



California's Public Hospital Systems: Transforming Diabetes Care

Executive Summary

- *Responding to the growing epidemic of diabetes, California's public hospital systems are transforming the practice of diabetes care from acute, episodic medicine to proactive, planned and patient-centered health care for entire patient populations.*
- *Patients with diabetes at most of California's public hospital clinics receive an evidence-based model of treatment. Research has shown that this model improves health outcomes and reduces avoidable emergency room use and hospital stays.*
- *Patients are empowered to make life changes and manage their diabetes. To make sure these changes are sustainable for patients, California's public hospital systems tailor diabetes care to each patient's cultural background and lifestyle.*

Responding to the Growing Diabetes Epidemic

The diabetes epidemic is growing rapidly, affecting one in seven adult Californians. Type 2 diabetes is especially on the rise as a result of increased rates of obesity and lack of physical activity. In California, 3.7 million adults have diabetes. Of these, an estimated 1.4 million have not been diagnosed. Further, 7.9 million adult Californians have pre-diabetes.¹

Low-income and uninsured populations tend to suffer from diabetes at higher rates, often due to poor access to healthy foods and safe spaces to exercise. These patient populations are primarily seen in California's public hospital systems. An estimated **330,000** of California's public hospitals' 2.5 million patients have diabetes. Thus, responding effectively to this epidemic is a high priority for California's public hospital systems.

As systems of care, California's public hospitals take an integrated, coordinated approach that results in patients receiving the right care in the right place at the right time. This approach includes a focus on care in the outpatient setting and efforts to reduce avoidable emergency room visits and hospital stays. As part of these larger delivery system improvement efforts, California's public hospital systems are implementing the key elements of transformative diabetes care described in the sections below.

Effective and Lasting Diabetes Care: Key Components

Medical Homes

Ongoing, planned treatment helps patients with diabetes stay healthy. The medical home concept is about identifying the appropriate level of care for each patient and for patient

California's Public Hospital Systems

California's public hospital systems make up the core of the state's health care safety net – delivering care to all who need it, regardless of ability to pay or insurance status. Approximately **70 percent** of our highly diverse patient population has either Medi-Cal coverage or no insurance.

These **19** public hospital systems serve as essential community resources throughout the state. Though just six percent of all California hospitals, public hospitals serve **2.5 million** Californians each

year and provide nearly half of all hospital care to the state's **6.6 million** uninsured. They operate **more than half** of the top-level trauma centers and **almost half** of the state's burn centers. California's public hospital systems train **43 percent** of all new physicians in the state.

California's public hospital systems deliver **10 million** outpatient visits per year and have **more than 100 outpatient clinics**.

¹ California Diabetes Program Fact Sheet 2008 updated with 2009 Technical Notes, California Department of Public Health.

populations, such as patients with diabetes. For this reason, national health care policy dialogue includes a focus on **medical homes** – regular sources of outpatient care. In California’s public hospital clinics that are serving as medical homes, patients are treated by a team of qualified clinic professionals who not only treat the symptoms, but also plan and coordinate the full scope of their patients’ health

Effective, patient-centered diabetes care is not just about the physician – it’s about having a team of providers, from nurses to health coaches to pharmacists, who make living with diabetes and staying healthy easier for patients.

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care needs. Medical homes proactively manage patient care, especially for those at highest risk. This is why California’s public hospital medical homes are targeting patients with chronic illnesses, including diabetes.

Teams, Technology and Patient-Centered Care

Working with the California Health Care Safety Net Institute (SNI), public hospital clinic teams have adopted the “Care Model” to treat diabetic patients. This model has been shown to reduce avoidable ER visits and hospitalizations.² Patients are given effective medical treatment, self-management tools and referrals to community resources. Providers incorporate clinical evidence, best practices for prevention and disease care, and information systems into their practices. They proactively monitor patients’ blood pressure, cholesterol and blood sugar levels, reconcile patients’ medications, and help patients set goals to improve their health.

About 80 percent of public hospital primary care clinics across the state have implemented crucial interventions from the Care Model, including:

- Providing **patient-centered and coordinated** care by multidisciplinary teams of clinic professionals, from nurses to physician diabetologists to nutritionists.
- Using **automated disease registries** to monitor the health of patients with or at risk for diabetes. The registries enable public hospital clinics to follow up

A Diabetes Success Story at San Francisco General Hospital Clinic

Grady is a 47-year-old man living in San Francisco, a house painter by trade. He went to see his doctor at one of San Francisco General Hospital and Trauma Center’s outpatient clinics because his vision was blurry. He thought it might be his high blood pressure, but it turned out he had Type 2 diabetes and did not know it.

When he first went to the clinic, his hemoglobin A1c (blood sugar) level was 12.7 percent, well above the target goal of seven percent or below. Now, it is 6.2 percent. The team of clinicians worked with Grady to help him incorporate taking diabetes medicine as part of his daily routine.

He also changed everything – diet, exercise and lifestyle – with the help and guidance of his providers. Grady says San Francisco General Hospital’s clinic – its doctors, nurses



Grady participating in a group visit for patients with diabetes at San Francisco General Hospital’s General Medicine Clinic

and other staff – is his support system. Grady says of the ongoing health care and education he has received since being diagnosed with diabetes: “If I didn’t have diabetes, I wouldn’t be as healthy as I am now.”

² Coleman, Katie, et al. *Evidence on the Chronic Care Model in the New Millennium*, Health Affairs, 2009; 28(1); 75-85.

with patients about their care and bring in patients due for check-ups.

