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Reforming Camden's Health Care System - One Patient at a Time

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Reforming Camden's Health Care System — One Patient at a Time

By Jeffrey Brenner, MD

We are faced with the challenges of an aging population, increasing numbers of patients with chronic illnesses, continually rising health care costs, growing numbers of uninsured, constrained public budgets, and the growing recognition that many Americans receive unsafe and ineffective care. Our health care system stands at the crossroads of access, quality, and cost without an obvious path forward. Systemic health care reform will require new and innovative approaches to long-standing problems. In Camden, New Jersey, an organization called the Camden Coalition of Healthcare Providers (CCHP) has begun to reframe the questions and look for better answers.

Camden, a small city with 3 hospitals in 9 square miles, has the dubious distinction of being at the top of 2 lists: it is the poorest city in the United States according to 2005 census data,[1] and it was named the "most dangerous city in the United States" by the Morgan-Quitno report in 2003. Once a thriving center of manufacturing and industrial commerce, the city's economy and social infrastructure have collapsed over the last 50 years. Currently, 44% of families live below the federal poverty level and the city's population of 79,000 is quite young (median age = 27 years).[1] The city government, police department, and school system are under varying levels of state takeover due to a history of corruption and poor performance. Ironically, a place like Camden may hold the keys to reinventing the health care delivery system – to make it safer, more cost-effective, and more patient-centered.

Five years ago, CCHP began building a citywide health database using claims data from the 3 local hospitals. The database now contains the name, address, date of birth, date of admission, insurance status, diagnosis codes, charges, and receipts for every Camden City resident who has been to a local hospital or emergency room (ER) from 2002 through 2007. From these data we have learned that, in a single year, 50% of the city's residents use an ER or hospital - twice the national rate. The leading utilizer averaged 113 visits a year. The vast majority of these visits are for acute and chronic problems that could be prevented with better access to primary care.

According to internal data collected from 2002 to 2007, 13% of the patients accounted for 80% of the costs (mostly to Medicaid and Medicare) and 20% of the patients generated 90% of the costs. The most expensive patient had $3.5 million in receipts. The top 1% of patients (1035 residents) went to the ER and hospital between 24 and 324 times. The $46 million that hospitals received for the care of these patients would be sufficient to fund approximately 100 primary care nurse practitioners (NP), with each NP caring for just 10 patients.

The database was a crucial first step in galvanizing support for CCHP from local stakeholders and foundations. Currently, CCHP has 3 main projects: a Citywide Care Management Project targeting "super utilizers" of the local ERs and hospitals; a Primary Care Capacity Building Project to assist local offices with practice improvement efforts; and a Web portal to improve efficiency and coordination of care.

Implemented in September 2007, the *Citywide Care Management Project* now has 60 patients enrolled. Patients are referred by physicians, nurses, and social workers at the local hospitals, and by several Medicaid health maintenance organizations (HMOs). A family physician, NP, community health worker, and social worker staff the project, which provides "transitional" primary care to patients because most have no existing relationship with a primary care provider. These patients have significant barriers to care including: homelessness,

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substance abuse, severe chronic illnesses, physical disability, and mental health problems. Project staff help patients fill their prescriptions, apply for long-term disability, enroll in a medical day program, find appropriate housing, get a bed in the homeless shelter, coordinate legal issues, find transportation, treat depression, manage chronic illnesses like diabetes, and coordinate appropriate testing/specialty care. The patients are monitored wherever they go: hospital, nursing home, medical day program, street corner, or homeless shelter.

The chief advantage of a citywide coalition is its ability to encourage collaboration and data sharing among hospitals, to identify common challenges, and to address the challenges with coordinated solutions. One successful strategy has been to organize a monthly Citywide Care Management Coordinating Meeting that is attended by social workers, ER physicians, hospitalists, and community-based physicians from across the city. An electronic health record (EHR) system is used to systemically track the care of our patients. Eventually, local ERs, hospital-based physicians, and Medicaid HMO care management staff will have access to the system as well.

We are currently managing 90 patients and have enough data on 36 patients, before and after the project, to begin analyzing outcomes. The citywide health database allows us to track 5 years' worth of hospital and ER claims prior to the intervention. Our system of soliciting referrals from local physicians and social workers has correctly identified and enrolled very expensive, high utilizing patients in our project (Figure 1). Our project tracking data shows an initial decrease in their utilization parameters and an improvement in their collections rate. Once we have a year of data we can begin the statistical analysis necessary to correct for problems in data like regression to the mean.

Like any maladaptive health behavior, it takes time and compassion to effect positive change in patterns of utilization. These patients don't want to go to the hospital – they just don't know how to get their needs met. After a few months of twice-weekly outreach visits, hospital utilization often drops significantly. Patients like these are not unique to Camden. Such patients are well known to every hospital and ER in every city in the country.

For much of Camden's population, reducing ER and hospital utilization will require transforming local primary care offices into high-performing, modern, patient-centered medical homes, with features like multidisciplinary care teams, EHRs, open-access scheduling, and patient registries. The primary care providers and clinics that operate in underserved communities struggle to keep their offices open. Unsafe communities, break-ins, low reimbursement rates, complex patients, and difficult insurance requirements create monumental challenges to providing high-quality care. Our Coalition has begun laying the groundwork for transitioning local practices into NCQA-certified medical homes[2] through monthly office manager meetings, provider education programs, individual practice assessments, and technical assistance.

Political scientists observe that systems in urban communities (ie, public health, safety, education) become insular, self-perpetuating, and resistant to change. A study of the education performance and civic capacity of 11 cities found that sustained improvements were achieved as a result of many years of sustained efforts by a stable group of stakeholders. The CCHP exemplifies the type of local multi-stakeholder coalition that will be critical to nationwide reform of our health care system. There are multiple efforts across the country to build similar organizations.

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Figure 1. Initial Project Outcomes for Patients in Citywide Care Management Project

Measured as rates per month before and after intervention at a 1:1 ratio
N=36 patients

Outcome Measure	Before	After	Absolute Change	Percent Change
Charges	$1,218,009.69	$531,202.91	-$686,806.78	-56.39%
Receipts	$83,992.29	$55,641.94	-$28,350.35	-33.75%
Collections rate	6.90%	10.47%	3.58%	+51.90%
Emergency Visits	43.532	29.363	-14.169	-32.55%
Inpatient Visits	18.063	7.850	-10.214	-56.54%

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A small, poor city like Camden is an excellent laboratory for understanding what is broken in our health care delivery system and for piloting practice-level, hospital-level, and community-wide solutions.

Unnecessary utilization and poor health outcomes in urban communities represent a systemic failure to build a well-funded, accessible, high-quality, proactive, coordinated, data-driven health care delivery system with a strong primary care base that is connected to the local network of community-based social services. We are working to build such a system – one "super utilizer" at a time.

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