

Early Detection of Children Likely to Have Problems in School



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Early Intervention Benefits: Rationale For Screening

- **Family interest in participation**
- **Better outcomes for participants:**
 - Higher graduation rates, reduced teen pregnancy, higher employment rates, decreased criminality and violent crime**
- **\$30,000 to >\$100,000 benefit to society**
(1992 \$\$s)
- **For every 1\$ spent on EI, society saves 17\$**

Conclusions from Early Intervention Research



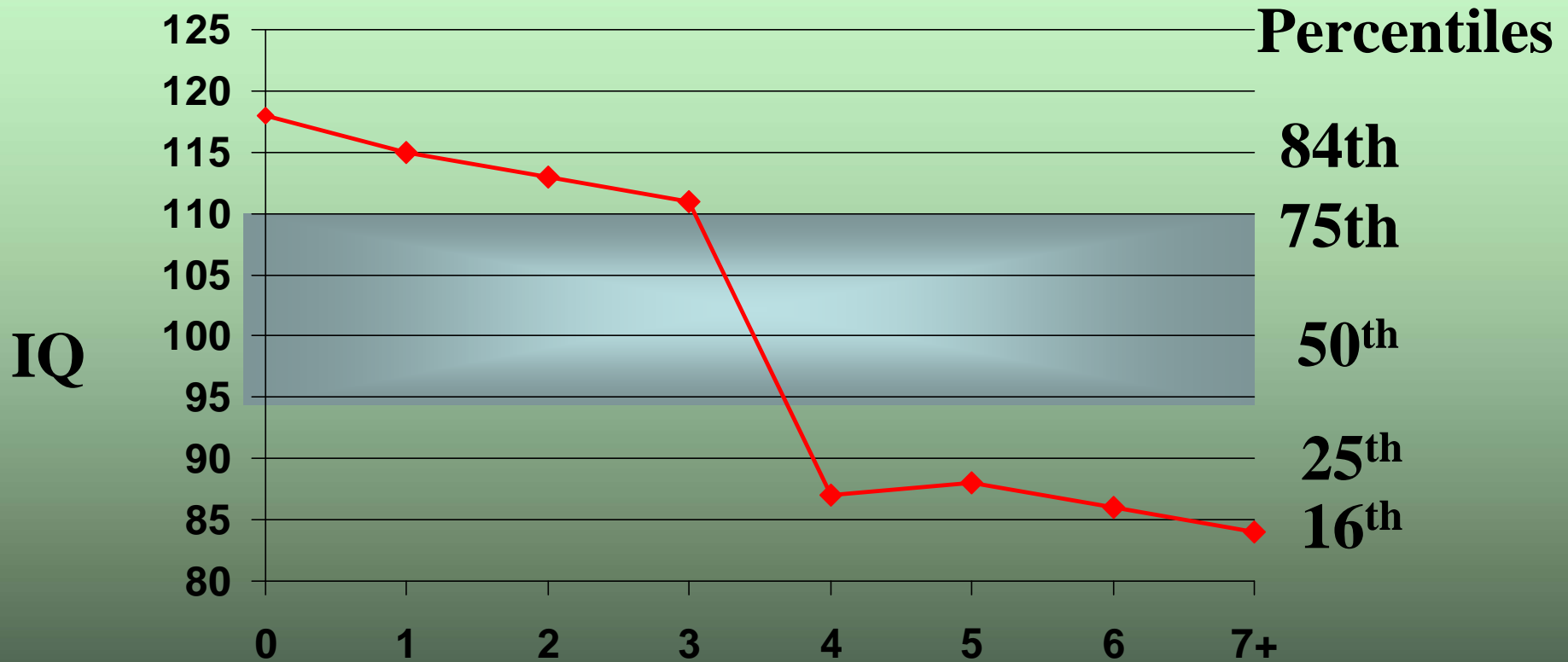
- ❖ Early intervention can prevent or ameliorate current and future difficulties
- ❖ Early detection is essential for identifying those in need of early intervention
- ❖ Children likely to have problems in school are those with below average language development, intelligence, and/or preacademic skills

What should intervention address?



- ▶ Psychosocial risk
- ▶ Parenting skills
- ▶ Children's development/behavior
- ▶ Neighborhoods (playgrounds, libraries, local social//healthservices)
- ▶ Ongoing throughout the school years

Effects of Psychosocial Risk Factors on Intelligence



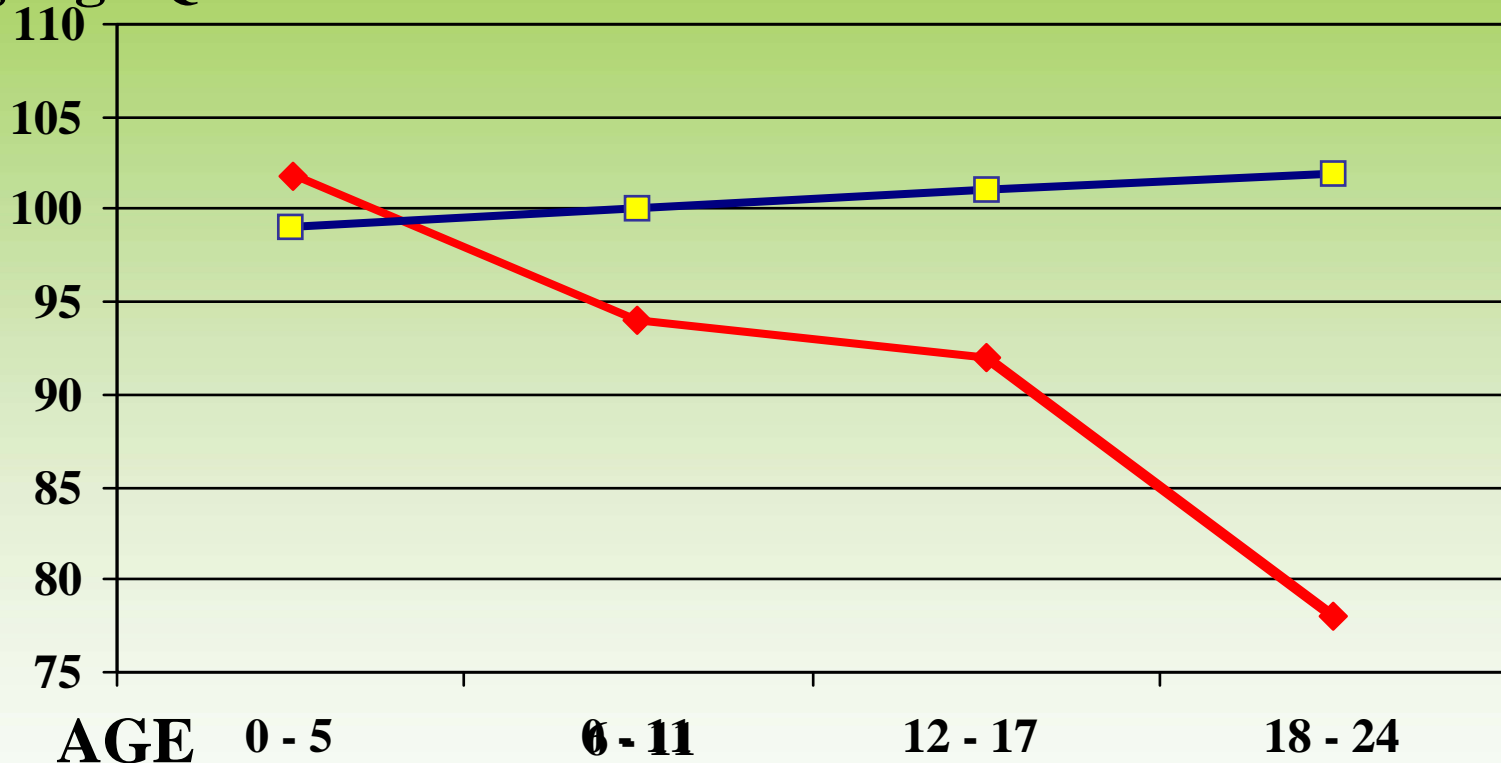
RISKS: < HS, > 3 children, stressful events, single parent, parental mental health problems, < responsive parenting, poverty, minority status, limited social support

