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## Mental health referral and services for maltreated children and child protection evaluations of children with special needs: A national survey of hospital- and community-based medically oriented teams<sup>☆</sup>

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### ABSTRACT

**Objective:** To survey the self-perceived capability of medically oriented child maltreatment teams in the US to provide mental health referrals and services when needed and to evaluate children with special health care needs (CSHCN).

**Methods:** Mailed questionnaire with 5 items related to mental health, 12 items on services for CSHCN, and 28 items on financial issues previously reported.

**Results:** Responses were received from 320 of 472 organizations (67.8%); 153 respondents had at least 1 physician or nurse practitioner and were included in the analysis; 91 were hospital-based teams (HBTs); and 62 were community-based teams (CBTs). CBTs were significantly more likely to offer mental health treatment (65.0% vs 35.6%). When mental health services were needed in another language, only half (50.7%) indicated that services were available in Spanish, less than a third (29.3%) could find services in sign language, and only 20.3% expected to find services for patients who used other languages. Of all children evaluated, 31.2% had special health care needs. CBTs reported seeing significantly more CSHCN than HBTs (38.3% vs 26.5%). Over two-thirds (67.7%) did not have a special program or specialized staff to serve CSHCN. Overall, teams had some training and experience with CSHCN. Children who were deaf were evaluated by 84.5% of teams, while only 50.5% reported using professionally trained sign language interpreters. Most teams (82.2%) indicated that more time was needed to evaluate CSHCN, and 69.1% found arranging for mental health treatment for CSHCN more difficult than children without special needs.

**Conclusions:** Medically oriented child maltreatment teams are generally able to arrange for mental health services for the children served, and most feel capable of serving CSHCN. Significantly more mental health service providers are needed for children and families who communicate in languages other than English (e.g., Spanish, American Sign Language [ASL]).

**Practice implications:** Our results suggest that medically oriented child maltreatment teams and mental health services for maltreated children would improve gaps in services by: (1) recruiting and training bilingual professionals, (2) ensuring that children or family members who are deaf receive professional ASL services, and (3) ensuring that training is provided related to the needs of CSHCN.

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## Introduction

Mental health needs are uniformly recognized as an important component of the care and treatment of children who have been maltreated (Landsverk, Garland, & Leslie, 2002; Widom & Maxfield, 2001). However, even before the current economic downturn, children's mental health services have been widely recognized as being limited in availability, difficult to access and poorly funded and reimbursed (US Department of Health and Human Services [DHHS], 1999). The mental health needs of American children, in general, continue to be relatively unmet. The delivery system is fragmented, difficult for families and providers to navigate and described as a "patchwork" that is complex, "sometimes to the point of inscrutability" (US Department of Health and Human Services [DHHS], 1999, p. 179). Children who are victimized by maltreatment face the same fractured system of providers, agencies and payers, perhaps at their most vulnerable time of need (Burns et al., 2004; Staudt, 2003). Additionally, with the increasing prominence of managed care approaches to health care reimbursement, authorization and payment for these essential mental health services may be difficult to arrange (Ratiner, 2000).

