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## Comprehensive Assessments for Children Entering Foster Care: A National Perspective

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### Abstract

**Objectives**—To 1) investigate the status of policies for comprehensive health assessments of children entering out-of-home care, 2) develop a profile for each primary sampling unit (PSU) regarding the comprehensiveness of its assessment policies with respect to physical, mental, and developmental health, and 3) examine the relationship between inclusiveness and the estimated percentage of children assessed, primary assessment location, and principal assessment provider type.

**Method**—In collaboration with the National Survey of Child and Adolescent Well-Being, a national probability sample of 92 PSUs was identified. Detailed telephone survey data, addressing policies for the assessment of physical, mental, and developmental needs of children on entry into out-of-home care, were collected from child welfare key informants. Descriptive statistics were used for analyses, and were weighted to account for the sampling strategy.

**Results**—Over 94% of PSUs surveyed assessed all children for physical health problems. The percentage of PSUs with inclusive policies regarding mental health and developmental assessment was much lower (47.8% and 57.8%, respectively). Only 42.6% of PSUs provided comprehensive physical, mental health, and developmental examinations inclusive of all children entering out-of-home care. Community locations and primary care providers were most often used to conduct assessments for physical and developmental problems.

**Conclusions**—Despite the publication of national guidelines regarding assessment, many PSUs do not have comprehensive policies or routine practices that address all children entering out-of-home care. Given the high use of primary care providers, these providers must be educated regarding the prevalence and types of problems experienced by children entering foster care.

### Keywords

foster care; health care; mental health services; developmental delay; child health

### ABBREVIATIONS

CWLA, Child Welfare League of America; AAP, American Academy of Pediatrics; PSU, primary sampling unit; CCCW, Caring for Children in Child Welfare; NSCAW, National Survey of Child

and Adolescent Well-Being; CI, confidence interval; CASRC, Child and Adolescent Services Research Group

The number of children in the United States foster care system has increased substantially over the last 2 decades, growing by 44% between 1987 and 1995.<sup>1</sup> Current national estimates are that over 580 000 children are in foster care.<sup>2</sup>

Children in foster care represent a particularly vulnerable subpopulation of US children. Those children have more serious and complex physical health, mental health, and developmental problems than children from normative samples.<sup>3,4</sup> Regarding chronic medical conditions, estimates range between 30% and 80%, with an estimated 25% of children having 3 or more chronic conditions.<sup>4-9</sup> Common physical health problems include infections, infestations, asthma, vision and hearing problems, malnutrition, short stature, skin abnormalities, anemia, failure to thrive, dental caries, and manifestations of abuse.<sup>3,6,10-13</sup> These problems occur at rates higher than the national average. For example, children in foster care are 3 times more likely to have asthma and twice as likely to have growth problems as children in the general pediatric population.<sup>8,14</sup> Increased risk for sexual activity and substance abuse contribute to additional health needs for adolescents in foster care.<sup>5</sup>

A large proportion of children entering foster care also have significant emotional and behavioral health problems, with estimates ranging from 35% to 50%.<sup>15,16</sup> Problems identified have ranged from relational and coping difficulties and school failure to emotional and behavioral disturbances causing moderate to severe impairment, with conduct disorder, attentional disorders, aggressive behavior, and depression being the most common disorders.<sup>17</sup> Rates of emotional and behavioral problems documented in children in foster care are higher than the 11% to 38.5% prevalence rates obtained from community samples that include children living in poverty.<sup>18-22</sup> Although rates of emotional and behavioral problems in these samples approach the lower limits of reported estimates for children in foster care, the experiences leading up to placement in foster care are related to higher estimates for this vulnerable subpopulation of children.

Developmental problems are also widespread among children in the foster care system, either as a complication of, or in addition to, their medical conditions. It is estimated that between 20% and 60% of young children entering foster care have a developmental disability or delay.<sup>6,23,24</sup> Problems include prematurity, cerebral palsy, mental retardation, developmental delays, and learning disabilities, as well as speech, hearing, and vision impairments. This compares with an estimate of ~10% among the general population.<sup>25</sup>

Concern over the well-being of children in foster care prompted both the Child Welfare League of America (CWLA) and the American Academy of Pediatrics (AAP) to publish guidelines related to the care of children in the foster care system ~1 decade ago.<sup>26,27</sup> Although these guidelines may need revisions to address current public health epidemics including dental caries, behavioral problems, and obesity, they do provide an important framework based on expert opinion for examining the current status of care for children in child welfare. The CWLA guidelines call for mandatory health assessments for children entering foster care; the AAP guidelines specify an initial health screening with a comprehensive examination within 30 days of entry into foster care. In addition, the AAP guidelines designate 3 key features of these mandatory health assessments: 1) assessments should be inclusive of all children entering foster care; 2) assessments should be comprehensive with respect to the identification of possible physical health, mental health, and developmental problems; and 3) assessments should be performed by a clinician who is knowledgeable about the treatment of children in foster care and can provide regular, ongoing primary care services.

