User's Guide to the Online PEDS:Developmental Milestones-Assessment Level (PEDS:DM-AL)

Welcome to Developmental-behavioral, social-emotional /Mental Health Assessment Online

PEDS:DM - Assessment Level (PEDS:DM – AL) Online determines children's strengths and weaknesses across developmental-behavioral and social-emotional/mental health domains, monitors progress over time, offers effective, nuanced intake data, and helps establish eligibility for early intervention and other services such as NICU and other subspecialty follow-up. In addition, *PEDS:DM – AL Online* offers measures with metrics useful for research outcomes. All information is returned in real-time. *PEDS Online* saves time and helps providers receive appropriate reimbursement (via the 96111 procedure code).

What PEDS:DM-AL Online Provides:

The *PEDS:DM – AL Online:*

- Presents age-appropriate items
- Determines basals/ceilings
- Scores and generates a test report that includes age-equivalent scores, raw scores, percentage of delay, and (more positively) percentage of skills mastered, results, and recommendations for services
- Renders the report as a .pdf or Word .doc so providers can add observations and personalize recommendations
- Provides billing and CPT-10 codes
- Also offers *Parents' Evaluation of Developmental Status (PEDS)* a measure eliciting parents' verbatim concerns. *PEDS* helps parents describe their own worries along with observations of disordered typical development; and The *Modified Checklist of Autism in Toddlers–Revised (MCHAT-R)*. Shows items failed so examiners can re-interview if needed

Settings Appropriate for PEDS:DM-Assessment Level:

- NICU Follow-up programs (both mail-out initiatives and services providing direct contact with families)
- Triage in Developmental-Behavioral Clinics
- Child Find (for determining initial eligibility and monitoring)
- Services for Children with Special Health Care Needs (CSHCN)
- Head Start (for pre- and post-testing and program evaluation)
- Preschool and special education programs (for program planning and charting progress, and identifying children with delayed or advanced development)
- Research initiatives requiring a brief but comprehensive measure of developmental status and skills
- Foster care intake and monitoring
- Home-visiting programs (such as Project Launch)

Implementation suggestions:

There are several approaches to using the *PEDS:DM-AL Online*, including

- Having clinicians or paraprofessionals administer the measures (e.g., over the phone, via observation/ live-interview, and/or hands-on) using protocol print-outs (digital files are provided) or entering responses online
- Letting parents self-administer the measures in paper-pencil format (e.g., in a waiting or exam room), or on an office computer or tablet and then having office staff type responses into the PEDS Online website.
- Sending parents to our "Parent Portal" so they can complete measures before the visit (e.g., on a home or office computer). Parents will not see the results. Instead, providers will receive an email alerting them of a completed screen. Please email *angel@pedstestonline* for a unique link to share with parents and, if helpful, how to put an icon with a link on a practice website.

Getting Started:

Make note of your unique site access information below:

Username:_____

Password:_____

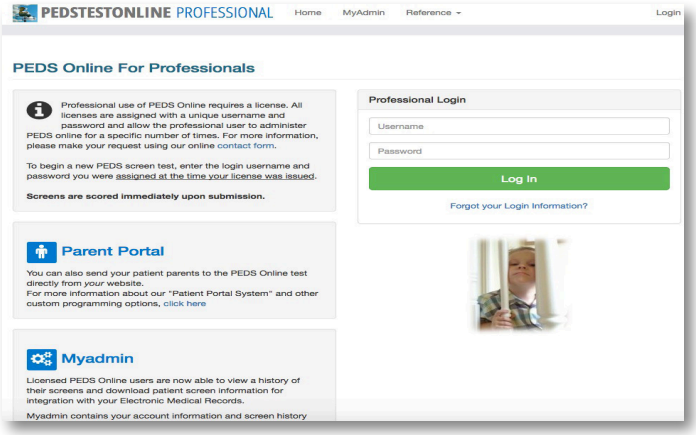
MyAdmin Password:_____

License Number: _____

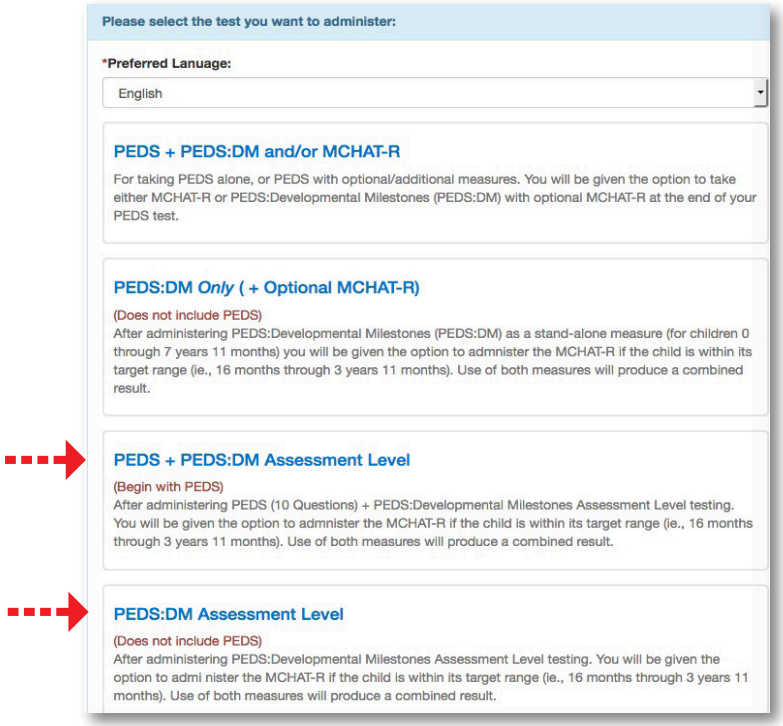
This information is included in your completed license agreement, but if lost please utilize the "Forgot login information" link located underneath the login or contact: angel@pedstestonline.com

Taking the Test - Step-by-Step Guide:

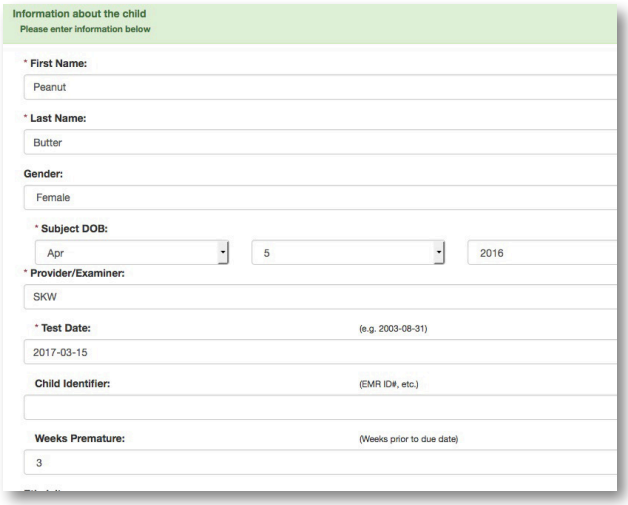
1. *Go to url: **www.pedstestonline.com/test**.*
2. *Enter **Username** and **Password** (case sensitive).*
3. *Choose preferred language (currently English only with Spanish coming soon). See below, "Working with Translations and Bilingual and Non-English Speaking Children" for tips on administering in other languages.*



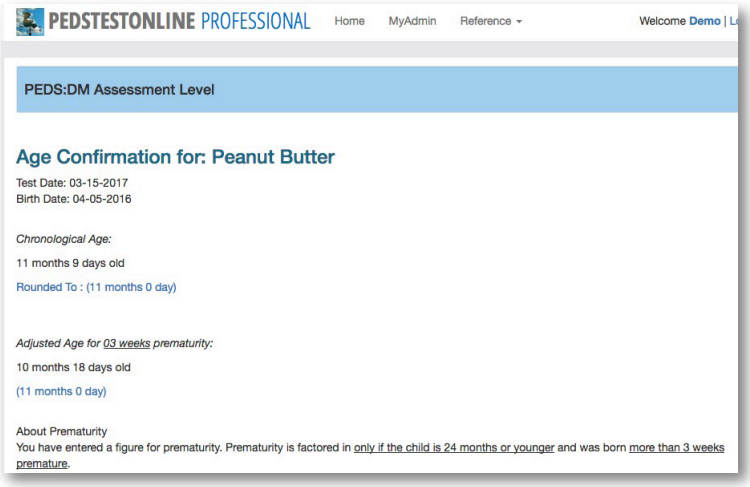
4. *To administer the PEDS:DM-Assessment Level, choose between PEDS:DM-AL with PEDS (administering PEDS first) or PEDS:DM-AL without PEDS. Both choices give you the option to also administer the M-CHAT-R.*
5. *Select the test you want to administer.*