With regard to maltreated children with special health care needs (CSHCN), there is a growing body of clinical and epidemiologic information that recognizes these children's increased risk of maltreatment when compared to routinely developing children (Hibbard & Desch, 2007). For example, Sullivan and Knutson (1998) found that disabilities were twice as prevalent among maltreated hospitalized children compared with non-maltreated hospital controls. According to the investigators, this finding was consistent with either of two hypotheses, namely that (1) disabilities increase the risk of maltreatment or that (2) maltreatment contributes to the development of disabilities. The hospital-based methodology prevented definitively determining which hypothesis should be accepted. A later study by these investigators using a broader, school-based population found that children with disabilities were 3.4 times more likely to be maltreated than their non-disabled peers (31% vs 9%) (Sullivan & Knutson, 2000). This work built on an earlier study mandated by the US Congress, which, using a nationally representative sample, had demonstrated that children with developmental disabilities were on average nearly at twice the risk of all forms of child maltreatment (Westat Inc., 1993). Despite this increasingly recognized risk of child maltreatment among CSHCN, child abuse teams may be unprepared for the clinical requirements for appropriately evaluating children with various special health care needs (Giardino, Hudson, & Marsh, 2003; Hibbard & Desch, 2007). In response, medical professionals have issued calls for additional research and training related to the connection between child maltreatment and disabilities or special health care needs (Hibbard & Desch, 2007; Kendall-Tackett, Lyon, Taliaferro, & Little, 2005). The readiness and capability of established medically oriented teams to evaluate CSHCN and to provide mental health referrals, treatment, and follow-up to all children seen by these teams are largely unknown. The purpose of this study, therefore, was to explore challenges faced by hospital- and community-based medically oriented child abuse teams, when: (1) arranging for mental health services for all children evaluated for suspected maltreatment and (2) serving CSHCN.

## Method

### *Description of survey*

In 1999, a self-report survey utilizing a 45-item questionnaire was conducted. Twenty-eight items focused on staffing and financial characteristics and were previously reported (Giardino, Montoya, & Leventhal, 2004). This article describes the responses to the remaining 17 items focusing on: (1) mental health referral and treatment of all children evaluated for suspected child maltreatment and (2) evaluation, referral and treatment of children with special health care needs. The survey provided respondents with the following American Academy of Pediatrics' definition of children with special health care needs: "Children with special health care needs are those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally" (McPherson et al., 1998, p. 138). The specific questions for the present study are listed in Table 1

Five items focused on mental health treatment, referral and follow-up and elicited information such as the percentage of maltreated children referred to mental health services, whether these services were provided by the team, and the availability of these services financially, geographically, in a timely manner, and in languages other than English. Ten items addressed the medically oriented team's self-perceived readiness and capability to evaluate CSHCN. One question specifically asked about the team's evaluation practices of children and families who are deaf and communicate via sign language. The final question had teams compare the evaluation of CSHCN and planning for the mental health needs of these children. Of the 17 items, 13 required discrete or dichotomous responses, and 2 required respondents to indicate all responses that applied in their case. One item required a rating from 1 to 10 on a Likert scale to rate the experience and competence in evaluating or treating CSHCN where 1 indicated no training or experience and not competent to evaluate or treat, 5 indicated some training or experience and may require some outside consultation or assistance, and 10 indicated the team specializes in working with the specific special needs child, possessing extensive training and experience in the area. One item invited respondents to describe any special staff or programs they have to serve children with special needs and to comment on differences they experienced between serving children with and without special needs. The survey protocol was reviewed and approved by the Institutional Review Board of The Children's Hospital of Philadelphia.

**Table 1**  
Survey questions.

### E. MENTAL HEALTH TREATMENT/FOLLOW-UP

1. What percentage of your patients diagnosed with child maltreatment does your team refer on for mental health treatment? \_\_\_\_\_% of all child maltreatment cases
  
2. Does your team offer mental health treatment for patients seen in your clinic? (check one)
  - Yes
  - No
  - Not routinely
  
3. If your team recommends mental health services for the child and/or their family,
  - a. Are these services
    - Available within the geographic area of patients?  Yes  No  Sporadically  Unsure
    - Affordable financially for patients?  Yes  No  Sporadically  Unsure
    - Accessible to patients within a week of referral?  Yes  No  Sporadically  Unsure
    - Accessible to patients within a month of referral?  Yes  No  Sporadically  Unsure
    - Accessible to patients within 6 months of referral?  Yes  No  Sporadically  Unsure
    - Accessible to patients who speak Spanish?  Yes  No  Sporadically  Unsure
    - Accessible to patients who use Sign Language?  Yes  No  Sporadically  Unsure
    - Accessible to patients speaking other languages?  Yes  No  Sporadically  Unsure
  