Research published over the last decade, however, has indicated that physical health, mental health, and developmental problems among children in foster care are not always identified or treated.<sup>3,24,28–30</sup> A 1995 study of young children in foster care in Los Angeles, New York City, and Philadelphia conducted by the General Accounting Office found that 12% of children in foster care received no routine care, 34% received no immunizations, and 32% continued to have unmet health needs after placement.<sup>31</sup> Regarding mental health services, although research has demonstrated a disproportionate use of services by children in foster care compared with children covered by Medicaid who are not in foster care, it is clear that children in foster care have variable access to necessary services.<sup>32–37</sup> There is no published research available addressing access to services for developmental delay among young children in foster care.

Findings regarding the high rates of problems among children in foster care and the possibility of unmet need suggest the importance of early assessment for identifying physical health, mental health, and developmental needs of children entering foster care. However, it is uncertain how many child welfare agencies have established inclusive and comprehensive policies for assessing children entering foster care. Research to date has not directly addressed the inclusiveness and comprehensiveness of policies with respect to the assessment of children entering foster care. The characteristics of clinicians conducting the assessments are also unknown. The little work available highlighted the strengths of multidisciplinary assessment centers in providing comprehensive assessments as compared with community providers; however, these multidisciplinary programs are often grant-funded and may not be commonly available.<sup>38,39</sup> In addition, despite the presence of published statements from the AAP about the role of pediatricians in the care of children in foster care,<sup>27,40</sup> the role clinicians in the community actually play in such assessments is not clear.

This paper reports findings from a national probability sample of child welfare agencies in the United States to describe stated policies and procedures at the local level with respect to early assessment. Our first objective addresses the status of policies for assessments of children entering out-of-home care, specifically, the inclusiveness and the comprehensiveness of policies. We define inclusiveness as a categorical variable that addresses whether a stated policy covers all children entering out-of-home care, is limited to subgroups of children based on nonclinical characteristics such as type of abuse experienced, or is not in place. Comprehensiveness of policies considers whether child welfare agencies have inclusive policies for the 3 domains of assessment named in the AAP policy statement, eg, physical, mental, and developmental health. We then develop a profile for each primary sampling unit (PSU) regarding the comprehensiveness of its assessment policies. Lastly, we examine the relationship between inclusiveness and the estimated percentage of children assessed, primary assessment location, and principal assessment provider type.

## METHODS

### Overview

This research was conducted under the auspices of the Caring for Children in Child Welfare (CCCW).<sup>41</sup> CCCW was designed as a supplemental study to the National Survey of Child and Adolescent Well-Being (NSCAW), a longitudinal study of over 6000 children who come into contact with child welfare systems. A national probability sampling strategy was employed to select PSUs, from which the sample of children would be drawn. PSUs were defined, in general, as geographic areas that encompass the population served by a single child welfare agency. A total of 100 PSUs were selected from a national sampling frame, with probability of PSU selection proportional to the size of the PSU's service population. Of the 100 PSUs identified by the sampling strategy, the NSCAW study ultimately collected child-level data in 92 PSUs. Eight PSUs were excluded because regulations in these areas required that child welfare agency

personnel obtain active consent from potential participants before contact by the NSCAW research team. This approach to enrollment proved unworkable and the final sampling frame was modified to reflect the fact that these areas could not be represented. The remaining 92 PSUs consisted of 96 counties in 36 states and constituted a nationally representative sample of child welfare agencies in which initial “active consent” by the child welfare agency was not required.<sup>42</sup> Further details of the NSCAW sampling plan and procedures have been published elsewhere.<sup>42,43</sup>

The CCCW study chose to work closely with the NSCAW study, investigating programs and policies in Medicaid, State Child Health Insurance Plans, child welfare, and public mental health systems that might impact on service use by children in child welfare. Detailed telephone survey instruments were developed to investigate policies, procedures, and linkages within these service systems. This research reports on the results from those survey modules that addressed specific policies and procedures for the assessment of physical health, mental health, and developmental needs of children on entry into out-of-home care. Approval for this study was given by the Institutional Review Board of Children’s Hospital (San Diego, CA).