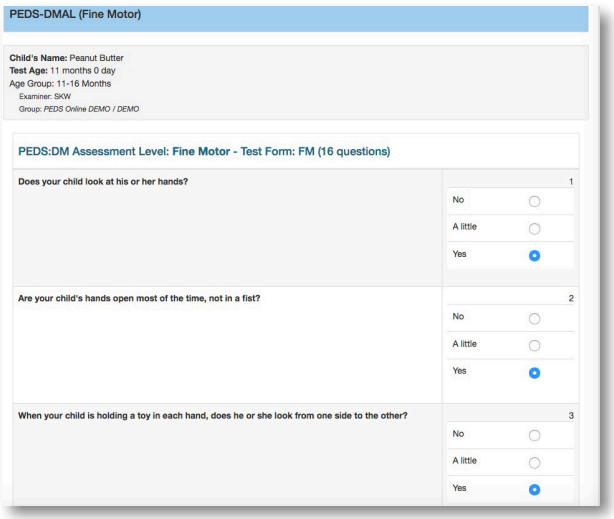
6. *Enter Information about the Child.*



7. *Select "**Continue: Confirm Age**" (Note that chronological age is corrected for prematurity in children under 24 months who were at least 3 weeks premature).*



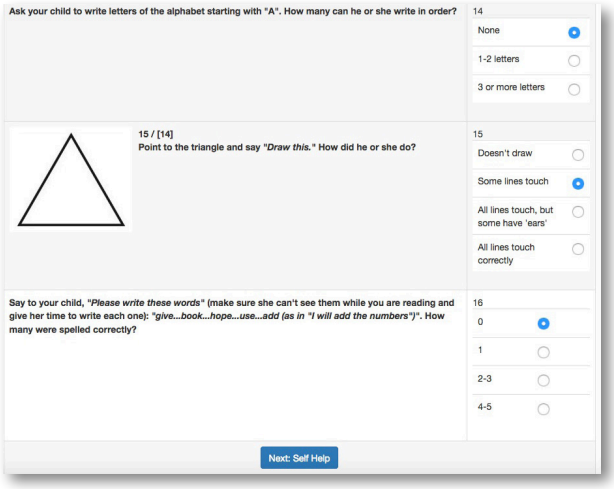
8. *If the Child's age is incorrect, Select "**Go back to make changes**" on the next page.*
9. *If the Child's age is correct, Select "**Continue: Get Test Form**".*
10. *Items are now presented beginning with Fine Motor. Basal level items are presented first (covering skills on which younger children are typically successful).*



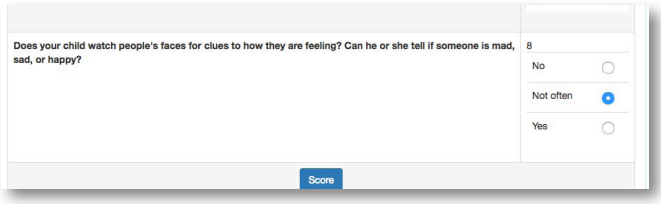
11. *For each subtest you will continue through a series of questions, some of which we expect a child to be successful (basal) and some of which we anticipate lack of success (ceiling).*

12. *Once the online service has determined that basal and ceiling are met you will see the "**Submit and Review**" button to review responses:*

***if incorrect** click on the link that says "Go Back to make changes"*



***if correct** select "**Next:** (subtest) - in this case, **Self Help**".*



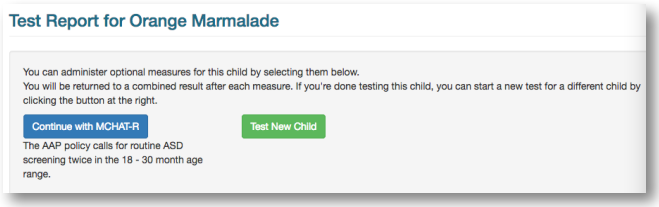
13. *After completing all subtests select "**Score**".*