  - b. How is access to services determined (Check all that apply)
    - family's ability to self-pay
    - government agency (e.g., CPS) sponsorship
    - other factor(s) (please specify): \_\_\_\_\_
    - coverage by health insurance
    - coverage by child's school district
  
  - c. Do you have difficulty getting payment authorization for mental health therapy for the patient's family, parental or siblings if this treatment is indicated? (check one)
    - Yes
    - No
    - Sporadically
    - Unsure

### F. SERVICES FOR SPECIAL NEEDS CHILDREN

*Special Needs Children are defined as "Children who have or are at increased risk for chronic physical, Developmental, behavioral, or emotional conditions and who also require health and related services of a type And amount beyond that required by children generally" (American Academy of Pediatrics).*

1. What percentage of your patients meet the Above definition for "Special Needs Children?" \_\_\_\_\_% of all patients seen by child maltreatment team
  
2. Only considering the portion of your patients that have special needs,
  - a. What percentage of these patients Attend residential schools or programs? \_\_\_\_\_% of all special needs patients
  
  - b. What percentage of these patients come From foster homes/programs? \_\_\_\_\_% of all special needs patients
  
3. Does your team have a special program or specialized staff to serve the needs of children with special needs? (check response)  Yes  No  Not routine

Comment:

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Table 1 (Continued)

4. Please rate your team's training, experience and competence in evaluating or treating patients with The following special needs using the scale below: *(please rate all that apply)*

0	1	2	3	4	5	6	7	8	9	10
Not applicable	no training/experience Not competent to evaluate				some training/experience may need outside Consultation/assistance				specialize in this area extensive training/experience	

- |   |  |
|---|--|
| <input type="checkbox"/> Attention Deficit/Hyperactivity Disorder | <input type="checkbox"/> Autism/Pervasive Developmental Disorder |
| <input type="checkbox"/> Behavior Disorders                       | <input type="checkbox"/> Cerebral Palsy                          |
| <input type="checkbox"/> Deafness/Hearing Impairment              | <input type="checkbox"/> Health Impairments                      |
| <input type="checkbox"/> Learning Disabilities                    | <input type="checkbox"/> Mental Retardation                      |
| <input type="checkbox"/> Speech/Language Disorders                | <input type="checkbox"/> Seizure Disorders                       |
| <input type="checkbox"/> Traumatic Brain Injury                   | <input type="checkbox"/> Visual Impairments/Blindness            |
| <input type="checkbox"/> Other <i>(please specify)</i> : _____    |  |

5. If you see patients/families with special needs, do you include clinicians from other disciplines (e.g., speech pathology, audiology, child development, etc.) on your team? (Check response)  
 Yes       No       Not routinely

*If yes, please specify the disciplines available:*

- |   |                                 |   |
|---|---------------------------------|---|
| <input type="radio"/> speech pathology                      | <input type="radio"/> audiology | <input type="radio"/> child development |
| <input type="radio"/> psychology/psychiatry                 | <input type="radio"/> education |   |
| <input type="radio"/> other <i>(please specify)</i> : _____ |                                 |   |

6. Does your team see patients

- A. Who are deaf?       Yes       No  
 B. With deaf family members (parents/sibs)?       Yes       No

*If yes to either question,*

a. Most often who interpreter for your deaf patients (check one only)?

- |  |  |   |
|--|--|---|
| <input type="radio"/> family members           | <input type="radio"/> school personnel                       | <input type="radio"/> clinic/hospital staff |
| <input type="radio"/> professional interpreter | <input type="radio"/> others <i>(please specify)</i> : _____ |   |

b. How do you fund your interpreting costs *(check all that apply)*?

