

Health Care Services Master Plan Task Force Technology + Innovation

OVERVIEW

Although US health care spending exceeds that of other developed nations, US health outcomes often fall short. In 2009, for example, the US spent \$2.5 trillion on health care, or about \$8,086 per capita.^{i, ii} Despite such investments, the US placed last among 16 high-income industrialized nations in terms of preventable deaths related to timely access to effective health care.ⁱⁱⁱ

Triple Aim

Effort to improve the US health care system by:

- Improving the patient care experience;
- Improving population health; and
- Reducing health care costs.

Health Reform and the push for the “Triple Aim” – an effort to improve the US health care system by increasing care quality while bettering population health and reducing costs – represent current efforts to stem the tide of high health care spending for low reward.^{iv} To realize the goals of these initiatives will require substantive investments in health information technology and innovations ranging from new models of health care delivery to revised reimbursement structures that incentivize better, more cost-effective patient care.

This briefing paper will present an overview of health information technology initiatives to date, focusing on federal regulations pushing the adoption and “meaningful use” of electronic health records (EHR) as well as state and local initiatives to advance EHR implementation. The paper will also review select innovations that offer promising avenues to health care access for San Francisco’s vulnerable populations.

HEALTH INFORMATION TECHNOLOGY

HITECH

Health Reform + HITECH

On February 17, 2009, President Obama signed into law the Health Information Technology and Clinical Health Act (HITECH) as part of the American Recovery and Reinvestment Act (“ARRA,” also known as the economic stimulus bill). Passed to stimulate the adoption of HIT, HITECH was the nation’s first step toward Health Reform and is intended to facilitate the electronic use and appropriate exchange of patient health information. Health Reform’s goals of improving quality, reducing costs, and increasing access and coverage require better methods of storing, analyzing, and sharing health information than current infrastructure allows.^v HITECH builds this infrastructure, paving the way for coordinated care, patient-centered medical homes, value-based purchasing, and bundled payment projects envisioned under Health Reform.

HITECH Overview

HITECH created the permanent Office of the National Coordinator for Health Information Technology (ONC) and provided \$19 billion over a four-year period for providers who adopt and use HIT.

Additionally, HITECH not only recognized but reinforced patient privacy protections created by the Health Insurance Portability and Accountability Act (HIPAA). Following is a brief overview of the key components of HITECH that relate to the establishment of a HIT infrastructure.

Office of the National Coordinator for Health Information Technology (ONC)

The ONC is charged with overseeing the development of a nationwide health information technology infrastructure that allows for the electronic use and exchange of information.^{vi} This infrastructure will:

- Ensure that each patient’s health information is secure and protected;
- Improve health care quality, reduce medical errors, reduce health disparities, and advance the delivery of patient-centered medical care;
- Reduce health care costs resulting from inefficiency, medical errors, inappropriate care, duplicative care, and incomplete information;
- Provide appropriate information to help guide medical decisions at the time and place of care;
- Ensure the inclusion of meaningful public input in development of such infrastructure;
- Improve the coordination of care and information among hospitals, laboratories, physician offices, and other entities through an effective infrastructure for the secure and authorized exchange of health information;
- Improve public health activities and facilitate the early identification of and rapid response to public health threats and emergencies, including bioterrorism events and infectious disease outbreaks;
- Facilitate health and clinical research and health care quality;
- Promote early detection, prevention, and management of chronic diseases;
- Promote a more effective marketplace, greater competition, greater systems analysis, increased consumer choice, and improved health outcomes; and
- Improve efforts to reduce health disparities.

Electronic Health Records (EHRs)

EHR refers to the computerized history of individual patient health information recorded at each provider encounter in any delivery setting. Included in this information are patient demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data, and radiology reports.^{viii} HITECH requires the use of EHR technology that is “certified” as meeting federal standards for security, privacy, and interoperability and is capable of achieving the meaningful use of EHRs by health care providers.

48 percent

Percent of California physicians (n=65,388) that have implemented EHRs. Forty-six percent of physicians have not implemented EHRs, and the EHR status of seven percent of physicians is unknown. Physicians in large practices are more likely to have adopted EHR-use than physicians in smaller practices.

Source: SK&A, 2010^{vii}

Medicare and Medicaid Incentive Payments

Beginning in 2011, HITECH provided financial incentives to hospitals and providers for the adoption and “meaningful use” of EHRs. To meet the definition of meaningful use, health care providers must implement and use an EHR and then exchange information electronically with other health care organizations. Providers will achieve meaningful use incrementally in three stages. Final rules for Stage 1 were published in July 2010 and require that hospitals and providers meet specified objectives to qualify for incentives. Though participation in the incentive payment program is voluntary, the law reduces reimbursements for physicians and hospitals who do not achieve meaningful use of EHRs by 2015.

