

# An Update on Assessing Development in the Pediatric Office: Has Anything Changed After Two Policy Statements?

Alma D. Guerrero, MD, MPH; Nicole Garro, MPH; John T. Chang, MD, PhD, MPH;  
Alice A. Kuo, MD, PhD

From the UCLA Center for Healthier Children, Families and Communities, Los Angeles, Calif (Dr Guerrero, Ms Garro, and Dr Kuo); Department of Pediatrics, David Geffen School of Medicine, University of California, Los Angeles, Calif (Dr Guerrero and Dr Kuo); Zynx Health Incorporated, Los Angeles, Calif (Dr Chang); Department of Medicine, David Geffen School of Medicine, University of California, Los Angeles, Calif (Dr Chang and Dr Kuo); and Department of Health Services, School of Public Health, University of California, Los Angeles, Calif (Dr Kuo) Address correspondence to Alma Guerrero, MD, MPH, UCLA Center for Healthier Children, Families and Communities, 10990 Wilshire Ave, Suite 900, Los Angeles, California 90024 (e-mail: [aguerrero@mednet.ucla.edu](mailto:aguerrero@mednet.ucla.edu)). Received for publication December 22, 2009; accepted August 10, 2010.

## ABSTRACT

**OBJECTIVE:** The aim of this study was to examine parental reports of receiving a child developmental assessment (DA), and the child, family, and type of health care setting characteristics and well-child care processes associated with receiving this aspect of preventive developmental care.

**METHODS:** The 2007 National Survey of Children's Health was used to study 16 223 children, aged 10 months to 4 years, who received a DA with a structured questionnaire from their primary care provider in the previous 12 months. Data were adjusted for child characteristics, family socioeconomic factors, type of health care setting, and processes of care.

**RESULTS:** Few children were assessed for developmental delays by using developmental questionnaires (28%). A greater percentage of parents of children with public insurance reported receiving a developmental questionnaire compared with parents of children who were uninsured or privately insured (32% vs 26% and 25%, respectively;  $P = .02$ ). The adjusted odds of receiving a developmental questionnaire were higher for

children with public insurance than private insurance (odds ratio [OR] 1.35, 95% confidence interval [CI], 1.05–1.73), higher for children whose usual place of care was a clinic or health center than a doctor's office (OR 1.36, 95% CI, 1.07–1.74), and higher for children reporting adequate family-centered care (OR 1.41, 95% CI, 1.14–1.74).

**CONCLUSIONS:** Parental receipt of developmental questionnaires is low and varies by type of insurance, type of place for usual source of care, and adequacy of family-centered care. There is room for improvement in the provision of developmental questionnaires and, our results suggest, areas for continuing research to understand variations in DA practices.

**KEYWORDS:** developmental assessments; developmental questionnaires; developmental screening; pediatric office; primary care practices; well-child care

**ACADEMIC PEDIATRICS** 2010;10:400–404

## WHAT'S NEW

We describe national estimates on the recommendation to provide structured questionnaires to assess child development in primary care and explore the association of any racial and ethnic disparities in the provision of this preventive developmental care.

## INTRODUCTION

Early identification of developmental problems is critical to ensure optimal developmental potential in children. To guide pediatricians in addressing developmental concerns in young children, the American Academy of Pediatrics (AAP) released 2 policy statements within the last decade emphasizing regularly eliciting parental concerns and administering validated and structured developmental screening tests in the pediatric office.<sup>1,2</sup> The availability of national surveys makes it possible to describe how well health care providers may be achieving the recommendations of the AAP. Before the release of both AAP policy statements,

a study using the 2000 National Survey of Early Childhood Health found only 57% of parents of young children report receiving a developmental assessment (DA) at a well-child visit in the last year, although use of a structured questionnaire was not specified.<sup>3</sup> Recent survey data can help examine whether increased attention to conducting regular DAs with a structured tool has actually led to improvements in reports of parents receiving one.

Using national data, we examined parental reports of the provision of DAs by using structured questionnaires. We also explored whether racial/ethnic differences in the provision of DAs exist, since disadvantaged minority children experience an increased risk for behavioral and developmental disorders, a disproportionate burden of health risk factors and morbidity, suboptimal health status, and poor quality of care.<sup>4–7</sup> Finally, to identify potential areas for improvement, we examined whether child characteristics, family sociodemographic factors, type of health care setting for usual source of care, and well-child care process measures were associated with reports of receiving a DA.

