



RESEARCH SUMMARY

Effect of a Nurse Care Coordination Program on Quality of Care

The Aim

A growing number of health care organizations are implementing interventions to improve care coordination among health professionals and organizations because of its association with better quality of care for patients. One increasingly popular intervention is the use of nurse care coordinators who provide additional care and support to patients with complex medical needs, including those with poorly controlled chronic illness, transitioning from hospital to home, or with multiple medical and behavioral health issues. These nurses typically work closely with patients to help coordinate the care delivered by different providers and to help patients actively manage their illnesses.

Although the use of nurse care coordinators is growing, little is known about how they affect patients and staff. This project is evaluating the impact of a nurse care coordinator program on patients' health and care experience, as well as staff interactions and work experiences.

Anticipated Benefits

This study is providing insights into the effects of using nurse care coordinators to improve coordination. If this strategy is shown to improve quality of care for patients and work experiences for staff, health care organizations will be better able to weigh the benefits of adopting this approach to care coordination.

Our Approach

The CAHPS® team studied the impact of using a nurse care coordination program at 12 community health centers affiliated with Community Health Center, Inc. (CHC), a private, non-profit, health system that provides comprehensive primary care services in medicine, dentistry, and behavioral health to over 130,000 patients in Connecticut. CHC has a special commitment to the uninsured, underinsured, and special populations such as patients with HIV/AIDS. The research team conducted a pre-post intervention study that compared changes in patient care experiences and staff work experiences at six centers using the new program (intervention group) to those for the six centers without the program (control group).

The team collected the data for this study using multiple methods, including surveys, information from electronic medical records, and sociometric sensors. To assess patients' experience of care, the team used the CAHPS Clinician & Group Survey (CG-CAHPS) with the Patient-Centered Medical Home (PCMH) items as well as supplemental items that ask about coordination of care. Patients' health was measured using data from CHC's electronic medical record. To gather information on face-to-face interactions, the staff wore sociometric sensors that collected data on the frequency, duration, and patterns of their interactions (e.g., turn-taking, centrality of individuals in the communication network). The team also used a survey to gather data on other staff work experiences.





Initial Findings

Analyses of the data suggest that the nurse care coordination program affected patient care and staff work experiences:

- The frequency of office visits for patients enrolled in the program increased significantly during the first few months, which was to be expected given the program’s emphasis on greater patient engagement, monitoring, and follow-up to achieve care plan goals (e.g., controlled conditions, no preventable hospitalization).
- Ratings of patient care experiences—including timeliness of care, care coordination, support for self-management, and care for mental health—improved moderately in centers using the program.
- The data from the sociometric sensors worn by staff suggests that the introduction of this program led to a better network structure for care coordination, as evidenced by a significant increase in the centrality of nurses in care teams. The sensor data also provided evidence of an increase in conversational behaviors between staff that are generally considered problematic for teamwork (e.g., decreased listening and increased interruptions of colleagues in conversation).
- Primary care providers’ participation in conversations with other care team members, listening, and uninterrupted speech were positively and significantly associated with the percentage of patients with controlled hypertension and diabetes.

Together, these preliminary results from the first nine months of the nurse care coordination program suggest some positive effects of the program on patient care experiences and care team network structure as well as some effects associated with poor patient clinical outcomes.