



## Educational/Counseling Model Health Care

## Linking urban families to community resources in the context of pediatric primary care

Arvin Garg<sup>a,\*</sup>, Sonia Sarkar<sup>b</sup>, Mark Marino<sup>b</sup>, Rebecca Onie<sup>b</sup>, Barry S. Solomon<sup>c</sup><sup>a</sup>The Floating Hospital for Children at Tufts Medical Center, Division of General Pediatrics and Adolescent Medicine, Boston, MA, USA<sup>b</sup>Project HEALTH, Boston, MA, USA<sup>c</sup>Johns Hopkins University School of Medicine, Division of General Pediatrics and Adolescent Medicine, Baltimore, MD, USA

## ARTICLE INFO

## Article history:

Received 18 June 2009

Received in revised form 3 September 2009

Accepted 25 October 2009

## Keywords:

Patient advocacy

Pediatric primary care

Community resources

## ABSTRACT

**Introduction:** Pediatric guidelines emphasize the importance for healthcare providers to view children in the context of family and community, and promote community resources at visits. In 2006, a Family Help Desk (FHD) was established in an urban academic-based clinic in Baltimore, MD to assist healthcare providers in educating families about available community-based resources.

**Methods:** A longitudinal cohort pilot study was conducted during a 6-week period in 2007 to evaluate the impact of the FHD in connecting at-risk families to community resources.

**Results:** Overall, 6% of parents ( $n = 59$ ) who brought their child for a scheduled clinic visit accessed the FHD. Parents had a mean of 1.7 social needs, including after-school programs and childcare (29%), employment (13%), housing (12%), and food (11%). Most parents who utilized the FHD (64%) contacted a community resource or service within 6 months of their clinic visit. Nineteen parents (32%) who utilized the FHD enrolled in community programs.

**Conclusion:** A clinic-based multi-disciplinary model can empower families to connect with community-based resources for basic social needs.

**Practice implications:** The Family Help Desk model has great potential for addressing family psychosocial needs, and educating families about community resources within the context of pediatric primary care.

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## 1. Introduction

A fundamental tenet of pediatric primary care is viewing the child in the context of family and community, and promoting community relationships and resources at health supervision visits [1]. Previous studies have found family psychosocial problems such as food insecurity and housing instability to negatively impact children's health and development [2–7]. Pediatricians and other child healthcare providers, therefore, have an important role in assisting families with their psychosocial needs.

Despite guidelines and empiric evidence, few pediatric healthcare providers routinely address these problems. Potential provider barriers include lack of time, professional training, and knowledge of community resources [8,9].

Multi-disciplinary approaches are needed to assist providers in educating at-risk families about available community resources and linking them to needed services. To date, pediatric primary care models have included non-medical caregivers such as social

workers [10,11], lawyers [12,13], and community outreach workers [14,15]. This report describes an innovative multi-disciplinary model which utilizes undergraduate students, who serve as patient advocates, to educate families and link them to community resources.

Project HEALTH is a non-profit organization founded in 1996 [16]. The organization primarily places undergraduate student volunteers at Family Help Desks at urban clinics that serve low-income populations. Student volunteers receive referrals from clinic staff members, meet with at-risk families, educate them regarding their eligibility for community-based social services, advocate for their needs, and assist with connecting them to services. Students then provide feedback to healthcare providers about the social service referrals and patient outcomes. Currently, Project HEALTH operates 18 resource desks at urban medical homes across the United States; approximately, 600 students from 10 universities serve 4000 families annually.

In 2006, as a joint venture with Project HEALTH, Johns Hopkins University, and the Baltimore City Health Department, a Family Help Desk (FHD) was established in the Harriet Lane Clinic (HLC), a medical home for low-income children. This study describes the impact of the FHD as an advocacy and educational initiative on connecting at-risk families from the HLC to community resources.

\* Corresponding author at: The Floating Hospital for Children at Tufts Medical Center, Division of General Pediatrics and Adolescent Medicine, 800 Washington Street, Box 854, Boston, MA 02111, USA. Tel.: +1 617 636 7711; fax: +1 617 636 8943.

E-mail address: [agarg@tuftsmedicalcenter.org](mailto:agarg@tuftsmedicalcenter.org) (A. Garg).