EHR Adoption and Implementation in San Francisco: A Work in Progress

San Francisco providers are at various stages of EHR adoption and implementation. Several San Francisco Community Clinic Consortium sites, for example, have been using EHR technology for years; additional sites are slated to adopt EHRs in 2012. In June 2012, San Francisco General Hospital (SFGH) is expected to launch the Siemens INVISON clinical system, bringing SFGH one step closer to attaining meaningful use.

EHR Incentive Payments Pose Administrative Burden to Federally Qualified Health Centers (FQHCs)

FQHCs are safety net providers that employ or contract with their clinicians. Medicare and Medicaid

Three Stages of Meaningful Use

- **Stage 1:** Where we are now. Effective 2011. Criteria focus on electronically collecting health information and using that information to track key conditions, coordinate care, and report on clinical measures.
- **Stage 2:** Criteria under review currently, implementation expected in 2013. Will expand on Stage 1 in the areas of disease management, clinical decision support, medication management, and bi-directional communication with public health agencies.
- **Stage 3:** Criteria to be established, implementation expected in 2015. Will expand on Stages 1 and 2 and will focus on improvements in quality, safety, patient access to self-management tools, and more.

Source: [CMS Fact Sheet](#), July 2010

reimburse FQHCs one all-inclusive rate for each face-to-face patient visit regardless of the number or type of procedures provided during that visit. It is the FQHC entity – rather than the individual provider – that both bills and is reimbursed by Medicare and Medicaid. HITECH, however, provides EHR incentive payments to *individual providers* rather than to the FQHCs that employ them. In addition, HITECH bases EHR incentive payments on providers’ costs for the purchase, implementation, and upgrade of certified EHR technology – even though it is the FQHC entity, not the provider, which incurs these costs. While FQHC employees and contractors will likely be willing to assign their incentive funding to the FQHC where they practice, HITECH does not align with FQHCs’ current administrative structure and poses an administrative burden to FQHCs seeking incentive payments.

Regional Extension Centers

HITECH provided grants to create Regional Extension Centers to offer technical assistance, guidance and information on best practices to support and accelerate health care providers’ efforts to become

meaningful users of EHRs. There are 60 Regional Extension Centers around the country representing nearly every geographic region.

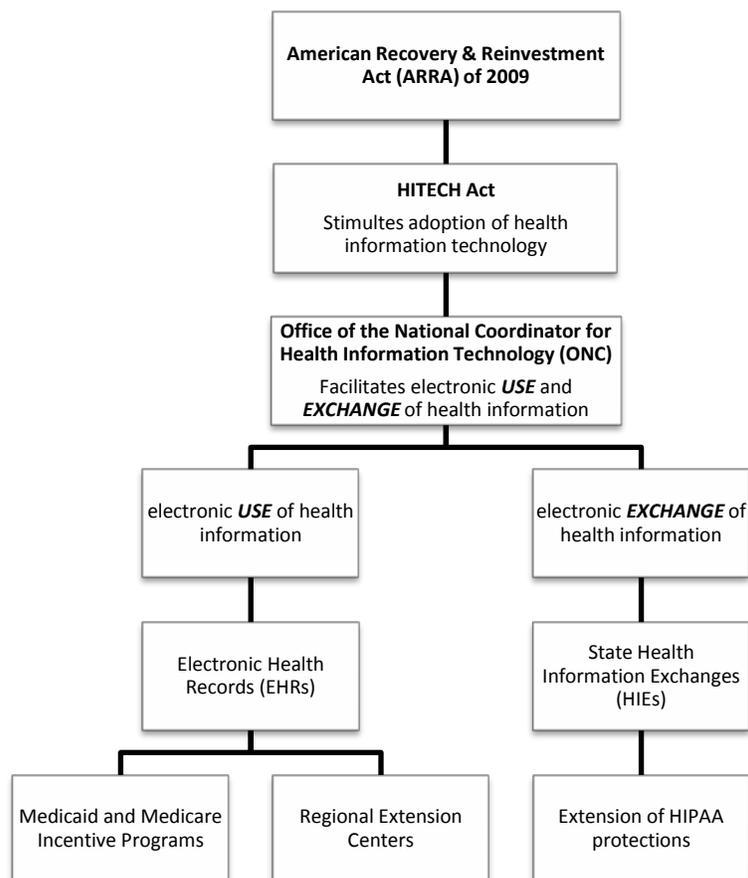
State Health Information Exchanges (HIEs)

HITECH includes a grant program to help states build capacity for exchanging health information across health care systems both within and across states while moving toward nationwide interoperability. HIEs are distinct from the health benefit exchanges established under Health Reform. (HIEs are portals for the exchange of clinical information whereas health benefit exchanges are marketplaces for the purchase of health insurance.) Participation in a HIE is not a specific Stage 1 meaningful use requirement; however, several of the requirements are services or capabilities commonly offered and/or facilitated by HIEs. Additionally, HITECH does not require formal linkage between regional extension centers and HIEs, but coordination is encouraged.^{ix}

Extension of HIPAA Protections

HIPAA, enacted in 1996, provides federal protections for personal health information held by covered entities (e.g., providers and health plans). HITECH extends the security and privacy provisions in HIPAA by expanding the list of covered entities responsible for maintaining these protections and subjecting violators to civil and criminal penalties. With these provisions, HITECH recognizes the benefit of sharing vital health information among health care providers without compromising a patient's right to privacy.

