



Caregiver acceptability of a novel social needs program in a pediatric emergency department during the coronavirus disease 2019 pandemic: a qualitative study

Neha Chohan, Bianca Nfonoyim¹, Lauren VonHoltz^{1,2}, Ashlee Murray^{1,2}

Department of Medicine, Perelman School of Medicine, University of Pennsylvania, Philadelphia;

¹Department of Pediatrics, The Children's Hospital of Philadelphia, Philadelphia;

²Division of Emergency Medicine, The Children's Hospital of Philadelphia, Philadelphia, PA, United States

Purpose: The coronavirus disease 2019 pandemic has heightened social needs of many families, with the demand for resources, such as food, housing assistance, utilities, childcare, and mental health, rising throughout the United States. These needs were recognized by the Division of Emergency Medicine and Department of Social Work at Children's Hospital of Philadelphia in April 2020, resulting in the creation of "Family Connects," a program that mobilizes a multidisciplinary workforce to meet social needs in the emergency department (ED). We aimed to understand experiences of families who engaged with and received information about the resources through the program.

Methods: We conducted a qualitative, semi-structured, telephone interview study with a purposive convenience sample of adult participants who visited our ED as legal guardians of their ill or injured children from December 2020 through February 2021 and were contacted by a Family Connects representative. Participants were recruited via phone calls and asked questions regarding their perspectives of the program logistics, the telephone interaction, and the information provided about resources. The interviews were recorded, transcribed verbatim, and de-identified. Transcripts were coded by 2 independent coders and analyzed for themes by 2 reviewers and the principal investigator.

Results: Twenty-eight interviews were completed with 18 families who received information about resources, and 10 who did not. Four major themes arose: overall positive experience with the program, mixed preferences surrounding modes of communication and information distribution, poor timing of phone calls during ED visit, and numerous barriers to accessing resources. Participants provided suggestions for improvement, including sending a text-alert prior to receiving the phone calls and post-ED follow-ups to help families access resources.

Conclusion: Families expressed an openness to being asked about social needs, though barriers including difficulty accessing resources and suboptimal phone call timing must be addressed to improve program delivery and effectiveness.

Key words: COVID-19; Emergency Service, Hospital; Evaluation Studies as Topic; Interviews as Topic; Needs Assessment; Social Support; Qualitative Research

Introduction

Families presenting to the pediatric emergency department (ED) often have unmet needs, such as lack of childcare, insufficient income to pay for utilities, and limited access to commodities such as car seats, shoes, and cribs¹. The coronavirus disease 2019 (COVID-19) pandemic has heightened social needs given that more families have experienced

Received: Jun 27, 2022 **Revised:** Sep 14, 2022

Accepted: Sep 15, 2022

Corresponding author

Ashlee Murray (ORCID 0000-0002-4881-5626)

Division of Emergency Medicine, The Children's Hospital of Philadelphia,
3501 Civic Center Blvd, CTRB 2211, PA 19104, United States

Tel: +1-610-633-2082 Fax: +1-215-590-4454

E-mail: murraya2@chop.edu

loss of income and health insurance, and difficulty accessing food or stable housing. According to the Pew Research Center, about 25% of adults in the United States reported that someone in their household had lost their job due to the pandemic, and 46% of adults with lower incomes reported difficulties paying bills²⁾. The pandemic has also exacerbated existing disparities, creating barriers to resources for already vulnerable populations³⁾.

EDs are integral in addressing social needs, because many patients may not have access to a regular source of primary care⁴⁾. Though families are interested in and receptive to having social needs addressed in EDs, physicians may not have the specific training or time to connect families with resources in addition to their clinical responsibilities. As a result, most EDs rely on social workers to assess for social stressors and connect patients with appropriate resources^{5,6)}. Though social workers are still accessible in EDs, limited time and high ED patient volume may limit their ability to assist all patients and families. Therefore, institutions have designed alternate strategies to support patients.

To meet these heightened social needs, the Division of Emergency Medicine and Department of Social Work at our pediatric hospital developed the Family Connects program in April 2020. The program utilizes representatives comprised of students and residents from medical, nursing, public health, and social work departments to contact families via phone calls. While the families are in the ED, they were provided information about community-based resources such as rent assistance, mental health services, food, and supplies for their infants and children. All families reached via our student representatives are offered information about resources, without a screening process. Further details about the program structure and population served can be found in a brief communication authored by VonHoltz et al.⁷⁾.

