Community Health Workers Can Reduce Hospitalizations by 65 Percent and Double Patient Satisfaction with Primary Care

Penn Study with Low-Income Patients and U.S. Veterans Points to Scalable, Low-Cost Strategy for Health Systems to Improve Quality of Health Care While Reducing Hospitalizations

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PHILADELPHIA, PA – Community health workers—trusted laypeople from local communities who help high-risk patients to address social issues like food and housing insecurity—can help reduce hospital stays by 65 percent and double the rate of patient satisfaction with primary care, according to new study results published in *JAMA Internal Medicine*. The study, conducted by researchers in the Perelman School of Medicine at the University of Pennsylvania, focused on chronically-ill low-income patients and U.S. veterans, and is the first multi-center randomized controlled trial to demonstrate these kinds of improvements resulting from a health system-based social intervention. The study was funded by a three-year, $1.9 million grant from the Patient-Centered Outcomes Research Institute (PCORI).

“Improving health quality while lowering costly hospitalizations is what so many health care leaders are trying to achieve,” says lead study author Shreya Kangovi, MD, MS, an assistant professor of Medicine and founding executive director of the Penn Center for Community Health Workers. “It’s remarkable that these results were achieved not by an expensive drug or technology, but from good old-fashioned social support.”

Shifts in financing have pushed health care organizations toward addressing social issues—eviction notices or domestic violence—that make it difficult for millions of working class Americans to stay healthy. Community health workers are well-positioned to address these issues because they’ve experienced similar challenges themselves. While they are a rapidly growing health care workforce, many programs struggle due to insufficient standardization, a lack of rigorous scientific evidence or because they only apply to one disease.

With these specific issues in mind, the Penn team developed IMPaCT (Individualized Management for Patient-Centered Targets), a community health worker model, to be highly standardized and scalable. In this study, a multi-site trial including a VA medical center, a federally-qualified health center, and an academic family practice clinic, nearly 600 patients were randomly assigned to receive standard primary care or six months of support from an IMPaCT community health worker plus standard primary care. Participants were residents of eight high-poverty zip codes in Philadelphia, PA, who had received a diagnosis of two or more targeted chronic diseases (diabetes, obesity, tobacco dependence, and hypertension), at least one of which was in poor control.
Between January 2015 and March 2016, 288 patients were assigned to usual primary care, while 304 patients were assigned to receive community health worker support. The community health worker-supported group received six months of hands-on, tailored support that included coaching, social support, advocacy, and health care navigation.

Compared to patients in the typical primary care group, those who received community health worker support were nearly twice as likely to report high-quality primary care, and spent fewer total days in the hospital at six months (155 days vs. 345 days) and at nine months (300 days vs. 471 days). Patients receiving community health worker support also had lower rates of repeat hospitalizations, including 30-day readmissions.

“We do things that doctors, nurses, and social workers don’t,” said Anthony Davis, a veteran and community health worker at the Crescenz VA Medical Center. “I noticed a lot of my patients had PTSD and were socially isolated. I took my time with them and got them to come out each week to social activities like movies or bowling. We even planted an urban garden. After these efforts, you can see the difference in their health.”

Noting that half the U.S. population currently lives with a chronic disease and 70 percent are projected to die from one, the study addresses the important question of whether a standardized intervention delivered by community health workers is effective for improving clinical outcomes among a chronically-ill, high-risk patient population.

“Our team is encouraged to report findings supporting the idea that health care organizations can use a standardized community health worker intervention to address socioeconomic factors, improve quality of care and reduce hospitalization,” says study co-author David Grande, an associate professor of Medicine. “The 65 percent reduction in total hospital days is significant when it comes to demonstrating the value for health systems using a standardized intervention like IMPaCT.”

The study’s findings are consistent with previous single-center randomized clinical trials measuring the effectiveness of the IMPaCT community health worker model, which showed notable results ranging from improved mental health and better access to quality care, to reduced hospital readmissions and improvements in chronic disease control.

The results are published just weeks after Penn’s IMPaCT model was selected among more than 450 applicants to receive “Gold Status” in the Department of Veterans Affairs Shark Tank competition. As a winner of the Shark Tank competition, the IMPaCT model will be replicated in Veterans Affairs medical centers where veterans face social challenges.

“If we don’t stop to consider and address the very real socioeconomic and behavioral factors that directly affect the health of so many people, we can only expect to see more of the same when it comes to more frequent and lengthier hospital stays, high readmission rates, and related economic costs,” Kangovi noted. “Our trial shows a way to deliver better care.”

Additional Penn authors on the study include Nandita Mitra, Lindsey Norton, Rory Harte, Xinyi Zhao, Tamala Carter, David Grande, and Judith A. Long.

TOPIC: Health Policy
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The Perelman School of Medicine has been ranked among the top medical schools in the United States for more than 20 years, according to U.S. News & World Report’s survey of research-oriented medical schools. The School is consistently among the nation’s top recipients of funding from the National Institutes of Health, with $405 million awarded in the 2017 fiscal year.

The University of Pennsylvania Health System’s patient care facilities include: The Hospital of the University of Pennsylvania and Penn Presbyterian Medical Center — which are recognized as one of the nation’s top “Honor Roll” hospitals by U.S. News & World Report — Chester County Hospital; Lancaster General Health; Penn Medicine Princeton Health; Penn Wissahickon Hospice; and Pennsylvania Hospital – the nation’s first hospital, founded in 1751. Additional affiliated inpatient care facilities and services throughout the Philadelphia region include Good Shepherd Penn Partners, a partnership between Good Shepherd Rehabilitation Network and Penn Medicine, and Princeton House Behavioral Health, a leading provider of highly skilled and compassionate behavioral healthcare.

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