PLUS Legacy Report

Name: Lauren Nelson

Legacy Report: Pediatric Providers' Perceptions on Addressing Social Needs in Context of Family Help Desk Interventions

Key Words:
Help Desk, Social Determinants of Health, Linkage Programs, Provider Perspective, Provider Burnout

Learning Objectives:
- Understand the changing scope of outpatient pediatric care and the need to incorporate systems addressing social determinants
- Increase awareness of barriers providers face in addressing social determinants during primary and urgent care visits
- Raise awareness about family health desk interventions at SFGH and in the Bay area
- Gain experience working on survey analysis and data
- Learn how to evaluate programs/interventions

Projects Objectives:
- Examine medical providers' perspectives on how clinics can help families address social needs
- Survey residents and other clinicians about:
    -Self perceived abilities to address social needs in the clinical setting
    -Barriers encountered to social screening and ways to mitigate those barriers
- Evaluate Survey data to examine provider trends and barriers in addressing social needs

Activities
- Worked with Bay Area Help Desk Consortium to develop a two site survey to survey providers involved with intervention and implementation of Help Desk as CHO and UCSF
- Pre-survey focus group to gauge providers attitudes and opinions regarding implementation of help desk model
- Obtained IRB approval for study
-Adapted survey for pre and one year post implementation of Help Desk programs
-Surveyed over 70 providers at SFGH regarding provider attitudes
-Currently working on survey analysis and preparing manuscript for publication

Outcomes
- Draft Manuscript (attached)
- Presentations:
(1) A poster presentation at the UCSF health disparities research symposium VIII, San Francisco, CA. Oct 2014

(2) Presented abstract for Round Table Presentation at the Academic Pediatric Association Region 9 and 10 meeting, Monterey, CA. Feb 2015
(3) Presented Poster/Abstract at Primary Care Leadership Academy Showcase, University of California San Francisco. San Francisco, CA. May 2015.

Lessons in Implementation:
- Difficulty of collecting survey data in a longitudinal project
    - -Response rate and sample size
    - -Interval time period (pre/post cohorts)
- Collaboration with other sites
    - -No post survey in UCSF BCHO arm
- Results significance
    - -Statistical significance of pre/post data
- Implications for my future
    - -Future in primary care

Potential future projects:
- Expand help desk model to other sites
- Larger survey of providers affected by help desk over longer period of time
- Comparison with patients experience, change in patient experience of clinic's capacity to address social needs

Resources:
- Ellen Laves, Laura Gottlieb, Amy Whittle
- CCLIP and Bay Area Consortium
- San Francisco General Hospital Children's Clinic
- UCSF Benioff Children's Hospital Oakland
- Kelley Meade
- PLUS advisors: Anda Kuo, Amy Beck, Eddie Cruz

Pediatric Providers' Perceptions on Addressing Social Needs at San Francisco General Hospital and Children's Hospital Oakland in context of family help desk interventions

Lauren Nelson, MD, MPH[1,2]; Amy Whittle, MD[2]; Ellen Laves, MD;[2] Laura Gottlieb, MD, MPH[3]

1. UCSF Pediatrics Leadership for the Underserved (PLUS) Program; 2. UCSF Department of Pediatrics; 3. UCSF Department of Family and Community Medicine

Introduction

Social needs encompass life conditions that can have a significant impact on an individual's health status including access to stable housing, food security, and job stability. Children, as a population, are disproportionately affected by poverty and are therefore more likely to be raised in environments with unmet social needs[1]. These unmet needs impact the health of children and families by leading to increased health care costs[2] and increased morbidity and mortality[3,4] both in rates of acute illnesses[5] and the development of chronic diseases later in life.[6]

It is recognized within the field of pediatrics, that the responsibility of addressing social needs, as supported by a number of policy statements of the American Academy of Pediatrics and Bright Future Guidelines, is within the realm of issues to be addressed by medical providers[7-10]. However, few studies have examined medical providers' self-perceived ability to address these social needs[7]. Providers' ability to address social needs may impact willingness, frequency, and confidence in addressing these issues in the clinical setting. In addition, literature suggests that providers working in environments with an increased burden of unmet social needs can be subject to higher rates of burnout and lower desire to work in the field of primary care[11].

This study seeks to address the provider perspective on self and clinic capacity to address social needs and add to the literature on the role that health

clinics can and should play in mitigating these processes.[12,13,14] This survey asked residents and other clinicians about their self-perceived ability to address social determinants in the clinical settings; confidence regarding resource referral; and feelings regarding burnout and desire to work in primary care. This study was performed in the context of implementation of the Community to Clinic Linkage Program (CCLiP) at San Francisco General Hospital and The Family Information & Navigation Desk (FIND) at Children's Hospital and Research Center Oakland. Both programs are part of the Bay Area Help Desk Consortium and entail pediatric urgent and primary care clinic-based programs that utilize volunteers to screen patients and families about health-related social needs and to link those patients with relevant hospital and community resources.

