



## Measure of Whether a Parent-Completed Standardized Developmental and Behavioral Screening (SDBS) Tool was Administered

### USERS TIP SHEET

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### Background Information

The American Academy of Pediatrics Statement on Identifying Infants and Young Children with Developmental Disorders in the Medical Home (July, 2006) states the importance of routine screening by pediatric health care providers for developmental and behavioral problems and delays using standardized developmental screening tools.<sup>1</sup> Furthermore, the AAP Statement highlight that **parent-completed standardized developmental and behavioral screening (SDBS) tools** are a feasible and cost-effective strategy to routine screening and surveillance.

Integral to assuring whether children are being screened in this way is the use of standardized measures to track the current level of screening and to monitor implementation efforts over time. No standardized and validated methods are available to health systems for this purpose. Some health systems examine medical charts for evidence of standardized screening of children. However, it is not know whether this data source is reliable or valid for measurement purposes due to variations in whether and how care providers document their screening activities, including whether or not completed tools are included in the chart.

Currently available validated developmental and behavioral screening tools for use in pediatric practices involve discussions with parents. Therefore, parents are an obvious source of data for determining whether a standardized screening occurred for their child.

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<sup>1</sup> [www.pediatrics.org/cgi/doi/10.1542/peds.2006-1231](http://www.pediatrics.org/cgi/doi/10.1542/peds.2006-1231)

The CAHMI received funding from The Commonwealth Fund to develop parent reported survey items that measure whether a standardized, parent-completed developmental and behavioral screening tool was administered. As part of this development work, the CAHMI did the following:

1. Analysis on existing databases with potential items from the Promoting Healthy Development Surveys (PHDS, ProPHDS, PHDS-PLUS) and the National Survey of Early Childhood Health (NSECH)
2. Convened an advisory group of key leaders in the child health services research field to review and provide feedback about the development of these survey items.
3. Developed new survey items to address the limitations observed in these databases.
4. Conducted N=23 cognitive interviews with parents who had and had not completed an SDBS tool.

The survey items, implementation and scoring guidelines presented are based on this development work and endorsed by our advisory committee. More detailed information about the analysis and development process can be found on the CAHMI website ([www.cahmi.org](http://www.cahmi.org)) and by contacting Colleen Reuland at [reulandc@ohsu.edu](mailto:reulandc@ohsu.edu).

### ***Design Parameters***

The following design parameters were established for this survey-based measure based on input from the SDBS advisory group and on the item-number limitations present in potential tools for inclusion such as the National Survey of Children's Health.

1. Items can total no more than three items or equivalent per child.
2. When scored, items should be sensitive to validated, endorsed, standardized screening methods that are:
  - a. Parent-completed
  - b. Go beyond fine and gross motor development to include language, behavior, etc.
  - c. Pick up both the concerns and observations based methods currently in use in the field (Parents Evaluation of Developmental Status, Ages and Stages Questionnaire) and other parent survey based methods anticipated to emerge over time.
3. The measure will be anchored to whether annual screening occurred.
4. The measure should only be scored for children 12 months old or older.
5. When scored, items should be sensitive to validated, endorsed, standardized screening methods that are:
  - a. Parent-completed
  - b. Go beyond fine and gross motor development to include language, behavior, etc.
  - c. Pick up both the concerns and observations based methods currently in use in in the field (Parents Evaluation of Developmental Status©, **Ages & Stages** Questionnaires®) and other parent survey based methods anticipated to emerge over time.

**Survey Items to Measure Whether a Parent-Completed  
Standardized Development and Behavior Screening (SDBS) Tool was Administered**

*Intro Text: Sometimes a child's doctor or other health care provider will ask a parent to fill out a questionnaire **at home or during their child's visit.***

**Q1:** In the last 12 months, did your child's doctor or other health care provider have you fill out a questionnaire about specific concerns or observations you may have about your child's development, communication or social behaviors?

**If yes to Q1:**

*Children 12-23.99 months old:*

- 1a) Did this questionnaire ask about your concerns or observations about how your child talks or makes speech sounds?
- 1b) Did this questionnaire ask about your concerns or observations about how your child interacts with you and others?

*Children 24-47.99 months old:*

- 1a) Did this questionnaire ask about your concerns or observations about words and phrases your child uses and understands?
- 1b) Did this questionnaire ask about your concerns or observations about how your child behaves and gets along with you and others?