## Sample

Interviews regarding foster care assessments were completed with key informants in 79 of the 92 PSUs (85.9%). In the 13 PSUs in which the interview was not obtained, the director or research review committee denied the study’s request for participation usually because of perceived burden on staff. Information on screening and assessment policies was obtained for 12 of the refusal PSUs from extant data, such as policy and procedure manuals and annual reports obtained from child welfare or other public sources, bringing the number of PSUs with data regarding assessment policies to 91 (98.9%). It was not possible to obtain extant data on entry assessments for one of the refusal PSUs.

## Procedures

Interview data were collected from child welfare informants from September 2000 through July 2001. Key informant names were obtained from the NSCAW contact in each PSU. Information on the CCCW study, an interview summary, and a copy of the informed consent agreement were sent to each identified informant. Trained research assistants then contacted the informant by telephone to confirm receipt of the informed consent and willingness to participate, ensure that the subject was the best available informant, and schedule the interview. A reminder telephone call was also made on the day before the interview.

The average duration of the interview was 45 minutes. No child or case-specific data were obtained during the interviews. The job titles of the respondents varied widely by PSU; however, most respondents served as caseworker supervisors or coordinators for the child welfare assessment program. Respondents were asked to identify alternative informants for specific questions or sections for which they were not the best informant. These additional informants were contacted and consented using the procedure described above. The number of informants per module ranged from 1 to 3, with an average of 1.4 informants.

For 12 of the 13 PSUs in which the child welfare administration would not give consent for participation, information on policies and procedures related to assessments was obtained from either printed or on-line versions of the agency’s policy and procedures manual. State administrative codes were examined through Lexis-Nexis searches. Annual reports and other documents pertaining to health care for children in child welfare were also obtained from county and state agency websites. As mentioned above, extant data were not available on one refusal PSU.

## Measures

One module of the CCCW interview, entitled “Entry Screening and Services,” specifically addressed assessments performed within the first 30 days of entry into foster care. The module consisted of 4 sections: 1) initial health screenings, 2) comprehensive physical health examinations, 3) mental health assessments, and 4) developmental assessments for children age 5 and under. To differentiate between the initial health screening and the comprehensive physical examination, PSU informants were first asked whether or not they provided an initial health screening, and then were asked to clarify whether the health screening was done in addition to a later, more comprehensive physical examination, or as part of a comprehensive physical examination.

For each domain (physical, mental, and developmental health), a series of 6 questions was asked as follows: 1) Does the county have any written policies in place that require this assessment for any children? If yes, is it for all children or only for specific groups of children entering out of home care? 2) Does the county have any formal system or program in place to ensure that any children receive this assessment? If yes, is it for all children or only for specific subgroups of children entering out of home care? 3) On average, what percentage of children entering out of home care actually receives this assessment? 4) What is the primary location where these assessments occur? 5) Who is the primary provider of these assessments? 6) Does your PSU require any specific measure or tool for this assessment? A measure or tool was further defined to include any standardized questionnaire or directly administered screening or evaluation test that was used to assess physical, mental, or developmental health. The specific tool(s) used and details regarding the tool(s) (screening test vs evaluation) were not obtained during this wave of interviews. In addition, questions were not asked regarding the specific content of the health examination, including screening for dental caries, vision and/or hearing abnormalities, positive tuberculin test, or abnormal blood and/or urine chemistries during this wave of interviews. A separate module addressed periodic reassessments and mechanisms for tracking health, mental health, and developmental problems, but is not described in this paper.

Based on the results of these questions, PSUs were characterized as falling into 1 of 3 categories of inclusiveness for each type of assessment: 1) policy in place inclusive of all children entering foster care; 2) policy in place for limited subgroups of children entering foster care, based on nonclinical characteristics of the child; 3) no policy in place. This classification was then used to address the objectives of this research. Comprehensiveness was defined as having an inclusive policy in place to address each of the 3 domains of a comprehensive assessment (physical, mental, and developmental health).

## Analyses

Policies and procedures were examined using descriptive statistics and regressions. Weighted analyses were performed using the statistical software STATA (version 7.0; Stata Corporation, College Station, TX) to take into account the NSCAW stratification plan and the probability of PSU selection. Weights were generated as the inverse of the probability of PSU selection. Analyses generated point estimates of means and proportions as well as confidence intervals (CIs) around these values. Given the sampling strategy and the moderate sample size of 92 PSUs, it should be noted that CI around estimates may be wide. Because of the sampling procedures and weighting strategies used, analyses are representative of the population of the nation’s child welfare systems.

## RESULTS

### Status of Policies: Comprehensiveness and Inclusiveness

The majority of PSUs (64.9%, CI: 41.0, 83.2) required health screening as part of the comprehensive physical examination. Another 26% (CI: 11.3, 49.5) of PSUs mandated an initial health screening before a comprehensive physical examination provided at a later point in time. Because no PSU offered a health screening without a comprehensive physical examination either concurrently or at a later date, data presented here only address policies regarding comprehensive physical examinations.

