to Emotions***
  - ***Awareness of Human Agency***
- **Reliable Training : 3 hours**
- **Excellent correlation with Autism diagnostic tests**
- **Validated for 18-36 months**



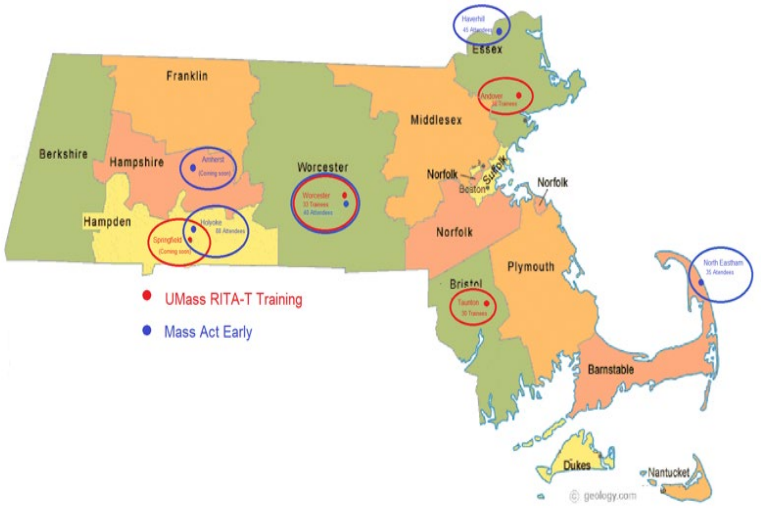
❖Administration and scoring time: **10 minutes**

RITA-T: Rapid Interactive Screening Test for Autism in Toddlers

- **RITA-T Cut off Scores**

- **< 12: Low risk for ASD**
- **12-16: Medium risk: needs further assessment**
- **>16: High risk for ASD**

Generalization of Model to other areas and EI Programs in MA Partnering with Department Public Health and with MA Act Early State Team



❖Administration and scoring time: **10 minutes**

A New Interactive Screening Test for Autism Spectrum Disorders in Toddlers

Roula Choueiri, MD[1], and Sheldon Wagner, PhD[2]

Objective To develop a clinically valid interactive level 2 screening assessment for autism spectrum disorders (ASD) in toddlers that is brief, easily administered, and scored by clinicians.

Study design We describe the development, training, standardization, and validation of the Rapid Interactive Screening Test for Autism in Toddlers (RITA-T) with ASD-specific diagnostic instruments. The RITA-T can be administered and scored in 10 minutes. We studied the validity of the RITA-T to distinguish between toddlers with ASD from toddlers with developmental delay (DD)/non-ASD in an early childhood clinic. We also evaluated the test's performance in toddlers with no developmental concerns. We identified a cutoff score based on sensitivity, specificity, and positive predictive value of the RITA-T that best differentiates between ASD and DD/non-ASD.

Results A total of 61 toddlers were enrolled. RITA-T scores were correlated with ASD-specific diagnostic tools ($r = 0.79$; $P < .01$) and ASD clinical diagnoses ($r = 0.77$; $P < .01$). Mean scores were significantly different in subjects with ASD, those with DD/non-ASD, and those with no developmental concerns (20.8 vs 13 vs 10.6, respectively; $P < .0001$). At a cutoff score of >14 , the RITA-T had a sensitivity of 1.00, specificity of 0.84, and positive predictive value of 0.88 for identifying ASD risk in a high-risk group.

Conclusion The RITA-T is a promising new level 2 interactive screening tool for improving the early identification of ASD in toddlers in general pediatric and early intervention settings and allowing access to treatment. *(J Pediatr 2015;167:460-6)*.