The primary aim of our study was to explore the acceptability of the Family Connects program among caregivers, and elicit suggestions for pro-

gram improvements. To the best of our knowledge, this was one of the first virtual social needs assessment and support programs developed in response to COVID-19 in a pediatric ED. Furthermore, no other studies have collected qualitative data from caregivers who have participated in such a social needs program.

Methods

1. Participants and study setting

Our metropolitan, quaternary care ED serves nearly 100,000 patients each year. Demographic data for the subset of the patients contacted by Family Connects were extracted from a secure, Family Connects quality improvement database, which is only accessible to the study team. Data included the patients' or caregivers' phone numbers, categorical data about the resource information provided, and how the representatives gave them the information. Except for the phone numbers, we did not obtain personally identifiable information. Families were contacted if they had been successfully reached by a Family Connects representative during their ED visit and had a phone number listed. Of note, this study population partially overlaps with that of the abovementioned brief communication⁷⁾, though the studies have different aims. This study was deemed exempt by the institutional review board of the Children's Hospital of Philadelphia (IRB no. 20-017972).

2. Study design

To better understand the experiences of families interacting with this novel program, we conducted a generic qualitative study using a convenience sample of participants and semi-structured interviews. Participants were recruited via phone calls and asked if they were willing to participate in phone interviews. Informed consents were verbally obtained from all participants at the beginning of the inter-

view. If the interviews could not be conducted at the time of the initial phone calls, another time was scheduled. The research team conducted phone calls until a saturation point was reached at 106 calls.

We developed and revised a final semi-structured interview guide after conducting 8 initial quality improvement phone calls with families. The final interview guide included questions relating to participant acceptability of receiving a phone call from Family Connects, participant experience and opinions about the program, the initial contact method, experiences with speaking to a Family Connects representative, barriers to accessing the resource with the information provided, and the helpfulness of the information (Appendix 1, <https://doi.org/10.22470/pemj.2022.00521>). While moving through the interviews, prompts were used to follow-up on questions and probe specific answers to achieve greater depth. Each interview lasted 10–20 minutes. Besides minor edits, all quotes were included verbatim. Responses were audio recorded, transcribed, and coded for common themes.

3. Data analysis

A codebook was developed and revised 3 times by the research team. The interviews were then divided amongst 2 independent coders after assessing for consistency in coding. Open coding was performed, and codes were organized into Excel (Microsoft, Redmond, WA) for thematic analysis. Themes were derived from the interview responses and 3 researchers independently performed the thematic analysis. Themes were then compared for consensus, and a final set of themes was established.

Results

Among a total of 106 families contacted via phone calls, we included 28 who completed the semi-structured interviews. Eighteen interviews were with families who received information about 1 or more resources and 10 with families who did not receive information about resources (Fig. 1). Tables 1–4 highlight the 4 main themes elicited during the interviews.

1. Overall positive experience with the program

Most families reported a positive experience with Family Connects. Families felt the program showed that the hospital cared about the families' social needs in addition to their medical well-being (Table 1). Some participants also quoted the existence of such a program as 1 of the reasons why they value the hospital for pediatric care. Many families commented that the program should continue beyond

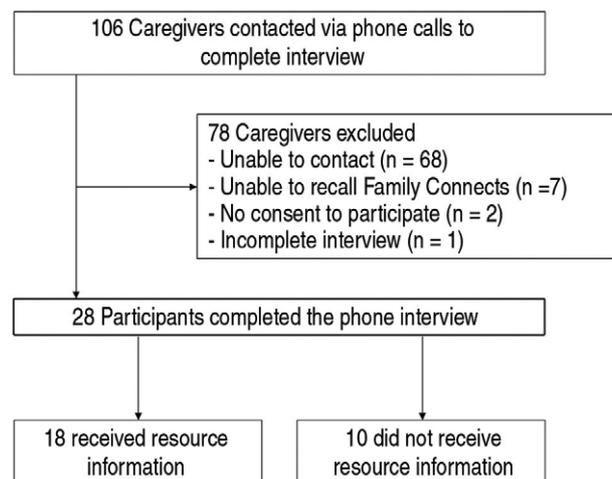


Fig. 1. Participant consort diagram.