(Sameroff et al., 1987)

Developmental Status by parent's verbal behavior and perceptions* in 0 - 2 year olds

(Glascoe & Leew, submitted)

Language Quotients



**Talks at meals, helps child learn new things, reads aloud, able to soothe, enjoys child, perceives child as interested in conversing*

Psychosocial risk factors: housing instability, 3+ children in the home, parental depression, limited facility with English

Early Detection Problems!!



- **16% - 18% of children have developmental-behavioral difficulties and need special services**
- **only about 30% are detected by their health care provider before school entrance**
- **only 1/4th of those eligible are enrolled in early intervention**

Provisos



- **Health care providers are uniquely positioned for optimal early detection**
- **Clinicians get very little feedback about how low their detection rates really are**
- **Consciousness raising about ineffective information methods is needed!**

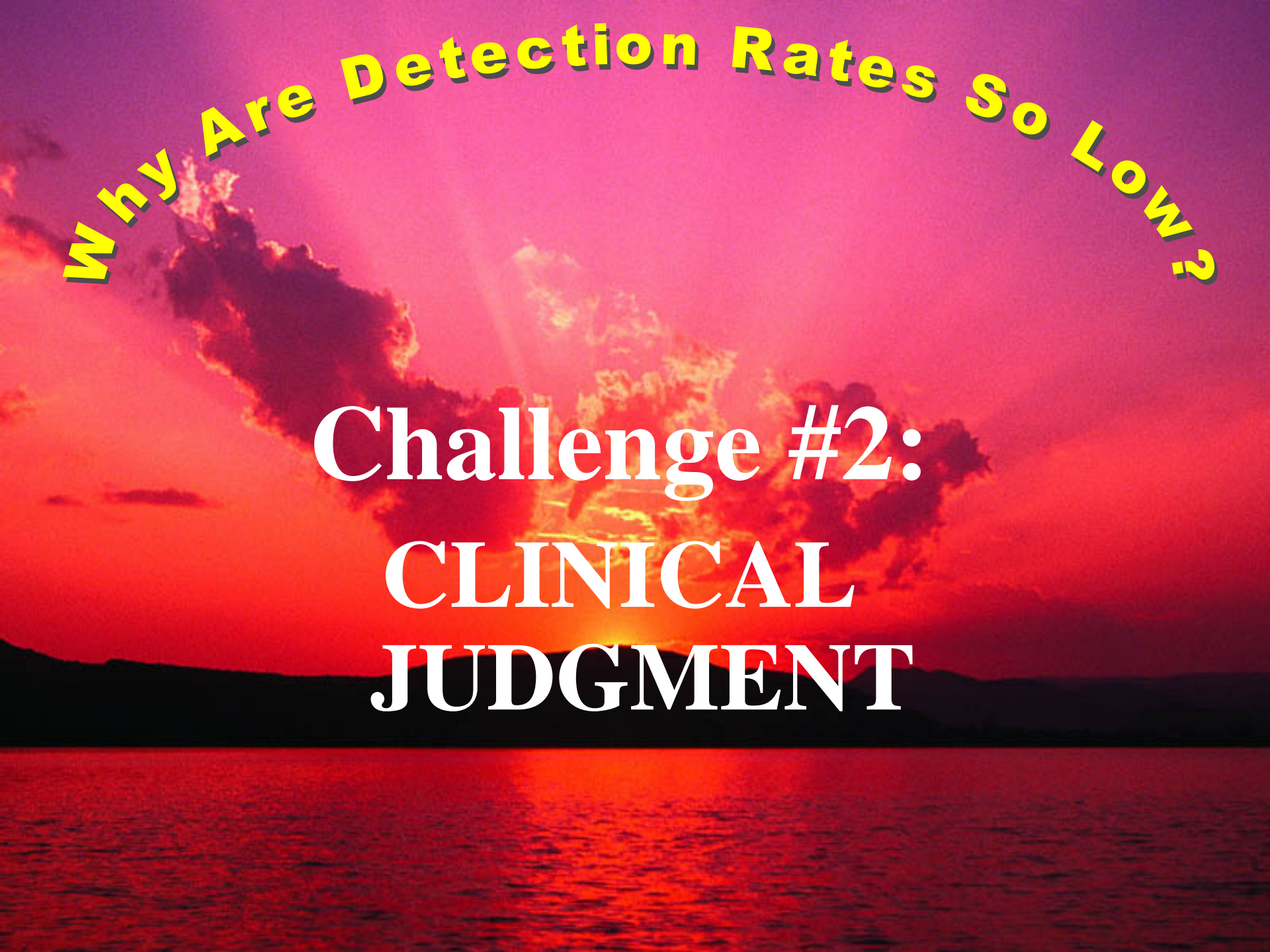


Why Are Detection Rates So Low?