Paediatrics & Child Health, 2017, 1–6
doi: 10.1093/pch/pxx187
Review Article

OXFORD

Review Article

Redesign of the autism spectrum screening and diagnostic process for children aged 12 to 36 months

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Abstract

Experience with the Rapid Interactive Test for Autism in Toddlers in an Autism Spectrum Disorder Diagnostic Clinic

Jean-François Lemay, MD, FRCPC, Parthiv Amin, MD, MASc, Shauna Langenberger, RN, MN, Scott McLeod, MD, FRCPC

ABSTRACT: *Objective:* To examine the psychometric properties of the Rapid Interactive Screening Test for Autism in Toddlers (RITA-T) in an autism spectrum disorder (ASD) clinic for children aged 18 to 36 months. *Methods:* The RITA-T (level 2 screening instrument) was integrated into an ASD screening and diagnostic process for evaluating children aged 18 to 36 months who were referred to a pediatric tertiary care center. Scoring of the RITA-T to differentiate ASD from non-ASD developmental concerns was evaluated. Screening instrument measurements included sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), positive likelihood ratio (LR+), and negative likelihood ratio (LR−). *Results:* From a total of 239 participants aged 18 to 36 months (males = 78% and females = 22%), 201 (84%) were diagnosed with ASD (4:1 male-to-female ratio). An ASD diagnosis was significantly associated with RITA-T scores, with ASD patients scoring higher than non-ASD patients [$F(1,235) = 170$, mean difference: males 9.21, mean difference: females 12.4, $p < 0.001$]. The RITA-T score was not statistically correlated with age or sex. The optimal cutoff score of ≥14 was determined from a receiver operator curve analysis (area under the curve = 0.953). In the study group, with a cutoff score of ≥14, the RITA-T showed a sensitivity of 0.97, specificity of 0.71, PPV of 0.95, NPV of 0.79, LR+ of 3.33, and LR− of 0.05. *Conclusion:* The RITA-T, as a level 2 screening instrument for ASD, exhibits discriminative psychometric properties similar to previously published results. When integrated into an ASD screening and diagnostic process for families for whom concerns about ASD have been raised with their children aged 18 to 36 months, the RITA-T helps to predict a best-estimate clinical diagnosis of ASD.

(*J Dev Behav Pediatr* 00:1–9, 2019) **Index terms:** autism spectrum disorders, developmental disabilities, screening tools, psychometrics.

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The Rapid Interactive Screening Test for Autism in Toddlers (RITA-T): Validity in a Lebanese Cross-Cultural Pilot Study

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Citation: Yassin R, Abbas LA, Krayem M, Salame E, Choueiri R, et al. (2020) The Rapid Interactive Screening Test for Autism in Toddlers (RITA-T): Validity in a Lebanese Cross-Cultural Pilot Study. Int J Autism & Relat Disabil: IJARD-136. DOI: 10.29011/2642-3227.000036

