



Social Determinants of Health

PROGRAM EVALUATION

Claire Cain
INDEPENDENT CONSULTANT

AUGUST 2019

A. Introduction

In December 2016, RCHC expanded its Population Health Program to include a robust, coalition-wide Social Determinants of Health (SDH) Program. The purpose of this program was to develop and implement a systematized approach for assessing and addressing patient's social needs, with the long-term goal of reducing health disparities and improving clinical and social outcomes.

Thank you to the following funders for supporting RCHC's SDH Program: County Medical Services Program, HRSA Health Center Controlled Network*, The California Endowment, Kaiser Permanente Community Benefits Program, Well-Being Trust, National Association of Community Health Centers, UCSF California Improvement Network, and the Robert Wood Johnson Foundation.

In June of 2019, Redwood Community Health Coalition (RCHC) hired an independent evaluator to evaluate this program. Member health centers, hospitals, and partner social service organizations were invited to complete surveys related to the following key program areas:

1. Participation in the *Social Determinants of Health/Health Equity Workgroup*;
2. Implementation of a standardized social needs screening questionnaire (called the PRAPARE Tool); and
3. Adoption of [NorCal Resources](#), an online community resource directory and referral system powered by the vendor Aunt Bertha.

The purpose of collecting this data was to better understand program components, examine progress to date, and explore gaps and opportunities for future improvement activities. When possible, self-reported survey data was validated with electronic medical records data from RCHC's aggregate analytics platform (called Relevant). In addition to reviewing survey data, the evaluator analyzed data community resource directory and referral data available in the NorCal Resources Analytics Dashboard.

*This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number H2QCS30258, Health Center Controlled Networks, for \$1,500,000. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

B. Overview of Key Program Components

The matrix below provides an overview of the three core components of RCHC’s SDH Program:

Table 1. Key Program Components

KEY COMPONENT	DESCRIPTION	PARTICIPANTS
SDH Workgroup/Health Equity Workgroup	<ul style="list-style-type: none"> • Bimonthly SDH Workgroup meetings serve as a forum for peer-to-peer learning, trainings, and T/A opportunities related to SDH activities. • The SDH Workgroup serves as the “leadership body” for determining next steps for the SDH Program. • In December 2018, the workgroup was broadened to include non-health center partners with a focus on health equity. 	<ul style="list-style-type: none"> • Member health centers, local hospitals, and community-based social service organizations
PRAPARE (Protocol for Responding to and Assessing Patients’ Assets, Risks, & Experiences)	<ul style="list-style-type: none"> • The PRAPARE tool is a standardized, validated questionnaire for assessing patients’ social needs in the community health center setting. • More information and a copy of the tool are available here. 	<ul style="list-style-type: none"> • Member health centers
Aunt Bertha & NorCal Resources	<ul style="list-style-type: none"> • In 2018, RCHC partnered with the vendor Aunt Bertha to create and deploy an online community resource directory and referral system (named NorCal Resources) throughout Marin, Napa, Sonoma & Yolo counties. • Organizations can use this platform to refer patients/clients to the appropriate social service provider. The platform allows users to collect data on which social service programs have been searched the most and how many referrals are made. • Community-based organizations (CBOs) can "claim" their listing and confirm the information listed is accurate and up to date. They can upload program forms and "close the loop" on referrals to indicate to the referring organization whether the referral is in progress, on hold, or completed. 	<ul style="list-style-type: none"> • Member health centers, local hospitals, and community-based social service organizations

C. Social Determinant of Health/Health Equity Workgroup

RCHC's SDH Program kicked off in late-2016 with an inaugural meeting of the SDH/Health Equity Workgroup. All health centers were invited to send a "SDH Champion" to this meeting to provide input around shared health center priorities. During the first year of workgroup meetings health centers selected the PRAPARE tool as their standard social needs screening tool and conducted an in-depth 6-month assessment of five different web-based community resource and referral platforms (leading to selection of and contracting with the Aunt Bertha team in 2018).

Over the years, the SDH Workgroup has evolved to include community hospitals and local social service organizations in addition to health center members. As a part of this evaluation a subset of SDH Workgroup participants were surveyed to better understand barriers to workgroup participation, key areas of focus, and how this workgroup could be more successful in the future.