Challenge #1:
MILESTONES
CHECKLISTS

Sample Checklist

- **Uses hungry, tired, thirsty**
- **Climbs stairs without holding on**
- **Stacks 12 blocks**
- **Knows colors**
- **Dresses self completely**
- **Plays games with rules**



Why Are Detection Rates So Low?

**Challenge #2:
CLINICAL
JUDGMENT**











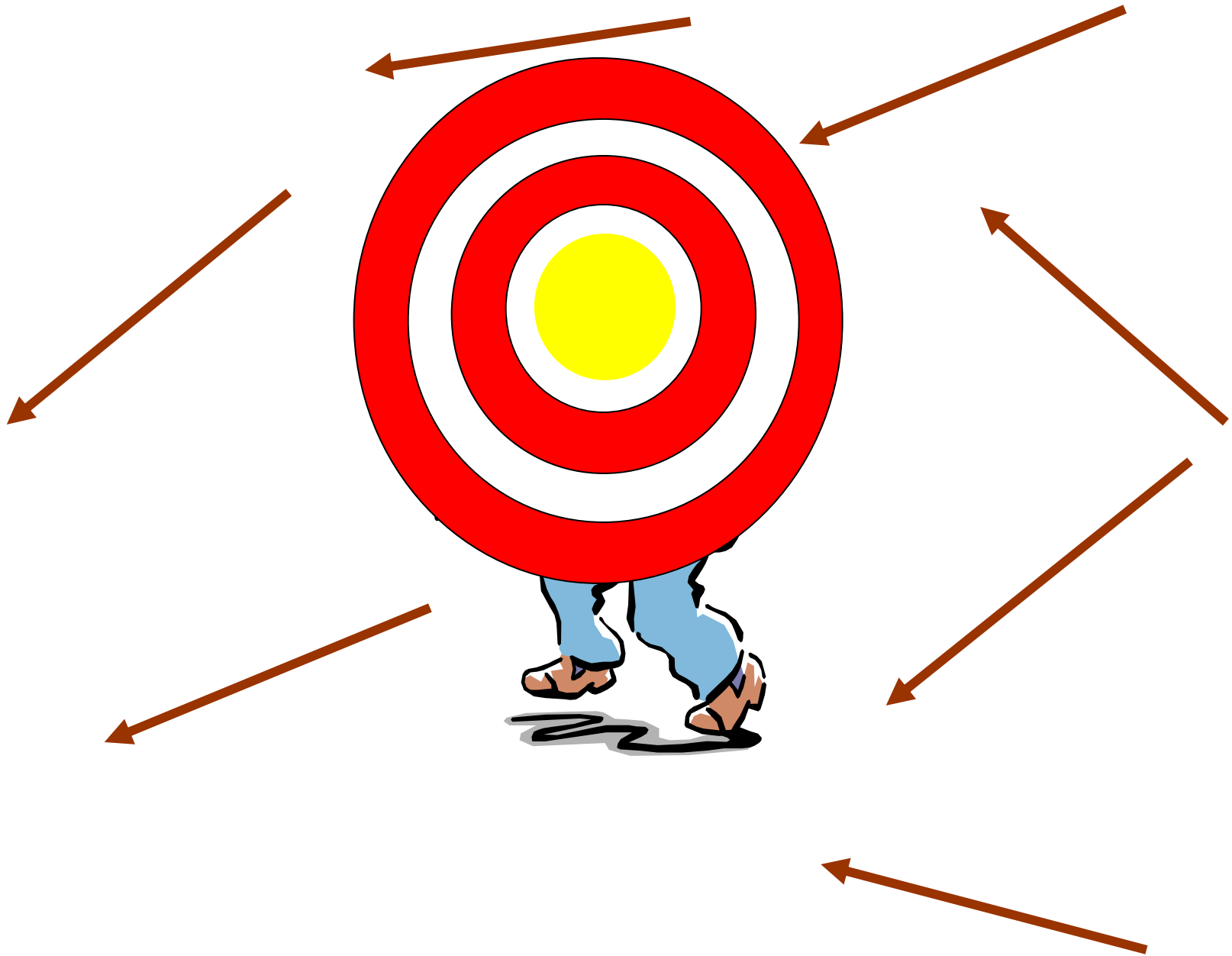
Why Are Detection Rates So Low?

Challenge #3:

DEVELOPMENT ITSELF:

Repeated Screening is Needed





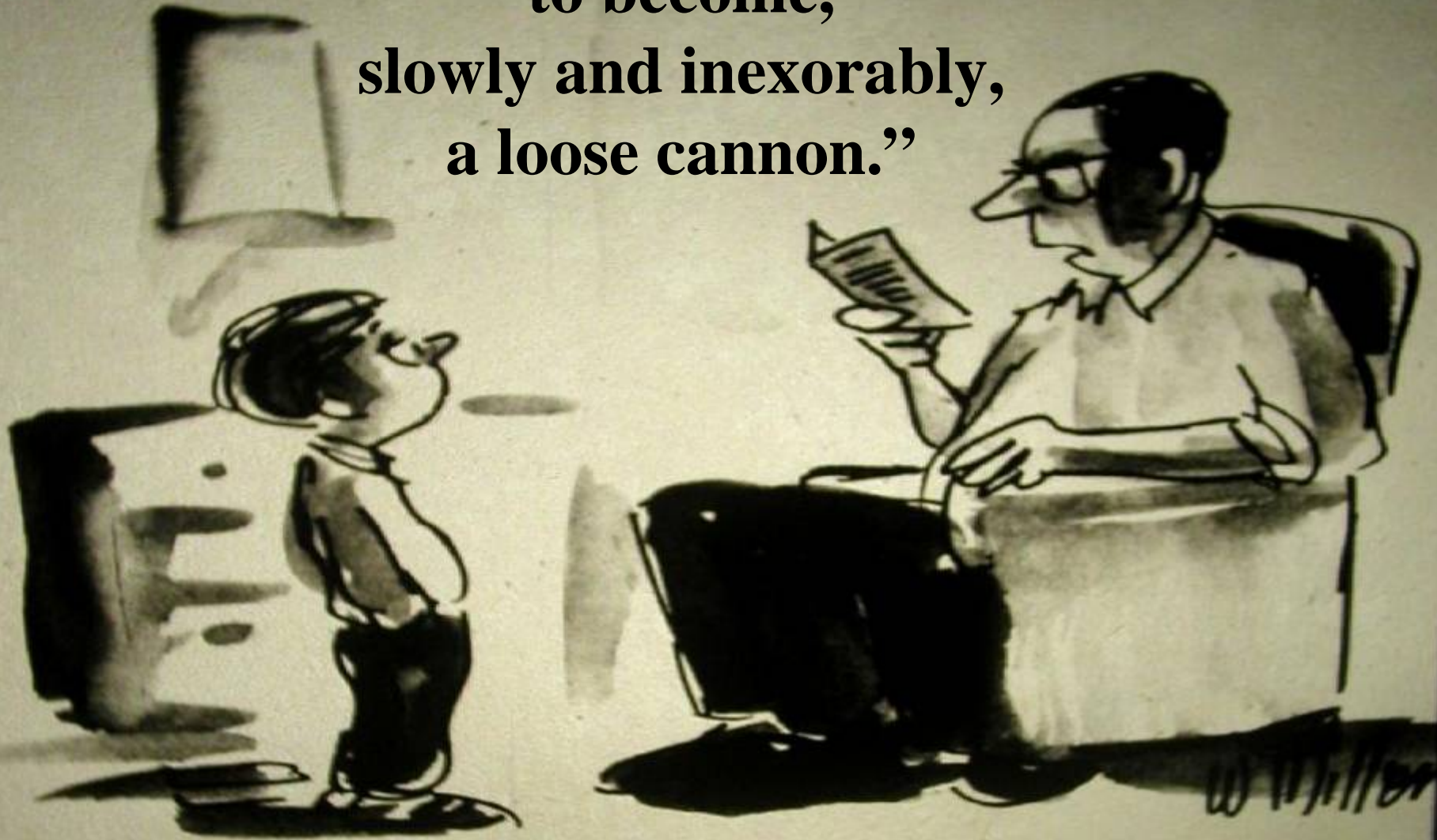


Why Are Detection Rates So Low?

Challenge #7:

**COMMUNICATING
WITH FAMILIES**

“Your teacher wishes me to delineate those watershed occasions in your life that have led you to become, slowly and inexorably, a loose cannon.”



Sample questions to parents that don't work well

**Do you think he has any
problems.....?**

**Do you have any worries
about her development?**



Why Are Detection Rates So Low?

Challenge #@\$%&!:

**LAUNDRY LIST OF OTHER
COMPLAINTS**

**Reasons for limited use of
screening tests at well visits:
COMMON YET SURMOUNTABLE MYTHS**

- **Common screening tests too long**
- **Tests difficult to administer**
- **Children uncooperative**
- **Reimbursement and time limited**
- **Challenges of giving difficult news**
- **Staff reluctant to take on new tasks**
- **Lack of familiarity with referral resources**

“Looking Good”





**So what
should we
do?**

- **Use newer, brief, accurate tools that make use of information from parents**
- **Thus freeing time for intervention**

Can parents be counted upon to give accurate and good quality information?

YES!

- Screens using parent report are as accurate as those using other measurement methods
- Parents of all socioeconomic backgrounds and education are equally accurate

Can parents read well enough to fill out screens?

Usually! But first ask,

“Would you like to complete this on your own or have someone go through it with you?”

**Also, double check screens for completion
and contradictions**

Detection rates

WITH Screening Tests

- **70% to 80% of children with developmental disabilities correctly identified**
Squires et al, *JDBP*. 1996;17:420 - 427
- **80% to 90% of children with mental health problems correctly identified**
Sturner, *JDBP* . 1991; 12: 51-64
- **Most over-referrals on standardized screens are children with below average development and psychosocial risk factors**
Glascoe, *APAM*. 2001; 155:54-59.

Detection/Enrollment Successes *WITH* Screening Tests

- **2% enrollment in EI increased to 12% --commensurate with prevalence**

ABCD Project, Commonwealth Fund

- **70% increased in ASD dx in ages 0 - 3**

Minnesota Dept of Education, Pediatrics, 2004

- **244% increase in referrals to EI**

Pediatrics, 2007



Parents' Evaluation of Developmental Status (PEDS)

www.pedstest.com









First Question

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

Additional Questions

Do you have concerns about how your child:

- 2... .is talking or making speech sounds?**
- 3... . understands what you say?**
- 4...uses his or her hands and fingers to do things?**
- 5...uses his or her arms and legs?**
- 6...behaves?**
- 7...gets along with others?**
- 8...is learning to do things for himself/herself?**
- 9....is learning preschool or school skills?**
- 10. Do you have any other concerns?**

Research Process

- 1. Parents' concerns elicited and then categorized into various developmental domains**
- 2. Children given a range of developmental and behavioral tests**
- 3. Types of concerns compared to test results**

Can parents' concerns help with early detection?

YES!!

- **Accuracy as good as much longer measures requiring hands-on administration**
- **Certain concerns at certain ages closely predict developmental/behavioral problems**
- **Some concerns don't predict problems and require parent education**

ACCURACY: ACROSS AGE RANGES

AGE SENSITIVITY SPECIFICITY

	N	%	N	%
0 - 1 1/2 yrs	3/4	75	66/82	80
1 1/2 - 3 yrs	27/34	79	117/149	79
3 - 4 1/2 yrs	26/35	74	118/165	72
4 1/2 - 8 yrs	42/57	74	172/245	70
TOTAL	98/130	75	473/641	74

Do Parental Characteristics Affect Their Concerns?

- Almost all parents' derive concerns by comparing their children to others
- No differences in accuracy on the basis of parents' level of education or parenting experience
- Educated parents, especially dads, 21 times as likely to raise concerns *spontaneously*.
- Less educated families less likely to spontaneously discuss concerns
- Children whose parents discussed concerns were 40 times more likely to be enrolled in special education

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

BRIEF ADMINISTRATION AND SCORING GUIDE

In health care and educational settings, parents often raise concerns about their child's language, behavior or other areas of development. Deciding on the best response is often challenging:

- Do concerns reflect such potentially serious problems that diagnostic testing is needed?
- Do parents simply need advice, and if so, on what topics?
- Should a developmental or behavioral screening test be administered?
- Should a child be watched carefully prompt attention for any emerging
- Are reassurance and routine monitoring

In contrast, some parents do not readily Others share them at times when it signals to respond carefully (e.g., "In way" comments at the end of an en parents need help carefully apprais

PEDS was designed to ensure if of age are detected at erns, determining a professional reports

28% have a moderate risk of disabilities and need screening, developmental promotion and vigilant observation

20% have a low risk of disabilities, but need readily behavioral guidance

developing compared to others. Under any circumstances, it is challenging for professionals to detect and address families' psychosocial needs. All this contributes to the finding that fewer than 30% of children with serious developmental and behavioral difficulties are identified before school entrance.