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Abstract

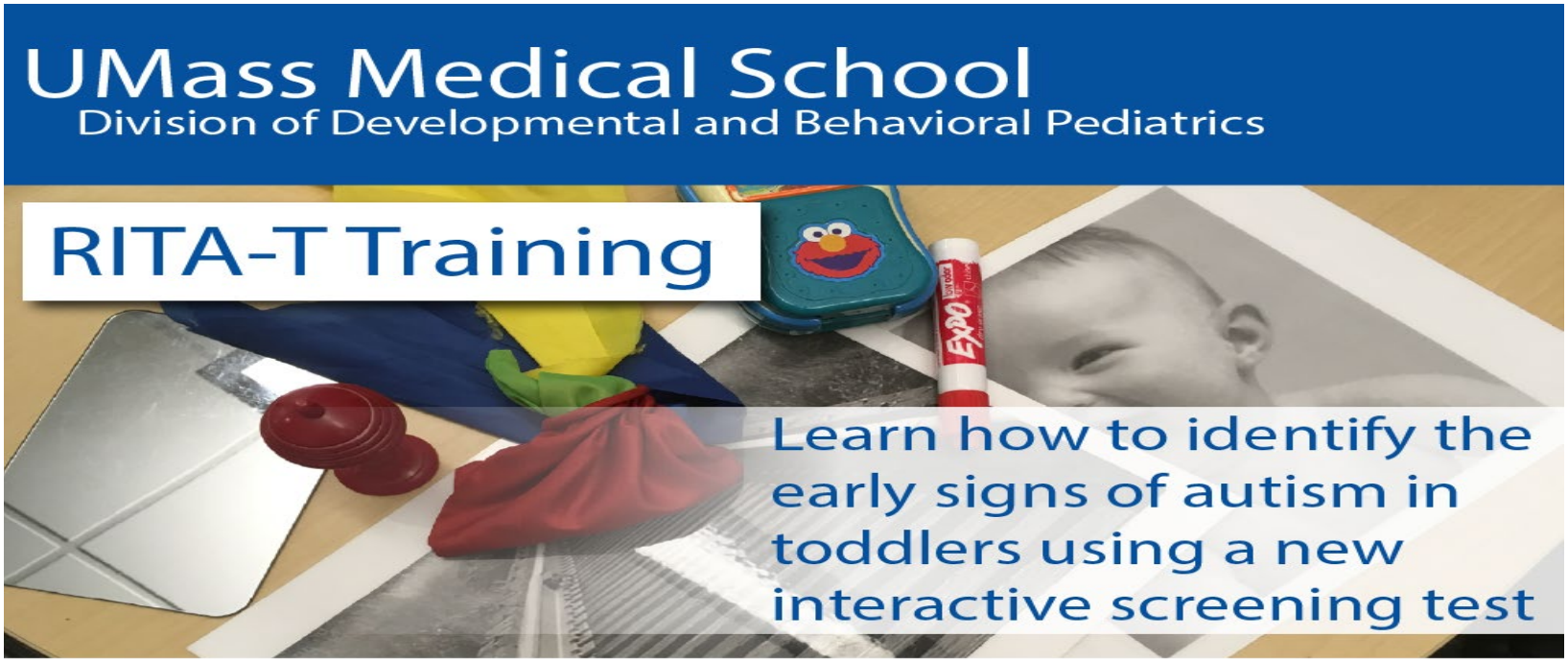
Objective is cross-culturally validating the Rapid Interactive Screening Test for Autism in Toddlers (RITA-T). Validity, specificity, sensitivity and cut off score were established in typically developing/at-risk, Autism Spectrum Disorders (ASD) negative/at-risk and ASD positive Lebanese toddlers aged 18-36 months. RITA-T/Modified Checklist for Autism in Toddlers-Revised (M-CHAT-R) tests preceded diagnosis by clinical evaluation, Autism Diagnostic Observation Schedule/Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) criteria. RITA-T demonstrates good internal consistency/test-retest reliability. Scores for RITA-T /M-CHAT-R were higher in at-risk-ASD vs. typically developing/at-risk non-ASD toddlers. Significant correlations between RITA-T and ADOS-2 scores suggested convergent validity. Receiver operating curve analysis identified 15 as cut-off for ASD (sensitivity=96%/specificity=100%) with positive/negative predictive values of 100% and 96%, respectively. The RITA-T is effective in screening ASD in Lebanese toddlers.

In press at the Journal Autism and Developmental Disorders:

Improving Early Identification and Access to Diagnosis of Autism Spectrum Disorder in Toddlers in a Culturally Diverse Community with the Rapid Interactive screening Test for Autism in Toddlers.

RITA-T online Training

http://www.umassmed.edu/AutismRITA-T/rita-t/



Fast Track RITA-T model at UMass

- Collaborate with EI programs
- Collaborate with pediatric practices and community health centers
- Pediatric Residents: continuity clinics
- If concerns about ASD:
  - MCHAT
  - RITA-T

Start conversation with families

- Referral received with
  - MCHAT-R scores
  - RITA-T scores

Within DBP

- All clinicians trained on it:
  - Social Work, Nurse Practitioner, psychologists, DBP, Clinical Research Assistants
  - Part of evaluation of younger children when referral question is not clear

Fast Track RITA-T Clinics

- **Diagnostic evaluation over 1 hour**:
  - Family sent intake that they bring with them
  - Possibility of ASD diagnosis has already been discussed with the family
  - EI Provider comes with family most often
  - In Person Interpreter arranged
  - Visits Focused

- **Focused:**
  - History of current concerns
  - Developmental and Medical History
  - Observation of play and behavior
  - Autism Testing
  - Provision of diagnosis and letter
  - Referrals to hearing and genetics
  - **Follow-up within 1-2 months with Social Work**
  - Regular follow up in DBP

ASD Diagnostic Criteria

ASD Diagnostic Criteria DSM-5

<u>Two core symptom domains</u>:
A- Qualitative abnormalities in Social Communication, marked by deficits in social-emotional reciprocity, deficits in nonverbal communicative behaviors, & deficits in developing relationships.
B- Repetitive, Restricted Behaviors, inclusive of repetitive speech, hyper/hypo-reactivity to sensory input