*Children 48-60 months old:*

- 1a) Did this questionnaire ask about your concerns or observations about words and phrases child uses and understands?
- 1b) Did this questionnaire ask about your concerns or observations about how your child behaves and gets along with you and others?

**If no to Q1:**

**Q1-No:** In the last 12 months, has anyone else ever asked you to fill out a form or questionnaire about specific concerns or observations you have about your child's development, communication or social behaviors?

**If Yes to Q1-No :**

*Children 12-23.99 months old:*

- 1-NO-a) Did this questionnaire ask about your concerns or observations about how your child talks or makes speech sounds?
- 1-NO-b) Did this questionnaire ask about your concerns or observations about how your child interacts with you and others?

***(Continued on next page)***

*Children 24-47.99 months old:*

1-NO-a) Did this questionnaire ask about your concerns or observations about words and phrases your child uses and understands?

1-NO-b) Did this questionnaire ask about your concerns or observations about how your child behaves and gets along with you and others?

*Children 48-60 months old:*

1-NO-a) Did this questionnaire ask about your concerns or observations about words and phrases child uses and understands?

1-NO-b) Did this questionnaire ask about your concerns or observations about how your child behaves and gets along with you and others?

**Implementation and Scoring Guidelines:  
Measure of Whether a Parent-Completed  
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The SDBS items will be formally added to the Promoting Healthy Development Survey (PHDS) tools and are recommended for inclusion in surveys focused on child health and health care quality. Therefore, the sampling and implementation of the SDBS items will be dependent on the sampling and implementation guidelines for the larger survey to which the items are included.

Below are some general guidelines for the sampling, placement and scoring of the SDBS items.

***Sampling:***

- The primary survey the SDBS items will be included in is the Promoting Healthy Development Survey (PHDS). Sampling for the PHDS includes a requirement that the child be continuously enrolled in the system and had a least one HEDIS defined well-child visit in the last 12-months or since the child's birth.
- If the SDBS items are included in a survey that does not have these requirements, then they the items should be scored for those children who meet one or both criteria (to the degree that this is feasible).

***Placement:***

- The items are anchored to a questionnaire that is provided by a child's doctor or other health provider before or during a child's visit. Therefore, the items should be placed in the section of the survey asks similar questions about health care the child may have received.
- The items must be preceded by a definition of the term "doctor or other health care provider".

***Scoring:***

**Numerator: Children Annually Screened Parent-Completed SDBS Tool**

- In order for a child to be identified as having an SDBS completed by the parent or caregiver, the respondent must have answered positively to the stem question AND both follow-up items.
  - Screening by child's doctor other health provider: Only those respondents who said Yes to Q1 AND Q1a AND Q1b are identified as having an SDBS.
  - Screening by someone else in the community: Only those respondents who said Yes to Q11-NO AND 1-NO-a AND 1-NO-b are identified as having an SDBS.

**Denominator: Eligible Children for Screening**

- The SDDBS items should only be scored for children 12 months to 3 years old (up to 48 months old).<sup>2</sup>
- As noted above, if the sampling for the survey does not require the child to be cont. enrolled or have had a visit, then the various scoring options should be explored (where feasible) to determine the appropriate denominator for the measure.

**Denominator Options:**

1. All children 12 months old- 3 years old.
2. All children 12 months old- 3 years old who had one more visit in the last 12 months to their child's doctor or other health provider
3. All children 12 months old- 3 years old who had one or more well-child visit in the last 12 months to their child's doctor or other health provider.
4. All children 12 months old- 3 years old who meet a cont. enrollment requirement (12 or 6 months or since the child was born).
5. All children 12 months old- 3 years old who meet a cont. enrollment requirement AND who had one or more visits in the last 12 months to a doctor or other health provider.
6. All children 12 months old- 3 years old who meet a cont. enrollment requirement AND who had one or more well-child visits in the last 12 months to a doctor or other health provider.

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**Important Note:** A detailed report displaying the cognitive interview and analytic findings described in the background section of this Users Tips Sheet is available on the CAHMI website.

**CAHMI Contact Information: [www.cahmi.org](http://www.cahmi.org) 503-494-1930**  
**Authors: Colleen Peck Reuland, MS and Christina Bethell, PhD**

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<sup>2</sup> The upper-age limit for the SDDBS is dependent on your goal for measurement and what is expected of providers. The current AAP statement recommends standardized screening up to 30-months old. The items have been tested and validated for children up to 4 years old.