PEDS TOOLS AND PEDS ONLINE

Presentation to the CDC’s Act Early Conference Northeast Region

Frances Page Glascoe, PhD
Professor of Pediatrics
Vanderbilt University
Nashville, Tennessee
PEDS TOOLS ARE:

- **Parents’ Evaluation of Developmental Status (PEDS):** 10 questions eliciting parents’ verbatim concerns across domains: language, motor, self-help, behavior, social-emotional skills, school readiness, health or psychosocial issues

- **PEDS: Developmental Milestones (PEDS:DM):** 6 – 8 validated multiple-choice questions about children’s skills in each domain

PEDS Online includes **PEDS, the PEDS:DM, plus ...**

The Modified Checklist of Autism in Toddlers-Revised (M-CHAT-R): 20 yes/no questions focused on detecting probable ASD
Case Example: Roger, 30 months old

Long history of parental complaints about behavior.

Pediatrician repeatedly advised.

Parents complied but unsuccessful.
PEDS Online For Professionals

Professional use of PEDS Online requires a license. All licenses are assigned with a unique username and password and allow the professional user to administer PEDS online for a specific number of times. For more information, please make your request using our online contact form.

Screens are scored immediately upon submission.

Licensed PEDS Online users are now able to view a history of their screens and download patient screen information for integration with your Electronic Medical Records.

You can also send your patient parents to the PEDS Online test directly from your website.

For more information about our "Patient Portal System" and other custom programming options, click here.

To view your account information and screen history, click here.
<table>
<thead>
<tr>
<th>PEDS:DM Questions (Test Form L) (6 questions)</th>
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<tbody>
<tr>
<td>Can your child scribble with a crayon or marker without going off the page much?</td>
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<tr>
<td>Yes ✔</td>
</tr>
<tr>
<td>How many of these body parts can your child point to if you say, <em>Where is your head?</em> &quot;...&quot;<em>Where are your legs?</em> &quot;...&quot;<em>arms?</em> &quot;...&quot;<em>fingers?</em> &quot;...&quot;<em>teeth?</em> &quot;...&quot;<em>thumbs?</em> &quot;...&quot;<em>toes?</em>&quot;</td>
</tr>
<tr>
<td>3 or more ✔</td>
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<tr>
<td>When your child talks, how many words does he or she usually use at a time?</td>
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<tr>
<td>2 or more ✔</td>
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<td>Can your child walk backwards two steps?</td>
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<tr>
<td>Yes ✔</td>
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<tr>
<td>Can your child take off loose clothes such as pull-down pants or a coat?</td>
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<tr>
<td>Most of the time ✔</td>
</tr>
<tr>
<td>Does your child pretend to do grown-up things like taking care of a baby, sweeping, driving, or cooking?</td>
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<tr>
<td>Yes ✔</td>
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Review parent responses for Roger Dodger

Child Name: Roger Dodger
Birth Date: 11-02-2012
Test Date: 05-09-2015
Child's Age: 2 years 6 months 0 day
Test Age: 2 years 6 months 0 day (No Prematurity)
Age Group: 2 years 5 months - 2 years 9 months
Test Form: L (6 Questions)

PEDS:DM (Developmental Milestones)

Parent responses indicate:


Milestones Unmet: None

Results: Low risk for developmental/mental health problems.

Recommendation: Provide reassurance, encouragement, and offers of parenting information.
**PEDS Administered: Questions 1 - 3**

*Please list any concerns about your child's learning, development, and behavior.*

Response: Many concerns about his behavior

*Do you have any concerns about how your child talks and makes speech sounds?*

Selected: Yes

Response: Says the same words over and over like "Wheel of Fortune"

*Do you have any concerns about how your child understands what you say?*

Selected: Yes

Response: Doesn't seem to listen or follow directions
Do you have any concerns about how your child uses his or her hands and fingers to do things?
Selected: No
Response:

Do you have any concerns about how your child uses his or her arms and legs?
Selected: No
Response:

Do you have any concerns about how your child behaves?
Selected: Yes
Response: temper tantrums constantly

