# Using Social Determinants Data & New Technology Tools to Connect with Appropriate Community Resources: *We asked the questions, now what?*

**October 2018**

The collection of data related to patients' non-medical needs through use of Social Determinant of Health (SDoH) assessment tools (e.g., NACHC's PRAPARE, AAFP's The EveryONE Project), can accelerate systemic population health improvement, as well as engage patients in addressing their social non-medical needs (such as transportation, shelter, intimate partner violence services, or access to healthy food) through coordinated access to appropriate services.

According to a 2017 American Academy of Family Physicians (AAFP) survey, 83% of respondents agreed that family physicians should identify and help with social determinants of health. Research from Kaiser Permanente suggests that, of those patients screened for social determinants of health, approximately two-thirds needed some services. PRAPARE pilot data from participating health centers identified housing, utilities, and food as the most frequently identified needs.

Unfortunately, 80% of the family physicians surveyed by AAFP responded that they don't have time to discuss social determinants of health with patients and more than half feel unable to provide their patients with solutions. So, tools are needed to help providers meet these newly identified needs, with existing resources.

## Using standardized social determinant of health data can improve overall care:

At an **individual** level both providers/ care teams and patient/ family/ care-givers empowered to improve health and well-being through targeted community/ social supports.

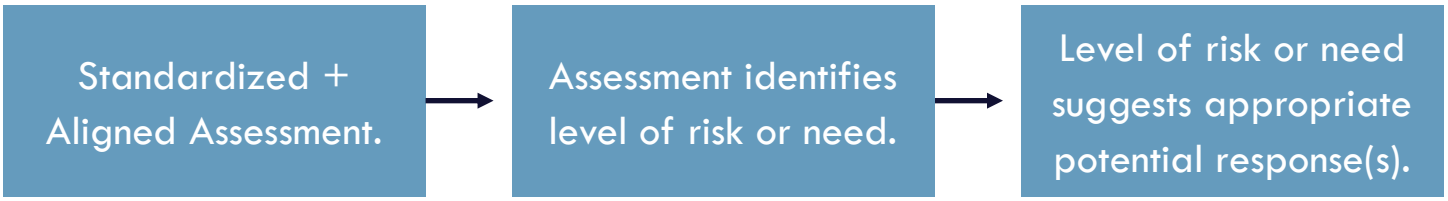
At an **organizational** level, the health center is able to optimize care teams and services to delivered patient and community-centered care.

At a **system** level, integrated care is made possible by cross-sector partnerships that minimize both gaps and duplication in services, as well as increasing focus on data-driven prevention and advocacy.

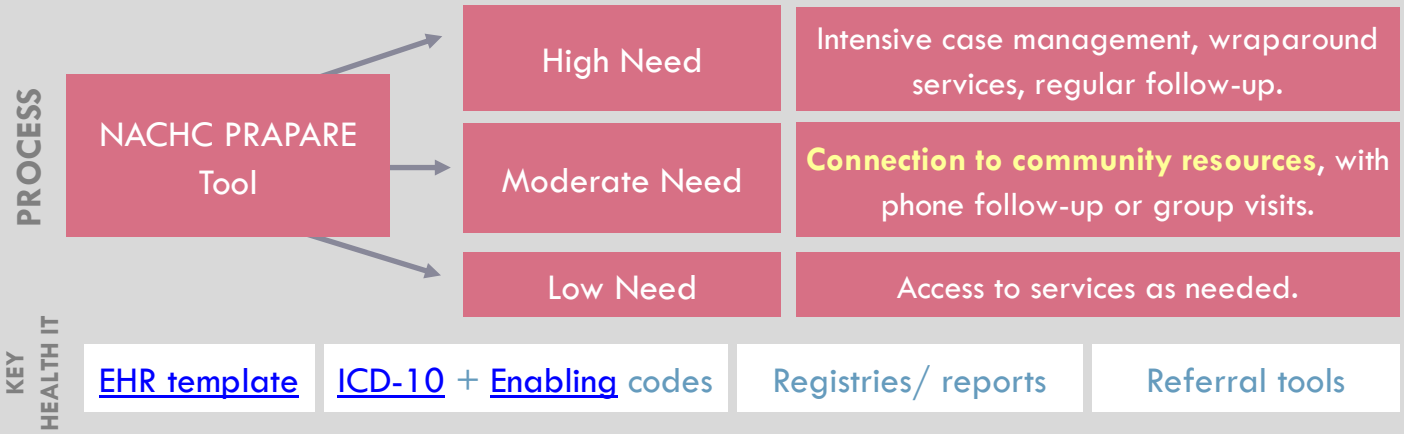
Source: Assessing and Addressing the Social Determinants of Health Using PRAPARE, A Presentation for Kansas Association of the Underserved. 2018.