Plus, symptoms limit & impair everyday functioning

ASD Diagnostic Criteria DSM-5

I. Social Communication (must meet all)

- Deficits in socio-emotional reciprocity
- Deficits in nonverbal communication behaviors used for social interaction
- Deficits in developing and maintaining relationships appropriate to developmental level

II. Restricted Repetitive Behaviors (RRB) (minimum 2 of 4)

Stereotyped or repetitive speech, motor movements or use of objects

Excessive adherence to routines, ritualized patterns of verbal or nonverbal behavior or excessive resistance to change

Highly restricted, fixated interests that are abnormal in intensity or focus

Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of environment

ASD/DSM-5 Severity Levels

Severity Level	Social Communication	RRBs
I (mild)	Inclusion support with peers; child shows age level speech	Cues & reminders for transitions to manage reluctance, organization and planning
II (moderate)	Inclusion support/partial separate class depending on variability in behaviors; inability to engage with peers; immature and diminished talk, and talk topics limited to interests	Step plans for transitions to manage inflexibility; distress around change, visible to casual observer
III (severe) Restricted/Repetitive Interests and Behaviors	Separate class due to limited & minimal initiations, responses, little intelligible speech & shows responses limited to self needs	Need to reduce demands due to limited coping, level of RRBs interfere with function, & frequent distress reactions with change

Putting it together…..

History

History

History

History

Ask about REGRESSION and lack of progress

Eye contact; response to name; sensory features (sounds, food, touch, smells up to 80%); transitions; repetitive behaviors (not seen until 2nd year sometimes)

Observations

Observe the child at a good time for them

- Well rested, well fed, no distractions (for child and parent)

Ask to have the child next to their favorite toys, games:

- Cars, trucks, dolls, dollhouses, puzzles etc…
- Have few out and keep others to side
- Have two snacks ready as well

Observations

- **OBSERVE spontaneous**
  - **Eye contact**
  - **Temperament**
  - **Gestures**
  - **PLAY: pretend/repetitive/sensory**
  - **Interactions with caregiver**

Screening and Evaluations

Elicit concerns

Observation of Play: better opportunity to observe child in regular environment

Screening:

MCHAT-R/F

RITA-T

Screening Telehealth Visit (s)

Observation of play

Involving parents

Semi-structured activities:

Response to name

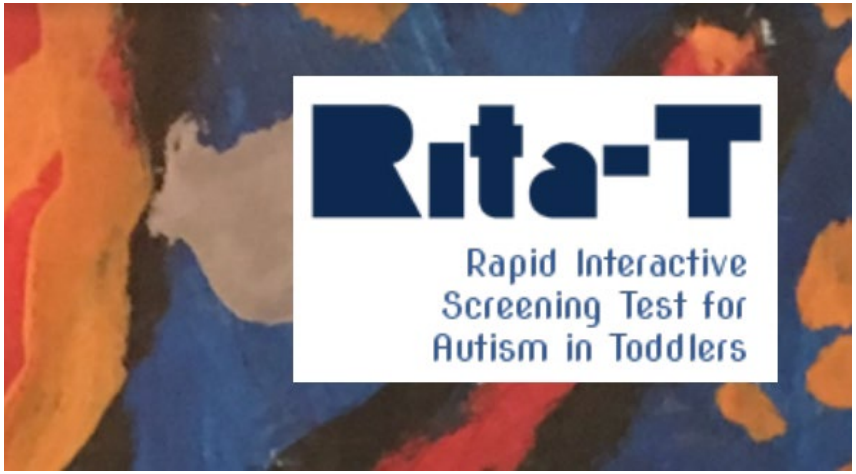
Joint attention

- Pointing
- **Look across to see what you point at? "Look" while pointing**
- **Point with his index when asked to?**
- Pointing for choice

Evaluate Play

Evaluate Eye contact

Telehealth RITA-T



- Telehealth modified RITA-T activities currently under validation
- Collecting data by telehealth
- Data analyzed and we hope to release it soon in the public domain

Summary

- **History**
- **Observations of spontaneous communication, play, and gestures**
- **Screening :** **MCHAT R/F**, **RITA-T**
- **Semi structured presses**
- **Telehealth RITA-T**