The following schematic provides an overview of the HITECH structure as it relates to the use and exchange of health information.



California's Implementation of HITECH

Medicare and Medicaid Incentive Payments

As a federal program, Medicare EHR incentives will be administered at the federal level. The California Department of Health Care Services administers incentive payments for Medi-Cal, California's Medicaid program. As part of its administration of the incentive payment program, California created a state-level registry for provider incentive payments, which began monitoring providers' meaningful use of EHRs in late 2011.^x

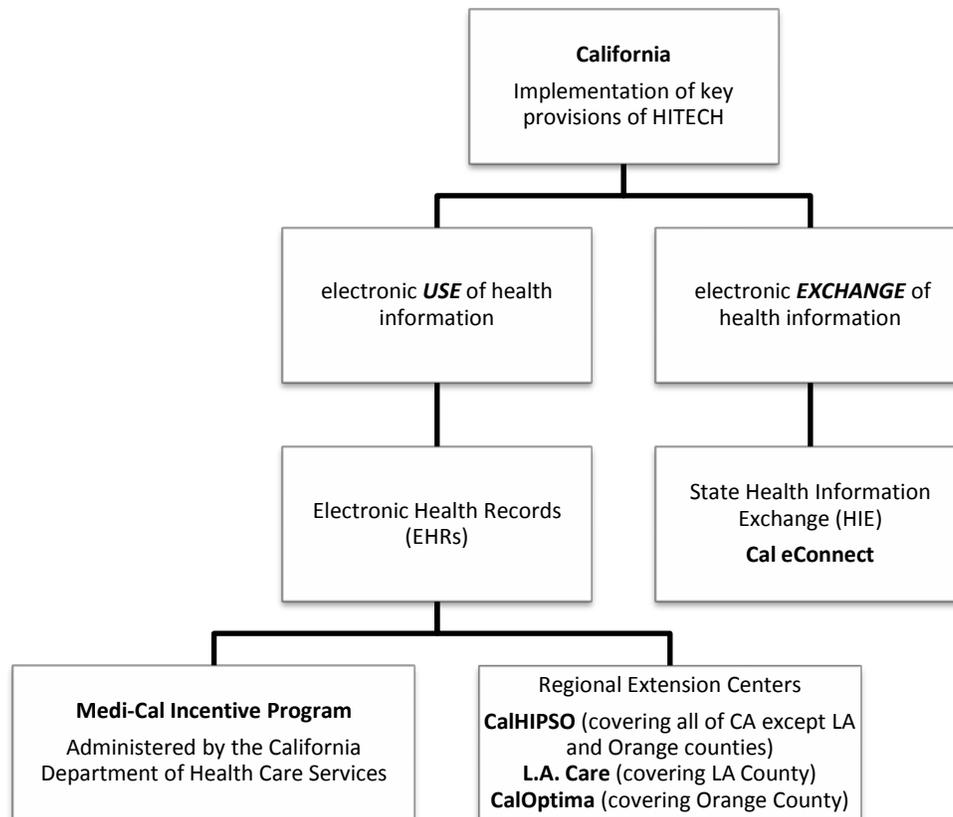
Regional Extension Centers

The California Health Information Partnership and Services Organization (CalHIPSO) is one of the 60 federally-designated Regional Extension Centers across the country and one of three Regional Extension Centers serving California. CalHIPSO provides services to all of California except Los Angeles and Orange counties, where Regional Extension Center services are provided by L.A. Care and CalOptima, respectively. CalHIPSO was founded by the California Medical Association, the California Primary Care Association, and the California Association of Public Hospitals & Health Systems to help providers navigate EHR implementation. CalHIPSO is working with 10 Local Extension Centers that offer in-depth knowledge of their local areas and provider communities. Local Extension Centers are local clinic consortia, regional medical societies, health plans, or other groups that have the ability to assist providers in a community.^{xi}

State Health Information Exchange (HIE)

Cal eConnect is a nonprofit California public benefit corporation designated by the State of California to lead a collaborative process for ensuring the meaningful use of electronic HIE in California. Funded by HITECH, Cal eConnect will work collaboratively to establish policies, services, and innovations that make possible the appropriate, secure, and efficient exchange of electronic health information.^{xii}

The following is a schematic that provides an overview of California's implementation of key HITECH provisions.



