BRIEF REPORT

Families' Perspectives on Social Services Navigation After Pediatric Urgent Care

Alison Aronstam, MD, MS, Denisse Velazquez, BA, Holly Wing, MA,
Danielle Hessler, PhD, Victoria F. Keeton, PhD, RN, CPNP,
Karen Sokal-Gutierrez, MD, MPH, and Laura M. Gottlieb, MD, MPH

Background: **Interest is growing in clinic-based programs that screen for and intervene on patients' social risk factors, including housing, food, and transportation. Though several studies suggest these programs can positively impact health, few examine the mechanisms underlying these effects. This study explores pathways through which identifying and intervening on social risks can impact families' health.**

Methods: **This qualitative study was embedded in a randomized clinical trial that examined the health impacts of participation in a social services navigation program. We conducted semi-structured interviews with 27 English or Spanish-speaking caregivers of pediatric patients who had participated in the navigation program. Interviews were analyzed using thematic analysis.**

Results: **Caregivers described 3 pathways through which the navigation program affected overall child and/or caregiver health: 1) increasing families' knowledge of and access to social services; 2) helping families connect with health care services; and 3) providing emotional support that reduced caregiver isolation and anxiety. Participants suggested that navigation programs can influence health even when they do not directly impact resource access.**

Discussion: **Social care programs may impact health through multiple potential pathways. Program impacts seem to be mediated by the extent to which programs increase knowledge of and access to social and health care services and support positive relationships between families and program personnel. (J Am Board Fam Med 2024;37:479–486.)**

Keywords: **Caregivers, Delivery of Health Care, Family Health, Health Disparities, Patient Navigators, Pediatrics, Public Health, Qualitative Research, Social Determinants of Health, Social Risk Factors, Social Service, Vulnerable Populations**

Introduction

A rapidly expanding body of research documents the impact of social risks such as food and housing insecurity on health.[1–5] As a result, national professional organizations have called for health care institutions to identify and intervene on social risk factors.[6] Health care delivery systems have, in turn, developed a range of "social care" programs ranging from relatively low-intensity interventions that provide written information about available

---

This article was externally peer reviewed.

Submitted 14 June 2023; revised 31 August 2023, 5 December 2023; accepted 2 January 2024.

From the Department of Medicine, University of California, San Francisco (AA), Department of Neurology, University of California, Los Angeles (DEV), Social Interventions Research and Evaluation Network, Center for Health and Community, University of California, San Francisco (HW), Department of Family and Community Medicine, University of California, San Francisco (DH), Betty Irene Moore School of Nursing, University of California, Davis (VFK), School of Public Health, University of California, Berkeley (KSG); University of California, Berkeley–University of California, San Francisco, Joint Medical Program (KSG), Department of Family and Community Medicine and Social Interventions Research and Evaluation Network, Center for Health and Community, University of California, San Francisco (LMG).

Funding: This work was supported by the Lisa and John Pritzker Family Fund and the Toxic Stress Research Network funded by the JPB Foundation of New York; the University of California, San Francisco Summer Explore Grant; the University of California, Berkeley–University of California, San Francisco Joint Medical Program Thesis Research Grant and the Schoeneman Summer Stipend. The research sponsors had no role in study design, data collection, analysis or interpretation of data or writing or submitting the manuscript.

Conflict of interest: Dr. Gottlieb received grants from the Agency for Healthcare Research and Quality, Episcopal Health Foundation, Robert Wood Johnson Foundation, Commonwealth Fund, and Kaiser Permanente outside the

doi: 10.3122/jabfm.2023.230232R2

resources[7–9] to higher intensity programs that use specialized professionals[10–13] to provide extensive support and follow-up.

In much of the existing literature, an underlying assumption is that social care programs directly improve health by facilitating connections to social services.[14] However, some research suggests that these programs do not consistently positively impact health,[15–17] and that when they do, health effects may not occur because of changes in social risk factors.[18–21] Mechanism questions have primarily focused on adult populations. We undertook this study to better understand the mechanisms through which pediatric social care programs may impact family health and wellbeing.

Methods

Setting and Participants

This qualitative study was embedded in a randomized clinical trial (RCT) based in a pediatric urgent care unit of a single urban safety-net hospital where more than 90% of patients are publicly insured or uninsured.[22] The hospital also houses a separate pediatrics primary care clinic.