Table 1. Overall positive experience with the program

Recommendations and participant quotes
Continue program after the pandemic and increase program workforce to reach more families.
“[The hospital] cares about its patients a little more than a different network.”
“Like a warm hug... it gave me hope.”

the pandemic, and that they felt it would be helpful for other families.

2. Mixed preferences surrounding modes of communication and information distribution

Participants had mixed preferences regarding the method of initial contact by the program (Table 2). While some participants preferred to receive a phone call, others were initially alarmed and confused. Several participants felt singled out and would have liked advanced notice prior to receiving the call. These negative reactions were cleared up once further explanation was provided. Many participants suggested that after the pandemic is over, the Family Connects program should start conducting in-person assessments because they felt this was a better way to engage with families, communicate empathy, and make families feel more comfortable. A few participants mentioned misplaced resources that were provided via paper handouts, and suggested other communication meth-

ods, such as text link or email, to allow them to refer to the information in the future.

3. Poor timing of phone calls during ED visit

Several participants commented that the ED visit was an inopportune time for the phone calls (Table 3). The participants were concerned about their children’s health, talking to their children’s doctor or were not in a mental space to discuss additional needs. Some participants expressed a preference for a text message before receiving the phone calls so that they could decide for themselves if they wanted to speak with a Family Connects representative. One participant suggested that the representative contact the family after the ED encounter, within 24 hours, to give families time to focus on their children’s medical needs during the ED visit.

Table 2. Mixed preferences surrounding modes of communication and information distribution

Recommendations and participant quotes
<p>Provide text messages or verbal alerts prior to a phone call and resources via a text and or email link. Give families program contact information in case of future needs. Allow in-person visits as COVID-19 restrictions allow.</p> <p>“I feel like people respond better to text messages than cold calling because you can decide if you want to respond or not... and it’s... some people like to text more than they do talking about certain things so would send a text first.”</p> <p>“It raised a red flag for me because I wasn’t sure... I... I wasn’t sure why they asked me that and when they did and talking about that I figured that something was wrong you know I thought that somebody had reported me and I was like wait what... I just brought my kid in for medical stuff and why are questioning me about our living and...”</p>

COVID-19: coronavirus disease 2019.

Table 3. Poor timing of phone calls during emergency department visit

Recommendations and participant quotes
<p>Provide text messages or verbal alerts prior to phone call explaining nature of the call and ask families if they would like to revive or decline the call.</p> <p>“When I had received a phone call I was like unaware of like, you know because so much was going on with my daughter, so my mind was focused on her at the time that I had received the phone call.”</p> <p>“I probably like suggest or give as like a word of advice that probably they should call, I mean I thought it was nice for us because I was only in the emergency room for a simple incident, but I don’t know, maybe people that are in the emergency room that are in pain or that have other more serious issues uh, probably should get the call like within the next 24 hours just to give time to have their needs treated and that before going through everything.”</p>

4. Numerous barriers to accessing resources

Many participants had general difficulty asking for resources or lacked knowledge of available resources (Table 4). Participants appreciated that the representatives listed all the available resources and gave examples of resources meeting their particular needs. For several participants, this revealed a previously unrecognized need. About half of the participants who received resource information had not yet contacted or accessed the resource. Many participants who had tried to access resources faced barriers, including non-working phone numbers, voice messages that were not returned or resources that no longer existed. A few participants expressed a need for additional resources and asked for a follow-up from our social worker. Several participants were able to access resources, such as food, health insurance, diapers, and wipes.

Discussion

As one of the first social needs assessment programs to be established in response to the COVID-19 pandemic, these study findings could indicate future directions for other social needs initiatives. Based on our results, we can make several suggestions to help future social needs assessment programs better serve families seeking care in EDs. While there are advantages to reaching out to families during the point of care in EDs, there are limitations to adequately addressing family needs during the ED visit.