14. *You will be presented with the report and recommendations, but before reviewing, decide if you wish to give the MCHAT-R:*

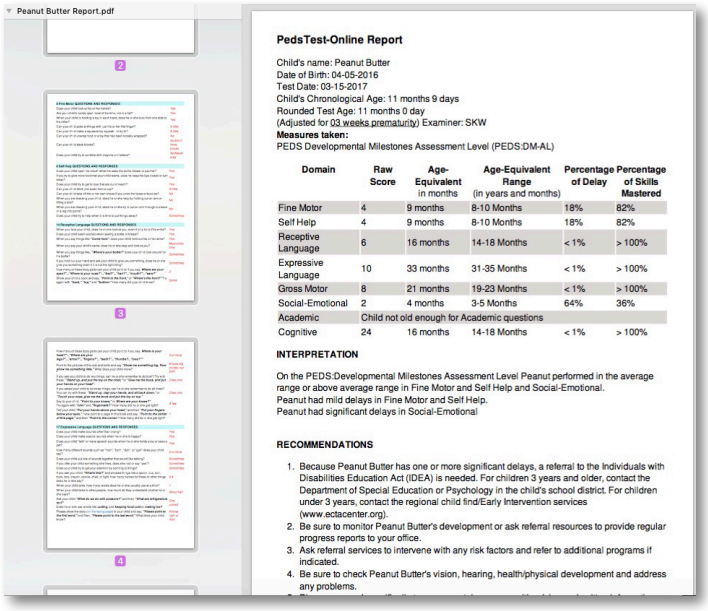
   *(a) Select "**Continue with MCHAT-R**". You will then be presented with the MCHAT-R items (if child is 16-48 months old).*

   (b) Once completed these will be scored.

   (c) Failed items are shown as a link so that you can re-interview as needed, preferably using the MCHAT-R interview available at www.mchatscreen.com.



15. Review ***TEST RESULTS, INTERPRETATION, RECOMMENDATIONS***, *all items responses, and ICD-10 Codes.*



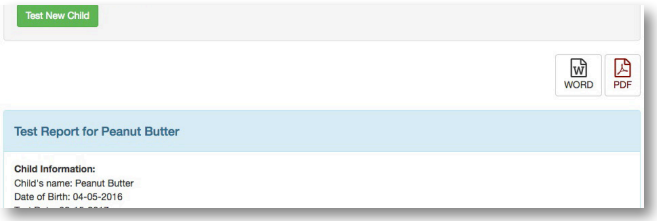
The results section shows:

- *Raw scores (the total number of successfully completed items)*
- *Age-Equivalents (the cumulative age in months credited per item)*
- *Age-Equivalent Range (bands the age-equivalent score with the standard error of measurement). The lower score reflects the independent learning level and is useful for selecting developmentally appropriate toys. The higher score reflects age-related tasks likely to be too difficult, i.e., a "frustration level". In between is the age-range appropriate for instruction.*
- *Percentage of Delay (is the age-equivalent score divided by chronological age and then multiplied by 100) and used for IDEA eligibility determination*
- *Percentage of Skills Mastered is the reciprocal of percentage of delay and useful for explaining to parents, in a positive way, children's accomplishments*

16. *You can now print or download the Test Report:*

   (a) Use the buttons to the right to save the report as a Word document or PDF. Either of these can be attached to the patient record (instead of printing/scanning).

   (b) If you download as a Word document you can add your behavioral observations, other test results and personalized recommendations



17. *Select "**Test New Child**" if you want to start a new test for a different child*

How to Use your Administration Panel for Research, Program Evaluation and Retrieving Lost Records

1) Login to your Administration Panel at *https://pedstestonline.com/myadmin*.

2) Enter your Username and MyAdmin Password.