Navigation Intervention

The parent trial examined the health impacts of participation in a social services navigation program that has been detailed in a prior publication.[23] RCT participants assigned to receive navigation services were enrolled in the Health Advocates program (HA). After an initial in-person meeting, resource navigators followed up with caregivers primarily by phone approximately every 2 weeks for up to 3 months. Navigators offered resource information, helped caregivers complete resource applications, and contacted service organizations directly.

IRB Approval

The study was approved by the University of California, San Francisco Institutional Review Board (IRB #15-18305).

Recruitment

We recruited a convenience sample of English and/or Spanish-speaking RCT participants who had enrolled in HA. During a study visit for the parent trial, we invited participants to complete an interview about their experiences with HA. Interested participants were contacted to schedule an interview after completing the primary study's 6-month follow-up.

Interviews

Interviewers used a semi-structured guide with questions about how engagement with HA affected social risks and health, as well as the program's strengths and weaknesses (See Appendix). Interviews lasted 20 minutes on average. All caregivers completed informed consent forms and received $25 gift cards for participation.

Data Analysis

All interviews were audio-recorded, transcribed and, when necessary, professionally translated into English. Using a thematic analysis approach,[24] 2 researchers independently coded all 27 interviews and discussed coding discrepancies until agreement was reached.

Results

Of 175 invited participants, 54 caregivers expressed interest in completing interviews, of whom 27 caregivers (26 mothers and 1 grandmother) were interviewed. Demographics and social risks of participants are summarized in Tables 1 and 2. The social risk and demographic characteristics of family members who completed interviews did not differ significantly from other families in the RCT who enrolled in HA. Sixteen caregivers reported that participation in the longitudinal navigation program positively affected their own and/or a family member's physical or emotional health. Nine other caregivers who did not directly endorse health impacts from the program nonetheless suggested ways that HA or similar programs could influence health and wellbeing. Looking across these interviews, we identified 3 main themes, each representing a unique pathway through which navigator programs could influence health (Figure 1).

Increased Knowledge of and Access to Social Services

Caregivers described how HA helped them gain concrete knowledge about and/or access to social services

---

submitted work. The other authors have no disclosures relevant to this article.

Corresponding author: Alison Aronstam, MD, MS, Department of Medicine, University of California, San Francisco, 505 Parnassus Avenue, San Francisco, CA 94143 (E-mail: alison.aronstam@ucsf.edu).

Table 1. Study Participants' Characteristics

	Caregivers of pediatric patients (n = 27) n (%) or mean (range)
Caregiver relationship to child	
Mother	26 (96%)
Grandmother	1 (4%)
Caregiver age	
18 to 24	2 (7%)
25 to 34	8 (30%)
35 to 44	14 (52%)
45 and older	3 (11%)
Household size	4.2 (2 to 8)
No. people in household younger than 17	2.2 (1 to 6)
Household income (n = 22)	
0-$10,000	7 (32%)
$10,001-$20,000	3 (14%)
$20,001-$30,000	6 (27%)
$30,001-$40,000	3 (14%)
>$40,000	3 (14%)
Caregiver education	
Less than high school	10 (37%)
High school graduate or GED	9 (33%)
Some college or college graduate	8 (30%)
Caregiver primary language	
English	13 (48%)
Spanish	14 (52%)
Caregiver race/ethnicity	
Non-Hispanic White	1 (4%)
Hispanic	20 (74%)
Non-Hispanic Black	5 (19%)
Non-Hispanic Pacific Islander/Hawaiian	1 (4%)
Child has usual source of primary care	24 (89%)

Table 2. Social Risks Reported by Study Participants at Baseline

Social Risk Domain	n (%)
Food insecurity	10 (37%)
Unstable housing	6 (22%)
Problems paying bills	7 (26%)
Housing problems like mold, insects, rats or mice	8 (30%)
Difficulty finding a job	4 (15%)
Disability interfering with the ability to work	3 (11%)
Having no primary care provider for your child or other household member	4 (15%)
Problems with current or former job	3 (11%)
Difficulty obtaining unemployment insurance	2 (7%)
Getting cut off from or denied from programs that provide income support	5 (19%)
Having no health insurance	5 (19%)
Receiving medial or pharmacy bills you cannot afford	3 (11%)
Difficulty finding afterschool activities or opportunities for recreation/education for you or your child	11 (41%)
Difficulty finding childcare	6 (22%)
Bullying	3 (11%)
Concerns about your or another adult's mental or behavioral health in your household	2 (7%)
Difficulty affording transportation	6 (22%)
Other legal issues	11 (41%)