A multipronged communication structure has the

potential to address some of the concerns expressed in the interviews. Specifically, text messages or verbal alerts could be sent to families prior to a phone call explaining the nature of the call and asking families if they would like to receive or decline the call. A structure for follow-up could also be beneficial for such a program because families may have future needs not addressed during the initial encounter. For instance, families could opt-in to a follow-up call or text from a Family Connects representative, with the goal of receiving additional support for multiple needs or high levels of need. Further, as COVID-19 restrictions allow, it may be helpful for such programs to be conducted in person to foster a more personable, comfortable interaction.

There are limitations of note. Family Connects has been implemented in a single metropolitan, academic, quaternary care ED, thus families' experiences with this program may not be generalizable to other settings. Also, the program had a robust student workforce, including social work interns, medical and nursing students, and residents who acted as representatives to make phone calls, which may not be possible in rural or resource-limited settings. Our participant pool was also relatively small, with only 28 total participants who completed the interview. Such limitations should be factored when attempting to implement similar programs.

In conclusion, families are receptive to and overall have a positive experience discussing their social needs in an acute care setting. While programs like Family Connects have the benefit of a larger, remote, multidisciplinary team to assess for

Table 4. Numerous barriers to accessing resources

Recommendations and participant quotes
Set up follow-ups for families with multiple or high-level needs. "People don't always like to ask or know who to ask." "It's just traumatizing, to go through a situation like that and to know that like if I needed it I wouldn't have to reach out myself cuz I cannot do that, you know I think a lot of people are like that oh I'll ask for help when I and you wait a little long you know." "I be leaving messages. No one gets back to you. Frustrating."

social needs, there are several areas for improvement. Specific challenges include initial confusion about the purpose of the phone calls, suboptimal timing for some families, and difficulty accessing provided resources. Future programs can use these findings to develop better programs, overcome challenges, and better help families connect with community resources.

ORCID

Neha Chohan (<https://orcid.org/0000-0002-4572-0330>)

Bianca Nfonoyim (<https://orcid.org/0000-0001-8676-8333>)

Lauren VonHoltz (<https://orcid.org/0000-0002-9248-5353>)

Ashlee Murray (<https://orcid.org/0000-0002-4881-5626>)

References

- Peterson EE. Screening families for unmet social needs in a pediatric clinic [Internet]. Dayton (OH): Wright State University; c2017 [cited 2021 Sep 26]. Available from: <https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?article=1196&context=mph>.
- Parker K, Minkin R, Bennett J. Economic fallout from COVID-19 continues to hit lower-income Americans the hardest [Internet]. Washington, DC: Pew Research Center; c2022 [cited 2021 Sep 26]. Available from: <https://www.pewresearch.org/social-trends/2020/09/24/economic-fallout-from-covid-19-continues-to-hit-lower-income-americans-the-hardest/>.
- Vesoulis A. Coronavirus may disproportionately hurt the poor and that's bad for everyone [Internet]. New York (NY): Time USA; c2022 [cited 2021 Sep 26]. Available from: <https://time.com/5800930/how-coronavirus-will-hurt-the-poor/>.
- Berry-Millett R, Bandara S, Bodenheimer T. The health care problem no one's talking about. *J Fam Pract* 2009;58:633-7.
- Zimmerman J, Dabelko HI. Collaborative models of patient care: new opportunities for hospital social workers. *Soc Work Health Care* 2007;44:33-47.
- Selby S, Wang D, Murray E, Lang E. Emergency departments as the health safety nets of society: a descriptive and multi-center analysis of social worker support in the emergency room. *Cureus* 2018;10:e3247.
- VonHoltz LA, Murray AL, Cullen DL. Family Connects: a novel social needs program within a pediatric emergency department. *Acad Pediatr* 2022 2022 Mar 7 [Epub]. <https://doi.org/10.1016/j.acap.2022.03.002>.

Conflict of interest

No potential conflicts of interest relevant to this article were reported.

Funding sources

This research was supported by the University of Pennsylvania Master of Public Health Capstone Grant (from the Penn Public Health Society) (Funding no. 1911608052). The sponsoring agency had no role in the design and conduct of the study. The content of this article is solely the responsibility of the authors and does not necessarily represent the official views of the sponsoring agencies.