HEALTHSHARE BAY AREA – A LOCAL APPROACH TO HEALTH INFORMATION EXCHANGE

Overview

Created through a collaboration of key health care providers, HealthShare Bay Area (HSBA) – a combination of efforts in San Francisco (the San Francisco Health Exchange, or “SFHEX”) and the East Bay (Alameda Contra Costa Health Information Technology and Exchange Coalition, “ACC-HITEC”) – will afford San Francisco and East Bay health care providers with a secure, controlled, and interoperable method for exchanging and aggregating patient health information across all participating providers of care. This data exchange is expected to improve the efficiency of service delivery while decreasing costs and improving patient care and outcomes throughout the Bay Area. HSBA will also help participating providers meet Stage 2 and 3 requirements for meaningful use.

Starting in the summer of 2012, participating providers will be able to query HSBA for patient information via a secure web portal. HSBA will act as a hub of information by authenticating that the request is coming from a valid registered provider, using its records locator to access a network of data sources and providing the clinician with valuable patient information entered by that patient’s current and previous providers (e.g., problem list, medication list, test results, immunizations, allergies, clinical documents such as discharge summaries, operative notes, ambulatory visit summaries, etc.).

Background

Established in August 2009 and operating under the auspices of the non-profit San Francisco Medical Society Community Service Foundation, HSBA implementation is overseen by a Governing Committee with representation from the following:

- Alameda Contra Costa Medical Society
- Alameda County Medical Center
- At-large independent physicians
- Brown and Toland Independent Practice Association (IPA)
- Catholic Healthcare West (St. Francis, St. Mary's)
- Chinese Hospital Association
- Community Health Center Network
- Health services consumer representative
- Hill Physicians IPA
- John Muir Health
- Licensed alternative medicine providers
- San Francisco Community Clinic Consortium
- San Francisco Department of Public Health
- San Francisco Kaiser Permanente Center
- San Francisco Mayor's Office
- San Francisco Medical Society
- Sutter Health (California Pacific Medical Center)
- University of California, San Francisco/Mt. Zion Medical Center

Accomplishments to Date

HSBA's major accomplishments to date include the creation of a comprehensive business plan and governing structure, establishment of prioritized interoperability needs that align with "meaningful use" criteria, and merger with the ACC-HITEC organization. HSBA has also initiated discussions with providers in San Mateo and Marin counties in an effort to pursue future collaboration. More recently, a founding member participating group has been established, and a technology vendor has been selected. Additionally, HSBA has become an independently incorporated non-profit entity and will apply for 501(c)(3) status.

Funding

Funding for HSBA will come largely from participating providers. Community fundraising and grant awards will also support HSBA's development. In November 2010, for example, HSBA received a \$50,000 grant from the MettaFund, a private health foundation supporting the City and County of San Francisco. HSBA anticipates applying for grant funding from Cal eConnect—the State-designated entity for health information exchange that is allocating federal stimulus dollars—sometime in the first quarter of 2012. HSBA is seeking other community foundation grants to further capitalize the exchange.

INNOVATION

Overview

With the advent of Health Reform and the pursuit of the "Triple Aim," health care providers and policymakers are in search of innovative means of improving health care delivery systems. Health Reform, for example, has advanced the concept of "patient-centeredness," resulting in increased focus on the patient-centered medical home model as a way to achieve more integrated, cost-effective care

that results in better patient outcomes. Other models, such as increased reliance on nurse practitioners and physician assistants to the full extent of their training – as well as the growing prominence of retail and mobile clinics^{xiii, xiv} – have offered innovative solutions to primary care access issues in some settings while offering the added benefit of containing costs.

The development of new research centers and funding streams dedicated to innovation indicate the degree to which new models will play a part in the evolving health care landscape, particularly under Health Reform. Launched under the Affordable Care Act, for example, the Center for Medicare and Medicaid Innovation (CMMI) is “a new engine for revitalizing and sustaining Medicare, Medicaid, and the Children's Health Insurance Program and ultimately for improving the health care system for all Americans.”^{xv} The CMMI serves as a catalyst for testing new models of health care delivery and payment, hopefully resulting in the widespread dissemination of innovations proven to improve health more cost-effectively. As part of its latest effort to generate innovative solutions to health care issues, the CMMI will award up to \$1 billion in grant funding through the Health Care Innovation Challenge. Awards will go to applicants who propose “compelling new ideas” for better, more cost-effective health care to persons enrolled in CMS programs, particularly to those with the highest health care needs. Several San Francisco providers collaborated to propose a Population-Oriented Team Model of Care Delivery project. (See box below for more information.)

Health Care Innovation Tracker

The following resources offer insight into innovations currently influencing the delivery of health care services and payment mechanisms:

- Center for Medicare and Medicaid Innovation (<http://innovations.cms.gov>)
- Agency for Healthcare Research and Quality Innovations Exchange (www.innovations.ahrq.gov)
- California HealthCare Foundation, Innovations for the Underserved (www.chcf.org/programs/innovations)

The list of possible health care innovations is long, preventing adequate discussion of each in the current issue brief. To complement the topic of health information technology – and to mirror discussion of the Health Care Services Master Plan Task Force – this brief will focus on the current state and potential impact of telehealth on increasing access to health care services among underserved populations. This issue paper will also address innovations in primary care, present the concept of community referrals as a mechanism to link patients to critical community-based services, and describe innovative efforts to address health inequities created by social determinants of health.