Table 1 reviews the inclusiveness and comprehensiveness of policies for the 3 types of assessments (physical health, mental health, and developmental health). With respect to physical health examinations, the percentage of PSUs with a policy in place for all children entering foster care was estimated at 86.4% (CI: 64.6, 95.7). Only a small proportion of PSUs had a policy and/or system that applied to limited subgroups (eg, children entering therapeutic foster care or group care settings, or with a history of physical and/or sexual abuse) or had no policy in place at all.

In contrast to the findings for physical health, policies for the assessment of mental health and developmental problems were much less common. Specifically, less than half of all PSUs addressed mental health assessments for all children, and only a slightly higher proportion of PSUs addressed developmental assessments for all children ages 5 and under. For mental health problems, the limitation of assessments to specific subgroups of children based on nonclinical characteristics, such as placement setting or maltreatment type, occurred in one fifth of PSUs; policies regarding developmental assessments for specific subgroups of children were much less common and were based on placement setting and age. Finally, almost a third of PSUs were lacking a policy or system for mental health or developmental assessments.

The CCCW survey instrument also asked about the presences of systems, rather than policies, to ensure that children receive assessments. It is possible that results could differ for policies and systems. For example, it could be hypothesized that some PSUs might have a policy in place but not have a system in place to assure assessments were provided. To address this question, analyses were conducted to examine the association between the presence of a policy and a system for each domain. In each domain, results regarding the presence of a system were very similar to those regarding policies attributable to the strong association between policies and system in each domain  $R^2 = .41$  ( $P \leq .05$ ) for physical health,  $R^2 = .71$  ( $P \leq .001$ ) for mental health, and  $R^2 = .72$  ( $P \leq .001$ ) for developmental health). All further analyses focus only on policies.

### Profiles of PSUs Regarding Comprehensiveness and Inclusiveness of Assessments

A profile variable was then created to describe patterns of policies in place across the 3 domains of assessment (physical, mental, and developmental health) for each PSU. Three patterns accounted for 75% of PSUs. Those patterns included: 1) comprehensive assessment including physical, mental, and developmental health domains inclusive of all children (42.6%; CI: 18.7, 70.6); 2) physical and developmental health assessments inclusive of all children with no mental health assessments (14.0%; CI: 6.0, 29.1); and 3) physical health assessments inclusive of all children with no developmental or mental health assessments (18.3%; CI: 8.5, 35.1). The remaining PSUs displayed other patterns but no single other pattern accounted for >9% of PSUs.



### Inclusiveness of Policies and Estimated Percentage of Children Assessed, Primary Location, and Principal Provider

Agency respondents also estimated the proportion of children receiving each of the assessments in their PSU. For each type of assessment, the estimated percentage of children receiving an assessment was higher in PSUs with inclusive policies than in those with limited or no policies ( $P \leq .001$  for all comparisons). With respect to physical health assessments, estimates of the percentage of children covered were 91.8% for PSUs with inclusive policies, 38.9% for PSUs with limited policies, and 7.9% for PSUs with no policy ( $P < .001$  on both Student  $t$  test comparisons of the inclusive policy group mean with the other 2 groups). For mental health services, estimates of the percentage of children covered were 86.2% for PSUs with inclusive policies, 35.5% for PSUs with limited policies, and 29.8% for PSUs with no policies in place ( $P < .001$  on both Student  $t$  test comparisons). The pattern for developmental services was similar. Inclusive PSUs estimated that 94% of children received an assessment, as compared with 28.7% and 26.3% in limited and no policy PSUs ( $P < .001$  on both Student  $t$  test comparisons). It should be noted, however, that although some PSUs were able to provide these data from tracking databases or annual reports, a proportion of PSUs did not have this type of data available and commented that they were unable to provide an estimate of children receiving an assessment. Specifically, information regarding the proportion of children who received an assessment was missing in the domain of physical, mental, and developmental health for 31%, 24%, and 36% of PSUs, respectively.

The primary setting used for each type of assessment was then examined (see Table 2). For health assessments, the majority of PSUs reported community settings, such as physician offices, as the primary location where physical examinations were performed. A smaller proportion of PSUs reported that a central child welfare setting, such as a receiving facility or specialized child welfare clinic, was the primary location for physical examinations. Relatively few PSUs reported other locations as primary settings, such as the public health department or children's hospitals. Almost half of PSUs reported that the local mental health agency was the primary location where mental health assessments were performed, although a substantial percentage of PSUs reported primary use of a central child welfare location or health facility in a community location. Most PSUs used a health facility in a community location to perform developmental assessments. In the remaining PSUs, a substantial percentage reporting primary use of a central child welfare location or some other location, such as the child's home, school, or the public health department.