and resources (Table 3). Caregivers noted how navigators helped them find the "right" information about services and provided helpful reminders and advocacy around applying for resources. For example, navigators provided a letter to 1 participant who was struggling to get her landlord to remove household mold. Several participants suggested that these connections to social services improved mental health, particularly. One caregiver noted that her children's "levels of stress … have been very low because [after receiving support enrolling in summer camp] they are busy with things they want to do."

Increased Access to, Engagement with, and Comfort Seeking Health Care Services

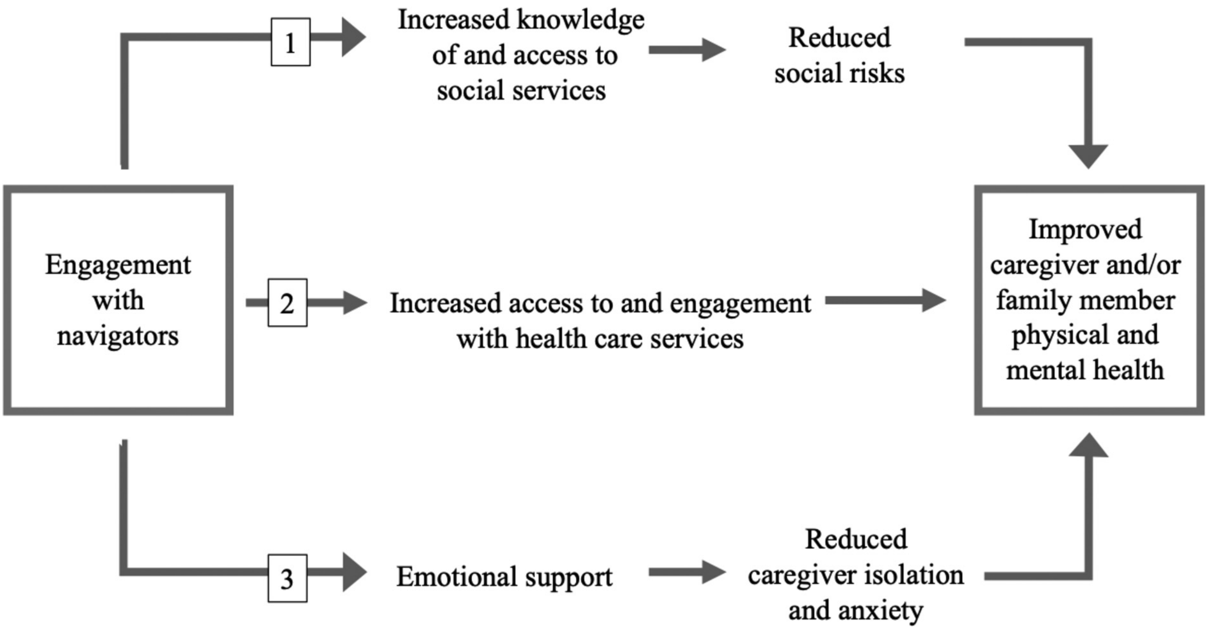
Participants also reported that HA increased their knowledge of and facilitated better access to health care services, though this was not an explicit aspect of the original intervention. Navigators provided information about health insurance, primary care, dental care, and mental health services. Some participants reported that HA helped them feel more comfortable accessing health care services.

Multiple participants suggested that HA helped caregivers attend to their own physical or mental health. Three caregivers described being so focused on caring for others that they tended to neglect their own health until navigators helped them recognize the need for self-care. One participant described HA as "a wake-up call of, okay, it is time for you to take care of yourself…. [T]ake a day out of your week to …schedule an appointment, or even go to your appointment."

Emotional Support

Participants also noted that HA helped them to feel cared for and reduced feelings of isolation and anxiety. One stated that working with the program "helped with my anxiety because at least I know that I do not have to do everything on my own." By forging supportive relationships with caregivers, navigators helped participants feel less isolated.