What we have learned so far

Telehalth Visits give such a better appreciation of child in their environment, family setting

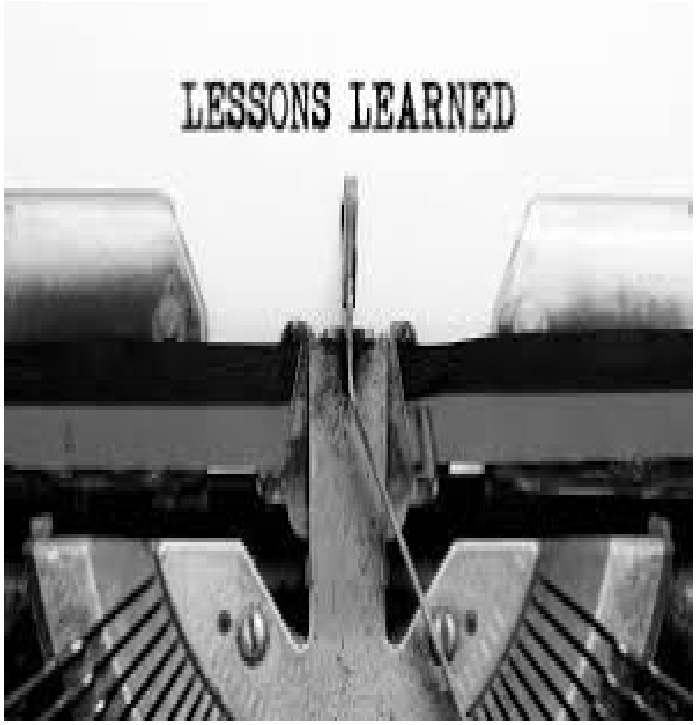
Screening/diagnostic evaluations

- Creation of new algorithms
- Prioritization of what is needed
- Care coordination
- Interpreters
- EI involved

Support for families who are otherwise isolated especially non-English speaking families

Difficulties

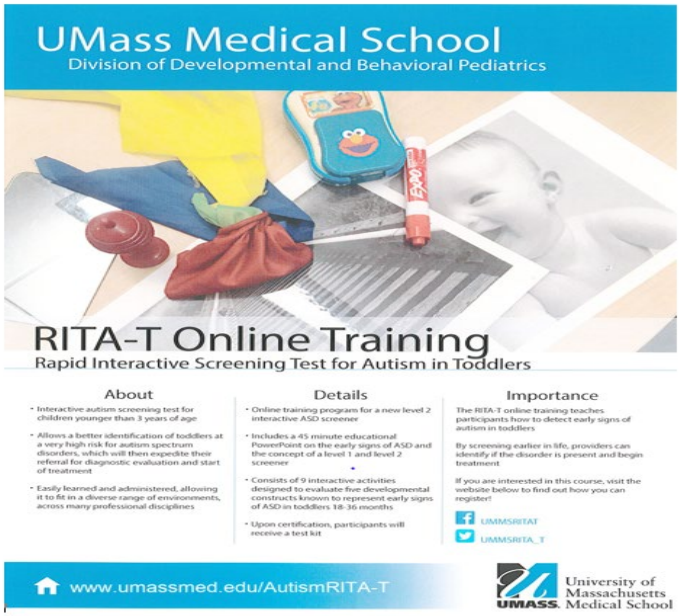
- Internet access, camera, link
- Rarely : need further visits
- Parents resistance or diagnostic dilemma



RITA-T online Training

http://www.umassmed.edu/AutismRITA-T

Interested to participate in validation of Telehealth RITA-T?
email us at RITA-T@umassmed.edu



RITA-T Training ZOOM
December 10/2020

CME Accreditation Statement
The University of Massachusetts Medical School is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Designation Statement
The University of Massachusetts Medical School designates this live activity for a maximum of 7 *AMA PRA Category 1 Credits™*. Physicians should claim only credit commensurate with the extent of their participation in the activity. ***Nursing:*** This offering meets the requirements for a maximum of **8.4 contact hours**, as specified by the Massachusetts Board of Registration in Nursing (244-CMR 5.04). Each nurse should claim only those hours of credit that he/she actually spent in the educational activity. At this time we are not offering certification for MOC Part 2, ABP. You may contact the ABP directly to inquire approval for MOC certification.

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