

## Parents' Evaluation of Developmental Status (PEDS):

### An evidence-based method for detecting and addressing developmental and behavioral problems in children

#### Case Example



*\*For this case example, no personally identifying information is included. Pseudonyms are used along with stock photography.*

Roger\* had regular checkups since birth. During each, his mother had a range of complaints, mostly health-related or behavioral (as shown on both the Score Form and Interpretation Form). These were addressed with medical/nutrition intervention, parent education (including Ferber's sleep techniques), and eventually in-home behavior therapy to address head-banging, pacing, and tantrums. Developmentally, Roger walked and talked on time and had a fairly substantial vocabulary, however unusual, at 18 months of age. His parents were active in playing with and teaching him.

The PEDS' Response Form (next page) shows what his mother wrote while waiting for Roger's two-year check-up.

The PEDS' Score Form (showing the concerns raised at prior visits as well) revealed 4 concerns predictive of developmental problems and 2 non-predictive concerns.

The Score Form points to Path A on the PEDS Interpretation Form and the need for audiological/speech-language assessment. Roger's pediatrician, Dr. Louise Hamilton, also followed the American Academy of Neurology's recommendations for second-stage screening using an autism-specific measure. Lacking time, she requested that the local Early Intervention (EI) program administer the Modified Checklist of Autism in Toddlers (M-CHAT). Dr. Hamilton also followed the AAN's recommendation for audiological, vision and lead screening, all of which were negative. (As an aside, PEDS online at [www.forepath.org](http://www.forepath.org) also provides the M-CHAT, offers automated scoring, generates a summary for parents and a referral letter for sharing with other professionals).

The early intervention program administered a range of measures and determined that Roger met eligibility criteria for enrollment in early intervention because of a receptive and expressive language delay and social deficits. (Note that it is not necessary to have a diagnosis for enrollment in early intervention). The program also interviewed Roger's parents to look at family stressors, mental health issues and other external contributors to Roger's difficulties but felt the family was healthy and coping well under the circumstances of a challenging child. The developmental specialist at the EI program also administered the M-CHAT which was positive and thus indicated the need to see an autism specialist. The EI program explained these results to Roger's mother and in a letter back to Dr. Hamilton, suggesting that Roger be placed on the waiting list for the autism specialist at a local university while the program continued to work with him and his family.



# PEDS RESPONSE FORM

Acme Pediatrics  
Provider

Child's Name Roger J. Parent's Name Malinda J.

Child's Birthday 8/8/05 Child's Age 2 Today's Date 8/10/07

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

*I'm worried about how my child talks and relates to us. He says things that don't have anything to do with what's going on. He's oblivious to anything but what he is doing. He's not doing as well as other kids in many ways.*

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

Circle one: No  Yes  A little  COMMENTS:

*He repeats odd things like "Wheel of Fortune"*

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

Circle one: No  Yes  A little  COMMENTS:

*I can't tell if he doesn't understand, doesn't hear well or just ignores us*

Do you have any concerns about how your child uses his or her hands and fingers to do things?

Circle one: No  Yes  A little  COMMENTS:

*He's good with manipulatives but does a lot of the same things over and over: spinning wheels on cars, flicking light switches, flipping pages*

Do you have any concerns about how your child uses his or her arms and legs?

Circle one: No  Yes  A little  COMMENTS:

*He's very coordinated and very fast!*

Do you have any concerns about how your child behaves?

Circle one: No  Yes  A little  COMMENTS:

*still lots of tantrums but headbanging is almost gone. Behavior therapy has been helpful and his tantrums are less severe and shorter*

Do you have any concerns about how your child gets along with others?

Circle one: No  Yes  A little  COMMENTS:

*He doesn't seem interested in watching other kids, let alone playing with them*

Do you have any concerns about how your child is learning to do things for himself/herself?

Circle one: No  Yes  A little  COMMENTS:

*He's very independent*

Do you have any concerns about how your child is learning preschool or school skills?