The subtle and emerging nature of children's problems also contributes to under-detection. For example, almost all children begin to talk at the usual time, but those with

PEDS RESPONSE FORM

Child's Name _____ Parent's Name _____
 Child's Birthdate _____ Child's Age _____ Today's Date _____

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

Do you have any concerns about how your child talks and makes speech sounds?
 Circle one: No Yes A little COMMENTS:

Do you have any concerns about how your child understands what you say?
 Circle one: No Yes A little COMMENTS:

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:

Do you have any concerns about how your child uses his or her arms and legs?
 Circle one: No Yes A little COMMENTS:

Do you have any concerns about how your child behaves?
 Circle one: No Yes A little COMMENTS:

Do you have any concerns about how your child gets along with others?
 Circle one: No Yes A little COMMENTS:

Do you have any concerns about how your child is learning to do things for himself/herself?
 Circle one: No Yes A little COMMENTS:

Do you have any concerns about how your child is learning preschool or school skills?
 Circle one: No Yes A little COMMENTS:

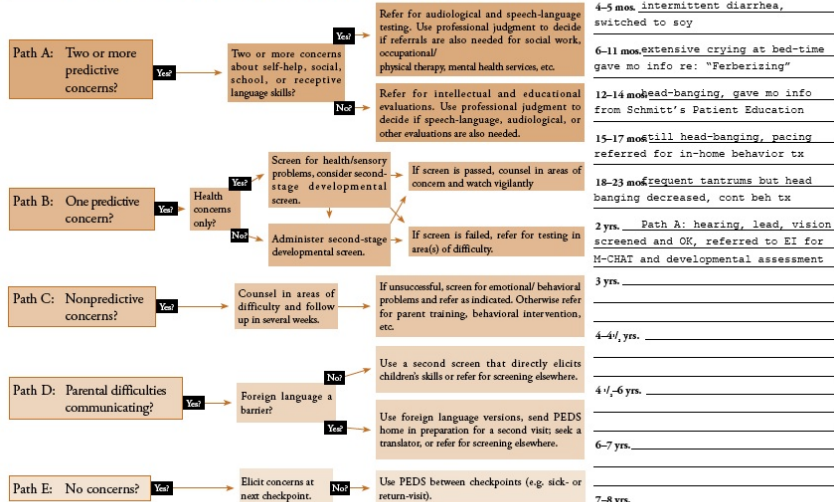
Please list any other concerns.



Specific Decisions

Child's Name Roger J Birthdate 8/8/03

PEDS INTERPRETATION FORM



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Permission is granted to reproduce these scored forms for training purposes only.

Roger J.

PEDS SCORE FORM

Child's Name _____ Birthdate _____

Find appropriate column for the child's age. Place a checkmark in the appropriate box to denote each concern on the PEDS Response Form. See First Scoring Guide for details on categorizing concerns. Shaded boxes are predictive concerns. Unshaded boxes are non-predictive concerns.

Child's Age	4-2 mos	4-6 mos	9-11 mos	13-14 mos	16-17 mos	18-24 mos	2 yrs	4-6 yrs	7-9 yrs	10 yrs
Global Cognitive	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expressive Language and Articulation	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>
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"/>
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"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social-emotional	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>
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"/>
Other	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Count the number of checkmarks in the small shaded boxes and place the total in the large shaded box below.

1 1 0 0 0 0 4

If the number shown in the large shaded box 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 total of small unshaded boxes and place the total in the large unshaded box below.

0 0 1 1 1 1 2

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



PARENTS' EVALUATION OF DEVELOPMENTAL STATUS

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

- Same 10 questions, 0 to 8 years
- Takes < 5 minutes for parents to complete, 2 to score
- Available in multiple languages
- Sorts children into high, moderate or low risk
- 4th – 5th grade reading level, > 90% can read
- Longitudinal monitoring form
- Training and parent ed materials on www.pedstest.com

The PEDS
Response Form in
English.
Translations
include
Portuguese,
Somali, Spanish,
Vietnamese,
Haitian-Creole, etc.

PEDS RESPONSE FORM

Provider _____

Child's Name _____ Parent's Name _____

Child's Birthday _____ Child's Age _____ Today's Date _____

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

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

Circle one: No Yes A little COMMENTS:

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

Circle one: No Yes A little COMMENTS:

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:

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

Circle one: No Yes A little COMMENTS:

Do you have any concerns about how your child behaves?

Circle one: No Yes A little COMMENTS:

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

Circle one: No Yes A little COMMENTS:

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

Circle one: No Yes A little COMMENTS:

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

Circle one: No Yes A little COMMENTS:

Please list any other concerns.

PEDS SCORE FORM

Child's Name _____ Birthday _____

Find appropriate column for the child's age. Place a checkmark in the appropriate box to show each concern on the PEDS Response form. See Brief Scoring Guide for details on categorizing concerns. Shaded boxes are predictive concerns. Unshaded boxes are non-predictive concerns.

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="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"/>
Expressive Language and Articulation	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Receptive Language	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social-emotional	<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"/>
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 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"/>

Hard time comprehending

Speech not clear

Hyperactive

Count the number of checks in the small shaded boxes and place the total in the large shaded box below.

