

# Challenges Associated With Living Remotely From a Pediatric Cancer Center: A Qualitative Study

Emily B. Walling, MD<sup>1,2</sup>; Mark Fiala, MSW<sup>3</sup>; Andrea Connolly, MS<sup>3</sup>; Alyssa Drevenak, MSOT<sup>3</sup>; and Sarah Gehlert, PhD<sup>3</sup>

**QUESTION ASKED:** How does living in a rural setting remote from the cancer center affect the clinical course of pediatric patients with cancer?

**SUMMARY ANSWER:** Families of pediatric patients with cancer who live in rural communities located a great distance from the cancer centers where they receive treatment face unique challenges compared with other families who care for children with cancer. Namely, these patients spend a significant amount of time receiving emergent care at local community hospitals that may be unprepared to care for children with complex health needs.

**WHAT WE DID:** We conducted semistructured qualitative interviews with rural caregivers of pediatric patients with cancer who received cancer care at our urban cancer center.

**WHAT WE FOUND:** We identified five multithemed domains in 18 parent interviews. Two domains captured themes related to specifics of receiving emergent care at local hospitals: experience at a local community hospital and interaction between local hospital

and cancer center. A third domain reflected themes related to the impact that distance from the cancer center had on family functioning. The final two domains consisted of themes that related to managing and coping with a pediatric cancer diagnosis: family and patient relationship with the cancer center and general cancer care management. We found that living in a rural community and undergoing treatment of cancer at an urban cancer center introduce unique challenges in addition to those that have been identified for other families who care for children with cancer.

**BIAS, CONFOUNDING FACTORS, REAL-LIFE IMPLICATIONS:**

We had a small, racially and ethnically homogeneous sample. We did not have an urban comparison group. Our interviews were retrospective in nature. Nonetheless, our sample represented a variety of cancer diagnoses and patient ages and corroborated previous findings. We described novel findings and suggest feasible steps to improve the care of rural children with cancer.

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## abstract

**PURPOSE** Pediatric patients with cancer who live in rural communities face disparate access to medical services compared with those in urban areas. Our objectives were to use qualitative methods to describe how living in a rural setting during receipt of treatment at an urban cancer center affects a patient's clinical course and to identify feasible areas of intervention to enhance service to these families.

**MATERIALS AND METHODS** We conducted semistructured interviews of caregivers of pediatric patients with cancer who received treatment at an urban pediatric hospital in the Midwest. Questions focused on how distance between home residence and cancer-treating hospital affected cancer treatment.

**RESULTS** Eighteen caregiver interviews were conducted. Five multithemed domains were identified; two related to receipt of emergent care at local hospitals, one related to the impact that distance had on the family, and two related to managing and coping with a pediatric cancer diagnosis.

**CONCLUSION** Rural families of pediatric patients with cancer face unique challenges in addition to those previously identified for pediatric patients with cancer, most notably increased travel time to their cancer centers and increased time spent in community hospitals to receive emergent care. We recommend feasible steps to improve the care of rural children with cancer, including improved parental anticipatory guidance about unanticipated emergent visits to local hospitals, outreach to local hospitals, and medical visit coordination.

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## INTRODUCTION

According to the US Census, roughly 20% of the population resides in rural areas.<sup>1</sup> Compared with urban residents, those in rural communities typically have lower incomes and higher poverty rates. Rural areas are associated with decreased access to health care, lower use of preventive health practices, and shorter life expectancy.<sup>1-8</sup> Access to pediatric care is similarly compromised.<sup>2,5,8</sup> Although the number of pediatricians has increased greatly in past decades, this gain is not reflected in rural areas.<sup>4,9</sup> Rural communities have a higher rate of infant mortality, and children have an increased likelihood of emergency room visits.<sup>7</sup> Inequities extend to those with medically complex conditions, like cancer.<sup>2,3,5,7,9-14</sup> The National Cancer Institute has recognized rural disparities as an understudied area and has committed to supporting a better understanding of these inequities.<sup>15,16</sup> Among adult patients with cancer, those in rural communities are diagnosed at later stages and have higher mortality

rates potentially because of lack of access to health care and routine screening.<sup>10,11,13,14,17</sup> In addition, rural survivors of cancer are more likely to experience financial hardship secondary to their cancer treatment and are less likely to adhere to recommended disease surveillance.<sup>10,18</sup>

Rural disparities are perhaps more pronounced in the pediatric population with cancer because of the rarity of pediatric malignancy and the smaller number of pediatric cancer centers, which are mostly located in urban settings.<sup>2,3,5</sup> Delays in diagnosis caused by a lack of access to specialty care have been reported, as have long times away from home, separation of family members, and increased financial burden.<sup>3,19</sup> An understudied area is how the patient's treatment course is affected. Our primary objective was to use qualitative methodology to describe how living in a rural setting affected the clinical course of pediatric patients with cancer. Our secondary objective was to identify feasible areas of intervention to provide more equitable care. We

## ASSOCIATED CONTENT

### Appendix

Author affiliations and support information (if applicable) appear at the end of this article.