Attendance

12 individuals responded to the survey, representing a total of 9 health centers and one local hospital (two organizations had multiple staff members respond). 58% of respondents had attended half or more than half of the SDH Workgroup meetings in the past year, with 42% of respondents attending less than half of all meetings. Of those who attended less than half of all meetings, nearly all of them indicated that the meetings were held on a day/time that was inconvenient for them.

When asked about preferred meeting times, one individual had a preference for meeting on Mondays or Fridays, two preferred to meet on Thursdays, and another individual remarked that it would simply be best if this group convened at the very start or end of the workday so it would be easier for those who commute. We recommend bringing this feedback to the SDH Workgroup and polling members regarding the best meeting time and meeting format moving forward. Those who regularly attended the meetings unanimously concurred that the length and frequency of the meetings was appropriate.

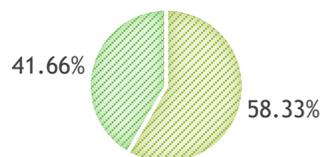
Buy-In

All survey respondents indicated that workgroup topic areas (e.g. health equity, social needs screening and referrals, etc.) were a priority for their organization's leadership team. Despite this consensus, leadership buy-in may not have had the desired trickle-down effect to frontline staff. At least one survey respondent from a local hospital indicated they had not fully "bought in" to the idea of assessing and addressing patients' social needs in the medical setting and questioned the workgroup's role in this area.

As the SDH Workgroup membership continues to expand, the team at RCHC may consider disseminating a "Readiness Assessment" to new members. The "Readiness Assessment" would allow organizations to determine their "level of readiness" for participating in workgroup activities (such as pilot testing

CHART 1. SDH WORKGROUP ATTENDANCE (JULY 2018-JULY 2019)

- I have attended 50% or more workgroup meetings
- I have attended less than half of all workgroup meetings

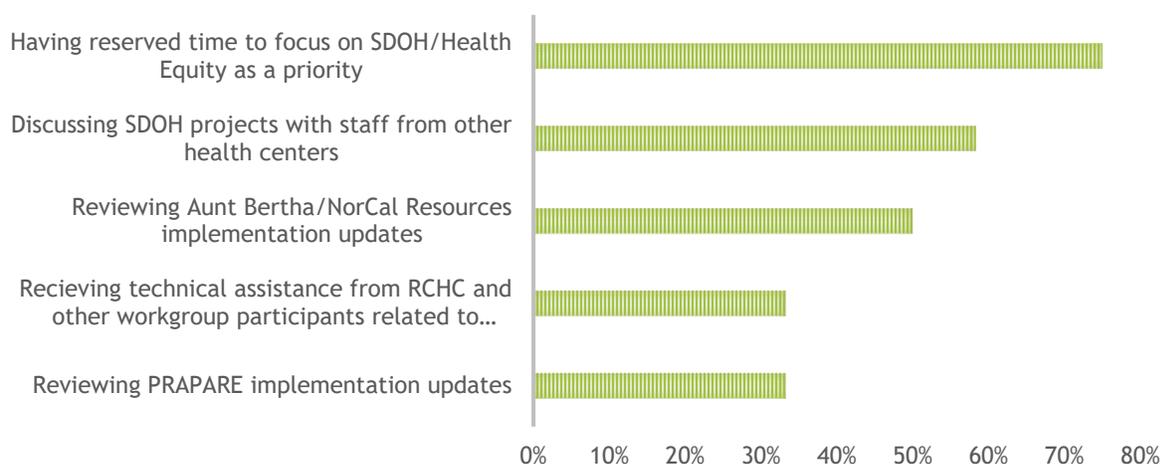


PRAPARE or utilizing NorCal Resources) prior to joining the workgroup. By helping each organization internally assess what functions they need to strengthen (which may include staff buy-in, capacity, etc.) prior to participation, RCHC can ensure workgroup meetings continue to be effective.

Perceived Value

Respondents were also asked about the most valuable aspects of the SDH Workgroup meetings. As evidenced by the table below¹, the top three “highest value” areas were identified as: having reserved time to focus on SDH, discussing SDH projects with other health centers, and reviewing Aunt Bertha/NorCal Resources updates.