A San Francisco Health Care Innovation: Population-Oriented Team Model of Care Delivery

In response to CMMI’s Health Care Innovation Challenge, several San Francisco providers – including Jewish Vocational Services, the San Francisco Community Clinic Consortium, the San Francisco Department of Public Health (SFDPH), San Francisco Health Plan, San Francisco Human Services Agency - Department of Aging and Adult Services, Training Academy for Personal Caregivers and Assistants, San Francisco Office of Economic and Workforce Development, University of California - San Francisco – have submitted a proposal for a Population-Oriented Team Model of Care Delivery project. This model, targeting the San Francisco safety net, will focus on the concept of “triple aim” by organizing Care Teams around the needs of specified populations, stratifying the target population into specific categories based on health risk and service needs and configuring primary care and community care teams to most efficiently and effectively respond to those needs. Care Teams will include a new, extensively trained workforce of allied health workers, peer educators, and care coordinators in addition to clinicians.

Telehealth

“Telehealth,” also known as “telemedicine,” broadly defines a range of health care interactions powered by telecommunication and information technologies (e.g., phone, email, video conferencing) to provide care to patients remotely. Examples of telehealth services include but are not limited to:

- Patient/provider email communication;
- Video conferencing –such as between a patient and a specialist to whom the patient might not otherwise have access or for video medical interpretation for non-English speaking patients;
- “Store-and-forward” communication, such as sending an image to an outside provider for consultation; and
- Remote health monitoring, such as when a diabetic patient submits blood glucose test results to his or her provider in real time.

40 percent

Percent of California physicians (n=519) who use email to communicate with patients about clinical issues. Among these, only 30 percent use email routinely.

Source: Center for Studying Health System Change, 2008

Proponents of telehealth argue that the practice has the power to transcend traditional health care access barriers cost-effectively, making the physical location of health care services less important, particularly for rural and underserved communities.

Telehealth in California: Degree of Practice, Regulation, and Reimbursement

California, considered a pioneer in the development and practice of telehealth, became one of the first states to advance legislation to require reimbursement for telehealth services. Despite this legislation, known as the Telemedicine Development Act of 1996, the practice of telehealth in California is not widespread and is most prominent in the state’s rural areas.

In terms of regulation, California views telemedicine as a complement to traditional medicine – not a separate form of medical practice. Practitioners are held to the same standard of care in the provision of telehealth services as they are in face-to-face interactions.^{xvi}

Reimbursement for telehealth services is determined by program and is largely limited.^{xvii} Under Medicare, for example, live interactive telehealth services are covered only if the patient resides in a rural area; store-and-forward services are not eligible for reimbursement. In contrast, Medi-Cal reimbursement for telehealth services has recently become *less* restricted, thanks in large part to California’s Telehealth Advancement Act of 2011. (Please see box below for more information.) Private insurance coverage is limited, dependent on contract negotiations between health plans and providers, and focuses largely on the state’s rural populations.

**Telehealth Advancement Act of 2011
(California Assembly Bill 415)**

In October 2011, California Governor Jerry Brown signed into law California Assembly Bill 415, also called the Telehealth Advancement Act of 2011. The Act, effective January 1, 2012, is intended to increase the practice of telehealth throughout the state, hopefully generating a projected \$1 billion in Medi-Cal savings for California.^{xviii} Specifically, the Act:

- Expands the definition of telehealth to include a broader range of services (including services provided by email and phone);
- Applies to telehealth services provided by all health care professionals licensed by the State of California – not just physicians;
- Eliminates certain documentation barriers. For example, Medi-Cal providers are no longer required to document barriers to face-to-face interactions, and a patient’s verbal consent is now deemed sufficient for telehealth service provision;
- No longer restricts Medi-Cal reimbursement for store-and-forward services (formerly limited to dermatology and ophthalmology);
- No longer restricts the settings in which telehealth services may be provided.

Efficacy

The evidence-base for telehealth services is mixed. Research has found, for example, that telehealth consultations garner high levels of patient satisfaction, mostly because of the convenience and immediacy of provider-patient interactions.^{xix} Some research has also found telehealth useful in managing chronic conditions (e.g., diabetes) remotely. Despite these positive outcomes, the efficacy of telehealth services is clouded by a general lack of randomized, controlled clinical trials, the results of which could be generalized to the broader population; most published studies focus on small, narrowly defined patient samples.^{xx}

The Future of Telehealth

Telehealth services hold promise for increasing access to health care services. However, various barriers have curbed widespread adoption of the practice. For example, the initial costs needed to establish the technological infrastructure required for telehealth services can be substantial, and most outside funding available for such capital costs targets rural areas. In addition, adoption of telehealth services would reflect a shift in how California providers do business while increasing concerns about patient privacy; however, the adoption of EHRs – and providers’ increasing ability to bill Medi-Cal and other payers for telehealth services – may facilitate this shift. On the patient side, more vulnerable

populations may lack access to the basic technology needed to communicate their health information privately and securely.