Do you have any concerns about how your child gets along with others?
Selected: A Little
Response: Doesn't always seem interested in us
PEDS Questions 8 - 10

Do you have any concerns about how your child is learning to do things for himself/herself?
   Selected: No
   Response: too independent

Do you have any concerns about how your child is learning preschool or school skills?
   Selected: No
   Response: he's too young for that

Please list any other concerns.
   Response: very picky eater, doesn't sleep well, deaf?
Proceed to M-CHAT (Strongly recommended)
Rationale: This child is high risk on PEDS: Path A. The AAP policy calls for routine ASD screening twice in the 18 - 30 month age range.

Brief Results:
PEDS - Path A-1: (high risk for developmental-behavioral problems)

PEDS:DM
Milestones met: Self Help, Fine Motor, Receptive Language, Gross Motor, Social Emotional, Expressive Language,

Recommendations:
Despite adequate performance on the PEDS:DM, this parent's concerns remain highly predictive of developmental-behavioral problems. A referral to Early Intervention or to the public schools is needed for further evaluation, intervention or monitoring.

<table>
<thead>
<tr>
<th>PEDS Predictive Concerns</th>
<th>PEDS Non-predictive Concerns</th>
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<tbody>
<tr>
<td>Expressive Language</td>
<td>Fine Motor</td>
</tr>
<tr>
<td>Receptive Language</td>
<td>Gross Motor</td>
</tr>
<tr>
<td>Other Health</td>
<td>Behavior</td>
</tr>
<tr>
<td></td>
<td>Social/Emotional</td>
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</tbody>
</table>
Brief Results:
PEDS - Path A-1: (high risk for developmental-behavioral problems)

PEDS:DM
Milestones *met*: Self Help, Fine Motor, Receptive Language, Gross Motor, Social Emotional, Expressive Language,

Milestones unmet in:

M-CHAT: Fail
Failed Answers: 2, 6, 7, 8, 9, 11, 12, 14, 15, 16, 17, 18

Recommendations:
Provide sensory and lead screens. Refer to Early Intervention or the public schools for speech-language and psycho-educational/developmental assessments, preferably by a specialist in autism spectrum disorders. Use professional judgment to decide if referrals are also needed for social work, occupational/physical therapy, mental health services, etc.
05-09-2015

Dear Child Development Specialist/ Health Provider,

On 05-09-2015, we administered three highly accurate developmental-behavioral screening tests to Roger Doger, born 11-02-2012. These include: Parents’ Evaluation of Developmental Status (PEDS), the Modified Checklist of Autism in Toddlers (M-CHAT) and/or PEDS: Developmental Milestones (PEDS:DM). All three measures were standardized on thousands of children around the United States and validated against diagnostic measures of intelligence, adaptive behavior, speech-language, etc. All are approved by the American Academy of Pediatrics and shown to be highly accurate in identifying children in need of various types of evaluations and intervention services.

Although the results of the PEDS:DM show milestones met in Self Help, Fine Motor, Receptive Language, Gross Motor, Social Emotional, Expressive Language, the results of PEDS place suggest that Roger is at risk. The M-CHAT results suggest difficulties with social-relatedness and understanding of practical language skills.

Given the above results, further testing is needed and should begin with no-cost evaluations through early intervention or through the public schools. Hearing, vision, and overall health status, including lead levels should also be checked. Your clinical judgment is needed to determine whether assessment of intelligence, adaptive behavior, academics/preacademics, mental health, social services or other assessments would be helpful. After these referrals are made, Roger should also be referred to an autism specialty service, if available.

Assessment is available without charge through your local child-find program (www.nectac.org) or through the public schools--please contact the school psychologist or speech language pathologist to make a referral. If Roger does not qualify for intervention or special education, please refer for services such as Head Start, after school tutoring, summer school, quality daycare, and parent training.

We encourage you to monitor Roger's progress and encourage you to make sure that families sign a two-way consent form so that you can share these results with other providers and they with you.

Please assist this family in finding timely testing and services and also help them get information on how to help at home.