Table 2 presents information regarding the inclusiveness of the PSUs policy type in relation to the primary assessment setting. No statistically significant association was found between policy type and assessment setting for the physical examination, as the primary location remained community locations, although PSUs with inclusive policies also used central child welfare locations. Variation was apparent in the mental health assessments, although with PSUs having inclusive policies more likely to report a central child welfare setting as the primary location, and those with a limited or no policy in place more likely to rely on mental health agencies. Finally, for developmental assessments, PSUs with inclusive policies were likely to use a central child welfare setting or a community location, whereas those assessing limited subgroups were much more likely to utilize other settings, such as the child's home or school. Those without a system in place relied on community locations. A  $\chi^2$  test indicated a statistically significant association between policy type and assessment location for both the mental health and developmental health domains ( $P \leq .001$  and  $P = .003$ , respectively).

Similar patterns were seen when the primary type of provider for each assessment was examined (see Table 3). Most PSUs reported that primary care providers were the dominant provider of physical assessments. Mental health specialists were the primary provider of the mental health assessments in many of the PSUs, although primary care providers were also

common. Primary care providers were also the dominant provider type for developmental assessments, although developmental specialists, mental health providers, nurses, caseworkers, or assessment teams provided the remaining developmental assessments.

When primary provider type was examined by policy type (see Table 3), a clear pattern emerged. Primary care providers continued to perform the vast majority of physical examinations across all policy types, but they also performed the majority of mental health and developmental assessments in PSUs reporting inclusive policies in these domains. For those systems with limited and/or no policy in place for mental health assessments, specialists were more often reported as the primary provider type. The primary provider of developmental assessments varied widely by policy type, with inclusive and no policy PSUs reporting primary care providers as the most common individuals delivering these services and limited subgroup PSUs using other types of providers such as nurses and assessment teams. A  $\chi^2$  test indicated a statistically significant association between primary provider type and policy type for both mental health ( $P \leq .001$ ) and developmental ( $P \leq .001$ ) domains.

Lastly, this module asked whether or not the providers were required to use a certain instrument or tool for the assessment. For mental health, 26.8% (CI: 10.4, 53.6) of PSUs did require a tool. The proportion requiring a tool was quite similar for developmental assessments (26.4%, CI: 9.7, 54.4). As mentioned previously, the specific tool(s) used and details regarding tools (screening test vs evaluation) were not obtained during this wave of interviews.

## DISCUSSION

This research, based on a national probability sample, confirms that many child welfare systems have developed policies for comprehensive physical examinations for all children entering foster care. In contrast, the findings from our study also suggest that policies for all children are much less common in the areas of mental health and development. Over 40% of PSUs had no policy to identify children with mental health and/or developmental problems on entry into out-of-home care.

We then created a profile variable to determine patterns of policy in place across the 3 domains (physical, mental, and developmental health) for each PSU. In the 3 most common patterns, covering 75% of PSUs, physical assessments inclusive of all children were paired with mental health and/or developmental assessments inclusive of all children, developmental assessments inclusive of all children with no policy for mental health assessments, or no policy for mental health and/or developmental assessments. Less than half of all PSUs reported policies for comprehensive physical health, mental health, and developmental assessments inclusive of all children.

Next, we examined the relationship between the inclusiveness of the policy in each domain and estimated number of children assessed, primary location of assessments, and provider type. The inclusiveness of the policy affected the proportion of children reported to receive an assessment. In all 3 domains, PSUs with inclusive policies reported much higher rates of children receiving an assessment than PSUs with limited or no policies. Given the level of missing data and the fact that documentation was not required of the estimates that were provided, these estimates should be viewed with caution. However, data were more likely to be missing in PSUs with limited or no policies in place. If those PSUs unable to report had lower percentages of children receiving assessments, which seems likely, the differences reported here would be conservative.

The inclusiveness of the policies also was related to primary location of assessments and provider type. A large percentage of PSUs relied on community locations for the identification of physical health problems; community locations were also commonly used assess for



developmental problems. Over half of PSUs with policies addressing mental health assessments used mental health agencies, with a smaller proportion using community locations. With respect to provider type, agencies with inclusive policies tended to rely more on primary care providers for the assessment of mental and developmental health, whereas agencies with limited or no policies relied more on specialists.