3) Once logged in use any of the left-side menu items to:

- Review and print screens on file
- Search by subject's name or unique child identifier
- Search screens by year
- Edit and rescore screens
- Download or read this Online Brief Guide
- Change passwords (/test and /myadmin)
- Update contact information
- Download an export of all data on file in Excel or data text file
- Submit a Support Ticket to *PEDStest Online* staff
- Enable Two-Factor Authentication

Note: The MCHAT-R can be added up to 30 days after initial testing or administered 30 days before the PEDS:DM-AL is given. This option is useful because the 96110 code (used for screens) cannot be billed on the same day as 96111.

Tips And Troubleshooting

Please find your issues below and the answers that follow:

Cannot connect to the *PEDStest Online* site:

1. First make sure you are still online and that your internet access is still working.
2. Check that you have the correct url (*www.pedstestonline.com/test*) and corresponding login information for that url (e.g. /test login vs. /myadmin login)
3. If the *PEDStest Online* site is down for maintenance, there will be a notification in RED at the top of the login window. We will do our best to make sure maintenance occurs on weekends when you are less likely to be screening children. But, if continuing or lengthy problems occur please let us know by email at *angel@pedstestonline.com* or by phone: 615-346-9550.

Username/password or MyAdmin password not working:

1. Please make sure your have entered each one correctly. They are case sensitive so check capitalization. Extra spaces before or after will cause problems too.
2. Go to *https://pedstestonline.com/myadmin* and click "Forgot Login Information"- this will automatically send instructions for resetting your password to the email associated with your account. If this does not work please contact *angel@pedstestonline.com* or by phone: 615-346-9550.
3. Has your license expired? We will send a prompt about 1 month before your expiration to see if you want to renew. If you need to reach us, please contact *angel@pedstestonline.com*.

I've lost a record/my computer crashed/or failed to catch a mistake on birthday or name—what do I do?

1. Lost Records/Computer Crashes: Go to *https://pedstestonline.com/myadmin* and enter your Username and MyAdmin Password. Choose "Most Recent 100" from the links on the left-hand menu. You'll then see all your records. If the record in question is not there, it is because screens weren't completed or because your computer lost connectivity before a screen was submitted. In such cases you will not be charged and will need to readminister all measures, i.e., start over.
2. Wrong birthdate/name: Go to *https://pedstestonline.com/myadmin* and open the record in question. Change the birthdate or name as needed and resubmit the results. Changing the birthdate could mean that re-administering PEDS:DM and/ PEDS:DM-AL is necessary.

How do I copy PEDS Online results and then paste into my electronic record?

The below keystroke commands explain how. In all cases you will need to have a browser window open (e.g., Internet Explorer) along with your EHR. Once both are open, you'll need to hold down two keys at the same time:

ALT+Tab to switch back to/from your EHR window (or use your mouse to click on the icon/tab for your EHR)
CTRL+A to highlight a page within a browser (or use your mouse to highlight)
CTRL+C to copy these (into the buffer memory of your computer)
CTRL+V to paste the information into the text fields for the visit
Or easier still:
After submitting a *PEDS:DM-AL* for scoring via *PEDStest Online,* you can choose to save the report as a PDF and then attach to the patient record. Similarly, you can save as a Word document and attach or copy/paste (via CTRL+C/CTRL+V as above) the report into 'Notes' or other text fields for the visit.

I'd like to view all our results what do I do?

Go to *https://pedstestonline.com/myadmin*
After entering your Username and MyAdmin Password you will see all your screens.

I'd like to put all my screen results into my own database. Can I export them?

Yes. Please go to *https://pedstestonline.com/myadmin* and select "Full Extract" from the left menu. This allows you to download all your results for use with SPSS, Excel or other database programs.

I'm working on a quality improvement initiative and would like to look at changes in early detection before and after implementation of PEDS Online. What do you suggest?

Go to *https://pedstestonline.com/myadmin*. After entering your Username and MyAdmin Password you will see all your screens. These are arranged by month along with the frequencies of various *PEDS* Paths. By comparing prior data to results from *PEDS Online*, you will see whether there have been improvements over time.

Can you help me create true integration with my electronic record (e.g., so that results return to the child's chart)?

