Building Data Infrastructure to Address Social Determinants of Health in San Francisco Health Network

Ben Lui, MD, MPH, Chief of Community Primary Care, Yee-Bun.Lui@sfdph.org
Department of Public Health, San Francisco, https://www.sfhealthnetwork.org/

Healthforce Center at UCSF

California Health Care Foundation

Project Description

I wanted to address our network's lack of SDoH data infrastructure to help our patients, staff and leadership. I believed I could do this by strengthening our network's SDoH data governance and informatics.

Problem Statement:

While our organization showed a high degree of alignment in the belief that effectively addressing the social determinants of health (SDoH) would improve our populations' health outcomes, our siloed efforts possess little alignment in SDoH data infrastructure and workflows.

Discovery:

1. I developed an initial business model and interviewed San Francisco Health Network (SFHN) leadership, front-line staff and SDoH stakeholders across SFDPH.
2. My interviews revealed broad and consistent concern about lack of resources to integrate IT platforms and the impact of our upcoming transition to a new EHR in Epic in Aug 2019. They also revealed a high level of desire and enthusiasm to align the siloed SDoH efforts across our network, and to build data infrastructure and workflows toward this alignment.
3. Based on my interviews and research I proposed to our SFHN Deputy Dir and CMIO the formation of a SFDPH Epic SDoH Advisory Subcommittee under the Epic Data Governance Committee. One of the main purposes of this SDoH subcommittee is to provide a mechanism for strategic alignment of SDoH efforts across our network and DPH.
4. I modified my project goal to place greater emphasis on organizational alignment and expanded its objectives.

Goal:

To develop SDoH data governance infrastructure and an unifying informatics strategy in San Francisco Health Network and DPH to promote greater organizational alignment in addressing social determinants of health for our patients and populations.

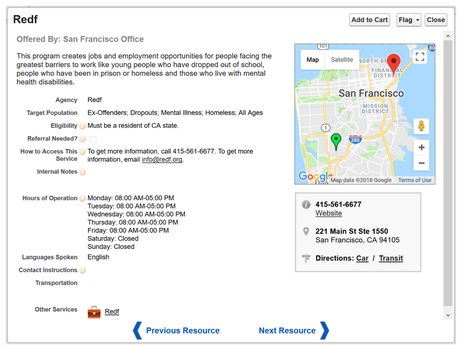
Outcome-oriented Objective:

1. By Dec 31, 2017, complete initial build of a curated electronic SF social services database using the Health Leads Reach platform.
2. By June 30, 2018, deploy standardized SDoH workflows in primary care using the Reach platform.
3. By June 30, 2018, stand up the DPH Epic SDoH Advisory Subcommittee under our Data Governance Committee.

Results

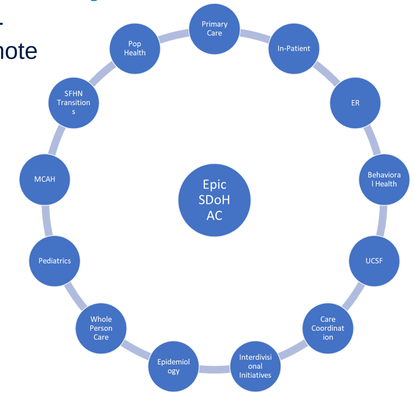
SF Social Resources Directory

Initial build contains over 700 curated resources.



DPH Epic SDoH Advisory Committee

Multidisciplinary and cross-sectorial membership promote organizational alignment.



Lessons Learned

- Go-Live of HL *Reach* platform has been delayed >1 year due to contracting problems. Slack time for this task was underestimated, esp. in the context of a much larger competing Epic EHR contract.
- Would have benefitted from more direct communication with the Contracting Office to better understand its resource constraints and how it would impact the overall project timeline.
- Institutional knowledge is especially crucial in systems transformations in large and complex organizations such the DPH.
- SDoH IT/IS solutions are in a rapidly evolving space.
- Communicate frequently, upward, downward and laterally.
- Develop the project plan yet be prepared for changes.

Next Steps:

- Revisit our SDoH informatics strategy given Epic Foundation 2018's evolving enhanced SDoH functionalities to be made available to our organization starting in Aug 2019.
- Continue growing our nascent DPH Epic SDoH Advisory Committee toward achieving greater strategic alignment of DPH's SDoH informatics and workflows.

Mission Model Canvas

Key Partners
- Health Leads
- San Francisco Health Plan (SFHP)
- San Francisco Department of Public Health Population Health Division

Key Activities
- Change management: create buy-in; collaborate with Union to revise BA job roles
- Design data sharing between *Reach* and our EHR
- Create *Reach* implementation Steering Committee

Key Resources
- Grant funding, from San Francisco Health Plan (SFHP)
- Health Leads
- BA work force
- SFHN IT/IS

Value Propositions
- Patients: Improved satisfaction and support with regard to linkages to social services
- BAs: Improved staff experience as measured by Gallup surveys
- Providers: Improved staff experience as measured by decreased burnout using the Maslach Inventory (Emotional Exhaustion, Cynicism)
- Primary Care Leadership: Improved ability to manage the work of our BAs and to perform QI activities to better meet our pts' social needs

Buy-in & Support
- Presentations to stakeholders
- Demos with stakeholders
- Create BA Superuser (SU) group
- Regular SU group meeting

Deployment
- Utilize existing monthly all BA meetings for change management and trainings
- Modify existing BA workflows for screening and referrals

Beneficiaries
- Patients with social needs: Referrals to social services are inconsistent. Actual linkage success is variable.
- Behavioral Assistants (BA): In our network the BAs are charged with linking patients to social services. They have variable training in resource knowledge and linkage. Providers: They have variable experience and support in social service linkage.
- Primary Care Leadership: Little to no data currently on social service referrals and linkages.

Mission Budget/Cost
- User licenses (up to 40): $12,000 for one-time set-up, then annual recurring, $24,000/yr
- Reach setup, customization, and maintenance: $10,000 one-time
- Resource database build and maintenance: $10,000 1X initial build, then $5,000/yr
- Consulting and technical assistance to co-design our social needs program: $14,000 1X
- Total initial costs Yr 1 = $49,000; Annual recurring costs starting Yr 2 = $41,000

Mission Achievement/Impact Factors
- Improved patient experience with BA services with regard to meeting social needs
- Improved staff experience for BAs; decreased burnout for providers
- PC Leadership: Improved ability to perform QI on meeting our pts' social needs
- Healthier patients
- Greater collaboration between DPH SFHN and Population Health Division