Lastly, only about one quarter of PSUs required a specific tool or instrument for identifying children with mental health or developmental needs. It is not known what tools, if any, the majority of providers were using to identify children with mental health and/or developmental problems. Available tools range from broad screening tools appropriate for universal screening to formal tests that identify specific types of mental health disorders and developmental delays.<sup>44,45</sup> Given the high proportion of children in out-of-home care with mental health and developmental needs, more in-depth screening tools or formal evaluation measures would be appropriate for these children. Further work should examine these tools and their reliability and validity for identifying problems in children entering out-of-home care.

### Implications

Because the results of this research are based on information from PSUs drawn from a national probability sample of child welfare agencies, they bear serious consideration. Two major findings—the limited percentage of PSUs with comprehensive mental health and developmental assessments inclusive of all children and the proportion of developmental and mental health assessments performed by primary care providers in community locations—have important clinical and research implications.

First, the lack of formalized policies and procedures for the identification of mental health problems deserves further discussion. Opponents of an inclusive practice of assessing all children for mental health on entry into foster care could argue that such a strategy would inappropriately identify children with mental health that might naturally resolve without intervention over time. Mental health identified on entry could, in fact, result from the traumatic experience of abuse and/or neglect coupled with removal from the home and might potentially revert within the first several months of placement in foster care. Alternatively, proponents of inclusive practices might cite the high prevalence rates of mental health problems among children in foster care and that inclusive assessments are appropriate given the high level of need in this vulnerable population of children.<sup>6,16,40</sup>

Similar arguments can be made with respect to developmental problems. Some developmental problems are responsive to early intervention strategies; one could argue that removal from a neglectful setting and placement in a developmentally stimulating environment could lead to resolution of these problems over time. Unfortunately, good data are not currently available that address the developmental trajectories of children in foster care. The timely receipt of such an assessment might also be critical given the large proportion of children who rapidly exit foster care within several months after entry and may be lost to follow-up. Clearly, to understand the potential impacts of inclusive policies, longitudinal studies are needed regarding the impact of early assessment and intervention for mental health and developmental problems on outcomes for children in foster care.

Given published prevalence rates of problems for children entering foster care, the strong possibility also exists that children with mental health and developmental needs are being missed in communities with limited or no policies in place. Outcomes related to the presence of inclusive, limited, and no policies for the assessment of mental and developmental health in children in child welfare are not known and need to be addressed.

Second, PSUs in general relied heavily on primary care clinicians in community settings for assessments across all 3 domains. The qualifications of the primary care clinicians, including their profession (nurse practitioners, family practice physician, pediatrician, or physician's assistants) or their knowledge of the needs of children in foster care was not captured with this study. This research also did not address the quality of assessments and linkages to services provided by primary care providers in these PSUs.

It is clear, however, from the high proportion of PSUs relying on primary care providers that these providers need to be knowledgeable with respect to the unique circumstances of children in foster care, mental health, and developmental assessments, and access to available community resources for treatment. The pediatric literature is replete with research documenting the limited training of pediatricians with respect to behavioral and developmental problems and consequent limited identification of these types of problems in primary care in children in the general population.<sup>46,47</sup> In addition, recent changes in reimbursement in this country have negatively affected the length of time primary care providers have with patients and may further impact their ability to thoroughly assess children entering foster care.<sup>48-51</sup> The literature also suggests that most physicians depend on their clinical judgment when evaluating a child for developmental and behavioral problems rather than using screening and/or assessment tools and under-identify children with needs.<sup>45</sup> Several recent articles have been published reviewing tools for the early detection of behavioral and developmental problems in pediatric settings and provide some guidance in this area for pediatricians.<sup>45,52-54</sup> Clearly, further research is needed to determine the quality of assessments that children entering foster care are receiving.

Centralized child welfare locations (either single point-of-entry receiving facilities or specialized foster care clinics) have been proposed as one mechanism for assuring comprehensive assessment of children in foster care. Although the published literature suggests that centralized locations out-perform community providers with respect to the identification of mental health and developmental problems, only 20% of PSUs reported use of these settings.<sup>38</sup> This may partially reflect community characteristics such as poverty level, size, and urbanicity, and these factors deserve further investigation. Child welfare agencies may want to investigate the feasibility of establishing more of these types of settings for providing assessments for children in child welfare. For those locations that continue to rely on primary care providers to perform a large percentage of assessments across the 3 domains (eg, rural communities), child welfare agencies may want to partner with local provider organizations to assure that these providers are aware of the special needs of children entering foster care. It will also be critical for primary care providers caring for children in foster care to lobby effectively for differential rate adjustments for reimbursement for office visits given the multiplicity of needs of these children.<sup>55</sup> One option is special carve-out plans or contracts for clinicians specializing in the care of foster children and other wards of the state. Clinicians with special expertise or contract incentives might be especially useful in rural areas or places where large, multidisciplinary assessment units are not available.