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hypothesized that living in a rural community a great distance from the treating hospital introduced unique challenges and exacerbated the existing challenges experienced by most families who care for children with cancer.

## MATERIALS AND METHODS

### Participants

St Louis Children's Hospital (SLCH) is an urban pediatric hospital associated with a National Cancer Institute–designated comprehensive cancer center where approximately 150 new occurrences of pediatric cancer are diagnosed annually and 600 patients are actively observed. Caregivers of pediatric patients with cancer who live in a rural area 2 or more hours driving distance from SLCH during their child's cancer treatment were identified from the patient database and screened for eligibility. Rural was defined as non-urbanized zip codes with fewer than 2,500 residents.<sup>1</sup> To capture those who required frequent visits to the treating hospital, the patient had to have received six or more treatments of chemotherapy and/or radiotherapy. In addition, patients had to have sought emergent care related to their cancer diagnoses or treatments at a local community hospital (at least one time). The sample was limited to caregivers of patients diagnosed at least 1 year before study entry. Eligible caregivers were approached in person or by telephone and invited to participate. Informed consent was obtained before the interview started, and participants were provided \$20 in compensation.

### Procedure

Semistructured interviews of caregivers were conducted. Six broad, open-ended questions were asked in non-academic language: Describe any impact living 2 hours from SLCH had during your child's treatment; describe a time when your child received emergent care at a local hospital; reflect on communication with your child's oncologist; describe what resources you would have found helpful while managing your child's cancer treatment. Two more questions probed for any additional information that participants might have wanted to share. Questions were in the form of an interview guide constructed to allow novel constructs to emerge and responses to be explored (Appendix Table A1, online only). The interviewer completed field notes immediately after each interview. Interviews were recorded and transcribed verbatim. Demographic data were collected by participant completed surveys (Appendix Table A2, online only). The study was approved by the Washington University Human Research Protection Office.

### Data Analysis

Qualitative interview techniques were used. Recruitment took place during a 16-week period in 2016 while interviews were being conducted and ended when redundancy of response was reached.<sup>20</sup> Given the qualitative nature of the study, participants were not stratified in groups nor were sample size calculations performed. An

inductive, thematic analysis was performed. Three authors read the transcripts independently, developed a codebook to describe each code in depth, and manually coded the interviews, which were divided so that each interview was independently coded by two authors. Data were analyzed with the senior author until agreement was reached. Coders met with the senior author at intervals to avoid drift in how data were interpreted and to determine when theoretical saturation or redundancy had been achieved. Patient responses as well as sociodemographic and clinical characteristics were listed using descriptive statistics.

## RESULTS

### Participants

Caregivers of 19 patients were initially identified and approached. Sixteen agreed to participate, all of whom were parents. This resulted in 18 interviews of 12 mothers and six fathers from 16 families. Fifteen interviews occurred in the outpatient pediatric oncology clinical offices; because of logistic challenges, three occurred by phone. The mean interview duration was 18.7 minutes. All participants were white. Most were married ( $n = 14$ ) with at least some college education ( $n = 14$ ) and an annual household income of less than \$80,000 ( $n = 12$ ). Several ( $n = 6$ ) estimated that they missed a month of work or less in the past year, and three quit working when their child was diagnosed. Participants estimated a median driving distance of 142 miles to the treating hospital, a median travel time of 3 hours per visit, and \$1,800 in travel-related expenses during the past year (Table 1). The median ages of patients were 4 years old at diagnosis and 7 years old at the time of the interview. Acute lymphoblastic leukemia was the predominant diagnosis (44%; Table 2).

### Domains and Themes

Data were categorized into domains, which summarized a topic, and themes, which summarized a specific sentiment about a topic.<sup>21</sup> Five principal domains emerged (Table 3). Two captured themes related to receipt of emergent care at local hospitals. One reflected the impact of distance to the cancer center on the family unit. Two reflected challenges in managing and coping with a pediatric cancer diagnosis.