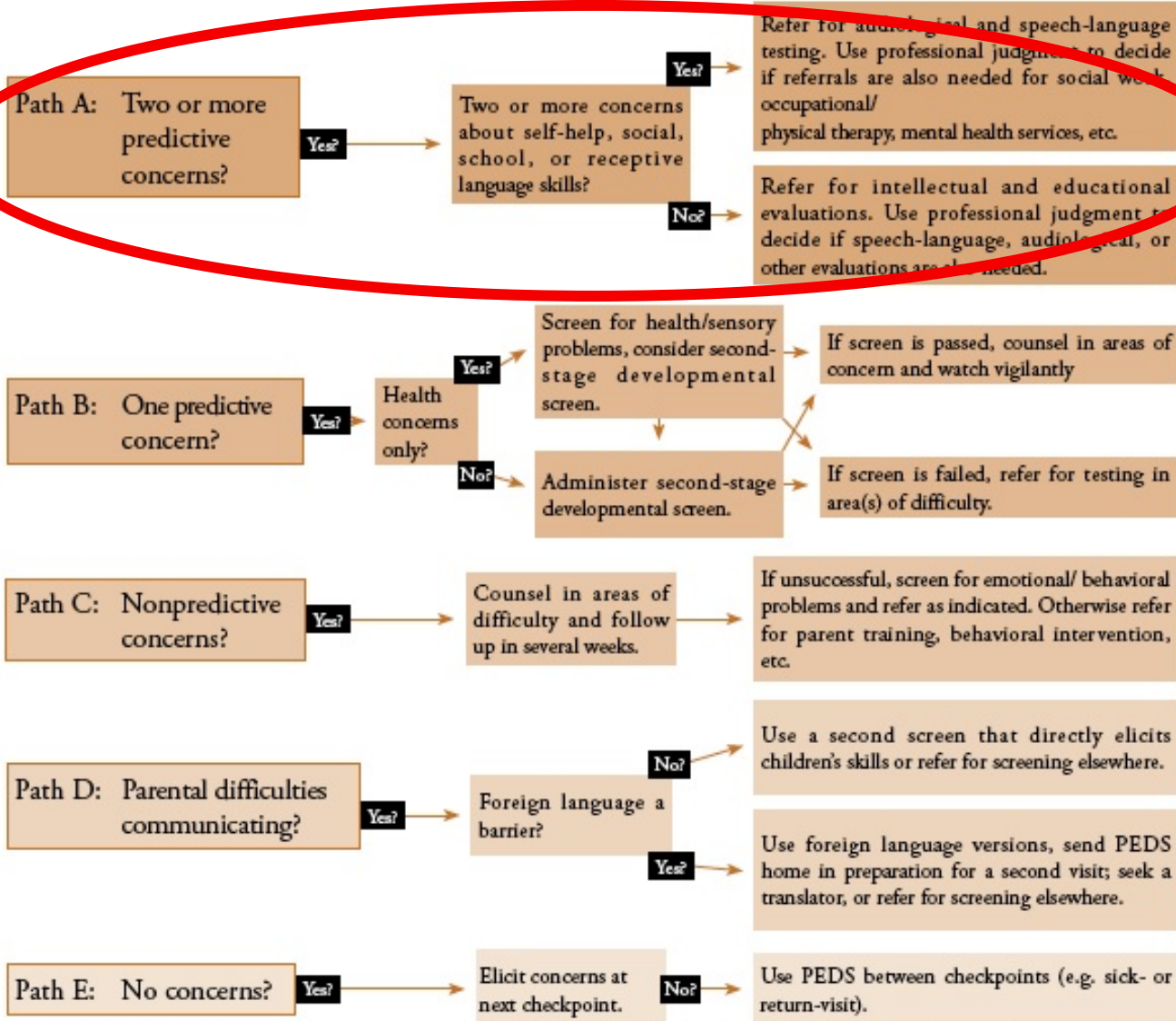
<input style="width: 30px; height: 30px; background-color: #e67e22;" type="checkbox"/>	<input style="width: 30px; height: 30px; background-color: #e67e22;" type="checkbox"/>	<input style="width: 30px; height: 30px; background-color: #e67e22;" type="checkbox"/>	<input style="width: 30px; height: 30px; background-color: #e67e22;" type="checkbox"/>	<input style="width: 30px; height: 30px; background-color: #e67e22;" type="checkbox"/>	<input style="width: 30px; height: 30px; background-color: #e67e22;" type="checkbox"/>	<input style="width: 30px; height: 30px; background-color: #e67e22;" type="checkbox"/>	<input style="width: 30px; height: 30px; background-color: #e67e22;" type="checkbox"/>	<input style="width: 30px; height: 30px; background-color: #e67e22; font-size: 24px; font-weight: bold; text-align: center;"/> 2	<input style="width: 30px; height: 30px; background-color: #e67e22;" type="checkbox"/>	<input style="width: 30px; height: 30px; background-color: #e67e22;" type="checkbox"/>	<input style="width: 30px; height: 30px; background-color: #e67e22;" type="checkbox"/>	<input style="width: 30px; height: 30px; background-color: #e67e22;" type="checkbox"/>
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If the number shown in the large shaded box 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 unshaded boxes and place the total in the large unshaded box below.

<input style="width: 30px; height: 30px;" type="checkbox"/>	<input style="width: 30px; height: 30px;" type="checkbox"/>	<input style="width: 30px; height: 30px;" type="checkbox"/>	<input style="width: 30px; height: 30px;" type="checkbox"/>	<input style="width: 30px; height: 30px;" type="checkbox"/>	<input style="width: 30px; height: 30px;" type="checkbox"/>	<input style="width: 30px; height: 30px;" type="checkbox"/>	<input style="width: 30px; height: 30px;" type="checkbox"/>	<input style="width: 30px; height: 30px; font-size: 24px; font-weight: bold; text-align: center;"/> 1	<input style="width: 30px; height: 30px;" type="checkbox"/>	<input style="width: 30px; height: 30px;" type="checkbox"/>	<input style="width: 30px; height: 30px;" type="checkbox"/>	<input style="width: 30px; height: 30px;" type="checkbox"/>
---	---	---	---	---	---	---	---	---	---	---	---	---

If the number shown in the large unshaded 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



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 no info re: "Ferberizing"

12-14 mos. head-banging, gave no 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 M-CHAT and developmental assessment

3 yrs. _____

4-4 1/2 yrs. _____

4 1/2-6 yrs. _____

6-7 yrs. _____

7-8 yrs. _____

Decision Support for the Developmental/ Behavioral Tasks of Health Supervision Visits

4developmental promotion

4behavioral guidance and patient education

4developmental/behavioral screening

4watchful waiting

4reassurance

4referral

Subsequent PEDS Findings



- Alerts parents that db issues are a part of well-care and better focuses visit on issues of importance to families
- Teaches parents think about development as a range of domains
- Increases positive parenting practices
- Makes it easier to give difficult news
- Increases attendance at well-visits
- Over-referrals are children performing in the below-average range on the better predictors of school success and who have psychosocial risk factors

“Oh, by the way....”

