Technology in Action: Connecting for Population Health

Wednesday, March 14, 3:30 PM

Participatory Technologies for Civic and Health Engagement

Nader Afzalan, Visiting Assistant Professor, University of Redlands
Chethan Sarabu, Clinical Informatics Fellow, Stanford Children’s Health
John Frederick Pearson, Clinical Informatics Fellow, Harvard Medical School

In this session, we discuss novel collaborative strategies around civic and health engagement activities for multiple stakeholders. We build on examples of using civic technologies and participatory GIS applications in both urban planning and public health sectors. The goal is generate ideas to better connect cities and healthcare organizations through common interests.

Participatory processes have been challenging for planners and policy makers due to various considerations, including the organization's limited resources or citizens’ lack of interest in participation. This challenge still exists even in the era of smart cities when organizations and citizens commonly use new technologies for collaboration and social interaction. New communication technologies (e.g. Smartphones, online participatory tools and social media) can greatly help planning and healthcare organizations by providing more accessible engagement opportunities for citizens and ready-to-use data for decision makers.

On the other hand, using these technologies may create challenges. For example, cities or healthcare organizations may not be ready for big data analysis or may not be fully aware of ethical and privacy issues of engaging citizens and patients through online technologies.

In this session, we engage the audience in a round-table discussion format to discuss methods of using new technologies for cities and healthcare organizations to collaborate on a joint mission: enhancing population health through participatory planning. The speakers briefly start the conversation by discussing case studies from planning and public health and then engage the audience to argue the following topics in small to medium sized groups: 1) What are the potentials and barriers of using civic technologies for connecting cities and healthcare organizations through citizen engagement? 2) What are the privacy, equity, and ethical issues of using citizen generated data by healthcare organizations?; 3) What are the effective strategies for collecting citizen generated data that is useful for urban planning departments, public health departments, and healthcare organizations?

Learning Objectives:

• Learn about potentials and barriers of using civic technologies for connecting cities and healthcare organizations through citizen engagement
• Learn about the privacy, equity, and ethical issues of using citizen generated data by healthcare organizations
• Learn about the effective strategies for collecting citizen generated data that is useful for urban planning departments, public health departments, and healthcare organizations
Wednesday, March 14, 5:00 PM

**The Dallas Social-Health Information Exchange Program**

Donna Persaud, Executive Medical Director and Vice President of Clinical Leadership, Parkland Center for Clinical Innovation
Stephanie Fenniri, Senior Community Partnerships Manager, Parkland Center for Clinical Innovation (PCCI)
Tammy Pastor, Community Social Worker, Parkland Center for Clinical Innovation (PCCI)

A cross-sectoral, transdisciplinary ecosystem initiative in Dallas, TX, that deployed intelligent technology to bridge divides between healthcare systems, social-service agencies, intervening nodes of care, and safety net patients, will form the basis for rich thought-leading discussions on how best to serve populations at scale with personalized, precision care.

The facilitators will demonstrate to the audience practical applications of the Dallas IEP framework targeted at improving the healthcare of specific, under-resourced subpopulations such as adults faced with food insecurity that are also living with hypertension and/or diabetes. In that prototypical application, the IEP enables inter-sectoral coordination, data sharing, plus closed-loop bi-directional cross-sector referral, of food-insecure patients with hypertension or diabetes, between hospital-based clinical teams and case management teams at community food pantries. Leveraging the real-world experiences and lessons learned from the Dallas IEP, facilitators and the audience will engage in a lively discussion to explore opportunities for testing such smart connections in a standardized way across multiple communities as a strategy for population health improvement.

The facilitators will present early-stage efforts to replicate the Dallas IEP model in disparate geographies across the U.S. and to adapt it to those local contexts to incarnate similar consortiums of multi-sectoral connected communities of service. A prototype of the Dallas framework intended for rollout in Louisville, Kentucky, will serve as a case study for participants. Finally, the session will tackle pathways for diverse consortiums of interconnected, integrated communities of service, each of which is firmly planted in its local and geographic context, could collaborate and engage in shared learnings across the entire breadth of the U.S. and even cross-nationally. Session participants will gain sufficient understanding of factors behind the success of the Dallas IEP and avenues for working with its architects to build cross-sectoral, transdisciplinary, collaborative social-health service networks in their respective contexts/geographies.