CHART 2. MOST VALUABLE ASPECTS OF SDH WORKGROUP MEETINGS



This information was further validated when respondents were asked to respond to the question: “What do you like most about SDH Workgroup meetings?” Nearly all of those who responded indicated it was most helpful to hear directly from other health centers about their strategies to address patients’ social needs.

Areas of Improvement & Key Activities Moving Forward

Members were also asked how the workgroup could be made more valuable, and which topics should be prioritized at future meetings. Key topic areas are outlined in the table below:

Table 2. Areas of Improvement & Key Activities Moving Forward

AREA	KEY WORKGROUP ACTIVITIES
Meeting Operations	<ul style="list-style-type: none"> Hold workgroup meetings consistently and provide minutes that clearly outline the steps that need to be accomplished before subsequent meetings

¹ Please note, in the chart below items add up to more than one hundred percent as respondents were asked to “check all that apply.”

Peer-to-Peer Learning

Provide examples of how other workgroup members are:

- Implementing SDH work within existing health center programs
- Juggling PRAPARE implementation with other responsibilities
- Conducting follow-up PRAPARE assessments (e.g. conduct once annually, f/u assessment can be self-reported by patient, etc.)
- Responding when a patient screens positive for a resource in limited supply (such as housing)

Technical Assistance

- Offer forums for health centers with the same EHR to meet and discuss their programs and troubleshoot software
- Provide training related to conducting closed loop referrals through NorCal Resources

Data Analysis

- Explore what workgroup members are doing with their PRAPARE and NorCal Resources data
- Discuss how data can be leveraged for grants or used to further improve patient outcomes
- Examine data to determine if PRAPARE/NorCal Resources implementation has led to improvements in clinical and social outcomes

D. Social Needs Assessments: The PRAPARE Tool

One of the initial priorities for RCHC’s Social Determinants of Health Workgroup was determining whether health centers would implement a single, standardized social needs screening tool and, if so, which tool they would use. It was important to the coalition that as health centers expanded their data sharing they would have an “apple to apples” comparison of metrics. Because of this, the workgroup decided to move forward with a single screening tool. Selecting a screening tool was a relatively straightforward process as only a few assessments were publicly available and PRAPARE was the only social needs screening questionnaire that had been built for and validated within the community health center setting.

Pilot Test Results

Pilot tests of the PRAPARE tool began with early adopters in late-2016, and with later adopters as recently as May 2019. As part of this evaluation, participants were surveyed to better understand successes and barriers associated with PRAPARE implementation, the extent to which the PRAPARE tool was being implemented in each organization, and the most prevalent social needs faced by patients.

Out of the 12 health centers that responded to the PRAPARE survey, 10 had already begun implementing or pilot testing the PRAPARE tool. Over 27,000 PRAPARE surveys have been completed since the initial pilot tests took place. During the first half of 2019 alone, over 10,000 PRAPARE questionnaires were completed by health center patients. At least 8 FQHCs have been asking all of the PRAPARE questions (others are asking a subset of these questions).

Most health centers either assess each patients' social needs once a year or conduct smaller pilot tests and assess those patients who meet pilot criteria. However, one health center actually began implementing the PRAPARE tool at every patient visit as they found it was easier to just incorporate it into their existing "Social History" screening.

Diffusion of Innovations

In an effort to better understand PRAPARE uptake and barriers to adoption, we included survey questions informed by Diffusion of Innovations Theory. This theory posits there are five main factors that influence adoption of an innovation, including: relative advantage of the innovation compared to other products, compatibility with the values and needs of the adopter, complexity, trialability, and the ability to quickly observe that the innovation provides positive results.

When asked about using the PRAPARE tool versus other tools, over half (55%) of respondents indicated they found PRAPARE to be more advantageous to community health centers than other social needs assessments. This was followed by 33% of respondents who remained neutral, and 11% of respondents who disagreed. They did not find PRAPARE to be more advantageous than other social needs screenings. This finding was surprising given that PRAPARE remains the only social needs questionnaire on the market specifically developed for use in community health centers. RCHC may consider reaching out to the participants who responded negatively to this question to better understand the alternative screening tools preferred.