Despite the mixed evidence base for telehealth services and potential barriers to its adoption, demand for such care is likely to increase, particularly as a means of managing chronic conditions, which account for 75 percent of US health care costs annually.^{xxi} Hospitals will have an added incentive to experiment with remote health monitoring and other telehealth services, as they will face payment reductions for excessive readmissions for certain conditions starting in 2013 under Medicare as part of Health Reform.^{xxii, xxiii} In addition, telehealth services offer an innovative solution to providing care to vulnerable populations who might not otherwise have access to timely, flexible care.

Telehealth Case Study: mHealth^{xxiv}

mHealth, the trend of using mobile phones for health, illustrates that telehealth services need not rely on complicated, inaccessible technology to have an impact. The applications of mobile health technology are many, ranging from remote health monitoring to voicemail or text medication reminders that increase adherence. The successful [Text4baby](#) application sends free health tips to expectant and new mothers via text, offering information to women who might otherwise lack easy access to prenatal support; text messages continue through the baby's first year. That mHealth can be as simple as sending a text message – smart phone technology is not a prerequisite for many mHealth applications – suggests one avenue of increasing health access for vulnerable populations who are more likely to have prepaid mobile phone plans. mHealth also promises to be more attractive to certain demographics, such as youth, who are increasingly reliant on mobile technology in their daily lives. In addition, certain minority groups have become increasingly reliant on mobile technology, signaling an opportunity to increase health access among San Francisco's diverse populations. According to the Pew Research Center, for example, Latinos and African Americans – both of which face high rates of chronic disease – are more likely than whites to own a cell phone and use non voice data applications on their mobile devices.^{xxv}

Innovations in Primary Care

According to a California HealthCare Foundation survey of insured persons, one-half of California's emergency room patients felt their needs could have been addressed via a doctor's visit had a primary care provider been available.^{xxvi} Explanations for inaccessibility include difficulty finding a provider who will accept Medi-Cal, untimely access to appointments, limited hours of operation, and transportation issues. This reality, coupled with an expanding insured population in demand of primary care under Health Reform, signals that innovations in primary care are key to increasing San Franciscans' access to needed services.

Examples of primary care innovations include worksite clinics at which employees may seek care with more limited disruptions to their health and productivity. (While adoption of worksite clinics decreased in the 1970s, mirroring the decline of the US manufacturing sector, Health Reform language pushing employers to provide wellness and prevention programs may stem this tide.^{xxvii}) Other primary care innovations include increasing reliance on pharmacies and retail clinics, which typically offer expanded hours of operation compared to the typical physician's office as well as shorter wait times and walk-in access. Please note, however, that existing research has not yet shown a link between the presence of

retail clinics and improved health care access for vulnerable populations, as retail clinics typically locate in lower poverty/higher median income areas.

Community partnerships also promise to bridge the primary care access gap by integrating care with the community. The ACCESS Health Care Network, for example, extends its patient reach through existing relationships with community organizations (e.g., churches, schools, etc.) and academic partners.^{xxviii}

ACCESS – the largest FQHC in the US, operating more than 50 health centers in metro Chicago – partners with community organizations to provide health and wellness education and outreach. ACCESS also offers a range of specialist services to patients through a partnership with the University of Chicago, which sends trained specialists to provide care at ACCESS health centers. In addition to the program’s philosophy of partnership and collaboration, ACCESS has increased patient access to care by extending its hours of operation and through adoption of an EHR system that allows patients to view their personal health data.

A Local Primary Care Innovation: HealthFirst^{xxix}

Initiated with support from the Skirball Foundation and Atlantic Philanthropies, HealthFirst is a chronic disease self-management program and resource center located in California Pacific Medical Center’s St. Luke’s Health Center. HealthFirst is unique in its integration of trained clinical health workers (CHW) in a primary care setting; HealthFirst is a recognized partner of the City College of San Francisco CHW certificate program.

In the HealthFirst model, primary care physicians refer stable, chronically ill patients to the program, which is staffed by CHWs, clinical nurse educators, a nurse practitioner, and a licensed clinical social worker. CHWs enhance this multidisciplinary, multilingual team to empower patients’ self-management of chronic conditions via medical adherence interventions, support, group sessions, and assistance overcoming barriers.

Research has shown that HealthFirst succeeds in improving the health outcomes of diabetic patients by bettering their blood sugar levels and cholesterol.^{xxx} In addition, HealthFirst has garnered high levels of patient satisfaction, significant in that the program serves high numbers of Spanish-speaking patients who are publicly insured or uninsured – persons who traditionally face health care access barriers.

