How an inner city care team is reducing hypertension disparities

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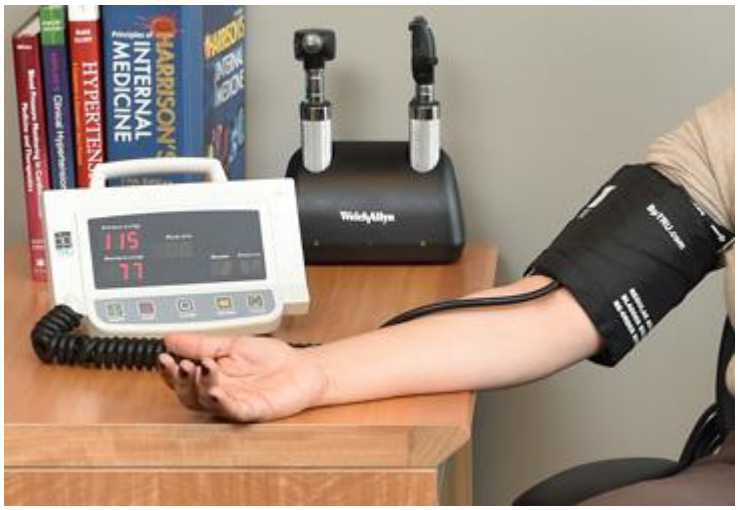
Lyndra Vassar
News Writer

Improving blood pressure control rates among medically underserved patients is no easy feat—but that's precisely what one academic medical center in New Jersey has done. Learn how care teams launched an effective pilot project to lower blood pressure, reduce disparities and improve quality care among black and Hispanic patients.

Disparities in the inner city



When the Urban Health Institute (UHI) at Cooper University Health Care first opened its doors in 2013, physicians and care teams had one common goal in mind: Improving the health of some of New Jersey's most medically disadvantaged and underserved patients who live or receive medical care in Camden.

In a city where the murder rate is 12 times higher than the national average and nearly 40 percent of

residents live in poverty, patients encounter daily challenges—beyond issues they may disclose in the exam room—that can compromise their health.

“Residents of Camden are living … with a median average family income of about $26,000,” said Rachel Adams, an advanced practice nurse at UHI. “So many of our patients are saddled with the challenges of … choosing between” crucial life necessities such as blood pressure medication or groceries to feed their children.

Roughly 50 percent of the city’s residents are black, and 47 percent are Hispanic, according to data from the U.S. Census Bureau. Adams noted that most patients “have lower health literacy in terms of their knowledge about basic health necessities” and “only about 56 percent of Camden residents have a high school diploma.”

Finding inspiration for hypertension solutions in India

To help address these disparities, Adams said Kathy Stillo, the executive director and co-founder of UHI, advised care teams to travel to India to learn about innovative solutions that would address the unique needs of Camden’s residents and ways to improve their health outcomes.

Stillo had previously traveled to the country and was aware of community-based care models developed by the Aravind Eye Hospital in Madurai, India, which serves a population of 26.7 million people across multiple districts, Adams said.

While in India, the UHI care team learned how care teams at Aravind conducted “task-shifting,” which allowed volunteers in local communities to assist care teams with tasks such as basic eye screenings “that were typically repetitive and took a long time for physicians to do,” Adams said. The goal of shifting these tasks was to free up time for “physicians to focus on what they were trained to do, which was the actual eye intervention and surgery.”

“Being able to see what [care teams at Aravind did] was really the impetus for our work,” Adams said. After returning from India, she and her colleagues developed a task-shifting protocol to help UHI physicians refer patients with hypertension to nurses for follow-up appointments and educational sessions that would help lower patients’ blood pressure.

How care teams at UHI tackled hypertension and disparities

The protocol has now been implemented as part of a pilot project to lower blood pressure among 74 patients at UHI—and it's effectiveness is being demonstrated. In one year, 51 percent of these patients have attained their goal blood pressure of <150/<90 mm Hg. Meeting this target means patients "improved both their systolic and diastolic blood pressures," Adams said.

What was the secret to their success? Adams recently shared insights on the project at a showcase of the Commission to End Health Care Disparities. She said physicians and care teams improved blood pressure control among some of New Jersey's most vulnerable patients by:

- **Offering targeted patient visits and hypertension treatments.** As part of the new protocol, nurses at UHI held three 30-minute visits with referred patients to accurately measure their blood pressure and discuss specific aspects of their hypertension treatments. These include blood pressure medications and lifestyle changes—such as proper diet and exercise—patients could make to improve their blood pressure. Since the project has been underway, UHI has conducted 231 such visits with patients. These personalized visits were essential to the project's success, Adams said. Patients typically met with the same nurse for each of their three visits, which improved patient accountability and motivated them to better partner with UHI's care teams. If patients attended three blood pressure visits and had two subsequent readings at their goal blood pressure, they graduated from the program, Adams said—but not without first speaking with their physician. After their third visit, nurses "referred every patient back to their physician," she added. "If at that point it's decided that the patient still needs to come for these visits, we continue them."

- **Educating patients on hypertension and sodium intake.** "So few people know what hypertension really is or that a low-salt intake can improve their blood pressure readings," Adams said. That's why during initial blood pressure visits, nurses played an educational video for patients, which featured an overview of hypertension, its associated health risks and key facts patients need to know about blood pressure medications. Nurses also discussed patients' questions, provided handouts on hypertension and issued patients wallet cards for documenting in-office blood pressure readings and that provide information for healthy lifestyles. After this introduction to the program, nurses met with patients for a second visit to teach them how to properly read nutritional labels for sodium content and which high-sodium foods to avoid.

- **Establishing an algorithm to titrate blood pressure medications.** "We followed the JNC-8 guidelines and wrote an algorithm" to assess whether patients were meeting their target blood pressure and if they needed to adjust their medication dosage, Adams said.
- **Partnering with AmeriCorp representatives to address social determinants of health.** Despite having more time to speak with patients, "sometimes [they] were embarrassed to

tell their … nurse that they didn't understand how to take their medication or didn't have the money to cover the copay for their medication," Adams said. "AmeriCorp [staff] were able to identify those challenges, and we could problem-solve ways to help the patient." AmeriCorp representatives also helped patients find "transportation and medical accompaniment to appointments," Adams said. "Being able to [integrate] a health coach [in the project] was really helpful."

Additional resources to improve your practice's hypertension management

- Get the one infographic you need for accurate blood pressure reading.
- Read the three questions you should ask patients when measuring their blood pressure.
- Hear what other physicians are doing to control hypertension in their practices.
- See how you can help patients manage blood pressure outside of office visits.
- Explore resources in the "M.A.P." (Measure accurately, Act rapidly, Partner with patients) collection, offered through the AMA's Improving Health Outcomes initiative. Resources include a list of common errors in blood pressure measurement, posters that show the proper positioning for the patient and the cuff, and resources about self-measured blood pressure.