Most Prevalent Social Needs

When asked about the most prevalent needs identified through PRAPARE screenings, the top three reported needs were:

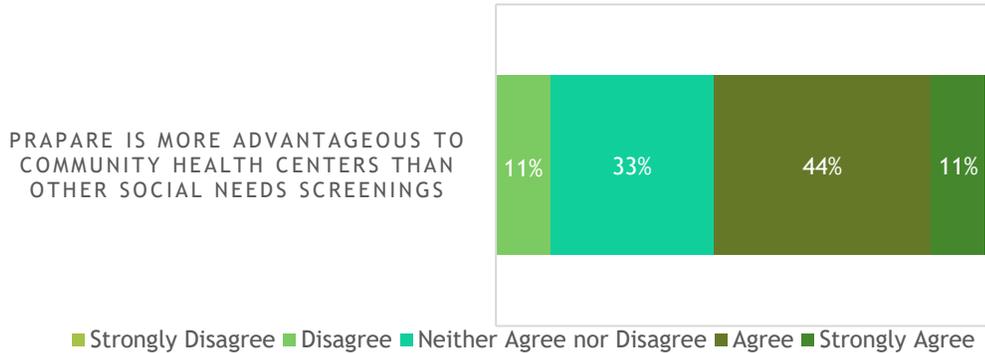
- 1) Transportation
- 2) Food
- 3) Housing

RCHC may consider developing targeted partnerships with community-based organizations working in these areas.





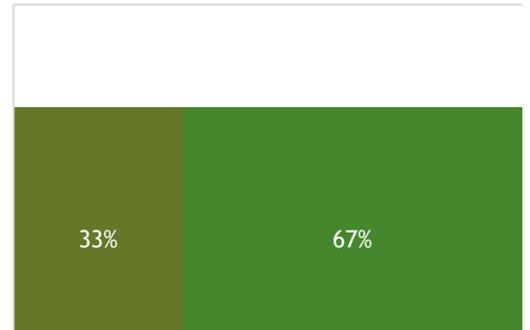
CHART 3. RELATIVE ADVANTAGE OF PRAPARE TOOL



When asked about compatibility with organizational values and needs, 100% of participants agreed or strongly agreed that incorporating social needs screening into their workflows aligned with their organizations' values, history, and future priorities.

CHART 4. COMPATABILITY WITH ORGANIZATIONAL VALUES AND PRIORITIES

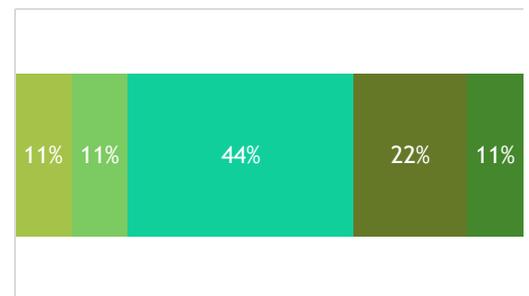
INCORPORATING SOCIAL NEEDS SCREENINGS INTO OUR WORKFLOWS ALIGNS WITH OUR HEALTH CENTERS VALUES, HISTORY, AND FUTURE NEEDS



There was greater variability in participant responses to complexity of PRAPARE implementation. Only 33% of respondents agreed or strongly agreed that training staff and implementing the PRAPARE tool had been a relatively simple process. While 44% of respondents remained neutral, nearly a quarter of respondents disagreed or strongly disagreed with this statement, indicating the implementation process had been more complex and/or challenging for them. RCHC may consider diving deeper into this data to collect and document implementation best practices from those who found the implementation process to be fairly simple so these best practices can be disseminated to others.