PEDS, by eliciting concerns in advance:

- **Reduces “doorknob concerns”-- the "grenades of the day"**
- **Focuses visits and facilitates patient flow**

Electronic PEDS

Online PEDS with (optional) Modified Checklist of Autism in Toddlers (M-CHAT)

EHR interface

Automated scoring

Generates parent summary and referral letters

Produces ICD-9 and procedure codes

Research underpinnings of the PEDS:DM



- ▶ Standardized on 1619 children/families in 22 US States whose demographics matched those of the US. 5% were administered items in Spanish
- ▶ Validation and item selection on all 1619 children who also administered one or more diagnostic measures
- ▶ Reliability: parent-professional agreement .81, test-test 98% - 99%, inter-rater: 82% - 96%



Sensitivity and Specificity

➤ By age levels: 83% and 84%
(range 75% to 87%)

➤ By domain: 83% and 84%
(range 70% to 93%)

➤ Readability

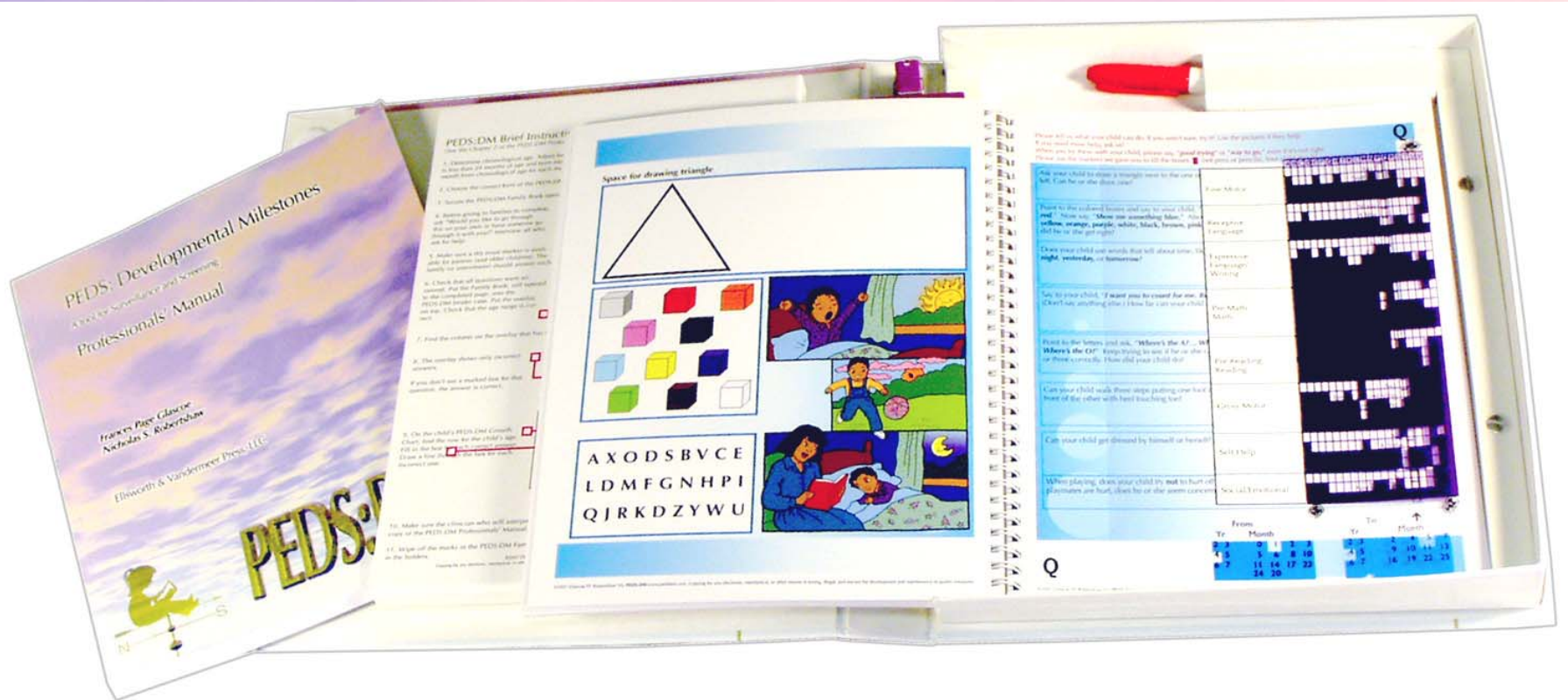
Flesch-Kincaid index 1.9 grade level

How does the PEDS:DM work?




- One item per domain at each age level
- 6 - 8 items per encounter
- Continuous items from birth to 8 years
- Administered hands-on or by parent report
- Laminated book of Forms parents write on with a dry erase marker
- Developmental promotion built into the test via short stories parents read aloud

PEDS: Developmental Milestones



www.pedstest.com

Items at the 5 - 7 month level. Each question taps a different developmental domain

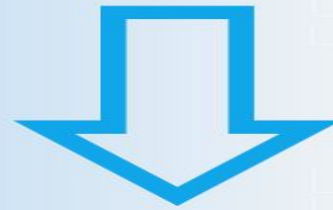
When you try these with your child, please say, "**good trying**" or "**way to go,**" even if it's not r
Please use the markers we gave you to fill the boxes  (not pens or pencils). Your child should

When your baby is holding a toy in each hand, does he or she look from one hand to the other? No
A Little
Yes

When you say things like, "**Come here**", does your baby hold out his or her arms? No
Sometimes
Yes

Does your baby "talk" or make speech sounds when he or she holds a toy or sees a pet? No
Sometimes
Yes

Keep Going!



If your baby is lying on her back can she pass a toy from one hand to the other? No
Sometimes
Yes

If you try to give more food than your baby wants, does he keep his lips closed or turn away? No
A little
Yes

When you play gentle tickling games with your baby, does he or she enjoy this? No/Haven't tried
Sometimes
Most of the time

The orange marks show the mom's answers to the questions

PEDS:Developmental Milestones (Developmental Promotion component)



Please have fun reading this to your child:

The Baby Who Stared at Everything

Once upon a time there was a daddy who saw that his baby liked to look at everything. She looked and she looked and she looked and she looked. Her daddy held her and told her the names of everything she saw. He told her the names of trees and dogs and books and bottles, and he even told her that her mother's name was Mama.

One day the baby said, "Ma ma ma ma ma ma ma ma." Her daddy smiled at his baby.

"That's right. That's your Mama," he said. The baby smiled back at her daddy. Then she said "Da da da da da da da da."

Her daddy smiled and said, "That's right, I'm your daddy. And your 'Da da da da' daddy just loves you."



When the scoring template is placed over the parents' answers, it reveals any skills not passed at age level.

When you try these with your child, please say, "good trying" or "way to go," even if it's not right. Please use the markers we gave you to fill the boxes (not pens or pencils). Your child should

When your baby is holding a toy in each hand or she look from one hand to the other?