- |   |  |
|---|--|
| <input type="radio"/> absorb into clinic operational expenses | <input type="radio"/> government funding                           |
| <input type="radio"/> covered by health insurance             | <input type="radio"/> other source <i>(please specify)</i> : _____ |

7. In comparison to children without special needs,

a. How much time does the initial evaluation of a special needs child take to complete? *(check one)*  
 more       less       the same       Unsure

b. How do you find arranging mental health planning and referral for a special needs child? *(check one)*  
 more difficult       less difficult       the same       Unsure

8. Please comment on other differences you experience in delivering services to children with special needs than when serving children without special needs. *(Please comment)*

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## Analysis

Data were analyzed using *t*-tests, Mann–Whitney U tests, and Pearson  $\chi^2$  tests, as appropriate. All comparison tests set the  $\alpha$  level at 0.05. The two narrative responses pertaining to serving children with special needs were transcribed and content analyzed for recurrent themes and patterns.

### *When the child or family does not speak English*

Since the 2000 US Census notes that Spanish is by far the most frequently spoken language in the US (Shin & Bruno, 2003), following English, we chose to ask specifically about Spanish; we also asked about “sign language” because of our focus on CSHCN. The various manual systems of sign language and American Sign Language used in the US were grouped into a single concept of “sign language” since most clinicians do not have adequate documentation of the distinctions between American Sign Language and other.

*US sign systems used by deaf children or deaf family members.* While we acknowledge that not all children with hearing loss use sign language, we focused on this aspect since additional specialized skills are needed to evaluate these children.

### *Sample*

In order to survey a broad national sample, lists of medically oriented child protection teams were obtained from the following four national organizations: (1) the American Academy of Pediatrics’ (AAP) Executive Committee on Child Abuse and Neglect, (2) the National Association of Children’s Hospitals and Related Institutions (NACHRI), (3) the National Children’s Alliance (formerly the National Network of Children’s Advocacy Centers that expressed a willingness to participate in research), and (4) the National Center on Child Abuse and Neglect (NCCAN, providers listed on an Internet web site in the summer of 1998 that appeared to have some medical evaluation component). The four lists were compiled into a single list of 528 organizations for the initial mailing in August 1998. Two rounds of follow-up mailings and one round of telephone contact occurred through February 1999.

## Results

### *Sample*

Of 528 surveys initially mailed, 56 were returned with no forwarding address and excluded, leaving a potential sample of 472. Responses were received from 320 organizations, yielding a response rate of 67.8%. Criterion for inclusion in this study was that the responding team include at least 1 physician or nurse practitioner. Of the responses received, 153 (47.8%) met this criterion and comprised the sample of respondents, 74 (23.1%) did not have a physician or nurse practitioner on their team, and 93 (29.1%) reported not having any form of a child protection team in their organization. The sample includes responses from institutions and programs from 41 of the 50 states, including every major region of the United States (US). Table 2 shows how the geographic distribution of study respondents closely parallels that of US population and the estimated number of non-institutionalized individuals with disabilities who are 5 years or older by regions as reported by the 2000 US Census (Waldrop & Stern, 2003).

Of the responding teams, 59.5% ( $n = 91$ ) were hospital-based, while the remaining were community-based. Of the hospital-based teams (HBTs), 49.4% were hospitals for children, 35.3% were general hospitals, 11.8% identified themselves as both general and children’s hospitals and 3.5% were settings such as a psychiatric hospital or a hospital-affiliated satellite clinic. Of the 91 hospital-based respondents, 92.2% were based in teaching hospitals. Of the 62 community-based teams (CBTs), 50.0% were based in children’s advocacy centers, 30.6% in other non-profit organizations, 14.8% in government agencies, and 6.7% in private practice settings.

**Table 2**

Regional distribution of sample, total U.S. population and 5-year-olds and older with disabilities by percentage.

Region	Percentage (%)		
	Study sample	U.S. population <sup>a</sup>	5-Year-olds and older with disabilities in U.S. <sup>a</sup>
Northeast	18.5	19.2	19.0
Midwest	23.8	22.9	21.0
South	37.7	35.5	38.3
West	19.9	22.4	21.6

<sup>a</sup> Waldrop and Stern (2003).