**Learning Objectives:**
- To learn the Dallas model for how healthcare and community-based social-service organizations jointly developed the health information technology architecture, cross-sectoral workflows, plus legal and operational framework, to integrate services across diverse sectors and facilitate parallel pursuit of collective-impact population health improvement
- To learn how the "big data" healthcare analytics sparked by the Dallas IEP have enabled partner organizations to engage in machine learning that generates actionable point-of-care clinical decision support that prompt real-time, ongoing improvements in healthcare for under-resourced populations;
- To learn how the Dallas IEP provides a visionary and replicable "blue print" that is adaptable to other geographies to create local consortiums of connected communities that engage in collaborative learning and knowledge sharing to jointly improve population health

Thursday, March 15, 11:30 AM

**Telehealth: Addressing Population Health through Technology and Community Collaborations**

Antonio Gomez, Program Manager, Community Health Promotion, Providence Health & Services
Delfina Hernandez Morales, Lead Coordinator Community Health Promotion, Providence Health & Services
Marisa Luengas Salazar, Coordinator Community Health Promotion, Providence Health & Services
In 2002, Providence Health & Services conducted a Community Health Needs Assessment in the Portland-metro service area. This assessment provided the momentum to create the Promotores de Salud de la Iglesia, a volunteer-driven program rooted in the principles of leadership and empowerment.

Since its founding, the program has trained, using Popular Education techniques, over 400 Promotores who are members of 16 churches located throughout four Oregon counties. Promotores complete an 80+ hour all-Spanish training divided into 14 different sessions. Upon graduation, Promotores may choose to become certified as Community Health Workers (CHWs) by the state of Oregon and have the opportunity to be employed by health systems.

Through a partnership between Providence's Express Care Virtual and community organizations, and leveraging the strong trust-based ties between local churches and Promotores, Telehealth + Promotores Clinics were launched in 2014 to bring health care and promotion to uninsured low-income families. Most of the clinics take place within the community parishes. Since 2014, more than 2,000 patients have been screened for BMI, glucose, triglycerides and cholesterol. All patients are provided with information to improve their health and those with numbers outside normal range are given the option of consulting with a Nurse Practitioner via live HD audio and video. Many are referred to Primary Care Providers and prescribed medication free of charge.

These community collaborations enable all participants to elevate the impact towards serving the poor and vulnerable and moving the needle of population health forward. In July 2, 2016, a relative of a patient said the following: "she [the patient] does not see doctors because she once had a bad experience with a doctor. But since here no one is going to touch her, she feels safe and confident about seeing the NP."

Learning Objectives:
• Demonstrate how trust enables Providence Health & Services to build strong relationships between health care systems, community members and social service organizations
• Learn how technology and community collaboration help health organizations to reach out underrepresented communities
• Discuss how Telehealth clinics tackle our common goal of improving population health

Thursday, March 15, 2:15 PM

Connections for Integrated Care: Linking Social Factors to Community Health
Karis Grounds, Director of Health and Partner Integration, 2-1-1 San Diego
Camey Christenson, Vice President of Business and Partnership, 2-1-1 San Diego

When a zip code is a stronger indicator of health than someone's genetic make-up or access to health care, we look to social influences of health. As changes are proposed to the Affordable Care Act, health providers, governmental entities, social services and community leaders look to upstream approaches to help address the rising health care costs. Although, there are many insights on best practices around accountable communities for health, standard shared tools and collective impact approaches are still being determined.

2-1-1 Community Information Exchange (CIE) works to improve clients’ health and social functioning by establishing a longitudinal shared client record that can be accessed through electronic bi-directional and closed-loop referrals between cross-sector providers.