## 2. Methods

This was a longitudinal cohort pilot study conducted at the HLC. The clinic serves as a medical home for approximately 8500 children and adolescents ages from birth to 21 years, with Medicaid as the predominant source of healthcare coverage. All parents who brought their child to the clinic for a scheduled clinic visit (non-sick visit) to a pediatric provider during the 6-week study period (September 25–October 31, 2007) were eligible. Because most participants were parents, we use the term parent to include all caregivers (parents and legal guardians).

The FHD was established in the HLC in October 2006 to assist providers in addressing families' psychosocial needs. The desk is located in close proximity to patient exam rooms. Typically, the desk is open 5 days per week for a 2-h shift in the mornings and afternoons with each shift staffed by two volunteer students. During the study period, a total of 20 students volunteered at the desk. A drop box is also available for providers and families when the desk is not open; it is checked daily by students.

Prior to the study period, all pediatric healthcare providers were informed about the FHD. Providers were instructed to contact the desk for families who may have psychosocial problems. Of note, families could also go to the FHD directly without being referred.

At the FHD, students, using a structured intake form, collected demographic and contact information, as well as the source of the referral (provider, clinic staff, or self-referral). A family needs questionnaire, based on a previously used instrument (WE CARE survey) [17], was administered to formally assess family psychosocial needs. The WE CARE survey was administered in the HLC in 2006 and was found to have excellent reliability [17]. The family needs questionnaire screened by self-report for 15 needs (employment, education, food insecurity, homelessness risk, childcare, after-school programs, utility, public benefits, health insurance, smoking, drug abuse, alcohol abuse, intimate partner violence, child school failure and safety equipment). It was written at the 6th grade level. Students verbally administered the survey if parent illiteracy was a concern. Once needs were identified, students educated parents regarding available community resources. Information on available resources was derived primarily from an electronic database of resources which was continually updated by student volunteers. Each student volunteer who gathered the initial intake was assigned to the referred family and served as their advocate. Students contacted the parent on a regular basis (at least bi-monthly) for a 6-month period. During follow-up calls, parents were queried regarding their satisfaction with the services or resources they enrolled in, and rated them as very satisfied, somewhat, or not satisfied. Each referred parent had a paper file which contained all the collected data. The files were stored in a locked file cabinet at the desk. The data was transferred to an electronic database for analysis 6 months after completion of the study period.

SPSS 15.0 (SPSS Inc., Chicago, IL) was used for the analysis. Descriptive statistics were used for this report. Frequencies of the primary outcomes (referral source, parent/family needs, contact of community programs/services, receipt of services or enrollment in community resources, and parental satisfaction with community resources) were calculated.

The study received a study exemption from the Institutional Review Board at Johns Hopkins School of Medicine.

## 3. Results

There were 982 scheduled clinic visits with pediatric healthcare providers during the study period. Since 71 sibling pairs were seen at the same visit, a total of 911 parents came to the HLC with their children during the 6-week period. Overall, 6% of parents ( $n = 59$ )

**Table 1**

Parent demographics ( $n = 59$ ).

Relationship to child	
Mother	92%
Father	4%
Other	4%
Race	
African-American	97%
Other	3%
Age, mean (SD)	29.6 years (9.6)
Marital status	
Single	91%
Married	9%
Educational status	
<High school	23%
High school/GED	58%
College	19%
Monthly household income, mean (SD)	\$893 (608)
Household size, mean (SD)	4.8 (2.0)

accessed the FHD. The majority of parents were African-American (98%), single (91%), mothers (93%); 22% had not completed high school (Table 1). Most parents (83%) were referred to the FHD by their child's provider.

Each parent had a mean of 1.7 psychosocial needs identified at the FHD. The most common needs were for after-school programs/childcare (29%), employment (13%), housing (12%), and food (11%) (Table 2).

The majority of parents who utilized the FHD (64%) contacted a community resource or service. Approximately, one-third of parents ( $n = 19$ ) who utilized the FHD reported enrolling in at least one community program; of these parents ( $n = 4$ ), 21% enrolled in two or more community programs. Parents most frequently enrolled in programs or services related to after-school programs/childcare (17%), housing (17%), and job training (17%). Over 90% of parents who enrolled in community resources or services were very or somewhat satisfied with the community resource.

## 4. Discussion and conclusion

### 4.1. Discussion

In this pilot study, we found the implementation of a Family Help Desk in an urban clinic had a positive impact on educating parents about community resources and linking them to these services.

This educational multi-disciplinary model of healthcare is consistent with the principles of community pediatrics, resulting in a true "synthesis of clinical practice and public health principles" aimed at promoting the overall health of children within the context of their families and communities [18]. This

**Table 2**

Types of family psychosocial needs identified at the Family Help Desk ( $n = 101$ ).