Circle one: No  Yes  A little  COMMENTS:

*He's too young for any of that!*

Please list any other concerns.

*We spend lots of time playing with Roger and talking to him. This seems to be helping him be more engaged. I still wonder about his hearing.*

# PEDS SCORE FORM

Child's Name Roger J. Birthday 8/8/05

You must refer to the *PEDS Brief Guide to Scoring and Administration* in order to correctly administer, score and interpret PEDS.

Child's Age:	0-3 mos.	4-5 mos.	6-11 mos.	12-14 mos.	15-17 mos.	18-23 mos.	2 yrs.	3 yrs.	4-4 1/2 yrs.	4 1/2-6 yrs.	6-7 yrs.	7-8 yrs.
Global/Cognitive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expressive Language and Articulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<b>Worried about how he talks</b>			
Receptive Language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>Not sure he understands us</b>			
Fine-Motor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gross Motor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behavior	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>Tantrums, head banging, repetitive play</b>			
Social-emotional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<b>Worried about how he relates, not interested in other children</b>			
Self-help	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<b>I wonder about his hearing</b>			

Count the number of checks in the small circles and place the total in the large circle below.

1 1 0 0 0 0 0 4 0 0 0 0 0

If the number shown in the large circle is 2 or more, follow Path A on PEDS Interpretation Form. If the number shown is exactly 1, follow Path B. If the number shown is 0, count the number of small boxes and place the total in the large box below.

0 0 1 1 1 1 1 2 1 1 1 1 1

If the number shown in the large box is 1 or more, follow Path C. If the number 0 is shown, consider Path D if relevant. Otherwise, follow Path E.

# PEDS INTERPRETATION FORM

**Path A:** Two or more predictive concerns?

Yes? **Yes** → Two or more concerns about self-help, social, school, or receptive language skills?

Refer for audiological and speech-language testing. Use professional judgment to decide if referrals are also needed for social work, occupational/physical therapy, mental health services, etc.

No? **No** →

Refer for intellectual and educational evaluations. Use professional judgment to decide if speech-language, audiological, or other evaluations are also needed.

**Path B:** One predictive concern?

Yes? **Yes** → Health concerns only?

Screen for health/sensory problems, consider second-stage developmental screen.

If screen is passed, counsel in areas of concern and watch vigilantly.

No? **No** → Administer second-stage developmental screen.

If screen is failed, refer for testing in area(s) of difficulty.

**Path C:** Nonpredictive concerns?

Yes? **Yes** → Counsel in areas of difficulty and follow up in several weeks.

If unsuccessful, screen for emotional/behavioral problems and refer as indicated. Otherwise refer for parent training, behavioral intervention, etc. If concerns still exist at age 4 1/2 and older, refer for mental health services.

**Path D:** Parental difficulties communicating?

Yes? **Yes** → Foreign language barrier?

Use a second screen that directly elicits children's skills or refer for screening elsewhere.

No? **No** →

Use foreign language versions, send PEDS home in preparation for a second visit; seek a translator, or refer for screening elsewhere.

**Path E:** No concerns?

Yes? **Yes** → Elicit concerns at next checkpoint.

Use PEDS between checkpoints (e.g. sick- or return-visit).

0-3 mos. diarrhea, no fever, suggested formula change

4-5 mos. intermittent diarrhea, switched to soy

6-11 mos. extensive crying at bed-time gave mo info re: "Ferberizing"

12-14 mos. head-banging, gave mo info from Schmitt's Patient Education

15-17 mos. still head-banging, pacing referred for in-home behavior tx

18-23 mos. frequent tantrums but head-banging decreased, cont beh tx

2 yrs. Path A: hearing, lead, vision screened and OK, referred to EI for

3 yrs. M-CHAT and developmental assessment

4-4 1/2 yrs. \_\_\_\_\_

4 1/2-6 yrs. \_\_\_\_\_

6-7 yrs. \_\_\_\_\_

7-8 yrs. \_\_\_\_\_