Assess Needs → Respond to Needs

Much like other screenings that are embedded in the regular workflow and used to assess the risk or severity of the patient's condition, such as the PHQ-9, Social Determinants of Health assessment tools like PRAPARE are designed to operate similarly:




**Example:**




In this resource, we focus on what technology tools exist to address social non-medical needs identified through screening. For those patients with high need, the standard response is likely to be health center-based and intensive. For example, patients with high need may be provided with 1) intensive case management, social workers, and referral coordinators; 2) direct assistance with connecting to resources; 3) follow up with external providers; and 4) regular in-person follow-up visits. This is likely to take up the majority of available staff capacity.

However, gathering social determinants of health information may also point to other needs among patients with more moderate needs or in a broader array of areas (such as paying utilities or legal services). Given staff capacity and resource limitations, as well as patient preferences, those patients may require another way to be connected with appropriate community resources. It is important that any approaches used allow for tracking and follow-up, as well as providing information about community resource service capacity.

**The tools profiled on the following pages support this process by facilitating connection with community resources and needed follow-up, partially answering the question *We collected social determinant of health data, now what do we do?***

Identifying level of risk or need among patients screened for social determinants of health in order to strategize responses is generally done with 'risk scoring':

- **SDoH only:** A health center could assign 1 point per social determinant of health identified.
- **Multiple sources:** A health center could assign points based on number of chronic conditions, medications, ED visits in the last 12 months, and SDoH, as discussed in this HITEQ population health presentation.

Whatever approach is taken, it is important to look at the distribution of risk scores/ need levels across the patient population to ensure you can respond and that reasonable proportions identified as high, moderate, and low. Note that Care Management Competency A in PCMH 2017 is concerned with this.

# Aunt Bertha www.AuntBertha.com

Aunt Bertha is a search engine software platform that connects people to government and charitable social service programs, making the process more easily accessible. The website aggregates data, compiling information on all social services in a zip code into service categories, simplifying the process of finding and applying for these available community resources. The content is reviewed and confirmed at least every six months. Data is regularly and frequently updated, using software to trigger alerts if public or online information has changed, which is then reviewed by human staff. Aunt Bertha is both a free public search engine and a platform/partnership with organizations.

**Public Search Engine (free)**

- Aggregates data by geography with accurate and up-to-date listings. The search engine provides 10 categories of services (food, housing, goods, transit, health, money, care, education, work, legal), with many subcategories within each.
- Search engine provides direct access to needed services in a less stigmatizing manner. Features include:
  1. Search filter based on personal characteristics, programs, or income eligibility.
  2. Offered in 100+ languages via dropdown immediately below search bar.
  3. Application process digitized for agencies, offering integrated application forms on the platform.

**Partnership Platform (subscription):**

- Health center-branded Aunt Bertha site that includes both a staff-facing platform (to search, track and manage patient data) as well as a community/patient-facing platform to help patients find individualized services based on specific needs.
- Provides community and population data for analysis. Data measures include zip codes, resources searched and clicked on, referral and follow-up data.
- Information sharing platform internally among staff to avoid duplication of effort and to promote internal communication.
- Closed-loop referrals with community partners.
- Ability to integrate with certain EHRs at health centers. Integration includes a single sign-in integration feature to ease staff utilization of the platform.