Methods

Data Source and Study Population

Children's Health Center at San Francisco General Hospital

One hundred and eighty medical providers were invited to complete a 33-question online survey. Surveys were collected over a two-month time period during early implementation (January - February 2014) and one-year post implementation (January to February 2015) of the Community to Clinic Linkage Program (CCLiP). Providers included attending physicians, pediatric nurse practitioners (PNPs) and first, second and third year pediatric and family medicine residents. All providers worked in urgent care and/or primary care at the Children's Health Center at San Francisco General Hospital, a county safety net hospital.

Children's Hospital and Research Center Oakland

One hundred and twenty medical providers were invited to complete a 14 to 28-question survey (survey given to second/third years/attending with 28 questions, first years with 19 questions and primary care clinicians with 14 questions). Surveys were collected by paper survey between June 2013 and September 2013 before implementation of FIND and were subsequently collected through an online survey in August of 2014 [To be adjusted with CHO second stage data collection]. Providers included attending physicians and first, second and third year pediatric residents. All providers worked in either primary care or urgent care at the Children's Hospital of Oakland.

Survey questions

The survey questions were modified from a 2011 Robert Wood Johnson Physician Questionnaire.[15] Topics covered in the survey included willingness, frequency, and time spent addressing social needs during urgent and primary care visits; knowledge regarding resource referral, providers' attitudes regarding importance of social need on health of patients; and physician confidence regarding resource referral. Providers were also asked about the degree to which they felt burnout at work, likeliness of working with underserved populations in the future and desire to continue to work or go into the field of primary care.

Statistical analysis

A 2-sample test of means was used to compare the pre-intervention population to the one-year post-intervention population at each site. The likert scale of responses was converted into numerical values for analysis, for

example, for the question ‘How willing are you to ask your patients about their social needs?” Not at all willing =1, Somewhat willing =2, Willing=3, Very Willing=4. Questions were selected for analysis (shown in table 1), based on there focus on issues including (1) willingness, confidence, and frequencies of asking/addressing social needs (2) feelings of burnout from work (2) desire to work in or continue to work in primary care. Site groups were analyzed separately for SFGH and CHRCO as well as in a combined analysis [awaiting CHO post survey results].

Results

Baseline surveys

At SFGH, of 180 invited participants, 59 pre-surveys were collected (33% response rate), 65% were completed by trainees (first through third year residents) (38/59); the remainder (35%)(21/59) were completed by attending physicians and PNPs. Among the trainees who participated, 80% were pediatric residents and 20% were family practice residents. Respondents were 81% female and 19% male.

At CHRCO, of 120 invited participants, 57 surveys were collected (48% response rate), 33% were complete by trainees (first through third year residents) (19/57); the remainder 66% (38/57) were completed by attending physicians. Respondents were 86% female and 14% male.

One-year post intervention surveys

At SFGH, of the originally invited 180 participants, 71 post-surveys were collected (39% response rate), 73% were completed by trainees (first

through third year residents) (52/71); the remainder (27%)(19/71) were completed by attending physician and PNPs. Among the trainees who participated, 81% were pediatric residents and 19% were family practice residents. Respondents were 77% female and 23% male. A total of 20 individuals could be linked as completing both the pre- and post- survey based on their answer to a unique identifier question.

[CHRCO post survey section to be added]

