

# 1: Highlights and Description

*Describes the components of the PEDS:DM, needed materials, benefits and features*

## What is the PEDS:DM?

- Fast, brief, flexible, reliable, accurate indicator of children's skills across developmental domains
- 6–8 items per encounter or age level
- Designed for children 0 – 7 – 11 years, with additional measures for older children and adolescents
- Each item taps a different developmental domain: expressive and receptive language, fine and gross motor, self-help, social-emotional and, for older children, academic and pre-academic skills
- Clear criteria for scoring: failure on each item suggests probable difficulties in that domain
- Written at a year one to two reading level
- Can be administered by parental report or directly to children
- Takes less than 5 minutes to administer, one minute to score
- Laminated book of test items
- Enables longitudinal monitoring of developmental progress
- Allows professionals to probe weakness and strengths
- Replaces informal checklists with ones supported by scientific evidence
- Standardised on more than 1600 children
- Validated against diagnostic measures of development
- Highly accurate: sensitivity and specificity range from 70% to 95% across domains and age levels
- Supplies a snapshot of child development
- Promotes development by encouraging families to read to their children after they've finished testing
- Provides information handouts for families on promoting child development, summary and referral templates
- Includes directions for locating needed resources to support child development, parenting skills, etc.
- Provides a guide for trainees needing to learn about testing young children
- Offers an assessment level version for use in early intervention programs where a more detailed test result (e.g. percentage of delay scores) and follow-along methods are needed

## What settings are appropriate for the PEDS:DM?

- Private pediatric and family medicine practices
- Continuity clinics and other primary care settings
- Public health departments
- Child-find programs
- Early intervention services
- Triage and intake services
- Pediatric and other professional training programs
- Childcare and preschool programs
- Computer assisted telephone interviews
- Research protocols requiring indicators of developmental status or outcomes assessment
- Program evaluation initiatives
- Waiting or exam rooms
- National surveys of child development

- Research protocols
- Maternal and Child Health Nurses

### **How is the PEDS:DM administered?**

Any or all of the following:

- Parent self-report
- Interview by professionals or paraprofessionals
- Observation
- Working directly with the child

### **Who should use the PEDS:DM?**

- Providers relying on informal lists of developmental milestones
- Providers challenged by lengthy parent-report screening tools
- Providers using selected items from larger measures since these lack criteria and validity
- Providers using 'Parents' Evaluation of Developmental Status' who wish to also confirm children's actual skill levels
- Trainees needing to learn about child development

### **Why use the PEDS:DM?**

- Fast and more accurate than informal checklists
- Saves provider time for more critical tasks, i.e. parent education, developmental promotion, collaboration with non-medical professionals
- Refines clinical judgment and enhances observation
- Teaches critical milestones to residents, medical students and other trainees
- Provides longitudinal monitoring of developmental progress, including weaknesses and strengths

### **What are the benefits of using Parents' Evaluation of Developmental Status (PEDS) with the PEDS:DM?**

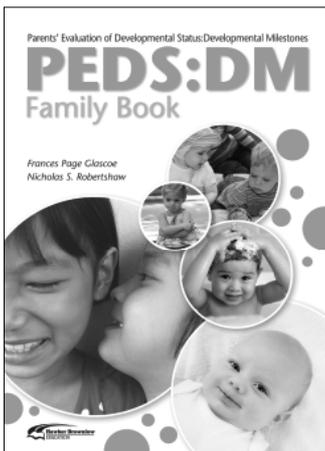
- PEDS, a screening and surveillance tool based on parents' concerns, is known to improve attendance at regular check-ups
- PEDS decreases parental frustrations and is associated with positive parenting practices (less smacking, more time-out, etc.)
- PEDS ensures that encounters are a collaborative process
- PEDS enhances the teachable moment
- PEDS focuses visits and reduces "oh by the way" concerns
- PEDS facilitates delivering difficult news via affirmation of existing concerns
- PEDS+PEDS:DM facilitates swift, accurate responses to parents' concerns and helps providers better determine when reassurance, watchful waiting, in-office guidance or referrals are needed
- PEDS+PEDS:DM provide essential components of developmental surveillance (a process that includes gathering parents' concerns, observing parent-child behaviours, assessing psychosocial risk, incorporating information about family and child medical history, results of current physical exam, etc.).
- Provides a combined PEDS+PEDS:DM Score/Interpretation Form for monitoring parents' concerns and children's performance across domains and tracking provider responses, documenting both measures

## What are the Components of The PEDS:DM?

### 1. The PEDS:DM Family Book:

This consists of laminated forms allowing parents to self-administer the measure (e.g. in the waiting or exam rooms prior to the encounter).