Fine Motor

No
A Little
Yes

When you say things like, "Come here", does he hold out his or her arms?

Receptive Language

Does your baby "talk" or make speech sounds or she holds a toy or sees a pet?

Expressive Language

Keep Going!



If your baby is lying on her back can she pick up one hand to the other?

Gross Motor

No
Sometimes
Yes

If you try to give more food than your baby can he keep his lips closed or turn away?

Self-Help

No
A little
Yes

When you play gentle tickling games with your baby does he or she enjoy this?

Social-Emotional



PEDS:Developmental Milestones: completed Recording Form with Vernon's performance at 9 months and specific provider decisions

PEDS:DM Developmental Growth Chart								Specific L
Directions: Shade box if passed, — if failed								
	Using hands and fingers	Listening	Talking	Reading/Prereading	Math/Premath	Using arms and legs	Getting along with others	
AGE								
7-0 - 7-11 yrs.								
6-1 - 6-11 yrs.								
5-6 - 6-0 yrs.								
4-11 - 5-5 yrs.								
4-6 - 4-10 yrs.								
4-1 - 4-5 yrs.								
3-8 - 4-0 yrs.								
3-3 - 3-7 yrs.								
2-10 - 3-2 yrs.								
2-5 - 2-9 yrs.								
2-2 - 2-4 yrs.								
23 - 25 mos.								
20 - 22 mos.								
17 - 19 mos.								
14 - 16 mos.								
11 - 13 mos.								
8 - 10 mos.	Shaded	Shaded	Shaded			Shaded	Shaded	Shaded
5 - 7 mos.	Shaded	Shaded	Shaded			Shaded	Shaded	Shaded
3 - 4 mos.	Shaded	Shaded	Shaded			Shaded	Shaded	Shaded
0 - 2 mos.	Shaded	Shaded	Shaded			Shaded	Shaded	Shaded

0 - 2 mos. Healthy development, happy mother

3 - 4 mos. Developing normally, gave no suggestions about sleeping skills

5 - 7 mos. No raised Q's about talking to Vernon. Gave handout on promoting speech-language

8 - 10 mos. speech-language and other skills WNL. Praised mom for reading/talking. Gave more info

11 - 13 mos.

14 - 16 mos.

17 - 19 mos.

20 - 22 mos.

23 - 25 mos.

2-2 - 2-4 yrs.

PEDS:Developmental Milestones and Developmental promotion. Vernon's mother needed parenting information and was given one of the parenting handouts in the PEDS:DM Professional Manual

Building Speech And Language Skills

ACTIVITIES

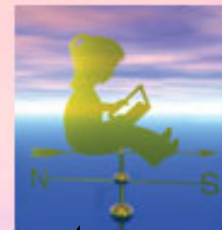
Here are some things you can do to help build your child's speech and language skills:

1. **TALK, TALK, TALK.** Describe what your child is doing as he does it (*"You're smiling."*). Talk about how she might be feeling (*"You're happy because you have your favorite toy"*). Name people (*"Look! There's your sister."*) and everyday objects (*"bottles, juice, bed, diaper"*). Mention features of objects (*"That ball is red and it's big. It is a big red ball."*) Talk about sounds around you and imitate them (cat's meowing, dogs barking, bacon sizzling). Sing songs and say nursery rhymes.
2. **LISTEN, LISTEN, LISTEN.** Conversations have two sides. Follow your child's lead and talk about things he or she brings up. Give him a chance to label things (*"Oh, you're thirsty. You want a drink. What do you want?"*). A young child will need an example (*"There's the orange juice. Mmm... orange juice tastes good."*). An older toddler may need a choice (*"Do you want juice or milk?"*) A young child may say only part of a sentence such as *"want truck"*. You can expand on this and answer (*"OK, you want the big truck."* or *"Here is the big yellow truck. It carries dirt! Varoom."*).
3. **READ, READ, READ.** Start reading early even though your child may be too young to understand what you are saying. This helps children learn that reading is fun. Early on let your children explore the books as they want to (using cloth books or action books like *"Pat the Bunny"*). Encourage your child to name the pictures (*"What's that?"*. *"What do you think will happen next?"*. *"Look! The bunny ate the carrots."*)

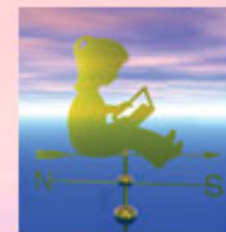
TIPS:

1. Look at your child while he or she is talking.
2. Listen patiently. Respond to the message rather than the way your child says it.
3. Set a good example. Speak slowly and don't rush.
4. Spend time every day with your child, talking in an unhurried, relaxed way.

Optional Measures included in the Family Book, Section 2

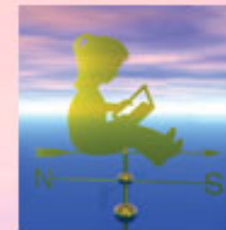


- ▶ Family Psychosocial Screen (risk factors: parent depression, domestic violence, substance abuse, etc.)
- ▶ Pictorial Pediatric Symptoms Checklist-17 (mental health in older children) and Vanderbilt ADHD Scale
- ▶ Modified Checklist of Autism in Toddlers (for children 18 months- 4 years)
- ▶ Brigance Parent-Child Interactions Scale (observation/report measure of resilience factors)
- ▶ Safety Word Inventory and Literacy Screener (SWILS)



PEDS:DM continued

- For NICU follow-up, EI, and research, the Assessment Level PEDS:DM offers more items at once and produces age-equivalent scores
- Includes training guides/case examples
- Has parent education materials
- Available in English and Spanish



www.pedstest.com

- Training slide shows and video
- Q and A
- Early detection discussion list
- Case examples
- Pre/post-tests for demonstrating proficiency
- Research info and clinician/researcher support
- *Online PEDS:DM coming soon!*

Implementation

- 4 Train all staff on the value of early detection
- 4 Encourage reluctant clinicians to test themselves
- 4 Encourage staff input into office procedures
- 4 Map the workflow
- 4 Test the process. Revise and try again!
- 4 Organize referral and patient education materials
- 4 Establish effective ways to communicate with parents and non-medical providers

Summary



- **Early detection requires accurate measurement if children are to benefit from EI**
- **Early intervention takes many forms**
- **Parent benefit themselves and clinicians by completing measures on their own**
- **Early detection initiatives require careful planning: referral resources, parent education, clinician/staff training and feedback**



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end