Figure 1. **Pathways to Health Impacts: Participants described 3 pathways through which the Health Advocates program positively affected caregiver and/or family members' physical and mental health.**



One participant described how having a navigator call and ask, "'How are things going?' . . . helped a lot.. . . [A] lot of the time I do feel like I am alone with my children. . .. [I]t did help to feel that like oh, this other adult, or this program is checking in to see if I am okay."

For several participants, the emotional support that HA provided was closely linked to navigators' assistance with resources. However, multiple participants also described emotional support that appeared less dependent on resolution of specific social risks and more connected to an increased sense of social connectedness. For example, 1 caregiver suggested that HA provided support even when she did not have any pressing resource needs: "When [the navigator] called and she just asked, 'How are you doing?' Just knowing that somebody cares. Even if I did not need anything at the time, just her calling and checking up on me

Table 3. The Health Advocates Program's Impact on Social Risks

Individual-Level Barriers to Resource Access	Health Advocates' Role in Helping Caregivers Overcome Barriers to Resource Access
Feeling uncomfortable asking for help and/or sharing information about social risks	• Navigators establish trust with caregivers and assure the security of information gathered • Health Advocates is integrated into routine care so that all families are screened for risks and offered support
Challenges accessing and lack of information about what resources are available, including information on eligibility requirements and the location of services	• Providing detailed resource information • Providing support for non-English speaking caregivers • Supporting individuals with low literacy by providing information orally (not only in writing)
Not knowing how and/or not having the time and energy to apply for resources	• Helping caregivers research resources and contact service providers • Providing regular reminders about resource applications
Not knowing how to troubleshoot when resource access stalls and further support is needed	• Offering guidance and support throughout the process of accessing resources
Having limited social capital in applying for services	• Contacting service organizations or businesses on caregivers' behalf and directly advocating for caregivers

was really nice…. Sometimes you feel alone, you know?"

Discussion

US health care institutions are increasingly integrating social care programs into clinical workflows. In this qualitative study, participants highlighted 3 distinct potential pathways through which health care-based resource navigation may influence health outcomes. Our results deepen prior research on care navigation conducted in both primary and urgent care and pediatric and adult settings that has indicated that program effects are not wholly dependent on connections to social services.

Evidence about specific mediating pathways can inform future health care investments, especially in the context of inadequate community social services.[18,19,21,25] For instance, an increasing number of health care organizations aim to integrate social care programs into clinical workflows using automated, technology-based tools that can efficiently provide information about social services resources.[7,26] Although automated referral programs have the potential to dramatically expand the reach of social care programs, our qualitative findings suggest that person-to-person programs may have distinct benefits, particularly in reducing patient and family caregivers' isolation and anxiety and increasing trust and comfort in health care. That these benefits are not limited to families endorsing social risks may help to explain previous work showing that patients who did not endorse specific social risks were nonetheless interested in assistance.[27,28]

Our findings also highlight the limitations of the current resource landscape. Although study participants expressed appreciation for the resource information they received, they also made clear that referrals did not guarantee receipt of services. Myriad factors—including individuals' concerns about privacy, the location of services, language barriers, and the length of application processes—affect resource access. Participants described specific ways that navigators helped them overcome these barriers. Findings underscore that some patients and caregivers – such as individuals who are more isolated or face language barriers – may disproportionately benefit from in-person, longitudinal navigation programs. Future social care research should explore differential impacts of navigation in different subpopulations and include a wider range of outcomes.

Study limitations include that participants may have been more likely to participate in study interviews if they had a positive experience with the HA program. In addition, our sample was recruited from an urgent care setting and did not include caregivers who do not speak English or Spanish or caregivers under age 18. These populations are likely to have unique experiences accessing social services and should be included in future work.

Future studies might use our results to inform strategies to measure health impacts of navigation programs. Results indicated that the impacts of the navigation program on caregiver wellbeing were likely not solely mediated by connections to social services but also by increased self-care behaviors and sense of social connectedness. These outcomes are not consistently assessed in quantitative studies that measure short-term health and utilization impacts yet may be key to understanding navigation programs' short and long-term impacts.

We thank Douglas Jutte and Colette Auerswald for their guidance on and support of this project. We also thank Abigail Romero for her contributions to participant recruitment.

To see this article online, please go to: http://jabfm.org/content/37/3/479.full.

