Can parent-report questionnaires be used to accurately screen for developmental delay?

Summary
The purpose of this study was to evaluate two different parent report questionnaires (Ages and Stages Questionnaire and the Child Development Inventory) for their feasibility and utility in identifying children with possible developmental delays at the time of their 18-month pediatrician visit. Over 300 children were recruited into the study and randomized to use either of the two parent report instruments. The results of these questionnaires were compared to the results of testing on a gold standard, the Batelle Development Inventory. The physician’s opinion regarding the child’s developmental status was incorporated to see whether it would improve the accuracy of the parent report questionnaires. Results of this study showed that parent report questionnaires is feasible to complete reliably within the setting of a busy pediatric ambulatory practice. Unfortunately the parent report questionnaires performed at 18 months fell below present recommended standards regarding accuracy (sensitivity and specificity) of screening tests. In addition, the physician’s opinion regarding the child’s development did not appreciably improve or modify the accuracy of the parent report questionnaires.

What families should know
Parent report questionnaires can be used in the setting of a pediatric clinic to assess development. Better parent report questionnaires are needed to improve sensitivity and specificity.

What practitioners should know
The sensitivity and specificity of these parent report questionnaires in identifying possible developmental concerns at 18 months of age does not yet reach the threshold for implementation on a widespread basis.
Screening for developmental concerns at a single age point may not be sufficient to accurately identify developmental delays. At risk children need to be reassessed by the primary physician before the provision of necessary medical and rehabilitation services.

Reference