Community Resource Referrals

Research resulting from the Robert Wood Johnson Foundation’s [Prescription for Health](#) initiative suggests that linkages between primary care providers and community resources offer the potential to help patients establish and maintain healthy behaviors.^{xxxi} While helping patients improve health outcomes, provider referrals, or “prescriptions,” to community resources (e.g., free fitness classes, support groups, etc.) offer the added benefit of potentially mitigating the burden placed on the US health care system by unhealthy behaviors that result in chronic disease.

Examples of existing community resource referral programs vary in the degree to which they use technological and human capital. The [United Way's National 2-1-1 Collaborative](#), for example, operates a phone system and resource database to provide users (providers and/or individuals themselves) with access to local information on available resources.

Resources Match: A San Francisco Community Resource Referral Example

Mission Asset Fund's "[Resources Match](#)," is an online intake, screening, and referral tool used to connect low-income people to various government programs, community-based services, and financial products. Thirty-six San Francisco community-based organizations, schools, and public departments use Resources Match currently. The Resources Match application matches individual socio-economic profiles against eligibility criteria and utilizes a scoring engine to match client data to services in the system.

[HealthLeads](#), in contrast, couples an online, Wiki-resource database with clinic-based volunteers, or "connectors," who link patients to community resources, facilitate that connection, and also follow-up on the patient's use of and success with the resources to which they are referred. HealthLeads is a social entrepreneurial venture that operates in six cities at 21 different sites.

Research has found that "linkages were stronger when they incorporated practice or resource abilities to motivate the patient, such as brief counseling or post-referral outreach,"^{xxxii} suggesting that some

iteration of the HealthLeads model could be a viable community referral resource approach for San Francisco.

Innovations to Address Social Determinants of Health

According to the World Health Organization, "The social determinants of health are the conditions in which people are born, grow, live, work and age, including the health system. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels, which are themselves influenced by policy choices. The social determinants of health are mostly responsible for health inequities - the unfair and avoidable differences in health status seen within and between countries."^{xxxiii}

Innovations targeting the health issues *caused* by social determinants offer the potential to lessen the community health impact they pose while aligning with the National Quality Strategy. Established under Health Reform and building on the concept of the "triple aim," the National Quality Strategy advances the importance of *population* health, charging health providers to partner with the broader community to "improve the health of the US population by supporting proven interventions to address behavioral, social, and environmental determinants of health in addition to delivering higher-quality care."^{xxxiv}

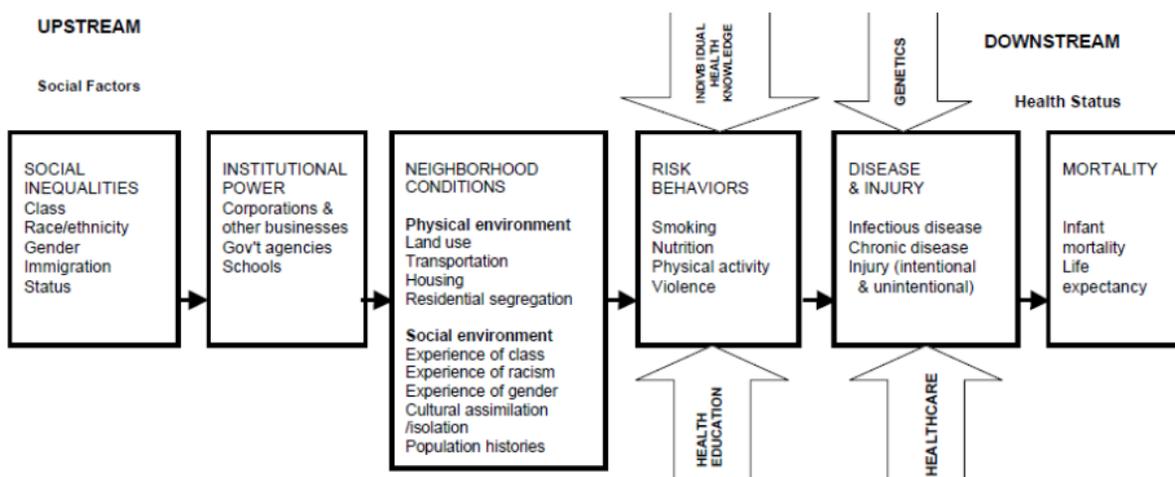
National Quality Strategy Principles

1. Person-centeredness and family engagement
2. Specific health considerations
3. Eliminating disparities in care
4. Aligning the efforts of public and private sectors
5. Quality improvement
6. Consistent national standards
7. Primary care will become a bigger focus
8. Coordination will be enhanced
9. Integration of care delivery
10. Providing clear information

Source: [Agency for Healthcare Research and Quality](#)

A local example of such innovation includes the [San Francisco Tobacco Free Project](#) (SFTFP), a project of SFDPH and local community-based organizations. The SFTFP strives to increase community and organizational capacity to address the social determinants of health associated with tobacco-related illness by partnering with community members and helping them acquire the skills and resources they need to investigate, plan, implement, and evaluate actions that change their environment and promote health.^{xxxv} In existence since 1996, SFTFP efforts have led to the enactment a citywide ban on tobacco ads, creation of tenant-driven smoke-free policies in multi-unit housing, enforcement of local and national laws prohibiting bidi tobacco product and cigar use by youth, and more.