CHART 5. COMPLEXITY OF IMPLEMENTATION

TRAINING STAFF AND IMPLEMENTING THE PRAPARE TOOL HAS BEEN A RELATIVELY SIMPLE PROCESS

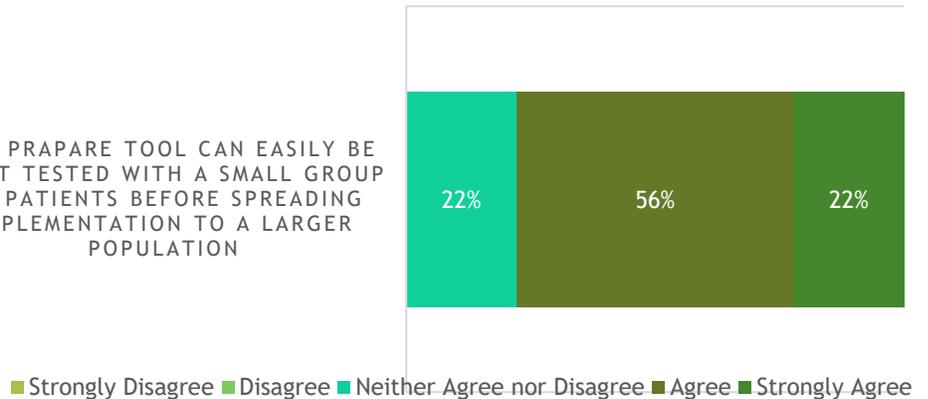


■ Strongly Disagree ■ Disagree ■ Neither Agree nor Disagree ■ Agree ■ Strongly Agree

An overwhelming majority of participants (78%) found that the PRAPARE tool could be easily pilot tested with a small group of patients prior to spreading implementation to a larger population. Although 22% of respondents remained neutral on this statement, there was absolutely zero disagreement.

CHART 6. TRIALABILITY AND PILOT TESTING

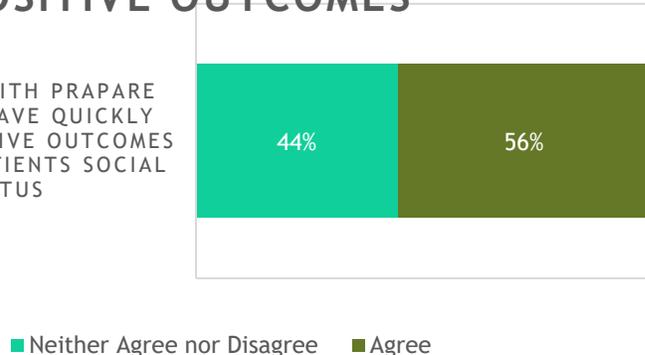
THE PRAPARE TOOL CAN EASILY BE PILOT TESTED WITH A SMALL GROUP OF PATIENTS BEFORE SPREADING IMPLEMENTATION TO A LARGER POPULATION



A total of 56% of respondents agreed that those assisting with PRAPARE implementation were able to quickly observe the positive outcomes from assessing patients’ social needs status. The remaining 44% remained neutral on the subject. One potential reason for the neutral response may be concerns related to the ability to actually address reported social needs. We found that nearly half of all respondents were “rarely confident” that they could provide a referral to the appropriate social service organization when a patient had a positive screening. This may be addressed by building a more robust community resource directory and referral system through Aunt Bertha’s [NorCal Resources](#) website.

CHART 7. OBSERVATION OF POSITIVE OUTCOMES

THOSE ASSISTING WITH PRAPARE IMPLEMENTATION HAVE QUICKLY OBSERVED THE POSITIVE OUTCOMES FROM ASSESSING PATIENTS SOCIAL NEEDS STATUS



Areas of Improvement & Key Activities Moving Forward

When asked about areas of improvement and key activities moving forward, respondents confirmed that determining the workflow logistics of how to actually implement the PRAPARE tool was the greatest barrier they faced. Respondents indicated that implementing the PRAPARE tool during the

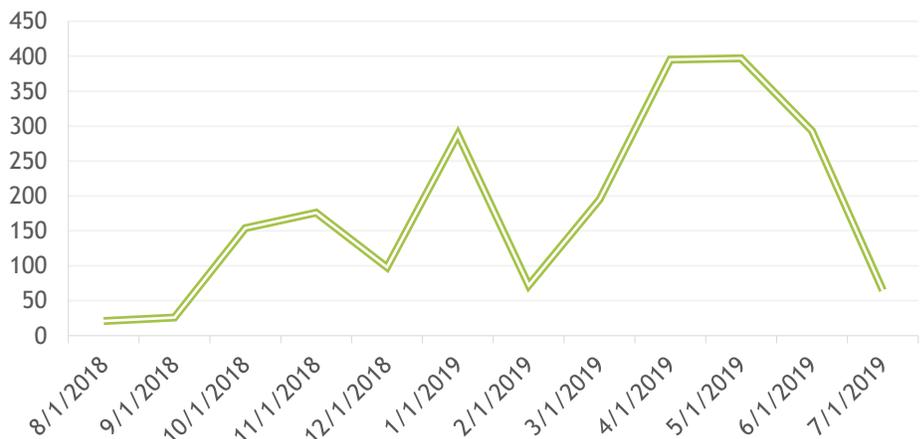
limited time of a patient visit was challenging. Staff turnover and the capacity of existing staff to assist with PRAPARE implementation were also noted as challenges.