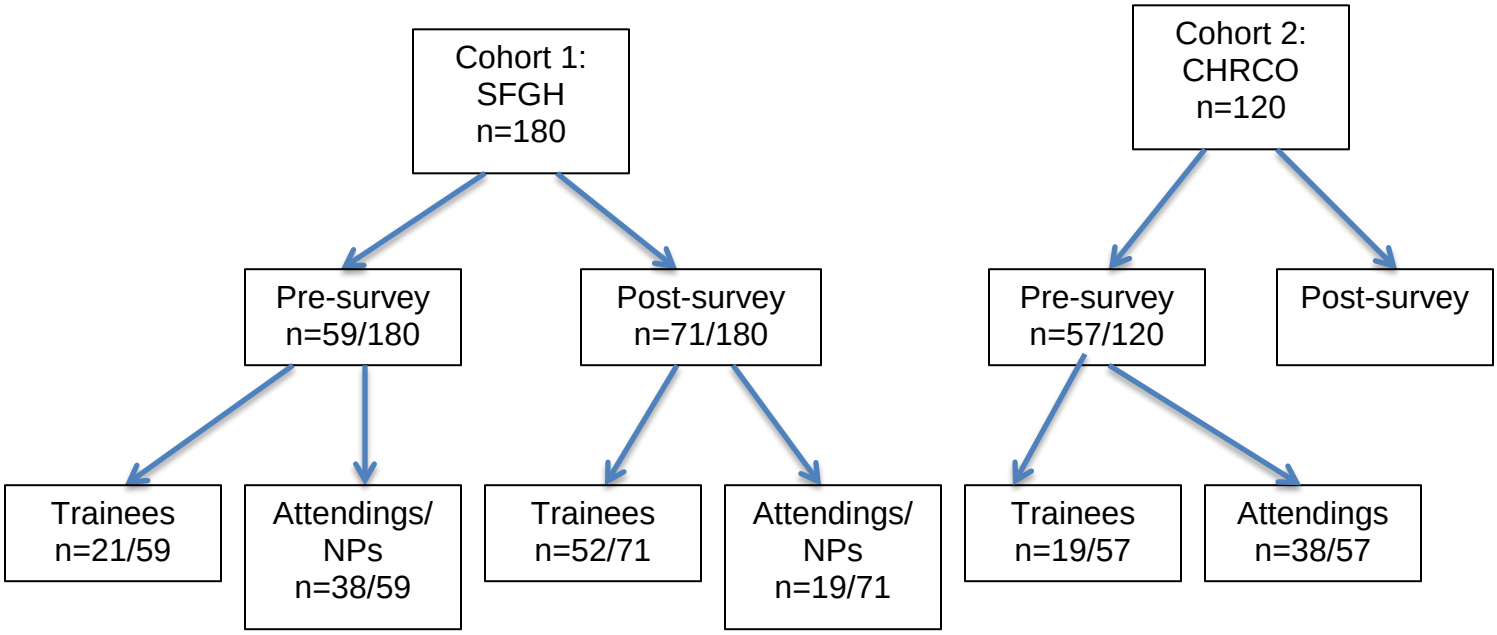

Table 1: Select survey questions with responses pre and post help desk intervention						
Survey question	**Responses**	**SFGH Pre-survey**	**SFGH Post-survey**	**Two Sample T-Test**	**CHRCO Pre-survey**	**CHRCO Post-survey**
How willing are you to ask patients about their social needs? (Primary Care)	**Not at all willing (1)** **Somewhat willing (2)** **Willing (3)** **Very willing (4)**	**0 (0%)** **1 (5%)** **6 (29%)** **14 (67%)** **n**=21**	**0 (0%)** **1 (53%)** **4 (21%)** **14 (74%)** **n=19**	**p=0.73**	***	
		u^{+} =3.62±0.59	**u = 3.68± 0.58**			
How often do you ask patients about their social needs? (Primary Care)	**Never (1)** **Rarely (2)** **Sometimes (3)** **Most of the time (4)** **Always (5)**	**0 (0%)** **0 (0%)** **4 (20%)** **7 (35%)** **10 (50%)** **n=20**	**0 (0%)** **1 (5%)** **2 (11%)** **9 (47%)** **7 (37%)** **n=19**	**p=0.31**	***	
		u=4.29±0.78	**u=4.16±0.83**			
How willing are you to ask patients about their social needs? (Urgent Care)	**Not at all willing (1)** **Somewhat willing (2)** **Willing (3)** **Very willing (4)**	**0 (0%)** **14 (32%)** **24 (55%)** **6 (14%)** **n=44**	**3 (6%)** **20 (37%)** **26 (48%)** **5 (9%)** **n=54**	**p=0.062**	**0 (0%)** **5 (14%)** **15 (41%)** **17 (46%)** **n=37**	
		u=2.82±0.66	**u=2.61±0.74**		**u=3.32±0.71**	
How often do you ask patients about their social needs? (Urgent Care)	**Never (1)** **Rarely (2)** **Sometimes (3)** **Most of the time (4)** **Always (5)**	**0 (0%)** **11 (25%)** **26 (59%)** **7 (16%)** **0 (0%)** **n=44**	**2 (4%)** **16 (30%)** **32 (59%)** **4 (7.4%)** **0 (0%)** **n=54**	**p=0.062**	**0 (0%)** **9 (33%)** **16 (59%)** *** **2 (8%)** **n=27**	
		u=2.91±0.64	**u=2.70±0.66**		**u=2.81±0.79**	
How confident are you in your ability to address social needs?	**Not at all confident (1)** **Somewhat confident (2)** **Confident (3)** **Very confident (4)**	**10 (21%)** **28 (60%)** **9 (19%)** **1 (2%)** **n=47**	**11 (20%)** **35 (63%)** **9 (16%)** **1 (2%)** **n=56**	**p=0.44**	**6 (12%)** **23 (47%)** **12 (24%)** **8 (16%)** **n=49**	
		u=2.02±0.70	**u=2.00±0.66**		**u=2.45±0.91**	
How knowledgeable are you about how to link your patients to resources to address their social needs?	**Not at all knowledgeable (1)** **Somewhat knowledgeable (2)** **Knowledgeable (3)** **Very knowledgeable (4)**	**8 (17%)** **31 (66%)** **8 (17%)** **1 (2%)** **n=47**	**11 (20%)** **31 (55%)** **13 (23%)** **0 (0%)** **n=56**	**p=0.48**	**14 (25%)** **28 (49%)** **13 (23%)** **2 (4%)** **n=57**	
		u=2.04±0.65	**u=2.04±0.66**		**u=2.05±0.79**	