After-school programs/childcare	29%
Employment	13%
Housing	12%
Food insecurity	11%
Adult education	9%
Utilities	7%
Health insurance	6%
Public benefits	5%
Safety equipment	4%
Smoking	3%
Other	1%

model is also consistent with a core theme of the *Bright Futures* health supervision guidelines for children and adolescents; namely, promoting community relationships and resources at health supervision visits [1]. We believe that our model can be replicated in non-pediatric settings (e.g. OB/GYN and internal medicine practices), as well as a variety of practice settings, including private offices, community health centers, and other academic institutions.

Unfortunately, pediatricians and other child healthcare providers often do not have the time or knowledge to educate families with social needs about community-based resources [8,9]. In our study, providers were able to overcome this barrier by connecting families to students at the FHD. Students had dedicated time to locate available community resources, advocate on behalf of the children and their families, follow-up with parents, and give feedback to providers.

To increase the impact of the FHD on linking families to services at other pediatric practices and settings, the model will need to be tailored to meet the needs of patients, families, healthcare providers and practice staff. Prior to implementation at other institutions, a needs assessment should be conducted in order to identify the specific needs for their patient populations. In our clinic, only 6% of families visiting the clinic in the study period utilized the FHD. One mechanism to increase referrals is to have the FHD fully operational during all clinic hours. Another mechanism is to implement universal screening for social needs at pediatric visits. Screening for family psychosocial problems, analogous to developmental screening, may lead to increased provider identification and referral of needs. Garg et al. [17] found that structured screening relying on parental self-report, in the same clinic, resulted in 51% of parents receiving a referral for family psychosocial problems from their child's provider. Based on these findings both of these changes were made to the structure of the FHD in the Harriet Lane Clinic. The desk is now open during all clinic hours and a family needs survey is given out at every scheduled visit.

Our study found a discrepancy between parental contact and receipt of services or enrollment in community resources. Low-income families likely face multiple barriers to accessing resources such as competing demands at home, time constraints, childcare, and transportation issues. Further investigation will be required to address these barriers within the care coordination aspect of our model.

Implementation of the FHD at academic-based clinics also has important implications for residency training. A prior study found that over 40% of pediatric residents felt a sense of futility in their primary care clinics; almost 50% worry that they have become numb to psychosocial circumstances of children [19]. The FHD may address residents' sense of futility by allowing them to refer families with social needs, learn about available community resources, and follow the impact that community resources have on families and children. In addition, medical students or residents could become actively involved with staffing the FHD during an advocacy rotation and assist families firsthand with their social needs. Having this type of exposure integrated with their clinical training may positively impact practice behaviors [20]. Future research could examine the impact of this experience on students' and residents' understanding of their patients' lives, the community in which they practice and their future career choices.

There were several limitations to this study. We report on the experience of the FHD at one urban clinic. As such, our findings may not generalize to other clinics or populations with different demographic characteristics. Although the study occurred 1 year after the desk was established, it still may take a longer time period to reach full integration within the clinic. The study relied on parental self-report which may have introduced social desirability

and recall biases when assessing enrollment and satisfaction with services. Finally, due to the small sample size, we could not look at differences by source of referral, educational status, or other demographic characteristics.

#### 4.2. Conclusion

We reported on an innovative multi-disciplinary healthcare model for educating families and connecting them to community-based resources and services within an academic pediatric primary care practice for low-income children. Our study found that undergraduate students, serving as patient advocates at an urban pediatric clinic, can have a positive impact on linking at-risk families to community services.

#### 4.3. Practice implications

The FHD has great potential for serving as a model for addressing family psychosocial problems within pediatric primary care. This model is consistent with priorities from leading national pediatric professional organizations. A key attribute is having undergraduate students educate at-risk families about available community resources and serve as patient advocates. Implementation and evaluation of the FHD in other healthcare settings is needed to further improve the model and assess the impact of this intervention on the well-being of low-income families and children.

#### Conflict of interest

There are no conflicts of interest for any of the authors.

#### Acknowledgements

We gratefully acknowledge Josh Sharfstein, MD, Commissioner of Health for the City of Baltimore, for his role in bringing Project HEALTH to urban Baltimore clinics, including the Harriet Lane Clinic. We also thank Janet Serwint, MD for her thoughtful review of the manuscript.

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