**How can Health Centers use Aunt Bertha?**

Health centers can use Aunt Bertha as a way to connect and refer patients to social non-medical services and resources. The platform can be utilized to improve care coordination, care management, and quality of care for patients, promoting resources beyond the health system to improve care. The platform serves as a resource for both providers and patients, giving patients and/or the agency access to the services they need, offering the following components:

| | | |
|---|---|---|
| Connect patients to resources. | Make closed-loop referrals, where either the health center or the community organization that received the referral can mark that referral as complete. | Track impact using data through Aunt Bertha's existing reports. Tailored or ad hoc reports may be available at additional cost. |

**Case study of California Primary Care Association and Aunt Bertha**

Aunt Bertha ran a pilot in Central Valley, setting up an 8-month learning collaborative with clinics in the Central Valley Health Network Consortia. This Transportation Learning Cohort focused on setting up websites for the clinics to identify transportation resources for their patients. Aunt Bertha set up health center-branded sites for participating clinics, and then initially populated resources for the clinic's site; clinic staff could add resources as needed.

**Lessons Learned:**

- Aunt Bertha is a tool that facilitates referrals but is *not* a case management resource. However, using the platform can provide clinics with data about status of referral and follow-up, which can be helpful for case management.
- Aunt Bertha websites ended up mainly used by care coordinators and staff, but were also available to patients.
- Size of clinics and availability of surrounding resources are important considerations in adopting the Aunt Bertha Platform. It may be more useful in areas where many similar social services/resources exist (such as urban areas).
- Capacity of community services are generally not relayed in Aunt Bertha listings (e.g., there may be shelters in the area, but whether beds are available remains unknown unless that community service is actively updating their listing).
- There may be challenges in sharing data and patient information with referral organizations.
- Staff behavior change can be a challenge in implementing a new software/tool, including integrating into workflows.
- Data is easily accessible, but analyzing requires more capacity. Data analysis assistance available at additional cost.

**Other PRAPARE and Aunt Bertha Case Study:** PRAPARE Assessment Project: Lone Star Circle of Care

# 2-1-1 www.211.org

2-1-1 is a public-facing service, run by United Way and available in every state, that connects people to local resources and assistance. 2-1-1 does not generally provide an integrated platform for health centers, but rather, provides free assistance in finding needed resources via website, phone, text, web chat, and email 24/7 to anyone in need, with translation available. 2-1-1 databases generally include details about hours of operation, cost, and transportation options.

**How can Health Centers use 2-1-1?**

Some local cross-sector groups have collaborated with 2-1-1 to create shared databases or homegrown tools for closed loop referrals, as discussed in the example below. Also, some states have databases with searchable web portals that identify community resources in a given zip code, such as 211texas.org,which can be linked from the health center website, as CommUnityCare in Austin has done. And, of course, patients can call or access 2-1-1 themselves!

**Case Study of 2-1-1 San Diego's Community Information Exchange**

San Diego 2-1-1, social service organizations, health centers, and Emergency Medical Services teamed up to create a Community Information Exchange (CIE). The CIE is a secure, interactive database, initially supported by grant funding, that allows multiple providers to access a patient record, track patient interaction with health and social service systems, and facilitate cross-sector care coordination.

**Challenges that May Arise in Similar Implementation:**

- Many data systems must be meaningfully combined. For example, the San Diego 2-1-1 CIE connects the Homeless Management Information System, local food banks and meal programs, healthcare services documented in participating EHRs, Emergency Medical Service systems, health plans, and some criminal justice data, including booking notifications.
- Participating organizations are likely to require different levels of involvement. Some may be willing and able to send and receive referrals and share data directly via information exchange; some may need database logins or similar functionality to update referrals manually.
- Consider the workflow and necessary outcomes of participating organizations. 2-1-1 San Diego uses the Risk Rating Scale and a Social Determinant of Health Risk Rating Continuum.
- Privacy and security is of utmost importance when creating a large scale data sharing system, particularly given that a database of this sort is likely to have historical medical and social needs, records of referral, and even health information if EHRs are directly connected. All participants must be trained, knowledgeable, and dedicated to privacy.

"While the CIE's first use case was focused on an extremely vulnerable homeless population, the broader vision of the CIE was to create a mechanism for health care providers to better understand the full picture of health and social service utilization for all patients. In 2016, the CIE merged with 2-1-1 San Diego in order to leverage 2-1-1 San Diego's numerous community connections and larger footprint. In 2017, the CIE transitioned to the Salesforce information technology platform, which significantly expanded the capacity for bi-directional referrals, shared understanding of patient social risk using the Risk Rating Scale, and integration of data from multiple community sources."