### *Mental health treatment and follow-up*

Over three-fourths (77.9%) of respondents referred their patients diagnosed with child maltreatment for mental health treatment, and 47.3% offer this treatment. There was no significant difference in referral rates between HBTs and CBTs. CBTs offered mental health services at significantly higher rates (65.0% vs 35.6%) than hospital-based teams [ $\chi^2 (2, 150) = 12.6, p = 0.002$ ]. Most respondents (91.2%) indicated that treatment could be found in the geographic region of the patient, although not as many thought that these services were financially affordable for patients (72.4%). Few teams (28.6%) reported that patients could receive mental health treatment within a week, but the majority (80%) thought services were accessible to patients within 1 month of their evaluation, and even more so within 6 months (92.4%). Significantly more patients evaluated by a community-based team could receive treatment within 1 week of evaluation than those seen by HBTs [ $\chi^2 (3, 147) = 8.85, p = 0.031$ ].

### *When the child or family does not speak English*

Only half (50.7%) indicated that services were available to their patients in Spanish. Less than a third of respondents (29.3%) could find services accessible for those who use sign language, and only 20.3% expected to find mental health treatment available to patients who used other languages. The only significant regional difference was that respondents from the western region of the US reported that mental health services were more accessible in Spanish than in other regions [80.0% vs 46.4% in the northeast, 41.5% in the south and 39.4% in the Midwest,  $\chi^2 (9, 144) = 18.86, p = 0.026$ ]. The only significant difference between HBTs and CBTs was found with patients who needed treatment in sign language: 39.0% of CBTs reported having mental health services accessible to patients in sign language versus 22.7% of HBTs [ $\chi^2 (3, 147) = 9.31, p = 0.025$ ].

### *Factors determining access in mental health treatment*

Most teams identified three factors that determined a child's access to recommended mental health treatment: (1) payment of services by a government agency, such as Child Protective Services (68.3%), (2) health insurance (66.9%), and (3) a family's ability to pay for treatment (57.7%). Within HBTs, access to treatment was determined more frequently by authorization by the patient's health insurance than when compared to referral to treatment by CBTs [76.2% vs 53.4%,  $\chi^2 (1, 142) = 8.01, p = 0.005$ ]. Only one quarter of the teams (25.4%) indicated that they had no difficulty getting recommended mental health treatment authorized for payment for their maltreated patients or their parents or siblings, while 33.8% reported having regular difficulty and another 18.5% reported having sporadic difficulty. There was no significant difference in level of difficulty between HBTs and CBTs. A few teams reported that all children recommended for treatment receive it regardless of funding availability. Thirty-five percent of respondents also identified other factors affecting a patient's access to mental health treatment, including clinical need, staff and caseload availability, geographical location of the patient, type of trauma, and level of care required.

### *Evaluation and mental health referral of children with special needs*

Respondents reported that an average of 31.2% of all patients seen by teams were CSHCN. CBTs reported seeing significantly more CSHCN than HBTs [38.3% vs 26.5%,  $t (89.75) = -2.04, p = 0.044$ ]. Of the special needs children, 26.7% came from foster homes or programs; there was no significant difference in the average percentage of special needs children from foster homes seen between HBTs and CBTs. Most (67.7%) teams did not have a special program or specialized staff to serve CSHCN, while 46.8% indicated that they included clinical specialists from other disciplines when working with a child with special needs. There were no differences between HBTs and CBTs when teams involved other clinical specialists when seeing CSHCN. Teams reported involving the following specialists: psychology/psychiatry (53.2%), child development (38.8%), speech language pathology (35.3%), education (31.7%), audiology (28.1%), and other clinicians (46.8%) such as child life, occupational therapy, or physical therapy.