- General directions are included at the top of each form. These are written at the first year level and tell parents to ask for help when needed and what to say to their children after they've tried each item, i.e. positive, non-specific feedback.
- Each form, a different one for each age, presents parents with 6–8 multiple choice questions focused on children's skills. Parents (and older children) mark pages with a dry-erase texta. There are straps that hold two of these in the inside cover.
- Opposite each page are colour images to help parents elicit children's skills (e.g. shapes to copy, colours to name etc.). At younger ages, visual stimuli is not needed, and so a short, illustrated story is provided. Parents are encouraged, after they've completed the PEDS:DM, to read this to their children as a way to encourage developmental promotion.
- In the second section of the PEDS:DM Family Book, there are additional measures parents can be asked to complete at selected encounters in order to guide surveillance efforts (e.g. to screen for autism spectrum disorders, capture resilience and risk factors, etc.). There are also screens for children older than 8 years that focus on school skills and mental health, attention span, etc. If you want parents to complete any of these supplemental measures, just mark the pages with a sticky note.
- At the very end of the PEDS:DM Family Book are all the visual stimuli used on the PEDS:DM. These are used with the Assessment Level version of the PEDS:DM which is designed for Neonatal Intensive Care Follow-Up, child-find programs and early intervention services in which age-equivalent/percentage of delay scores are often needed.

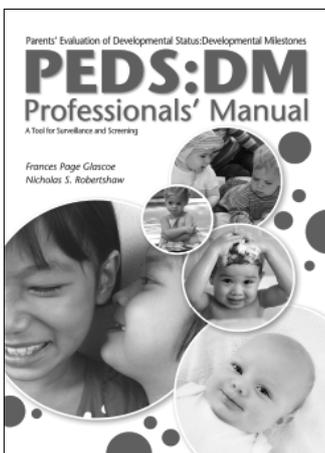


The PEDS:DM Family Book

### 2. The PEDS:DM for Professionals:

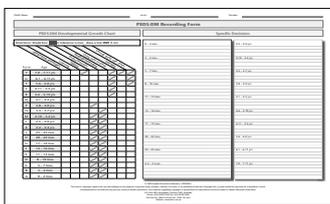
This manual includes:

- Complete directions for administering the measure.
- Instructions on how to identify the correct form, how to ask parents whether help is needed, how to fix the pages so that only the age-appropriate form shows, how to determine correct/incorrect responses and how to transfer results to the PEDS:DM Developmental Growth Chart to facilitate monitoring progress across visits.
- Suggestions for noting the fact of a PEDS:DM administration in encounter forms.
- Directions for giving feedback to families on PEDS:DM results.
- Instructions on how to incorporate the PEDS:DM into a simple evidence-based approach to surveillance by also deploying Parents' Evaluation of Developmental Status (PEDS) with its emphasis on eliciting and responding in a valid evidence-based manner to parents' concerns.
- Procedures for implementing an evidence-based comprehensive longitudinal surveillance approach using PEDS, the PEDS:DM and supplementary measures such as the Modified Checklist of Autism in Toddlers, the Family Psychosocial Screen, Pediatric Symptom Checklist (and the pictorial version), the BRIGANCE® Parent-Child Interactions Scale, etc. These measures are included in the back of the PEDS:DM Family Book.
- Guidance and tools for screening older children 8 years and older for academic and mental health problems.
- Directions for scoring and interpreting supplemental measures.

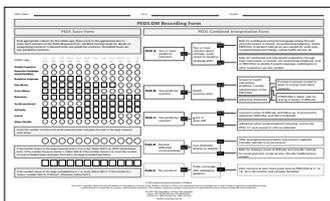


The PEDS:DM Professionals' Manual

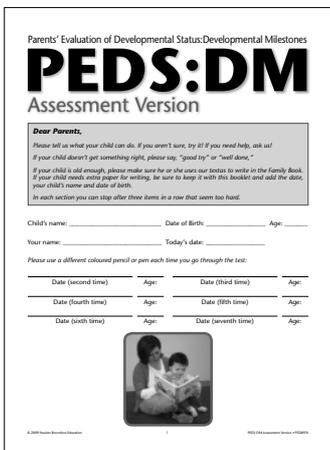
- A list of websites to aid professionals in finding services, and building knowledge of developmental-behavioural issues
- Information handouts for families on common developmental-behavioural issues (e.g. discipline, speech-language development, school readiness) and a list of websites offering quality information for parents and youth on a range of topics.
- Summary reports and referral letters that can be modified as needed and used to give parents written feedback and to share results and recommendations with referral sources.
- A guide for using PEDS:DM in early intervention, preschool and other follow-up where a continuous set of items producing age-equivalent scores may be needed because programs have varied reporting requirements and participants may have wider variations in functioning across domains than a more typical sample. Such children may perform less than optimally on the restricted set of items accorded by the encounter form version of the PEDS:DM. This approach involves the Assessment Level version of the PEDS:DM which comes with response booklets including a parent feedback form that can be reused to track development over time. A scoring guide for the Assessment Level version is included in Chapter 8.
- Guidance for those teaching trainees about development (e.g. via administering measures to children in order to learn techniques in child behaviour management, rapport building, etc.).
- Complete information on the psychometric underpinnings of the PEDS:DM including standardisation, reliability, validity and accuracy studies.
- References used in the Professionals' Manual.