### Experience at a Local Community Hospital

Several themes were related to receipt of emergent care at local, community hospitals (referred to as local hospitals) instead of at the cancer center. This care location introduced several challenges; a common one was communication between the family and physicians who provided emergent care at the local hospital. The subjective quality of this communication heavily affected the caregiver trust of local providers. Parents were particularly distressed when they felt that their concerns were not taken seriously by local providers: "I wish very much that they would have listened more to the parent, um, than taking control. This is my son, I've been doing this for 2 years now."

**TABLE 1.** Participant Sociodemographic Characteristics

Characteristic	No. (%) of Patients
<b>Relationship</b>	
Mother	12 (68)
Father	6 (32)
<b>Race/ethnicity</b>	
White	18 (100)
Not Hispanic or Latino	18 (100)
<b>Marital status</b>	
Married	17 (94)
Never married	1 (6)
<b>Education</b>	
High school	3 (17)
Some college/2-year degree	11 (61)
4-year degree/advanced degree	3 (17)
Unreported	1 (6)
<b>Self-reported annual household income, US\$</b>	
10,000-29,999	4 (22)
30,000-49,999	4 (22)
50,000-79,999	4 (22)
≥ 80,000	4 (22)
Unreported	2 (11)
Median No. of children (IQR)	2 (2-3)
Median population, No. of residents by zip code per 2010 US Census (IQR) <sup>9</sup>	1,329 (1,107-1,839)
Median estimated driving distance to treating hospital, miles (IQR)	142 (114-152)
Median estimated driving time to treating hospital, hours (IQR)	3 (3-3)
Median estimated expense related to travel over the past year, US\$ (IQR)	1,800 (950-3,625)
<b>Estimated time missed from work in past year, months</b>	
≤ 1	6 (33)
≥ 3	1 (6)
Quit working when child diagnosed	3 (17)
<b>Explanations for why quitting work was not applicable</b>	
Stay-at-home parent	2 (11)
Retired	1 (6)
No explanation	1 (6)
No response	4 (22)

NOTE. No. of participants = 18.

Abbreviation: IQR, interquartile range.

Another theme was lack of resources at the local hospital. Many participants expressed frustration and anger at being directed to a local hospital for emergent care or for a specific service that the local hospital could not provide, either because the local site lacked physicians trained in

pediatrics or oncology or sufficient resources to provide specialized care. Many felt that their child suffered unnecessarily because of these deficiencies. Parents described delays in care, inadequate symptom management, incorrect procedure for or inability to access central lines, and underappreciation of the child's immunocompromised state. Participants wanted physicians at their cancer center to be aware of limitations at community hospitals and, when unanticipated deficiencies developed, this was viewed as a lack of communication between local and cancer center providers. Many parents wished the cancer center would reach out to local hospitals and provide basic teaching about oncology care. The additional time spent at local hospitals also distressed families. A desire to avoid the local emergency department and drive directly to the cancer center pervaded. Parents described anger, frustration, anxiety, and perceived unsafe behavior related to this recommendation: "Umm, there's been times when I've drove down here [to SLCH] at 100 miles per hour ... and we got pulled over, by a state trooper."

However, one participant described how their local hospital adapted to their child's needs by stocking necessary supplies and felt that their child was prioritized at the local hospital because of his health circumstances. In addition, some families coordinated routine laboratory draws with their local hospital, which helped decrease the frequency of visits to the cancer center.

### Interaction Between Local Hospitals and the Cancer Center

Several themes related to communication between physicians at the local hospital and the cancer center. Participants liked that care was dictated to their local emergency departments by oncology specialists at the cancer center, and most felt that local providers were open to guidance from the cancer center. However, some felt that local providers failed to follow recommendations, which increased anxiety. Also, if patients required transportation to the cancer center for specialized care, participants reported redundant care between the local hospital and the cancer center, often attributed to poor communication between providers at the respective institutions: "... Sometimes when we've been transported [from the local hospital to SLCH] they have no clue of his symptoms, or what is really going on so we start from scratch when we get here."