Table 3 lists the mean ratings of respondents self-reported competence in dealing with each type of special need in descending order. Overall, teams reported having some training and experience with children with each type of special need. HBTs felt significantly more competent than CBTs in evaluating children with, cerebral palsy, seizure disorders, spina bifida, and traumatic brain injury.

The vast majority of teams (82.2%) indicated that more time was needed to evaluate children with special needs than children without special needs. Over two-thirds (69.1%) found arranging for mental health referrals and services for a special needs child to be more difficult than for children without special needs. HBTs and CBTs teams responded to these two items similarly.

### *Services for children and family members who are deaf or hard of hearing*

Most teams reported evaluating deaf children (84.5%) and children with deaf family members (87.9%). Only half of the teams (50.5%) reported using professionally trained sign language interpreters, while 34.7% indicated that family members, school personnel or clinic or hospital staff served as interpreters during these evaluations. When asked about how the team's

**Table 3**

Special needs: mean (standard deviation) of team's self-rating of competence in working with specific needs populations (1, no competency, 10, specialize with this population).

Special needs	Total N = 153	Team setting	
		Hospital N = 91	Community N = 62
Attention deficit/hyperactivity disorder	6.9 (SD = 2.6)	6.7 (SD = 2.8)	7.1 (SD = 2.3)
Behavior disorder	6.9 (SD = 2.6)	6.8 (SD = 2.7)	7.0 (SD = 2.5)
Health Impairment	6.6 (SD = 3.0)	7.1 (SD = 2.8) <sup>a</sup>	6.0 (SD = 3.2)
Learning disorder	6.2 (SD = 2.8)	6.1 (SD = 3.1)	6.3 (SD = 2.3)
Mental retardation	6.1 (SD = 2.8)	6.4 (SD = 2.8)	5.8 (SD = 2.7)
Seizure disorder	6.0 (SD = 3.1)	6.6 (SD = 2.8) <sup>b</sup>	5.2 (SD = 3.2)
Cerebral palsy	5.3 (SD = 3.1)	5.9 (SD = 2.9) <sup>c</sup>	4.6 (SD = 3.2)
Spina bifida	5.3 (SD = 3.2)	5.8 (SD = 3.0) <sup>d</sup>	4.6 (SD = 3.2)
Orthopedic impairment	5.1 (SD = 3.3)	5.3 (SD = 3.4)	4.8 (SD = 3.1)
Speech/language disorder	5.1 (SD = 2.7)	5.4 (SD = 2.8)	4.9 (SD = 2.5)
Traumatic brain injury	4.8 (SD = 3.0)	5.3 (SD = 3.0) <sup>e</sup>	4.1 (SD = 2.8)
Autism/pervasive developmental disorder	4.7 (SD = 3.0)	5.0 (SD = 3.0)	4.4 (SD = 2.9)
Visual impairment	4.3 (SD = 2.9)	4.6 (SD = 3.3)	3.9 (SD = 2.8)
Deaf or hard of hearing	4.3 (SD = 2.7)	4.4 (SD = 2.7)	4.2 (SD = 2.7)

<sup>a</sup>  $t(118) = 2.09, p = 0.039$ .

<sup>b</sup>  $t(121) = 2.06, p = 0.011$ .

<sup>c</sup>  $t(120) = 2.36, p = 0.020$ .

<sup>d</sup>  $t(115) = 2.13, p = 0.036$ .

<sup>e</sup>  $t(120) = 2.24, p = 0.027$ .

sign language interpreting services were paid for, 75.2% absorbed the cost into their clinic's overall operational expenses, and 18.8% depended upon funding from governmental sources. CBTs reported obtaining government funding for these expenses significantly more often than HBTs [31.9% vs 10.0%,  $\chi^2(1, 117) = 8.85, p = 0.003$ ]. Very few teams depended upon reimbursement from health insurance (2.6%). A few teams (11.3%) would not see deaf patients or families with deaf members due to the cost of interpreters.