The PEDS:DM Recording Form (*PEDS:DM Developmental Growth Chart*)



The PEDS:DM Recording Form (*PEDS:DM Score and Interpretation*)



The PEDS:DM Assessment Level Booklet

### 3. Recording Forms

In order to meet a range of user needs, there are three options for recording forms, all of which offer a longitudinal record of developmental progress.

- PEDS:DM Recording Form (designed for primary care encounters). On one side is the PEDS:DM Developmental Growth Chart. This form plots performance over time as a bar graph revealing strengths and weaknesses across domains. The form provides space to highlight significant results and note actions taken in response. It uses family-friendly language so that scored versions can be shared with parents. The other side of the PEDS:DM Recording Form is for existing PEDS users who wish to add the PEDS:DM to create a brief approach to surveillance.
- The PEDS:DM Recording Form includes the PEDS Score Form and a revised PEDS Interpretation Form showing when the PEDS:DM is needed and how its results facilitate responses to parents' concerns.
- PEDS:DM Assessment Level Booklets. The entire measure is contained within this booklet which presents families with age-continuous items from the PEDS:DM. The booklet is designed to be reusable, one per patient/student for the entire 0–8 year age range. On the back is a Reporting Grid with space to record administration dates, age equivalent scores and percentage of skills mastered/percentage of delays in each domain. The Reporting Grid uses family-friendly terms for developmental domains, and completed grids are photocopyable so they can be shared with parents, administrators and researchers.

been enrolled for almost a month in the daycare program and that both were doing well, particularly Maria, who now appeared more engaged, less repetitive in her play, less passive, more fun to be with and less "dopey acting". Dr Samuels noticed that Maria was a far more animated child who now vocalised, made eye-contact, played more appropriately with toys and smiled!

Ms Roberts reported she was now working part-time and also involved in job-training focused on improving her literacy, resumé writing and competence with computers. She was now on a waiting list for public housing but that was expected to be in place in 2–3 weeks. She had already started receiving food and instruction in nutritional planning for young children. Dr Samuels commented in his chart notes that Ms Roberts seemed more responsive to her daughter, smiling and talking with her during the visit.

Follow-ups repeated the M-CHAT but found neither signs of autism spectrum disorder nor delays in receptive language, motor or social-emotional skills. Maria continued to have expressive language delays that experts thought might be secondary to growing up bilingual and being raised by an overwhelmed parent with understandable symptoms of depression. They planned to have a speech-language pathologist work with Maria and her daycare teacher once a week and to meet monthly with her mother to help her work on Maria's language skills at home.

**Comment:** *This family probably still has difficult roads ahead but the use of a comprehensive surveillance model helped identify a large pile-up of stressors that were clearly taking a toll on Maria's development and her family's well-being. The rich set of interventions identified by comprehensive surveillance promoted a more optimal developmental outcome for Maria, enhanced her mother's ability to be a responsive nurturing parent and facilitated her efforts, as sole bread-winner, to provide her children with appropriate housing, nourishment, stable income and healthcare.*

## The Comprehensive Surveillance Recording Form

The form on the next page may be useful in recording all dimensions of surveillance. There are instructions for using it on the page that follows the form.

The Comprehensive Surveillance Recording Form has space to note the presence of parental concerns and their predictive value, children's developmental status, performance on autism-specific screens, mental health measures, parent-child interactions, psychosocial risk factors, presence or absence of problems found in child or family medical history and in the physical exam. There is brief space to write comments.

The form also shows the recommended timing (with horizontal lines) for measuring each dimension of surveillance. Vertically lined areas are used for noting problems and white areas are used to note the absence of problems.

Child's Name Maria Roberts Date of Birth \_\_\_\_\_ Provider \_\_\_\_\_

Comprehensive Developmental Surveillance: Longitudinal Recording Form

Age	Parents' Concerns <sup>1</sup>		Developmental/Academic Delay(s) <sup>2</sup>		ASD Screen <sup>3</sup>		Mental Health <sup>4</sup>		Psychosocial Risk <sup>5</sup>		Observation (Parent-Child Interactions) <sup>6</sup>		Family/Child Medical History <sup>7</sup>		Physical Exam <sup>8</sup>		Action:
	None	Predictive	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	
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