Learn about the launch of the system and goal to integrate, technology platforms, provide a snapshot into a patient’s SDoH on a crisis to thriving continuum, resource database, bi-directional information sharing and community care coordination. During this session, we will discuss how technology can address silo sectors, highlight the successes of information sharing, and the impact on the bottom line across providers.
Learning Objectives:

- Describe key elements to build a community information exchange platform
- Understand infrastructure needed to build direct referral partnerships with health and social service agencies
- Outline the upstream impacts of CIE and clinical to community linkages on health care costs

**Thursday, March 15, 4:00 PM**

**Diversified Partnerships in Telehealth**

Irina Gelman, Director of Public Health, Fulton County Health Department

This presentation is intended to demonstrate the groundbreaking Fulton County, NY telehealth initiative. This is the first program to include the integration of public health education and prevention in the expanded access to care model, providing an innovative approach to population health efforts. As a governmental agency, we have collaborated with an array of stakeholders including non-governmental organizations, through multi-sectoral community coalitions consisting of businesses, schools, non-profit organizations, health care organizations, community planning agencies, local housing authorities, social service agencies, civic organizations, faith-based institutions, and other community-based organizations.

This presentation spans the main topic tracks of: Technology in Action; Health System Transformation; Social Determinants of Health; Policies for Population Health; while bridging the other themes of: Enduring and sustainable community collaborations; Health equity and disparities; Community engagement; Breaking down barriers within the organization and community.

The countywide initiative is an expansion of the current pilot project that is a part of the initial DSRIP engagement (Medicaid restructuring) strategy, which includes a limited number of health stations installed at the Fulton Montgomery Community College, Fulton County Public Health Department and the Fulton County Office for the Aging and Youth. These health stations virtually connect to local/community providers of choice, to ensure continuity of care. Ideally, Fulton county residents will utilize their own smart personal devices (phones, laptops, tablets, etc.) in their homes, and throughout the community. However, the health stations will be available when alternate means of access are not feasible due to socio-economic, connectivity, computer literacy and/or other reasons. Also included are topic areas of behavioral and mental health; chronic disease prevention and management; high-cost, high-need patients; delivery system and payment innovations; and rural hospitals/communities. This population health initiative is viable, capable of being sustained long-term, provides a positive public health impact in our region and is the quintessential embodiment of telehealth.

Learning Objectives:

- Define telehealth within the context of existing health infrastructure and transformation developing a culture of population health
- Identify diverse resources and pertinent stakeholders available for similar initiative, linking community and population health
- Implement similar initiatives, cross-sector, community-based strategies that address the social determinants of health and enable communities to achieve the highest level of health for everyone

**Friday, March 16, 8:45 AM**

**Connecting Patients and Community Resources to Improve Health**

Christopher Nolan, Manager of Community Benefit and Population Health, Rush University Medical Center

Stacy Tessler Lindau, Founder and Chief Innovation Officer, Associate Professor, NowPow, University of Chicago Medicine
Technology can create challenges in the healthcare space, or it can serve as a bridge to improve the health and vitality of the communities we serve. The goal of this interactive breakout session is to focus on the latter; using a case study of how the CommunityRx/NowPow technology platform is changing the way Rush University Medical Center provides care.

CommunityRx, developed with a 2012-15 Centers for Medicare and Medicaid Services Health Care Innovation Award (HCIA), pioneered the concept of e-prescribing community resources at the point of care. This research, based on Chicago's South and West Sides, demonstrated that feasibility of systematically connecting patients to community-based resources near their home. During the study, more than 250,000 HealtheRx - personalized community-based resource lists - were created via an automated EMR interface for more than 113,000 people to support self-care and caregiving needs.

More than 80% of participants found the HealtheRx very useful, and 1 in 5 accessed resources from the HealtheRx; nearly half used the HealtheRx to inform someone else. The HCIA required innovators to identify a sustainable business model. NowPow, LLC, headquartered on Chicago's South Side, licensed the platform and added new functionality including sending trackable ("closed loop") referrals between clinics and community partners and screening for social needs. Rush University Medical Center was attracted to these capabilities to optimize efficiency and impact of its care coordinator workforce and to generate data to inform its community-based strategies. Rush has adopted the platform across its system and, using this system to screen and make closed-loop referrals for food, utility, and primary care/insurance needs.

Learning Objectives:
- Recognize how a health system can leverage technology to improve patient and community health through better connectivity
- Assess the value of screening for social determinants of health and making both warm and trackable handoffs to community partners
- Explore the potential impact on the human and social services sectors of extending referral technology to community-based service providers