Yes, but this requires the commitment of your EHR vendor or IT staff. As part of your license agreement, *PEDS Online* will support 5 hours of our IT time, but after that your EHR or IT staff will need to cover all costs. Please ask one or both to contact us at: *angel@pedstestonline.com*. Please also contact the software consultant for your EHR.

Why do children whose parents simply want to know about child development land on the high or moderate risk path on *PEDS*?

When parents express concerns about their child-rearing knowledge or skills (e.g., they don't know what to expect from their child), the site will produce a risk path on *PEDS*. In such cases, there is a clear need to provide parenting information such as educational handouts. BUT, it is important to remember that parents unsure about what their child should be doing, may also be families at risk. So… for optimal advice to parents, monitoring of progress, and swift detection of emerging delays, it is critical to offer vigilant watchful waiting, prompt referrals to Head Start or quality day care for children who may be delayed but not disabled, and careful follow-up (e.g., a return visit in 6 months or less).

Other questions?

Please see our FAQs at *www.pedstest.com/FrequentlyAskedQuestions*. If you have suggestions for site improvement or concerns about a specific result, please let us know by email: *angel@pedstestonline.com*.

Working With Translations

Translations are often needed for effective encounters with parents. If you are using one of our translations of the *PEDS:DM-Assessment Level* with the Online service, some guidelines for using translations include:

- If you are using an interpreter to interview the parents and child, you must use an official translation of the test, and the translator must use the exact wording of the translation. Word choices may have very different meanings in other languages. For example, in translating *PEDS* into Chinese, the word "concerns" also means "care" (as in "do you care about your child?"). Of course Chinese and all other parents care about their chil-

dren and so we found inordinately high rates of Chinese parents expressing concerns. Researchers had to substitute a far stronger word, "worries," in order to obtain appropriate response rates. Meanwhile, in English, the word "worries" does not work well. All this means that words have different connotations across languages and our translations have been culturally and linguistically vetted.

- If translation support is needed for clinical care, make sure translators (whether working in person within clinics or via a telephone translation service), have fully vetted translations of tools. Although professional translators are bilingual, questions about child development and behavior can be delicate (as described above) and need to be very carefully written, vetted, and tested to make sure they work. Ad hoc translations are often problematic, ineffective and may be marred, even within the same language, by dialectical differences between translators and families.

Bilingual and Non-English Speaking Children

1. Children who are non-English-speaking should be tested in their primary language, the language spoken most in the home. Even children who speak some English perform best when tested in their native tongue, although testing in both languages is often wise, especially if they are enrolled in an English-speaking daycare, preschool or school program. If the examiner is not fluent in the child's language, an interpreter will be needed during assessment (be sure to use established translations for measures if these are available). Interpreters must be available to elicit parental information and explain results. If an interpreter is not available parents should be asked to bring a friend to help interpret to both the parent and child. LanguageLine Solutions is a helpful site for connecting with an interpreter. Their website is: *https://www.languageline.com*.
2. Lay interpreters will need the same guidance given to parents who accompany children into testing (See Chapter 9 of the PEDS:DM technical manual. Contact *research@pedstest.org* if you need a .pdf of this chapter.). Professional (and lay) interpreters should be asked to comment on the children's articulation and syntax skills in their native language. These areas of language development are difficult to assess by examiners who do not speak the child's native tongue. Casual comments by interpreters such as, "When he speaks Japanese, his words are not in the usual order," offer invaluable clues to the possible presence of a language disorder.
3. Overall, it is critical to recognize that many professionals miss developmental-behavioral problems in bilingual/dual-language children and are far too willing to dismiss poor performance on measures. To avoid this error, be alert to behavioral problems that may manifest during language-related tasks because these are important clues to the presence of difficulties. Also listen carefully to parents' observations about how a child performs compared to his or her peers, take careful note of psychosocial risk factors because these predict ongoing difficulties whether a child is a dual-language learner or not. Ultimately err on the side of caution—refer rather than defer.
4. When interpreting screening results, recognize that bilingualism often contributes positively to cognitive development and typically produces only temporary and mild expressive language delays. Below-cutoff performance in areas other than expressive language is rarely due to bilingualism alone. Bilingualism rarely contributes to native language difficulties in the areas of receptive language or articulation, and is not a contributor to disordered patterns of expressive syntax, i.e., putting words in the wrong order in the native language. Such difficulties suggest the presence of a language disorder or other developmental disability.

