

Data Network Transforms Camden Care

By LAUREN H. WARD

amden, N.J., the small suburban city located just outside of Philadelphia, is considered one of the most dangerous and poverty-stricken places in the U.S. The 2010 Census reports 77,344 city residents. It is estimated that around 95 percent of the population is eligible for Medicaid assistance. Many live in substandard living conditions, experience frequent violence and suffer from poor health.

Access to health care is a major issue for Camden residents, even though the city is well served with two major hospitals and an additional emergency center operated by another regional provider. How and when residents used health services became a regular topic in 2002 when local primary care physician Jeffrey Brenner, MD, began meeting over breakfast with several other local primary care providers to discuss the daily troubles facing physicians working in Camden.

Over time, the group grew to include medical professionals and representatives of health care organizations from across the city, and they decided to formalize — becoming what is known today as the Camden Coalition of Healthcare Providers. This independent nonprofit organization has become the community organizer of the Camden health provider arena. The organization describes its mission as improving the health status of all Camden residents by increasing the

capacity, quality and access of care in the city.

A BROKEN SYSTEM

In urban environments such as Camden, health care delivery is often fragmented and uncoordinated. As one of the city's primary care physicians, Brenner cared for many patients who suffered from multiple co-morbidities, and he was aware that most of them made infrequent office visits to receive care.

Brenner often would walk into an exam room to meet with a patient who recounted trips to local hospitals and emergency departments since his or her last visit to Brenner's office. Sometimes patients told Brenner about surgery, treatments or medications they had been given elsewhere, but they couldn't fill in important details. Often they didn't know how to take their medicine properly.

This pattern presented a major dilemma for Brenner and other Cam-

den health care providers. Determining the proper treatment for patients without knowing specifics about their medical, surgical and treatment history can be not

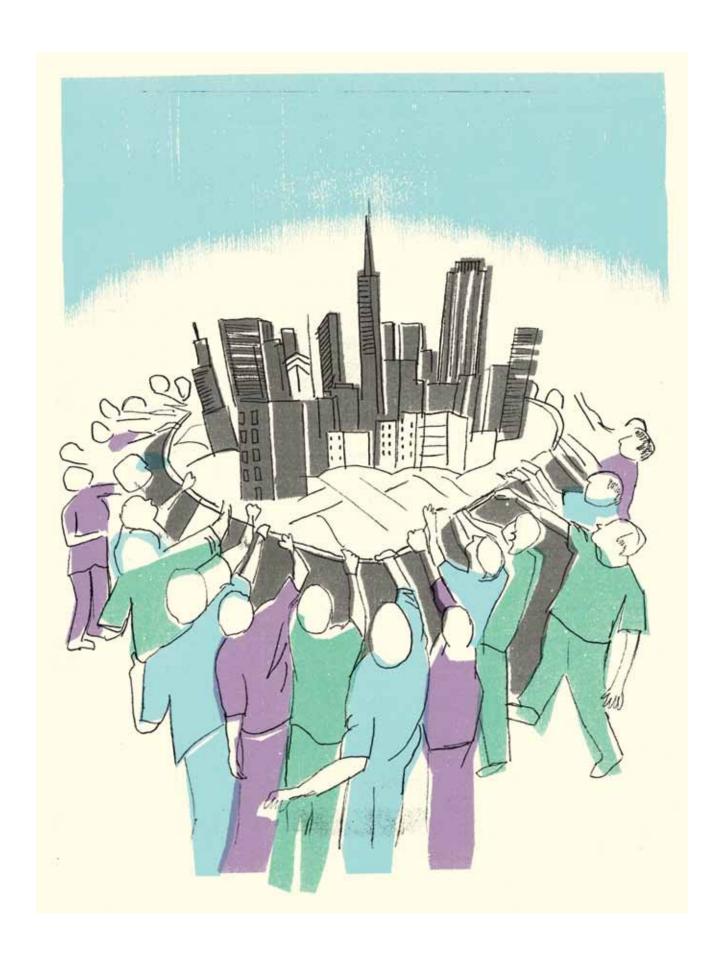
just challenging, it can be dangerous.

For Brenner, devising a way to keep track of these "drifter" patients became a health care priority. He also believed important public health data could be generated if Camden were able to track and map locations of crime, injury and disease — though, as a member of the citizen reform commission for the Camden Police Department, he knew the city's information system was riddled with holes.

Brenner began by submitting a proposal to Cooper University Hospital, the hospital he was working for at the time, to gather patient information for anyone who had been a victim of any type of accident or injury within the last year.

The hospital agreed, and Brenner was able to use the data to create maps, graphs and charts plotting disease, crime and injury hot spots based on the experiences of Cooper University Hospital patients.

"We realized if we could ever build



a data set that linked all three Camden hospitals, that it would tell a really important story," Brenner said.

