In the U.S., the burden of poor health outcomes and high costs are highly concentrated in a small fraction of patients with complex needs and frequent hospitalizations. These patients often have multiple interacting health care needs and experience fragmented care. To address this fragmentation, the existing Comprehensive Care Program provides patients the opportunity to get care from the same physician in the clinic and the hospital, leveraging the power of relationships to promote healing and wellbeing. The program's preliminary results demonstrate strong outcomes: decreased hospitalizations, increased satisfaction and improved mental health; but, a significant proportion of patients never fully engaged with the program due to nonmedical barriers.

Systems for Action (S4A) aims to discover and apply new evidence about ways of aligning the delivery and financing systems that support the Robert Wood Johnson Foundation's vision to build a Culture of Health. S4A seeks to identify system-level strategies for enhancing the reach, quality, efficiency, and equity of services and supports that promote health and well-being on a population-wide basis.

The research teams is piloting a randomized controlled trial to establish and begin to evaluate a new model of care: the Comprehensive Care, Community and Culture Program (C4P). Local, state and national stakeholders participate in the dissemination of the results by building on strong previously established relationships and implementing the insights of C4P participants to inform these activities, and ultimately, improve health for vulnerable populations while reducing health care costs.

Patients who are high-risk and less likely to engage in care face barriers such as social isolation, mental health and cognitive challenges, and financial limitations. The medical sector has historically been ill-equipped to address the social determinants critical to health and wellbeing. Care coordination, while an important strategy to improve outcomes and reduce costs of care, has increased the size and complexity of the care team. A new model of care is needed to fully address patient needs.
In order to address this challenge of fragmented care and underlying social needs that increase risk for hospitalization and impact overall wellbeing, researchers at the University of Chicago developed the Comprehensive Care, Community and Culture Program (C4P) to test an innovative approach building on the success of their earlier work.

The C4P program works with frequently hospitalized patients who primarily live in underserved communities on the South Side of Chicago. In addition to care from the same physician in the hospital and the clinic, the program is designed to enhance patients’ access to support from community health workers and to educational, cultural and arts opportunities that promote health and wellbeing. C4P leverages resources across sectors to support patients in a holistic manner, addressing multiple dimensions of wellness and activating them to engage in their health care. The program harnesses relationships with stakeholders including local government, public health, social service, faith-based organizations, community leaders and patients themselves to bring cross-sector community engagement into the program.

**THE SPECIFIC PROGRAM STRATEGIES INCLUDE:**

- Defragmenting care for patients at increased risk of hospitalization, allowing them to see the same doctor in the clinic and in the hospital.

- Conducting systematic screening for unmet social needs.

- Employing community health workers to see patients in their homes on an ongoing basis to support chronic disease management, provide health education, assist in navigating the health care system, and build relationships with patients to better engage them in care.

- Offering a cultural arts and humanities program, Artful Living, which features group activities in partnership with arts organizations. These activities provide social interaction, entertainment, while also building skills and generating meaning and belonging for participants.

- Providing educational events and resources addressing practical challenges of daily life such as financial planning and accessing transportation.

- Designing and implementing interventions that address clusters of unmet social needs identified through a latent class analysis that include the following:
  - **child-related needs**
  - **social engagement needs**
  - **financial and health insurance needs**
  - **healthy eating/physical activities**

  These include launching a Social Service Alignment Learning Collaborative, community garden and healthy eating program, and social work-driven financial wellness clinic.

- Building a Patient and Community Advisory Board to bring together people with diverse backgrounds to strategize about how to improve health care in their communities.

The C4P program also engages intergenerational cohorts of AmeriCorps service members in extending the program and supporting patient enrollment, interviewing, social service support and program operations.
The core care model is essentially an almost costless redistribution of inpatient and outpatient physician effort to create a set of physicians who care for their panel of patients in and out of the hospital. Additional costs associated with the C4P model are the cost to hire community health workers and minimal costs for hosting community-based arts and social programming. Overall, the program is estimated to bring cost savings of $3,000-$4,000 per patient per year, which if scaled in the US, would imply tens of billions of dollars saved.

Researchers are reviewing Medicare claims data and hospital discharge data to understand whether the program affected physical and mental health outcomes and costs of care. They also conducted surveys to assess any changes in patient satisfaction with care. Patient activation was measured with a quantifiable scale determining patient engagement in healthcare at baseline and follow up calls.

Findings from the C4P program (2016-2018) to-date include two years of follow-up and indicate better outcomes for patients in the C4P arm over CCP on hospitalizations, unmet needs and patient activation. Hospitalization rates were lower in the CCP (6%, p-value=0.72) and C4P (29%, p=0.07) arms compared to the standard arm after two years of follow up. The hospitalization rate for C4P compared to CCP was estimated to be 24% lower (p=0.12). Activation, a patient's willingness and ability to take independent actions to manage their health and care, also increased in CCP and C4P. Patients with a low level of activation at baseline had the largest benefits.
RECOMMENDED ACTION

This evidence indicates that an integrated approach to addressing medical and psychosocial needs of patients with complex needs is an effective way for health systems and health care providers to improve patient outcomes, reduce hospitalizations and costs. The effects appear to be particularly strong for patients who are not actively involved in their care. Expanding implementation of programs that screen for and address social needs while ensuring continuity of health care is a promising direction for improving equity and outcomes in the U.S. healthcare system. It is important to note that interventions should be designed to address social needs as they co-occur with other needs, not only individually nor in isolation.

Given the cost-savings realized by this approach, hospitals and physician practices can consider adopting the program now with their existing funding, particularly those entities that operate with funding from risk-based contracts such as Medicare ACOs, Medicare Shared Savings Program, and Medicare Advantage contracts.

This low-cost, sustainable approach allows for increased scalability for other organizations at the nexus of health and social service, including medical centers, social service agencies, and community-based organizations. The research team is codifying key components of the CCP and C4P models into an implementation playbook that assesses “site readiness” and is working with healthcare systems locally, nationally and internationally to replicate the program.

Key stakeholders in expanding the reach of this program include health insurers/payers, health systems, social service organizations, and policy makers. Health systems leaders can connect to and leverage existing community resources; for example, universities often have community arts and culture programs, and some medical centers have community health worker programs that can collaborate to serve patients in need.

To support dissemination of the program, the research team launched a not-for-profit entity, Comprehensive Care Institute, which will offer hands-on consulting services and convening capabilities, including conferences and learning collaboratives around the topic of “comprehensive care,” to optimize knowledge-sharing and model scalability.

RESEARCH LIMITATIONS

While many of the outcomes in this research are drawn from administrative and billing data, some measures are self-reported and subjective. The program has been studied in only one population, which can limit generalizability, but efforts to replicate it are underway.