Explaining and Reporting Test Results

1. Make sure your report concludes with recommendations for any needed non-medical services and for follow-up in your clinic (if needed). and consider customizing recommendations with information about local services.
2. For explaining results to parents, remain positive and encouraging about the value of recommended services.
3. Make sure you give parents telephone numbers and descriptions of recommended services, brochures if possible, and preferably also make appointments for parents.
4. Establish two-way communication with referral services so both you and they can remain updated on progress.
5. For children with chronic illness who may need temporary home-bound instruction, make sure to create a timeframe for reviewing discharge instructions and updating recommendations for returning to school.
6. All parents, even when their children are referred to special services, benefit from developmental promotion. When children have a vast range of needs, provide parents a list of websites and parent support programs. When issues are fewer in number, provide one or two written information handouts. See *www.pedstest.com/TheBook* for links to web-based parenting information.

Interested in Research Studies?

Research is still needed on the effectiveness of a comprehensive model of developmental surveillance in early identification. Ideally such studies should embrace all components of surveillance simultaneously (e.g., with *PEDS*, the *PEDS:DM*, the *MCHAT-R*, etc.). Future research should also view the value of developmental surveillance as a platform for preliminary intervention into children's development and into the many factors that influence it including family functioning and well-being, parenting skills, and psychosocial risk. Are developmental outcomes improved when comprehensive surveillance is offered? Do parents come to view providers as invaluable collaborators in child-rearing? What are the strengths and limits of intervention in primary care settings? Additional studies on the *PEDS:DM* should view its relationship to performance on other criterion tools, professional-parent concordance for items not standardized by parental report, and its discriminant validity in detecting each of the broad categories of developmental disabilities. Finally, research is needed on optimal ways for primary care and non-medical providers to implement surveillance in their practices.

We welcome studies on the *PEDS:DM* and on developmental surveillance in general. We are also happy to work with those who wish to translate the measure and standardize it for other nations (we typically donate its use in developing countries after completion of a donation license agreement). Otherwise, a percentage of *PEDS:DM* sales are given by PEDStest.com,LLC, Curriculum Associates, and Albert BRIGANCE® and to international non-profit organizations focused on promoting child development and positive parenting. Interested researchers, clinicians, and foundations are welcome to contact Dr. Frances Glascoe (*Frances.P.Glascoe@Vanderbilt.edu*) for assistance with projects. We are honored to post abstracts of completed and in-progress studies on our website so that *PEDS:DM* users can readily share information and findings. Finally, we welcome feedback on the tool because this is critical for improving its value to practitioners engaged in early detection and intervention.

References and Resources

PEDS:Developmental Milestones Professionals Manual
Contains guidance on how to administer the *PEDS:DM – AL* hands-on and guidance for trainees learning to manage children and parents during testing, psychometric studies on the *PEDS:DM*, etc. To order a physical or digital copy go to *www.pedstest.com/ordering*.

PEDS Tools website: www.pedstest.com
Includes freely downloadable videos, case examples, and slide shows, independent learning modules for trainees covering basics of child development, guidance on billing and coding, resources for professionals including links to typical referral resources, translation updates, ongoing and completed research projects, etc.

Glascoe FP, Marks KP, Poon JK, Macias MM (eds). Identifying and Addressing Developmental and Behavioral Problems: A Practical Guide for Medical and Non-medical Professionals, Trainees, Researchers and Advocates. Nolensville, Tennessee: PEDStest.com, LLC, 2013. www.pedstest.com/ordering or www.amazon.com
This textbook covers prevalence, referral resources, basics of child development for trainees, how to deliver difficult news to parents, well-child visit templates useful for complying with AAP policy, psychosocial risk and public domain tools for measuring risk, how to work with bilingual and dual-language learners, psychometric standards, assessment for subspecialty services such as NICU follow-up, research methods in child development, training professionals in practice including collaboration across service sectors, advocacy strategies and includes pre- and post-tests for evaluating learning and training effectiveness.