How often have you observed that patients get asked about their social needs from other professionals? (Primary Care)	**Never (1)** **Rarely (2)** **Sometimes (3)** **Most of the time (4)** **Always (5)**	**0 (0%)** **5 (25%)** **9 (45%)** **5 (25%)** **2 (10%)** **n=20** **u=3.19±0.93**	**0 (0%)** **1 (5%)** **6 (32%)** **10 (53%)** **2 (11%)** **n=19** **u=3.68±0.75**	**p=0.037***	***	
How often have you observed that patients get asked about their social needs from other professionals? (Urgent Care)	**Never (1)** **Rarely (2)** **Sometimes (3)** **Most of the time (4)** **Always (5)**	**1 (2%)** **15 (34%)** **23 (52%)** **5 (11%)** **0 (0%)** **n=44** **u=2.73±0.69**	**1 (4%)** **19 (35%)** **22 (41%)** **18 (33%)** **0 (0%)** **n=54** **u=2.95±0.83**	**p=0.07**	***	
How confident are you in your clinics capacity to address social needs?	**Not at all confident (1)** **Somewhat confident (2)** **Confident (3)** **Very confident (4)**	**4 (9%)** **14 (30%)** **24 (51%)** **6 (13%)** **n=47** **u=2.67±0.89**	**2 (4%)** **30 (54%)** **21 (38%)** **3 (5%)** **n=56** **u=2.45±0.66**	**p=0.07**	***	
I often feel burned out by my work.	**Strongly Disagree (1)** **Disagree (2)** **Somewhat Disagree (2.5)** **Undecided/neutral (3)** **Somewhat Agree (3.5)** **Agree (4)** **Strongly Agree (5)**	**4 (9%)** **9 (19%)** **8 (17%)** ***** ***** **18 (38%)** **9 (19%)** **n=47** **u=3.40±1.23**	**0 (0%)** **9 (16%)** **16 (29%)** ***** ***** **24 (43%)** **7 (13%)** **n=56** **u=3.52±0.91**	**p=0.29**	**3 (9%)** **6 (18%)** **6 (18%)** **3 (9%)** **5 (15%)** **4 (12%)** **6 (18%)** **n=33** **u=3.11±1.23**	
How likely are you to go into and/or continue to work in primary care practice?	**Not at all likely (1)** **Somewhat likely (2)** **Likely (3)** **Very Likely (4)**	**14 (33%)** **14 (33%)** **3 (7%)** **12 (28%)** **n=43** **u=2.30±1.21**	**22 (45%)** **8 (16%)** **5 (10%)** **14 (29%)** **n=49** **u=2.22±1.30**	**p=0.38**		

*= statistical significant p value **= sample size += mean of sample ***=not included in site survey

Statistically, the T-test was significant for the question of “How often have you observed that patients get asked about their social needs from other professionals? (Primary Care),” which had a p value of 0.037 and a difference in mean between the two populations 3.19 before intervention compared to 3.68 post intervention on a likert scale from 1-5 ranging from never to always. Effect size was calculated as 0.58. There was also a trend, although it did not reach statistical significance, of increased willingness to ask in primary care (effect size 0.1) and increased observation of patients getting asked about social needs from other professionals in urgent care (effect size 0.29). A matched analysis was attempted between 20 individuals identified as completing both the pre-and post analysis. However, paired T test failed to identify statistically significant differences between pairs before and after the intervention [included excel document has data for matched analysis of above questions]

Discussion/Conclusion

[The discussion/conclusion section is awaiting completion of further data analysis from CHO post intervention. Sub-group analysis of the SFGH population has demonstrated statistical significance for increased frequency of asking about social needs from other professionals in primary care. Limitations on this study so far include small sample size n=59 (pre-survey) and n=71 (post-survey). Including analysis from CHO would likely double the sample size since pre-survey data includes a sample of n= 57. Discussion of themes that emerge from combined data await this further aspect of data analysis]

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