## Discussion

### Mental health

There are three key findings related to mental health referral and services arranged by medically oriented child maltreatment teams from this self-report study: First, at the time of this survey, teams report that they are generally able to arrange for mental health services for the children in their geographic region with varying wait times. Second, CBTs are significantly more able than HBTs to deliver the mental health treatment services. Third, funding of mental health services was a key determiner of accessibility for most children. The cost of mental health treatment was viewed as unaffordable by nearly 27.6% of teams. The majority of teams reported that children's access to recommended mental health services was more likely when these services were paid for either by (1) a government agency, such as Child Protective Services (CPS), (2) health insurance, or (3) by the child's family. Only one quarter of the teams (25.4%) reported having no difficulty at all with getting recommended mental health treatment authorized, while more than half reported having at least some difficulty (52.3%). Given the current economic climate, where many services are being broadly eliminated to balance budgets for private organizations and local and state government, access to mental health treatment by maltreated children and availability of medically oriented child protection teams to evaluate CSHCN may be even more daunting for teams today than when these data were collected nearly 10 years ago.

These findings are consistent with the health services literature examining access to mental health services for children involved with CPS. In a study of a nationally representative sample of children who had a completed CPS investigation, nearly half had clinically significant mental health issues, and while the most severely affected did receive mental health care, 25% of children with mental health problems did not receive any care (Burns et al., 2004). In related work, gaps in service delivery around mental health care were identified that varied widely with the children's age, ethnicity, form of abuse, and type of mental health need; the highest rates of service delivery occurred, as might be anticipated, immediately upon contact with CPS during the investigation phase of the children's cases (Leslie et al., 2005).

Our findings reveal a significant potential service gap among existing mental health services for maltreated children or families across the US who do not speak English. Only half of study respondents could identify mental health services available in Spanish for their patients, fewer than a third could find services using sign language, and about a fifth reported being able to find treatment for children or families who spoke languages other than English or Spanish. These findings are in contrast to the changing trends of the US population. The 2000 US Census revealed that the number and percentage of people in the US who spoke a language other than English at home increased between 1990 and 2000. Spanish continued to be the most frequently non-English language in the US with over 28 million speakers followed by Chinese with 2 million speakers (Shin & Bruno, 2003). Other languages most frequently used in the US include: French, German, Tagalog, Vietnamese,

Italian, Korean, Russian, Polish, and Arabic, each with 1.6–0.6 million speakers, for a total of over 7 million Indo-European speakers. The US Census Bureau projects that by 2050, the Hispanic and Asian populations in the US will triple over 2000 levels to where half of the population will be comprised of people of color (Hispanic of any race, Black, Asian) with people of Hispanic origin being the largest single group comprising 24% of the US population (Bergman, 2004).

Given these population trends, there appears to be a serious need to increase the availability and capacity of mental health services for maltreated children in languages other than English. The National Standards for Care for Culturally and Linguistically Appropriate Services in Health Care, published online in 2001 by the US Department of Health and Human Services (DHHS) is an excellent resource for guiding healthcare facilities in making services effective and accessible for individuals whose language is not English (DHHS, 2001). Training programs that prepare mental health professionals should be provided incentives to recruit and train candidates who are bilingual to meet this current and growing gap in the mental health system, including clinicians fluent in American Sign Language (ASL).