It is suggested that RCHC reserve time at every or every other workgroup meeting for health centers to share implementation best practices, staffing, and workflows. RCHC may also consider identifying and sharing promising practices related to disseminating the PRAPARE tool as a “self-assessment” for patients to complete as they are sitting in the waiting room. Allowing patients to complete the PRAPARE tool on their own would give staff more time to review and address each patient’s social needs.

E. Social Services & Referrals: NorCal Resources

In addition to implementing a standardized process for collecting social needs data, health centers requested a structured process for addressing social needs once a need was identified. The SDH Workgroup elected to partner with a vendor to create a web-based community resource directory and referral system. During a 6-month period spanning part of 2017/2018, RCHC and a group of health center collaborators conducted a detailed assessment of community resource directory and referral platforms. This ultimately led to a partnership with the vendor Aunt Bertha, who created RCHC’s community resource directory and referral system: [NorCal Resources](#).

CHART 8. COUNT OF SEARCHES BY MONTH



NorCal Resources community resource directory launched in Sonoma County in fall of 2018, and has spread across Marin, Napa, and Yolo counties over the past year. As a part of this evaluation, NorCal Resources users—from both health centers and community-based organizations (CBOs)—were invited to participate in a survey about adoption and implementation of the platform.

Pilot Test Results

Over the past year (July 2018-July 2019), 143 organizations have claimed a total of 300 programs on the NorCal Resources website. “Claiming” a program signifies that the organization has verified the listing information is accurate. Once a program is claimed, organizations then have the opportunity to upload program forms, eligibility requirements, etc., to their listing.

On average, over 181 searches have been conducted on the NorCal Resources platform each month. Over the past year, 115 NorCal Resources users have made a total of 134 referrals.

The three most common search categories are food, housing, and health care. However, food programs and housing programs each only account for 6% of the programs listed in RCHC’s service area, while health care accounts for 20% of all services listed.

RCHC and the Aunt Bertha team may consider targeted outreach to service organizations that are regularly searched, but contain few listings in the resource directory (such as food and housing programs).

Training and T/A

Eight individuals from healthcare organizations responded to the survey, representing a hospital and six community health centers. All respondent organizations had staff participate in a NorCal Resources

CHART 9. COUNT OF SEARCHES BY CATEGORY

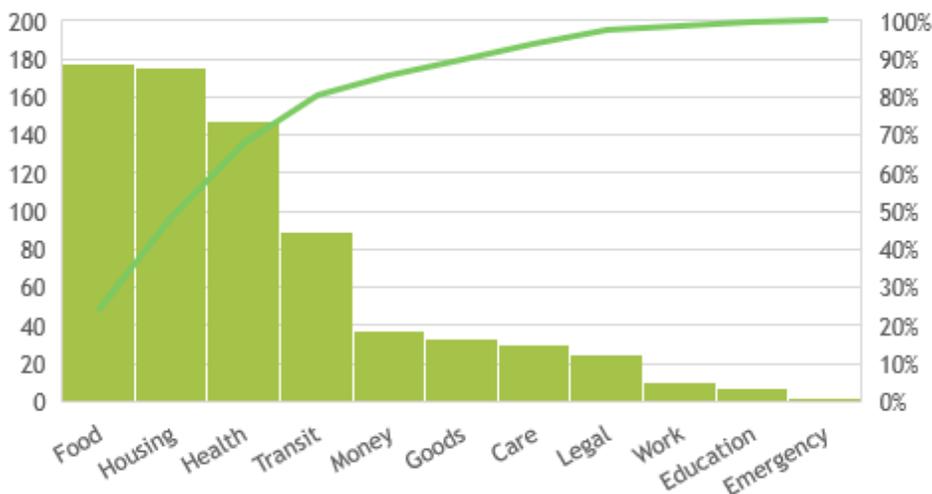
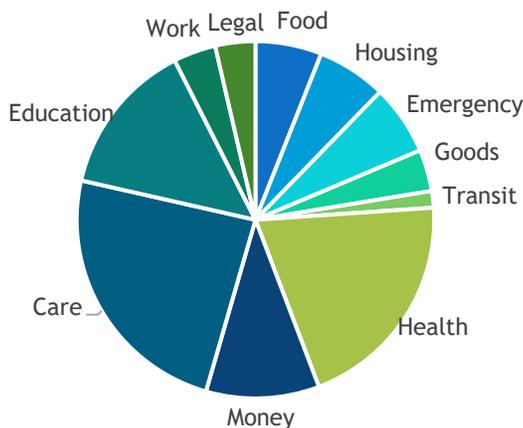