Over the next six years, Our Lady of Lourdes Medical Center, a member of Catholic Health East, in collaboration with Cooper University Hospital and Virtua Health Camden, worked with the Coalition and Camconnect, an independent, non-profit, non-partisan, data intermediary and data warehouse, to create a citywide database of claims.

The Camden Health Information Exchange links private doctors, hospital emergency rooms and community health centers in a collaborative effort to improve the care of patients with chronic diseases.

"SUPER-USERS" BURDEN SYSTEM

Information in the database included everything from patients' names and addresses to their dates of admission and discharge to their diagnoses. Also included were the charge receipts for every Camden resident who had been to any of the city's hospitals or emergency rooms. It quickly became obvious how valuable this type of data could be for understanding the patterns of complex public health problems.

The database eventually led to the creation of the Health Information Exchange, a live data feed of patient medical information that flows from an effective tool to providing proper patient care and reducing the overutilization of health services. For the first time, health providers across the city could link patients across institutions. This was quite an achievement, to have health systems cooperate and collaborate on a project of that magnitude.

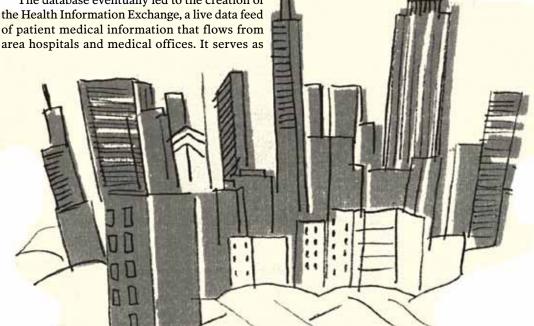
The database of over 387,000 patient records showed that within one year, 50 percent of Camden residents used ER and/or other hospital services. The majority of those residents were seek-

> ing care for symptoms Brenner and other primary care providers normally treated in their offices. Essentially, patients were turning to hospitals for primary care.

> Brenner mapped, graphed and charted chronic illness by sections in Camden. "I knew the city so well that I

could begin to take the data and tell stories with it. That's an incredibly powerful tool for making change," he said.

He found that 1,000 patients made up the top 1 percent of those who used emergency room and hospital services. Those "super-users" accounted for 39,000 visits and an average of \$375 million per year in costs.





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What's more, overutilization of ER and hospital services was a citywide problem. Thousands of people were getting lost on discharge. It was obvious that health care in Camden was so fragmented that it was having a tremendous impact on patients' care.

As Brenner explained, multiple barriers and stressors such as poverty, mental illness, lack of health insurance, housing and transportation build up over time in people's lives, and when they need care, they go to the one place that won't reject them — the ERs and hospitals.

EXCHANGE'S IMPACT

The Camden Health Information Exchange links private doctors, hospital emergency rooms and community health centers in a collaborative effort to improve the care of patients with chronic diseases.

Health care providers within the city can access pertinent patient information, which physicians ultimately use as part of the patient assessment and treatment plan. This patient data is critical to managing care for patients with multiple co-morbid diseases. It allows care providers to adhere to prescription regimens and schedules for regular follow-up appointments.

"Organizations like the Camden Coalition of Healthcare Providers are critical as catalysts for collaboration and systemwide improvements to health care delivery for complex, chronically ill patients in Camden," said Brenner. "No institution can improve health care alone, but through multi-site collaboration, we knit together our fragmented and complex system making it more patient-centered and cost effective."

Maureen Hetu, chief information officer for Lourdes Health System, said Lourdes is very proud of its role in developing the Camden Health Information Exchange.

"Together with our partners, we have been able to achieve results that have had a positive impact on the lives of patients in our community," she said. "This project has been rewarding for all involved and has been completely in line with our mission and vision."

Organizers hope the Health Information Exchange will help lower health care costs by reducing unnecessary tests and improving the coordination of care. The early findings suggest that expanding this new model for the delivery of care to frequent utilizers in other areas of the state has the potential to save millions of dollars

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in medical care resources while improving health outcomes for the patients it would serve.

"It is possible to provide higher quality care and lower costs by providing more systematic and organized care," said Brenner. "Patients with complex, chronic illnesses often fall through the cracks. We are working together — providers, medical offices, hospitals, and public health organizations — in Camden to build a seamless, organized, communitywide approach to the care of individuals with multiple health conditions."

Kimberly Barnes, vice president for planning and development for Lourdes, has been a board member since the Camden Coalition's early days. She noted, "The coalition's work is not just a local endeavor but serves as a national model that reflects the best opportunities offered by health care reform: to improve quality at reduced cost. There is much we have learned from the coalition that has implications for our own work in Lourdes Health System as we develop our new models of patient-centered care, focused on coordination of services in the setting that is best for the patient."

Barnes added, "Dr. Brenner and the coalition's work in Camden will be influencing communities across the nation for years to come."

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