- Implementing **clinical best practices**, such as conducting regular foot checks to prevent amputations (a not-uncommon consequence of uncontrolled diabetes).

For example, Riverside County Regional Medical Center's Family Medicine Clinic was able to help diabetes patients reduce their average hemoglobin A1c blood sugar levels from nine percent to 8.3 percent in less than one year, moving patients closer to "optimal" levels of seven percent or below. In the same time period, El Monte Comprehensive Health Center in Los Angeles increased the number of diabetes patients with optimal blood pressure control, meaning less than 130/80, from under 55 percent to **over 90 percent**.

Culturally Appropriate Patient Empowerment

Patient populations in public hospital clinics are highly diverse, both ethnically and culturally. They also face many hurdles in managing their serious health conditions and can find making lifestyle changes to be an overwhelming proposition. Therefore, California's public hospital systems equip patients with empowerment tools that are consistent with their **cultural background and life situation**, so that they will have the best chance of managing their diabetes successfully.

For example, public hospital clinics use health coaches to help patients navigate the health care system. Health coaches assist patients with paperwork and work with them

after medical visits to make sure they fully understand the medications and advice recommended by the physician. Taking it a step further, health coaches discuss with patients how to best incorporate treatment – such as taking medications, checking blood pressure and injecting insulin – into the patient's day-to-day life in a way that is attainable and comfortable within the context of the patient's lifestyle.

In a one-year SNI pilot program in 2008, 29 public hospital clinics **increased the percentage of patients with a self-management goal by 41 percent**, thus improving the likelihood that these 6,300 patients will truly incorporate healthier, sustainable behaviors. California's public hospital clinics have found that by helping patients make changes one step at a time, patients are better able to take charge of their care.

Addressing Language Access and Health Care Disparities

A precondition to putting patients in the driver's seat of their health care is ensuring that they can communicate with their providers and obtain equitable care. California's public hospital systems are **national leaders in providing patients with language access** – 17 public hospitals across the state are set up to use remote video and voice technologies to provide **health care interpretation for patients in essentially every language needed**.³ Communication in patients' preferred languages allows patients to understand how to manage diabetes, from recognizing symptoms to

Culturally Appropriate Care: Promotoras

Across California, public hospital outpatient facilities are drawing on the expertise of staff *promotoras*, or health promoters, who reach out to Spanish-speaking patient populations. Working with clinicians, the *promotoras* have become an essential part of helping patients manage their diabetes. They provide culturally relevant nutrition education, self-management support, and periodic check-ins to ensure patients are managing their medication and exercise regimens. In addition, the *promotoras* often serve as case managers for patients by providing guidance, and coordinating patients' care.



One of Harbor-UCLA's Family Health Center's promotoras, Ekvira, demonstrating portion sizes

³ Using remote technology enables access to a wide array of health care interpreters located throughout the region or state. By doing so, qualified health care interpretation in more than 120 languages is readily available.

taking medications appropriately. Additionally, California's public hospital systems are implementing strategies to identify and address health care disparities. Many public hospitals compare patient demographic data to outcomes and services data as part of their efforts to make sure that all patients receive appropriate health services. This is especially important because inequitable diabetes care can make the difference between life and death.

Part of the Solution

California's public hospitals' comprehensive diabetes care exemplifies the types of effective and efficient strategies that state and federal policymakers seek to encourage and institute:

- *Coordination of patients' planned and ongoing health services*
- *Use of evidence-based medicine*
- *Provision of culturally appropriate care*

Although reimbursed at only about half their costs, California's public hospital systems are making their dollars count by providing comprehensive diabetes care to help address a growing epidemic. Building on almost a decade of delivering patient-centered and evidence-based diabetes care, California's public hospital systems are positioned to continue expanding diabetes care in their outpatient clinics throughout the state.

Our public hospital systems are engaged in community partnerships to address many factors – such as unsafe

streets for exercise or lack of access to nutritional foods – that require community-wide coalitions and linkages. They also are conducting community outreach and health education on diabetes. For example, they are participating in community health fairs where they offer free prevention screenings for common conditions like diabetes, partnering with schools and other organizations, and driving mobile clinics into less-accessible areas of their communities.

Over 10 percent of the more than three million adults with diabetes in California are cared for by public hospital systems. These systems are doing an outstanding job with very limited resources for California's most vulnerable people.

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We now look to health care reform and other future policies to help sustain and strengthen diabetes care and other delivery system innovations. For this epidemic to be fully addressed, our communities need to confront larger societal issues and our health care system must systematically adopt transformative and comprehensive diabetes care, prevention, education and outreach.

Helping California's Public Hospitals and Their Clinics

As the quality improvement partner of the California Association of Public Hospitals and Health Systems (CAPH), the California Health Care Safety Net Institute (SNI) assures that public hospital systems are recognized leaders in delivering and transforming health care practices that enable all individuals and families – particularly in diverse and underserved communities – to enjoy optimal health. SNI designs and directs programs that accelerate the spread of innovative practices among California's public hospitals, their clinics and beyond, so that more people receive effective, efficient and respectful health care regardless of their ability to pay. SNI has been particularly effective in helping public hospital clinics improve their care of patients with diabetes.

SNI's initiatives are supported by critical funding from the California HealthCare Foundation, The California Endowment, the Blue Shield of California Foundation, the Kaiser Permanente Community Benefit Fund, The California Wellness Foundation and the Agency for Healthcare Research and Quality.

For more information about SNI, visit www.safetynetinstitute.org.