Different solutions may need to be examined for PSUs that do not have an inclusive policy in place. Fortunately, a very small minority of PSUs reported limited or no policies with respect to physical examinations for children. For those PSUs without a mechanism in place to provide physical examinations, however, some procedure needs to be put into place to assure that signs of abuse are documented and that medical problems are identified before placement to protect both foster caregivers and child welfare agencies from liability. The proportions of PSUs with limited or no policies in place with respect to mental health and developmental problems were much larger and the default "system" for identifying children with mental health or developmental problems in those PSUs relied on caseworker and foster parent and/or kinship

parent observations. Whether such observers have the knowledge, skills, and tools to effectively identify and respond to these kinds of problems requires further investigation.

From a public policy perspective, it is also disturbing that more children are not accessing mental health and developmental assessments given their legal entitlement through the federal Medicaid and Early Periodic Screening, Diagnosis, and Testing programs and the early intervention and special education services available under the Individuals with Disabilities Education Act (1997), Parts B and C (Public Law 105–17). Child welfare, Medicaid, mental health, and early intervention/special education services agencies should explore some of the collaborative care models proposed in the literature to improve access to these federally mandated services.<sup>56,57</sup>

## Limitations

Several limitations of this study should be noted. First, this is the largest study to date addressing this topic, yet the small sample size decreased the precision of the point estimates generated. Although the precision could be challenged, the overall findings are clear—many locations do not routinely assess foster children likely to be in great need for mental health and developmental services. The study also focused on the presence or absence of policies without taking into account potential variations in need for such policies among children in different PSUs. Again, this is a more theoretical than real limitation in that no study of youth in foster care has failed to demonstrate extremely high levels of need, independent of location. This study was limited in that it did not have an independent measure of need for assessments for children entering foster care in each of the PSUs. Despite these limitations, this study provides data from a national probability sample and thus provides reasonable estimates regarding the status of policies in child welfare in the United States. In addition, although some variation in need for assessment may exist in different areas of the country, the CWLA and AAP have concluded that these types of problems are sufficiently common in children entering out-of-home care to warrant such comprehensive and inclusive policies. This study aimed to examine the status of policies in a nationally representative sample regarding compliance with published guidelines.

## CONCLUSIONS

This study demonstrates that approximately half of the PSUs from a nationally representative sample do not have inclusive or comprehensive policies for assessing children entering out-of-home care. Those communities with inclusive policies relied heavily on primary care clinicians and community locations to assess children.

Although research to date has conclusively documented the high rates of physical, mental, and developmental health problems in children in foster care, these results demonstrate a significant gap between need for assessment for developmental and behavioral problems in children in foster care and practice in the community. These findings argue for ongoing research regarding early identification of problems on entry into out-of-home care. First, research is needed to examine the relative benefits and limitations of assessments for physical, mental, and developmental health needs on entry into care as compared with assessments obtained after a period of stabilization in out-of-home care. Second, more longitudinal research is needed addressing the benefits of early identification and intervention for physical, mental, and developmental health problems for these high-risk children. If evidence were available, it would move the CWLA and AAP's calls for inclusive assessments from the realm of expert opinion to evidence-based guidelines. These research efforts will need to address cultural sensitivity and validity given the high proportion of children of color in the child welfare rolls. Third, research is needed to determine the relative efficacy and cost-effectiveness of different mechanisms for assuring that children's physical, mental, and developmental health problems

are addressed when they enter foster care, including the benefits of inclusive policies, the characteristics of providers assessing children, and the types of tools used in those assessments.

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**TABLE 1**

Inclusiveness of Policies on Assessment of Physical, Mental, and Developmental Health of Children Entering Foster Care

| Assessment Domain | Type of Policy*      | Percent (95% CI) of PSUs <sup>‡</sup> |
|-------------------|----------------------|---------------------------------------|
| Physical health   | Inclusive            | 86.4 (64.6, 95.7)                     |
|                   | Limited to subgroups | 7.9 (1.5, 32.4)                       |
|                   | No policy            | 5.7 (1.4, 21.2)                       |
| Mental health     | Inclusive            | 47.8 (24.0, 72.6)                     |
|                   | Limited to subgroups | 20.2 (8.4, 41.2)                      |
|                   | No policy            | 32.0 (16.8, 52.2)                     |
| Developmental     | Inclusive            | 57.8 (34.6, 77.9)                     |
|                   | Limited to subgroups | 6.0 (2.5, 13.8)                       |
|                   | No policy            | 36.2 (18.3, 58.9)                     |

\* Policy types include “inclusive,” in which all children were assessed; “limited to subgroups,” in which subgroups of children were assessed based on non-clinical characteristics, and “none.”