CHART 10. PROGRAMS AVAILABLE IN RCHC'S SERVICE AREA



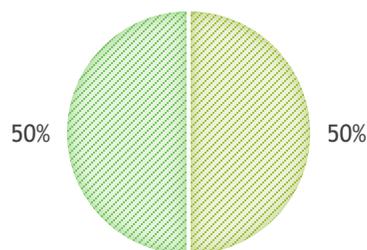
demo or training, with anywhere between 1 – 20 staff members trained at each organization. The majority of respondents found the training to be “average,” sharing that there had been some technical issues with the webinar trainings provided. However, one health center indicated the training provided by RCHC was greatly appreciated, as their internal trainings were not sufficient for staff to have all their questions answered. Participants requested that RCHC provide one-on-one trainings on site at each health center, and provide additional technical assistance related to closed-loop referrals as CBO engagement increases.

Level of Utilization and Adoption

Healthcare organizations were split regarding the extent to which they had adopted the NorCal Resources platform. Although all participants were aware of and using the platform, only half indicated that they had used the platform to review their own programs or identify social service programs that may benefit their patients. The other half of respondents were just beginning to explore the NorCal Resources website.

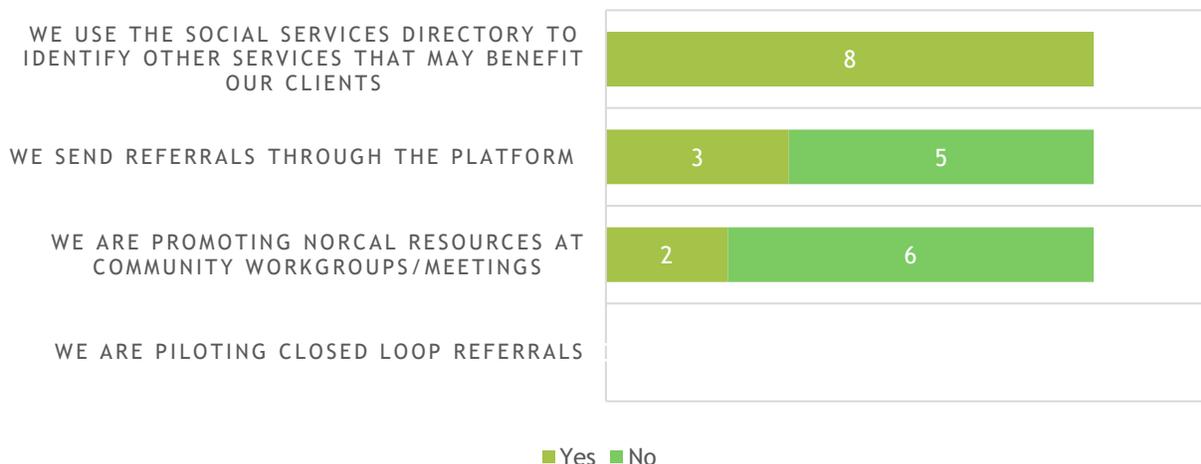
CHART 11. STAFF UTILIZATION OF NORCAL RESOURCES

- At least one staff member has used the platform to review their own programs, or identify social service programs that may benefit their patients
- We have just started to explore the NorCal Resources Website



However, as evidenced by the chart below, 100% of respondents also reported that they were utilizing the NorCal Resources platform to identify other services that may be of benefit to their clients. Nearly 40% of respondents had been sending social service referrals through the platform (either by printing, texting, or emailing information from the social service directory), and 25% of respondents were promoting use of the resource directory at community meetings. Currently, no respondents have completed a closed-loop referral (whereby a social service agency notifies that healthcare agency that the patient has completed the referral). Participants were

CHART 12. ADOPTION OF NORCAL RESOURCES



greatly interested in learning more about closed-loop referrals and how these could be conducted more frequently in the future.