**Lessons Learned:**

- **Leveraging Existing Relationships:** A history of community engagement, commitment to providing efficient access to appropriate services for those in need, and using information to inform community planning are all keys to success.
- **Early Champions:** Early champions of the CIE helped elevate the importance of tracking SDoH, as well as population health and value-based initiatives, and the importance of investing in shared community resources and systems.
- **Business Case:** Demonstrating a compelling business case to partners was critical in gaining buy-in and support for the CIE. Positive results from an initial pilot in the housing community helped demonstrate the effectiveness of the CIE in reducing EMS visits and homelessness. To gain further buy-in, seek to demonstrate the efficacy of the CIE in reducing readmissions/unnecessary utilization, and improved outcomes, particularly for high-need, high-cost patients.
- **Provider Buy-in:** Making the case to clinicians to identify SDoH and make needed referrals is important but challenging. Both individual and group meetings were used to convey vision, shared utility, and promising results. However, screening may be seen as "one more thing", particularly in urgent care settings, leading it to be sometimes neglected.
- Cross-sector data sharing is particularly relevant to individuals with complex health and social needs who often cycle through various systems such as healthcare, social services, and criminal justice, where cross-sector communication or coordination currently doesn't exist and is needed.

**Learn more about 2-1-1 San Diego's Community Information Exchange services and outcomes today.**

# Other Tools

## Other Tools to Connect Patients to Needed Community Resources and Services

NowPow, uses an ePerscribing model (Health**Rx**) with closed loop referral functionality for social services and supports. It has a 'nudge' feature, which allows staff to send text or email messages populated with appropriate service information in the appropriate language. NowPow also offers tracking of patient engagements, allowing all appropriate team members to stay in the loop. NowPow grew out of CommunityRx work from the University of Chicago, and has been piloted by the Alliance of Chicago, an HCCN.

The EveryONE Project™ Advancing health equity in every community

neighborhood navigator

The EveryONE Project Neighborhood Navigator, from the American Academy of Family Physicians, provides the next step for improving social determinants of health among patients, and is a companion tool to the EveryONE Project that includes screening tools and resources to advance health equity. The Neighborhood Navigator has a public-facing search engine powered by Aunt Bertha.

Health Leads enables healthcare providers to prescribe basic resources like food and heat/ utilities just as they do medication and refer patients to HealthLeads just as they do any other specialty. HealthLeads recruits and trains college students to be Health Leads Advocates, who then "fill" these prescriptions by working side by side with patients to connect them with the basic resources they need to be healthy. Health Leads Reach, is Health Leads' cloud-based tool that drives social needs programs and includes resource databases, patient and provider portals, and an analytics platform — as well as case management tools, which is not the case with some other tools profiled.

- The Dimock Center, a federally qualified health center in Boston, used Health Leads Reach technology for tracking patients' social needs and community resource referrals. A case study discussing successes, limitations, as well as funding and staffing, is available.

Healthify

Healthify is a platform that offers services to connect people to social services and resources by providing a database with features of searching, referring, and tracking data for patients. All features of Healthify come with purchase of the platform, as Healthify does not offer a free public-facing search engine.

A group of health centers in Mass. have created a closed/ private Facebook group to share knowledge with their colleagues and community partners about availability community services for referrals. Similar groups have been established using Slack. No patient information is shared in this forum, but it allows sharing of immediate, local knowledge.

## Other Resources to Identify and Address Community-Level Social Needs

This information can be helpful in designing community interventions by targeting resources and efforts to appropriate areas and needs. Some may also be helpful for benchmarking.

- Health Landscape and Community Vital Signs' Population Health Profiler provides service area and social determinants of health mapping of Community Vital Signs, as well as mapping of County Health Rankings data.
- University of Kansas's Community Tool Box, which helps with assessing community needs and resources, addressing social determinants of health, engaging stakeholders, action planning, building leadership, improving cultural competency, planning an evaluation, and sustaining your efforts over time.
- Robert Wood Johnson's County Health Rankings & Roadmaps, annual rankings that provide a snapshot of how health is influenced by where people live, learn, work and play, and provide a starting point for change in communities.
- CDC's State Public Health Departments and Resources; U.S. Department of Health & Human Services' Community Resources Guide

**Learn more: The Role of Social Determinants in Promoting Health and Health Equity, KFF.org**

**Using Social Determinants Data to Connect with Appropriate Community Resources, October 2018.**
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