<sup>‡</sup>Weighted percent.

**TABLE 2**  
 Inclusiveness of Policy by Primary Setting for Assessment of Physical Health, Mental Health, and Developmental Status of Children Entering Foster Care\*

| Assessment Domain          | Type of Policy       | Percent (95% CI) of PSUs Using Central Child Welfare Location <sup>‡</sup> | Percent (95% CI) of PSUs Using Community Location <sup>‡</sup> | Percent (95% CI) of PSUs Using Mental Health Agency <sup>‡</sup> | Percent (95% CI) of PSUs Using Other <sup>§</sup> |
|----------------------------|----------------------|--|--|--|---|
| Physical health            | Inclusive            | 24.0 (7.0, 57.0)   | 68.7 (40.5, 87.6)  | —  | 7.3 (1.9, 24.2)                                   |
|                            | Limited to subgroups | .9 (0.0, 11.4)   | 99.1 (88.6, 99.9)  | —  | —   |
|                            | No policy            | 1.8 (0.3, 11.3)  | 98.2 (88.7, 99.7)  | —  | —   |
| Mental health <sup>¶</sup> | Inclusive            | 59.7 (21.6, 88.8)  | 22.3 (4.8, 62.2)   | 16.3 (3.3, 52.2)   | 1.7 (0.4, 7.9)                                    |
|                            | Limited to subgroups | 2.3 (6, 8.8)   | 32.2 (8.3, 71.3)   | 64.6 (26.8, 90.1)  | .9 (0.1, 6.9)                                     |
|                            | No policy            | 3.1 (0.5, 17.5)  | 32.9 (15.5, 56.7)  | 54.7 (31.1, 76.3)  | 9.3 (1.3, 45.1)                                   |
| Developmental <sup>¶</sup> | Inclusive            | 44.5 (14.8, 78.8)  | 37.6 (14.1, 68.8)  | —  | 17.9 (5.0, 47.1)                                  |
|                            | Limited to subgroups | 5.2 (1.3, 18.1)  | 32.8 (8.3, 72.6)   | —  | 61.9 (25.0, 88.8)                                 |
|                            | No policy            | 0.2 (0.0, 1.5)   | 61.1 (29.8, 85.2)  | —  | 38.7 (14.6, 52.9)                                 |

\* Weighted percent.

<sup>‡</sup> Central child welfare locations include receiving facilities and specialized clinics for children in child welfare.

<sup>§</sup> Other setting includes public health department.

<sup>¶</sup> Comparison of assessment location by policy type with design-based *F* statistic: *P* < .05.

**TABLE 3**  
 Inclusiveness of Policy by Primary Provider Type for Assessment of Physical Health, Mental Health, and Developmental Status of Children Entering Foster Care\*

| Assessment Domain          | Type of Policy       | Percent (95% CI) of PSUs Using Primary Care Providers | Percent (95% CI) of PSUs Using Specialists | Percent (95% CI) of PSUs Using Other Provider Types |
|----------------------------|----------------------|---|--|---|
| Physical health            | Inclusive            | 99.6 (98.5, 99.9)                                     | —  | 0.4 (0.1, 1.5)                                      |
|                            | Limited to subgroups | 100.00  | —  | —   |
| Mental health <sup>‡</sup> | No policy            | 100.00  | —  | —   |
|                            | Inclusive            | 75.3 (40.1, 93.3)                                     | 23.5 (6.2, 58.6)                           | 1.3 (0.2, 7.6)                                      |
| Developmental <sup>‡</sup> | Limited to subgroups | 10.5 (2.7, 33.2)                                      | 88.7 (66.3, 96.9)                          | .7 (0.0, 5.7)                                       |
|                            | No policy            | 15.4 (4.4, 41.7)                                      | 84.6 (58.3, 95.6)                          | —   |
|                            | Inclusive            | 72.1 (40.2, 90.8)                                     | 27.2 (8.8, 59.1)                           | 0.7 (0.0, 5.9)                                      |
|                            | Limited to subgroups | 5.5 (1.3, 21.2)                                       | 37.7 (9.9, 76.9)                           | 56.8 (20.6, 86.9)                                   |
|                            | No policy            | 76.2 (52.9, 90.1)                                     | 23.5 (9.7, 46.8)                           | .4 (0.0, 11.3)                                      |

\* Weighted percent.

<sup>‡</sup> Comparison of assessment provider by policy type with a design-based *F* statistic; *P* < .05.