Please note that interventions like the SFTFP do not address the underlying causes of poverty and other social determinants of health; however, they offer a public health approach to addressing the health inequities resulting from social determinants by empowering communities to create health policies and services tailored to their needs. Understanding this approach is most easily illustrated via the [Bay Area Regional Health Inequities Initiative](#) (BARHII) Conceptual Framework for Understanding and Measuring Health Inequities, which appears below. Rather than targeting the more “upstream” causes of social inequality (e.g., class, race/ethnicity, etc.), for example, innovations like the SFTFP focus their efforts on more “midstream” issues at the neighborhood level.



Collectively, the SFTFP and BARHII conceptual framework demonstrate the importance of a “health in all policies” (HiAP) approach to promoting and protecting health, an innovation that recognizes that health is affected by a range of *non*-health care related policies that influence the way people live, work, and play (e.g., easy access to transportation, affordable and nutritious food, etc.). The HiAP approach also offers implications for land use including but not limited to the location of health care facilities. For example, zoning restrictions on where fast food restaurants and liquor stores may be located (e.g., a specified distance from schools and health care facilities) offer the potential to promote healthy behaviors and support the existing health care system. By formally adopting a HiAP approach, San Francisco has the power to advance the importance of public health across disciplines while addressing the health inequities facing the city and county’s vulnerable populations.

PRELIMINARY POLICY CONSIDERATIONS

*Recommendations: The Health Care Services Master Plan shall include policy recommendations to promote an equitable and efficient distribution of health care services in the City; the elimination of healthcare service gaps and medically underserved areas; and the placement of Medical Uses within the City in a manner that is consistent with the character, needs and infrastructure of the different neighborhoods, and that promotes and protects the public health, safety, convenience, and general welfare. **San Francisco Ordinance No. 300-10***

The HCSMP Task Force is an advisory body charged with developing possible HCSMP recommendations informed by data and community feedback. SFDPH will consider these possible recommendations for inclusion in the final HCSMP. However, given the collective expertise of the Task Force – and given that Task Force discussions will likely yield ideas beyond the scope of the HCSMP – SFDPH presents below a series of policy considerations that may inform both the HCSMP’s development as well as San Francisco’s broader health planning efforts.

LAND USE-SPECIFIC POLICY CONSIDERATIONS

The Task Force may wish to recommend that SFDPH consider including the following in the final HCSMP:

- Explore the possibility of incentivizing Medical Use projects that participate in HealthShare Bay Area.
- Explore the possibility of incentivizing affordable retail clinics located in underserved areas.

POLICY CONSIDERATIONS RELEVANT TO BROADER HEALTH PLANNING EFFORTS

The Task Force may wish to recommend that SFDPH consider the following in its broader health planning efforts:

Federal Level

- The EHR Incentive Payment Program assignment methodology for FQHCs should be modified to enable an FQHC entity to receive incentive funds for the providers who predominantly practice there.

State Level

- Use nurse practitioners and physician assistants to the fullest extent of their education and training.

Local Level

- Advance a San Francisco-wide “health in all policies” initiative.

- Foster collaboration between existing community resources databases to create a single streamlined, comprehensive community resource repository for San Francisco. Explore complementing the resulting streamlined system with “connectors” to facilitate and follow-up on community resource referrals.
- Promote community collaboration (e.g., with community-based organizations, academic institutions, etc.) to improve health outreach, education, and service delivery.

LISTED ACRONYMS

Acronym	Definition
ACC-HITEC	Alameda Contra Costa Health Information Technology and Exchange Coalition
ARRA	American Recovery and Reinvestment Act
BARHII	Bay Area Regional Health Inequities Initiative
CalHIPSO	California Health Information Partnership and Services Organization
CHW	Community Health Worker
CMMI	Center for Medicare and Medicaid Innovation
CMS	Centers for Medicare and Medicaid Services
EHR	Electronic Health Records
FQHC	Federally Qualified Health Center
HiAP	Health in All Policies
HIE	Health Information Exchange
HIPAA	Health Insurance Portability and Accountability Act
HIT	Health Information Technology
HITECH	Health Information Technology and Clinical Health Act
HSBA	HealthShare Bay Area
IPA	Independent Practice Association
ONC	Office of the National Coordinator for Health Information Technology
SFDPH	San Francisco Department of Public Health
SFGH	San Francisco General Hospital
SFTFP	San Francisco Tobacco Free Project

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ⁱⁱⁱ Commonwealth Fund Press Release. “New Study: U.S. Ranks Last Among High-Income Nations on Preventable Deaths, Lagging Behind as Others Improve More Rapidly.” September 23, 2011. <http://www.commonwealthfund.org/News/News-Releases/2011/Sep/US-Ranks-Last-on-Preventable-Deaths.aspx>.

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