### CSHCN

There were five key findings related to how medically oriented child maltreatment teams managed CSHCN: First, both HBTs and CBTs reported working with a sizeable number of CSHCN. This propensity to serve children with disabilities and special needs would be expected since work by Sullivan and Knutson (1998, 2000) and others (Westat Inc., 1993) consistently point to a higher rate of child maltreatment among CSHCN. Second, over two-thirds of teams did not have a special program or specialized staff to serve CSHCN. It seems prudent that professionals serving on these teams be trained or at least establish formal collaborations to clinical specialists in order to serve these CSHCN effectively. Third, over 80% of the teams, either CBTs or HBTs, agreed that more time was needed to evaluate CSHCN. This finding lends support for the development of clinical procedure and treatment codes that account for the additional time needed in these more complex cases. This seems especially appropriate since teams likely are even more pressed by economic pressures to meet pre-established clinical productivity goals. Fourth, over two-thirds identified the increased difficulty in mental health planning and referral for CSHCN compared to typically developing children. This finding is consistent with clinical reports that have identified the labor-intensive nature of offering care to CSHCN suspected of having been abused or neglected (Elvick, Berkowitz, Nicholas, Lipman, & Inkelis, 1990; Giardino et al., 2003). These findings lend support to the development of behavioral health clinicians who specialize in evaluation and treatment of the range of CSHCN.

A fifth finding is that while most medically oriented child maltreatment teams reported evaluating deaf children and children of deaf parents, a significantly smaller number reported using a professional sign language interpreter or sign fluent staff.

About 19.5% reported relying upon family members or school personnel to interpret child protection evaluations involving deaf children or deaf parents. The Americans with Disabilities Act (ADA) and many state laws now specifically prohibit using family members as interpreters for children during child protection evaluations, or mental health assessment or treatment. Best practices also preclude using school personnel and family members as interpreters for evaluations for a variety of reasons: interpreting inaccuracies and omissions, conflict of dual roles and goals, and so on (Brookhouser, Sullivan, & Scanlan, 1986; Flores et al., 2003). Because of these issues and challenges inherent to interpretation between ASL and English (Montoya et al., 2004), deaf children and children with deaf parents should only be evaluated by child protection professionals who have at least “Advanced” fluency in American Sign Language or with the assistance of nationally certified sign language interpreters. The signing fluency of staff or interpreters should be confirmed through nationally recognized interpreting credentials or recommended signing proficiency levels (Caccamise, Newell, Fennell, & Carr, 1988; Meyers, 1995).

Of note, federal laws such as Section 504 of the 1973 Rehab Act and Title III of the ADA require all services open to the public regardless of setting serve deaf children and families and provide reasonable accommodations (qualified interpreters, assistive technology, or other accommodations) at no expense to the child or family. Most respondents followed guidance by the US Department of Justice (1993) by absorbing the cost of interpreting services as an organizational operating expense. CBTs more frequently obtained public or third party funding for these costs.

There are three limitations of this study. First, the survey was conducted several years ago so there may have been changes in the ensuing years since the original survey was done, such as the impact of current economic downturn in the US economy. Ongoing reports, however, have continued to demonstrate challenges in the overall behavioral health system serving children so the results remain of potential value (Glied & Cuellar, 2003; Hess & Van Landeghem, 2005). Second, although a number of authoritative address lists from national organizations were used to identify programs, this survey may not have reached all teams involved with this work. Therefore, despite a credible response rate of 68%, the responses may not be representative of teams that are not on the lists used for this study. Third, since the results are based on self-reports, the respondents may have over-estimated their capabilities and competencies.

### Conclusions

Medically oriented child maltreatment teams are generally able to arrange for mental health services for the children served. Most teams feel capable of evaluating CSHCN, but have particular difficulty with arranging for the mental health needs of these CSHCN. Our study examined responses from a broad, geographically and programmatically diverse group of medically oriented child maltreatment teams throughout the US and found some differences based on whether a team's

setting was within a hospital or in the community. This self-report survey also provided information about particular challenges that will likely only increase for teams: serving children and families who do not speak English. Significantly more mental health service providers are needed for children and families who communicate in languages other than English (e.g., Spanish, American Sign Language [ASL]). Teams should be trained in evaluation of CSHCN or at least establish formal collaborations with clinical specialists in order to effectively serve these children. Clinical procedure and treatment codes should be developed that account for the additional time needed to evaluate CSHCN and those who do not speak English.

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