### Impact on Family

Themes captured in this domain reinforced that the long distance to the cancer center had repercussions for the entire family. Financial burden was a prevalent theme with dual impacts of increased time away from work and increased costs related to food, gas, and lodging. Many participants commented on the stress of the long drive often compounded by inclement weather or that their child experienced treatment-related symptoms not easily managed on the road. Participants often reported that they felt

**TABLE 2.** Patient Sociodemographic and Clinical Characteristics

Characteristic	No. (%) of Patients
Median age of patient at time of interview, years (IQR)	7 (6-10)
Median age at cancer diagnosis, years (IQR)	4 (3-7)
Race/ethnicity	
White/not Hispanic or Latino	16 (100)
Cancer diagnosis	
Acute lymphoblastic leukemia	7 (44)
Neuroblastoma	2 (12.5)
Non-Hodgkin lymphoma	2 (12.5)
Osteosarcoma	1 (6)
Wilms tumor	1 (6)
Post-transplantation lymphoproliferative disease	1 (6)
Langerhans cell histiocytosis	1 (6)

NOTE. No. of patients = 16.

Abbreviation: IQR, interquartile range.

separated from the support of their partner, extended family members, and community. However, when extended family and community support were available, this was reported as both financially and emotionally beneficial. Also, optimization of insurance coverage, either independently or with the assistance of a social worker, was crucial to alleviate the financial burden.

Participants described considerable disruption to the family unit and guilt about missing important activities of their other children. Participants frequently worried about the patient's separation from siblings and school. Nevertheless, some families incorporated fun activities into the trip to the urban cancer treating hospital, and many described the benefits of time in the car with their child, which displayed resilience and excellent coping skills: "... It's been good because we've been able to have communication in the car together where he can't escape (laughs). Um, and just time to, bond together." Also, "[This experience] ... kind of changed our whole family. Uh, it kind of brought us all together."

### Family and Patient Relationship With the Cancer Center

This domain captured participant sentiments toward the cancer center. The perceived quality of communication with providers at the cancer center and between providers at the cancer center was a major factor that affected trust in the medical team. Participants generally felt well informed about the patient's diagnosis and treatment. Most said that they found communication with the cancer center satisfactory and trusted the care received. However, several found communication to be problematic and felt that anticipatory guidance, particularly related to unanticipated costs or emergency visits, was lacking.

### General Cancer Care Management

This domain related to caring for a child with cancer. Many participants thought supportive resources to manage

cancer care needed improvement. Namely, the need for assistance in navigation of insurance to address costs incurred by receipt of treatment at the local and cancer treating hospital, coordination of appointments to minimize trips to the cancer center, and the need for improved anticipatory guidance were common concerns: "... Sometimes we have had to be here one day and turn around and come back the next.... I've thought 'oh this is really getting hard on me'..."

## DISCUSSION

To our knowledge, this is the only recent qualitative investigation to describe experiences of caregivers who live in rural communities while they care for a child with cancer. Our participants identified challenges previously described in the literature, including increased financial burden and missed time from work.<sup>3</sup> A novel and predominant finding was the added stress imposed by receipt of emergent care at local, community hospitals, namely because of the lack of experience with pediatric patients who have cancer and limited resources. This is understandable when one considers the burden of establishing the complex resources needed to support a rare diagnosis in a local service area. However, some obstacles can be proactively addressed. If local hospitals were identified at diagnosis, communication between the local hospital and cancer center could be established early. If deficiencies were discovered, local hospitals may be prompted to stock materials or parents could be redirected to other hospitals at which they are routinely available. This would foster collaboration between local physicians and specialists at the cancer-treating hospital, and thereby lower levels of frustration and increase parent's trust of local providers.

Experience with local hospitals was heavily affected by the perceived quality of communication between hospitals. Parents expressed frustration with instructions by specialists at the cancer center, particularly when directed to their local hospital for emergent care. Participants overwhelmingly wanted to avoid their local hospital and go directly to the cancer center. Similarly, patients who required admission to the cancer center after initial evaluation at a local hospital were most often routed through the cancer center's emergency department instead of directly to the inpatient unit, which resulted in care that was perceived as redundant. For safety reasons, which include the need for prompt evaluation, stabilization, and administration of antibiotics, these guidelines cannot be modified. However, many participants did not seem to understand why these recommendations were in place, which highlights a need for improved anticipatory guidance. Previous research has shown that caregivers who live a greater distance from their child's cancer treating hospital have greater information needs, and early clarification about the rationale for these expectations could mitigate frustration.<sup>22</sup>