References

1. Meyers A, Cutts D, Frank DA, et al. Subsidized housing and children's nutritional status: data from a multisite surveillance study. Arch Pediatr Adolesc Med 2005;159:551.
2. Black MM, Cutts DB, Frank DA, and the Children's Sentinel Nutritional Assessment Program Study Group, et al. Special supplemental nutrition program for women, infants, and children participation and infants' growth and health: a multisite surveillance study. Pediatrics 2004;114:169–76.
3. Cook JT, Frank DA, Berkowitz C, et al. Food insecurity is associated with adverse health outcomes among human infants and toddlers. J Nutr 2004;134:1432–8.
4. Kivimäki M, Vahtera J, Virtanen M, Elovainio M, Pentti J, Ferrie J. Temporary employment and risk of overall and cause-specific mortality. Am J Epidemiol 2003;158:663–8.
5. Beebe-Dimmer J, Lynch JW, Turrell G, Lustgarten S, Raghunathan T, Kaplan GA. Childhood and adult socioeconomic conditions and 31-year mortality risk in women. Am J Epidemiol 2004;159:481–90.

6. Advancing Health Equity by Addressing the Social Determinants of Health in Family Medicine (Position Paper). Published online April 2019. Available at: https://www.aafp.org/about/policies/all/social-determinants-health-family-medicine.html.
7. Wylie SA, Hassan A, Krull EG, et al. Assessing and referring adolescents' health-related social problems: qualitative evaluation of a novel web-based approach. J Telemed Telecare 2012;18:392–8.
8. Garg A, Butz AM, Dworkin PH, Lewis RA, Thompson RE, Serwint JR. Improving the management of family psychosocial problems at low-income children's well-child care visits: the WE CARE Project. Pediatrics 2007;120:547–58.
9. Garg A, Toy S, Tripodis Y, Silverstein M, Freeman E. Addressing social determinants of health at well child care visits: a cluster RCT. Pediatrics 2015; 135:e296–e304.
10. Sege R, Preer G, Morton SJ, et al. Medical-legal strategies to improve infant health care: a randomized trial. Pediatrics 2015;136:97–106.
11. Page-Reeves J, Kaufman W, Bleecker M, et al. Addressing social determinants of health in a clinic setting: the WellRx Pilot in Albuquerque, New Mexico. J Am Board Fam Med 2016;29:414–8.
12. Kitchen A, Brook J. Social work at the heart of the medical team. Soc Work Health Care 2005;40:1–18.
13. Kangovi S, Mitra N, Norton L, et al. Effect of community health worker support on clinical outcomes of low-income patients across primary care facilities: a randomized clinical trial. JAMA Intern Med 2018;178:1635.
14. Gurewich D, Garg A, Kressin NR. Addressing social determinants of health within healthcare delivery systems: a framework to ground and inform health outcomes. J Gen Intern Med 2020;35:1571–5.
15. Manderson B, McMurray J, Piraino E, Stolee P. Navigation roles support chronically ill older adults through healthcare transitions: a systematic review of the literature. Health Soc Care Community 2012;20:113–27.
16. Teggart K, Neil-Sztramko SE, Nadarajah A, et al. Effectiveness of system navigation programs linking primary care with community-based health and social services: a systematic review. BMC Health Serv Res 2023;23:450.
17. Roland KB, Milliken EL, Rohan EA, et al. Use of community health workers and patient navigators to improve cancer outcomes among patients served by federally qualified health centers: a systematic literature review. Health Equity 2017;1:61–76.
18. Chisholm H, Kershaw T, Sotelo Guerra L, Bocek K, Garcia Y, Casey Lion K. A realist evaluation analysis of a novel multi-faceted inpatient patient navigation program. Acad Pediatr. Published online September 2021:S1876285921004502.
19. Gottlieb LM, Hessler D, Long D, et al. Effects of social needs screening and in-person service navigation on child health: a randomized clinical trial. JAMA Pediatr 2016;170:e162521.
20. Berkowitz SA, Hulberg AC, Placzek H, et al. Mechanisms associated with clinical improvement in interventions that address health-related social needs: a mixed-methods analysis. Popul Health Manag 2019;22:399–405.
21. RTI International. *Accountable Health Communities (AHC) Model Evaluation: Second Evaluation Report*. May 2023. Accessed December 4, 2023. Available at: https://www.cms.gov/priorities/innovation/data-and-reports/2023/ahc-second-eval-rpt.
22. Priscilla Chan and Mark Zuckerberg San Francisco general hospital and trauma center FY 2020-2021 annual report. Published online 2021. Available at: https://sf.gov/sites/default/files/2021-10/05%20ZSFG%20FY%20Annual%20Report%202020-2021.pdf.
23. Gottlieb LM, Adler NE, Wing H, et al. Effects of In-person assistance vs personalized written resources about social services on household social risks and child and caregiver health: a randomized clinical trial. JAMA Netw Open 2020;3(3):e200701.
24. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol 2006;3:77–101.
25. Balaban RB, Galbraith AA, Burns ME, Vialle-Valentin CE, Larochelle MR, Ross-Degnan D. A patient navigator intervention to reduce hospital readmissions among high-risk safety-net patients: a randomized controlled trial. J Gen Intern Med 2015;30:907–15.
26. Lindau ST, Makelarski JA, Abramsohn EM, et al. CommunityRx: a real-world controlled clinical trial of a scalable, low-intensity community resource referral intervention. Am J Public Health 2019; 109:600–6.
27. Bottino CJ, Rhodes ET, Kreatsoulas C, Cox JE, Fleegler EW. Food insecurity screening in pediatric primary care: can offering referrals help identify families in need? Acad Pediatr 2017;17:497–503.
28. Hassan A, Scherer EA, Pikcilingis A, et al. Improving social determinants of Health. Am J Prev Med 2015;49:822–31.