Sincerely,

Provider

Clinic

Phone

Procedure code: 96110 (X 3) Possible ICD-9 code: 315.9 if milestones met M-CHAT: fail
About the Results of your Child’s Screen

Dear Parent,

On 05-09-2015 we administered to Roger Doger, born 11-02-2012, several highly accurate brief tests of learning, development and behavior. These include: Parents' Evaluation of Developmental Status" (PEDS), the Modified Checklist of Autism In Toddlers (M-CHAT) which is a measure of social skills and understanding everyday language) and PEDS: Developmental Milestones (PEDS:DM).

Roger performed well on the PEDS:DM which suggests progress in Self Help, Fine Motor, Receptive Language, Gross Motor, Social Emotional, Expressive Language. But your concerns along with Roger's difficulty on the M-CHAT suggest that further testing is needed. This office will make several referrals starting with a program that will not cost you and will lead to recommendations for any no-cost programs for which Roger may be eligible.

In addition, this office would like to have Roger seen by a service that specializes in autism spectrum disorder to decide if Roger needs special help learning to understand others.

We would also like to make sure that Roger gets vision, hearing and lead screening to make sure there are no problems in these areas, and address any health questions you may have.

We would like your permission to send the results of today's testing to the services we are recommending. We would also like your permission to receive information from them on the additional testing they do and the recommendations they have for helping Roger.

We would also like to give you information on things you can do at home to help your child learn. If you have access to the internet, you will find helpful links at www.pedtestonline.com.

Sincerely,

Provider

Clinic

Phone
Other Info on PEDS Tools- 1

- Measures development plus behavior/social-emotional/mental health + psychosocial risk
- Complies with AAP early detection policy
- Can be self-administered by parents, by interview or.. for the PEDS:DM also hands-on
- Takes ~ 5 minutes to give both Peds and PEDS:DM
- 1977 initial studies and first publication
- Re-normed/validated in 2013 on 37,000 children, 0 – 8 years of age in 19 US States + 3 Canadian provinces
- 25 international psychometric studies
Other Info on PEDS Tools - II

- PEDS:DM written at the 2\textsuperscript{nd} grade level (without response options included).
- PEDS written at the 4\textsuperscript{th} grade level (without response options -- 2\textsuperscript{nd} grade level with options)
- PEDS Serves as a critical literacy screen to reduce random answering and thus under- or over-referrals
- 41 translations complying with International Test Commission Guidelines
Detects all developmental-behavioral disabilities with 83%+ sensitivity/specificity to dx measures (across 44/47 validation studies)

~ 78% to 91% sensitivity in detecting ASD across 6 studies

83% sensitivity for PEDS at 12 months predicting ASD diagnosis at 3 years

But given the importance of the earliest possible detection and intervention, an ASD specific screen is recommended following broad-band screens
Other Cool Info

- PEDS Tools save time so that visits focus on families’ needs
- PEDS Tools increase uptake on well-visits
- PEDS Online generates a database for outcomes
- Delaware DPH enables EI to view children screened/identify which clinics need training
- 211LA uses PEDS Online and live referral coordination to facilitate 2-3 times enrollment uptake compared with handing out phone numbers.
Costs

- ~ $0.50 in print, $3.00 for PEDS Online (for one or all screens per encounter)
- Material costs for screens whether protocols are purchased or photocopiable is negligible. The cost of screening is time/clinic overhead expenses
- More time is needed the longer the measure and the more difficult to read and score
- Time/costs accrue for dictating referral letters, take-home summary reports, looking up billing codes
- Online screening services with brief measures, automated scoring and report writing save time and costs ~ $40 per child
www.pedstest.com

- Self-training – case examples, videos, slide shows, optional post-test, group training guidance, FAQs
- Research studies
- Implementation guidance
- Referral resources including parenting websites
- Free trial of PEDS Online
- List of translations
- Descriptions of national and state initiatives using PEDS Tools
- Newsletter sign-up
- Upcoming presentations and exhibits
Frances.P.Glascoe@Vanderbilt.edu

The end