**TABLE 3.** Domains and Themes

Experience at local hospital
Effect of communication between local and cancer center on patient care at local hospital
Interaction between family and physicians at local hospital
Trust of local providers (eg, families feel they need to dictate care)
Prioritization of patients with cancer
Unfamiliarity of key procedures (eg, not able to access line, not prioritizing time to antibiotics)
Lack of resources
Lack of pediatric appointments (eg, leads to inability to provide services)
Interaction between local hospital and cancer center
Quality of the communication between providers
Parents' perception of on-call cancer center physician confidence in local hospital physician
Lack of inclusion of parent in conversation between local and cancer center physician
Impact on family
Distance complicated cancer treatment and management
Desire to avoid local ED and drive directly to cancer center
Financial burden (eg, time away from work, increased cost associated with food/gas/lodging)
Family unit separation (eg, time away from spouse, other children, sibling separation)
Impact on patient (e.g. long car rides, time away from school)
Effect on family bonding (eg, incorporation of fun activities, more time together)
Family and patient relationship with cancer center
Trust of cancer center
Overall feeling about cancer center
Quality of communication with cancer center
General cancer care management
Need for specific resources (eg, financial help, assistance navigating insurance)
Need for improved anticipatory guidance (eg, process when child requires emergent care)
Coordination of appointments to minimize trips to cancer center

Abbreviation: ED, emergency department.

The participants identified several factors they believed negatively affected their child's clinical course, including increased infection risk and discomfort as a result of delay in treatment. Determination of survival differences was beyond the scope of this investigation, but previous research has identified survival differences by ethnicity and socioeconomic status.<sup>23-25</sup> In one study of patients with acute lymphoblastic leukemia, a survival difference was not appreciated by rural versus urban residences.<sup>26</sup> However, additional investigation is needed, particularly for pediatric cancers without the same effective treatment and outcomes as acute lymphoblastic leukemia.

A notable challenge was travel time to the cancer-treating hospital. A survey of caregivers of pediatric patients with cancer found that many rural families traveled more than 2 hours to the treatment center, a distance reflected in our sample.<sup>3</sup> Location of the nearest children's hospital and lack of public transportation are major contributors to difficulties in access to specialty care.<sup>5</sup> This affects patients beyond initial diagnosis; there is evidence to suggest that patients who live a great distance from their cancer center who experience relapse are less likely to seek additional treatment, and the survivors' ability to receive care for sequelae of cancer therapy is compromised.<sup>27-30</sup>

The participants estimated sizeable costs related to travel. Compared with nonrural families, rural parents are more likely to report financial difficulties associated with their child's medical needs and miss more work days than their urban counterparts.<sup>3,6,22</sup> Lack of coordination between the family and the cancer-treating hospital contributed to families' financial burdens. When safe and feasible, obtaining surveillance laboratory results at local facilities is a possible solution. Also, cross-disciplinary provider meetings to coordinate care could reduce multiple trips. Finally, encouraging caregivers to work with hospital social workers to optimize insurance options may alleviate financial burdens.

Many protective factors were identified. Extended family and community support alleviated financial burden. Participants who reported positive associations related to distance to the cancer center tended to report more satisfactory experiences overall. Conversely, miscommunications that resulted in additional time spent at either the local or treatment hospital and increased cost eroded the therapeutic alliance between families and the treatment team. These findings were likely aggravated by increased geographic distance to the cancer center.

Addressing barriers to care for rural families will take a coordinated, multipronged approach. An obvious issue is the need for rural physicians. Medical education should be at the forefront of addressing health access inequities and should provide learners with opportunities to provide care for underserved communities. Indeed, when exposed to rural medicine, students and residents may be more likely to choose rural practice.<sup>31,32</sup> A more immediate solution to address unmet information and coordination needs is through patient navigators. A study of cancer survivors found that those who lived a great distance from their providers found these services particularly important, especially for logistic questions they were reluctant to ask their cancer providers.<sup>33</sup> Another promising area is the development of telemedicine. This technology has the promise of providing expertise to underserved areas and has had a positive impact in cancer care.<sup>34-36</sup> Home health nursing is another potential tool, although this is dependent on coverage areas.<sup>37-39</sup>

This study has several limitations, including a racially and ethnically homogeneous sample. Patients who could not be contacted by phone or who did not come to clinic could not be screened for eligibility; thus, we potentially missed the most burdened population. A retrospective review of missed appointments or treatments, although beyond the scope of this study, may help identify the patients in greatest need. We did not have a comparator group of caregivers of patients who lived close to the hospital, but the experience of receiving emergent care at community hospitals is almost certainly unique to the rural population. Interviews were retrospective, which was purposeful to allow parents time to reflect on their experiences and to avoid adding time during active phases of treatment. Parents whose children died as a

result of cancer were intentionally excluded, and we acknowledge this as a deficiency. Still, the sample covered a variety of patient ages and cancer diagnoses, and many findings were consistent with previous literature.