## METHODS

### SAMPLE

This study used the 2007 National Survey of Children's Health (NSCH), a survey of a nationally representative sample of parents of children aged 0 to 17 years. NSCH was designed to estimate a variety of physical, emotional, and behavioral child health care indicators. Interviews were conducted in 66% of sampled households with children, with an overall weighted response rate of 46.7%. A total of 91 642 interviews were completed for the 2007 NSCH. Details on the NSCH survey methods and weighting procedures are described elsewhere.<sup>8</sup>

Because the NSCH asks parents to report receipt of a developmental questionnaire in the prior 12 months, our analyses included children under the age of 4 to capture the upper-bound age limit (42 months) of the last recommended age to screen (30 months). We excluded children aged under 10 months or children without a doctor's visit in the past 12 months, because their parents were not asked about receiving a developmental questionnaire. Our final analytic sample included children who had nonmissing data for all of the measures of interest in our a priori model.

### MEASURES

Parents/guardians who had reported that their child had been to a health care provider in the last 12 months were asked, "During the past 12 months, did a doctor or other health care provider have you fill out a questionnaire about specific concerns or observations you may have about [child]'s development, communication, or social behaviors?" Responses were dichotomized as yes or no.

Measures from the following 4 domains were used as covariates in our model: (1) child characteristics, (2) family sociodemographic characteristics, (3) type of health care setting, and (4) well-child care processes. All covariates have been previously associated with differential child health services<sup>9,10</sup> or used in previous analyses to examine the receipt of child DAs.<sup>3</sup>

Child characteristics included age, gender, race/ethnicity, an overall health status measure, and a child's risk of developmental and behavioral disorder based on responses from the Parents' Evaluation of Developmental Status. Using responses to the specific probes and the scoring scheme developed by the Child and Adolescent Health Measurement Initiative Data Resource Center of the NSCH,<sup>11</sup> children were categorized as having low or no developmental risk versus high or moderate developmental risk.

Family sociodemographic characteristics included maternal education, number of children in household, child's insurance status, and family poverty status. Poverty status was based on federal poverty guidelines for a family of 4 and was categorized as 0% to 99%, 100% to 199%, 200% to 399%, and  $\geq 400\%$ .

The type of health care setting was categorized as a doctor's office, hospital emergency room, outpatient department, or clinic and health center. Since over 95% of parents surveyed in the NSCH 2007 reported having

a usual place of care, we selected the type of health care setting parents reported as the usual source of care to examine whether this might be an important factor in receiving a DA.

The well-child care process measures included having a personal provider, the number of preventive care visits in the past year, and the adequacy of family-centered care. Adequacy of family-centered care was constructed using the 6 family-centered care questions and scoring algorithm of the Child and Adolescent Health Measurement Initiative Data Resource Center.<sup>11</sup> Parents who responded usually or always to all components of the family-centered care composite were categorized as having adequate family-centered care.

### STATISTICAL ANALYSIS

Data analyses were performed using Stata 10.1 (Stata-Corp LP, College Station, Tex) to account for the complex survey design of NSCH and its intention to reflect a nationally representative sample of children. Bivariate analyses were used to assess differences in the report of receiving a developmental questionnaire in the past 12 months. We used  $\chi^2$  analyses to identify significant bivariate associations ( $P < .05$ ). Generalized and multivariate logistic regression models were used to identify differences in the odds of reporting receiving a developmental questionnaire and each of the 4 measure domains described above. To examine which specific factors might change the odds of receiving a developmental questionnaire, the full multivariate logistic regression model included variables from all 4 domains. To assess the robustness of our findings and examine the effects on our findings of excluding those observations with any missing data, we performed sensitivity analyses examining the effect on model estimation.

## RESULTS

Our analytic sample included 16 223 children. Approximately 28% of parents of children aged 10 months to 4 years reported receiving a developmental questionnaire in the previous 12 months. Bivariate analyses revealed receipt of a developmental questionnaire was associated with a child's mean age but no other child characteristics (Table 1). A greater percentage of parents of children with public insurance reported receiving a developmental questionnaire compared with parents of children who were uninsured or privately insured (32% vs 26% and 25%, respectively;  $P = .02$ ). Also among those reporting receiving a developmental questionnaire, there was a greater mean number of preventive visits in the past year (3.2 vs 2.8;  $P < .001$ ) and a greater percentage reporting adequate family-centered care (29% vs 24%;  $P = .01$ ).

In a generalized logistic regression model examining the unadjusted odds of receiving a developmental questionnaire by race/ethnicity, black (non-Latino) children had 34% greater odds compared with white (non-Latino) children (odds ratio [OR] 1.34, 95% confidence interval [CI], 1.06–1.71). No differences were found in the other racial/ethnicity groups.

Download English Version:

<https://daneshyari.com/en/article/4139966>

Download Persian Version:

<https://daneshyari.com/article/4139966>

[Daneshyari.com](https://daneshyari.com)