Diffusion of Innovations Theory

In an effort to better understand NorCal Resources uptake and barriers to adoption, we included survey questions informed by Diffusion of Innovations Theory (similar to those discussed on pg. 5). NorCal Resources scored highly on questions related to compatibility, complexity/ease of implementation, and trialability. All survey respondents from healthcare organizations agreed or strongly agreed to the following:

- NorCal Resources is compatible with our organization's values, past experiences, and current needs;
- NorCal Resources is easy to understand and implement; and
- NorCal Resources can be easily pilot tested prior to investing the time/energy/resources for full implementation across an organization.

Respondents were more conflicted in regards to whether the NorCal Resources/Aunt Bertha product was more advantageous than other similar platforms (50% remained neutral on this topic while 17% found the NorCal Resources/Aunt Bertha product less advantageous than other platforms). Although 67% of participating organizations were able to quickly observe positive outcomes from use of this platform, 33% of respondents indicated they were neutral on the topic.

Areas of Improvement & Key Activities Moving Forward

The majority of healthcare organizations shared that social service listings (including location, hours of operation, contact information, etc.) were “usually reliable,” with one health center reporting that they found listings were “rarely reliable.” Another health center elaborated that a significant number of community resources were missing from the NorCal Resources platform. When the health center attempted to upload a number of new listings to the platform, the Aunt Bertha IT team required a full month to review and validate these programs before they could be posted online.

Health centers also remarked that the process for staff to create a new username/login can be burdensome. When creating a new NorCal Resources login the user receives a confirmation weblink that expires after 24 hours. This is a significant barrier for patient-facing staff as they often have to see patients and cannot immediately check their email to click on the confirmation link.

Logging on to another system has also proved challenging and time consuming for staff. Many survey participants are interested in learning more about how to utilize single sign on to bypass logging into “yet another system.”

Willingness to Change Platforms

RCHC is aware of similar pilot projects that local hospitals and health care systems have embarked on (for example, Sutter is utilizing Aunt Bertha and Kaiser has contracted with UniteUs to develop a community resource directory and referral system). We asked survey participants whether they would be interested in collaborating on either of these projects in the future. One respondent wrote:

It's very crucial that the different health systems of our community try to promote the adoption of a single community wide platform.

Others agreed, with over 80% of respondents claiming it would be beneficial for the community to utilize one single community resource directory/referral system. Nearly 60% of survey participants indicated they would be willing to change vendors/platforms if all of the local hospitals, health care systems, and social service partners agreed to collaborate using the same social service directory and referral platform, the 40% who did not agree indicated they were “neutral” on this topic. However, it should be noted that 38% of respondents also indicated that changing platforms would require significant staff training and would be burdensome to take on.

Community Feedback

Community-based social service organizations were also asked to provide feedback about NorCal Resources. Most notably, all respondents indicated the need for a single streamlined social service directory and referral system in the community.

“I believe it is important in both Sonoma and Marin to have a single referral platform that is well maintained if we are going to be successful building a strong clinical-community partnership in caring for patients.”

An overview of the feedback provided by five community-based organization is available in Table 3. below.

Table 3. Key Priorities of CBOs

AREA	OPPORTUNITY FOR IMPROVEMENT
Competing platforms	<ul style="list-style-type: none"> • Eliminate competition between multiple platforms by selecting one single resource/directory referral platform to move forward with as a community. • 100% of CBOs indicated that they would be willing to change to one community-wide platform. • The majority of CBOs indicated reported that training staff on a new platform would not be overly burdensome.
Training and Technical Assistance	<ul style="list-style-type: none"> • All participants indicated that the training provided thus far was “average” or “above average.” • CBOs would like regularly scheduled follow-up trainings (perhaps quarterly?) to ensure NorCal Resources doesn’t “fall off their radar.”
Marketing	<ul style="list-style-type: none"> • CBOs indicated that marketing of the NorCal Resources website should be a greater priority for RCHC to ensure both CBOs and community members are aware of its existence.