This study, although small in scope, meaningfully contributes to the literature about disparities in pediatric cancer treatment by providing information from the perspective of caregivers of pediatric patients with cancer. The information gathered is generalizable to other tertiary pediatric hospitals that serve medically complex patients in underserved areas. Although long-term solutions are needed, we recommend feasible, immediate steps to improve the care of children with cancer who live in rural communities.

## AFFILIATIONS

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## AUTHOR CONTRIBUTIONS

**Conception and design:** Emily B. Walling, Mark Fiala, Sarah Gehlert

**Collection and assembly of data:** Emily B. Walling, Mark Fiala, Sarah Gehlert

**Data analysis and interpretation:** All authors

**Manuscript writing:** All authors

**Final approval of manuscript:** All authors

**Accountable for all aspects of the work:** All authors

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**AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST**

**Challenges Associated With Living Remotely From a Pediatric Cancer Center: A Qualitative Study**

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## APPENDIX

**TABLE A1.** Interview Questions for Parents

Question
1. In what ways do you feel that living approximately 3 hours from SLCH has affected you and your child during their treatment?
2. What resources, if any, would have made managing your child's cancer care easier? Probe: Specifically, what information would have been helpful? Would it have been helpful to have a list of local hospitals to go to if an emergency arises?
3. Tell me about a time when your child received emergency care at a local hospital during their cancer treatment. Walk me through the steps of what happened. How did the experience make you feel? What about the experience went well? What, if anything, was difficult about that experience? What about the experience do you wish SLCH had done differently? What about the experience do you wish the ER had done differently? Has your child received emergency care at SLCH? What, if anything, was different about that experience?
4. Tell me about the communication, if any, that you had with the patient's oncologist during the time your child received emergency care at a local hospital. What parts of the communication were the most helpful? What could have improved the communication?
5. Was there anything you thought I would ask you today, but didn't?
6. Is there anything else you'd like to tell me about your experience with managing your child's cancer care?

Abbreviations: ER, emergency room; SLCH, St Louis Children's Hospital.

**TABLE A2.** Parent Demographics

Question
1. What was the age of the child at time of cancer diagnosis (in years)?
2. What is the current age of the child?
3. What is the child's cancer diagnosis?
4. What is the estimated amount of work you have missed in the past year while managing your child's cancer care (in days)?
5. What is the estimated amount of school your child has missed in the past year because of their cancer care (in days)?
6. What is the estimated amount of money that you have spent in the past year for travel expenses related to your child's cancer care (in US\$)?
7. What is the child's race? (choose all that apply)
a) White
b) Black
c) Asian or Pacific Islander
d) American Indian or Alaskan Native
e) Other
8. What is your child's ethnicity?
a) Hispanic or Latino
b) Not Hispanic or Latino
9. What is your relationship to the child?
a) Mother
b) Father
c) Other (specify)
10. What is the highest grade or level of school that you have completed?
a) Eighth grade or less
b) Some high school but did not graduate
c) High school graduate or GED
d) Some college or 2-year degree
e) 4-year college graduate
f) More than a 4-year college degree
11. What is your current marital status?
a) Married
b) Divorced
c) Separated
d) Widowed
e) Never married
12. How many children in total do you have?
13. Where do you currently live?
a) House, apartment, condominium, or mobile home owned or being bought by you and/or your spouse or partner
b) House, apartment, condominium, or mobile home being rented by you and/or your spouse or partner
c) Currently homeless
14. What category best represents the combined income for all family members in your household for the past 12 months?
a) < \$5,000
b) \$5,000-\$9,999
c) \$10,000-\$19,999
d) \$20,000-\$29,999
e) \$30,000-\$39,999

(continued on following page)

**TABLE A2.** Parent Demographics (continued)

f) \$40,000-\$49,999
g) \$50,000-\$79,999
h) \$80,000-\$99,999
i) $\geq$ \$100,000
j) Don't know

Abbreviation: GED, general educational development.