Appendix.

Interview Guide

Confirm permission to record interview: Before we begin, may I have your permission to record this interview? As a reminder, you are free to ask me to turn off the recording, skip any questions, or end the interview at any time.

I would like to learn about your experience working with the Health Advocates program. I am interested to learn whether you feel the program impacted your family's health. I am also curious whether you feel the program affected your experience obtaining resources in the clinic or community.

1) What was your experience like working with the Health Advocates program?
    a) What about the program worked well?
    b) What about the program do you think could be improved?

2) What has changed for you since you started working with the Health Advocates program?

    Probes to ask about impact on health:

    a) Do you feel that the program has affected your health?
        i) If yes: Can you describe how your health has changed?
        ii) What do you think caused that change?

        Can specify that this impact does not necessarily have to relate to accessing resources. We are interested in any way that participating in the program may have changed individuals' health, stress levels and/or experience of health care.

    b) Do you feel that the program has affected the health of anyone in your family?
        i) If yes: Can you describe how your family's health has changed?
        ii) What do you think caused that change?

    c) Since working with the Navigator in this program, do you feel that there has been any change in how your family has accessed health care services?

        For example, was there any change in how often you or your family went to urgent care or the ER, or to see their primary doctor?

        i) If yes: Can you describe that change?
        ii) What do you think has caused that change?

    d) Since working with the Navigator, has there been any change in how you feel about the your child's health care team, the hospital and/or the larger health care system?
        i) If yes: Can you describe that change?
        ii) What do you think has caused that change?
        iii) What do you think about having the Health Advocates navigation services available in the hospital?

        Probes to ask about impact on accessing resources:

    e) Did working with a Navigator make it easier to get support for any challenges that you experience related to basic needs, like food or housing?
        i) If yes: Can you describe what assistance the Navigator provided that made it easier to get the support you needed?

    f) What resources and referrals did you receive from the Navigator?

        Going through each resource (name resource/organization in each question):

        i) Before working with the Navigator, were you aware of this resource/organization?
        ii) Can you walk me through your experience applying for that resource?
        iii) Was there anything that made applying for the resource or enrolling in the program difficult?

        Question to help probe for discussion of barriers:

        We've heard some families say that it is hard to access resources because: it is unclear who is eligible for services; it is difficult to get to some of the organizations; or applications are not available in the right language. Other reasons are that the hours of some organizations are not convenient or it takes a long time to get into see someone or to be approved for services.

iv) Did any of these kinds of barriers make it difficult for you to enroll in/receive support from the program? If so, was the Navigator able to support you in overcoming these challenges? If not – can you say more about how you accessed the resources that you needed?

v) How did the experience of working with the Navigator compare with experiences that you have had in the past trying to access these kinds of services?

Those are all my questions. Is there anything else you would like to share about your experience working with the Health Advocates program?

THANK YOU!