Enhanced Care Team Nurse Process to Improve Diabetes Care

Joseph R. Herges, PharmD
Lisa L. Ruehmann, RN
John C. Matulis III, DO
Benjamin C. Hickox, APRN, CNS, DNP
Rozalina G. McCoy, MD, MS

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THE INNOVATION

Collaborative practice models such as the Chronic Care Model are particularly relevant for integrated health care delivery systems, accountable care organizations, and patient-centered medical homes, which focus on improving population health and reducing costs of care.[1,2] Our team has developed an adult primary care diabetes management model whereby registered nurses (RNs) engage directly with patients, clinicians, pharmacists, and other team members to facilitate proactive, patient-centered, evidence-based diabetes care, overcome clinical inertia, and support patient self-management.

WHO & WHERE

Mayo Clinic Employee and Community Health (ECH) practices deliver comprehensive primary care across 5 clinics located in urban (1), suburban (3), and rural (1) areas. Patients are paneled to Internal Medicine and Family Medicine primary care clinicians (PCCs) (physicians, residents, nurse practitioners, physician assistants) within care teams, which include nurses (RNs and licensed practical nurses), pharmacists, and social workers. At the time of implementation, 318 PCCs, 90 care team RNs, and 6 pharmacists cared for over 7,200 adults (aged 18-75 years) with diabetes.

HOW

The "enhanced care team RN" process was iteratively developed by a multidisciplinary team including PCCs, RNs, pharmacists, and clinical nurse specialists. After a successful 14-month pilot in 1 clinic, ECH leadership approved a staggered rollout to the remaining clinics over 3 months. In preparation of the rollout, RNs received a 4-hour education session and an electronic health record (EHR) documentation guide was developed. Each PCC was paired with an RN. As detailed in Supplemental Figure 1, the RN identifies patients not meeting the composite D5 diabetes quality indicator (glycemic and blood pressure control, non-smoking, aspirin use for secondary prevention of ischemic vascular disease, and statin use as indicated (Supplemental Appendix) from an EHR report (Supplemental Table 1). The goal is to review 10% of patients not meeting D5 each month. The RN reviews the EHR for current management plans and guided by a process algorithm, engages a clinical pharmacist for treatment recommendations, a social worker for addressing social determinants of health, and an appointment coordinator as necessary. Clinical pharmacists focus on medication appropriateness, efficacy, safety, and adherence[3] and have a collaborative practice agreement to initiate, modify, or discontinue medications. If treatment changes and/or referrals are advised, the RN communicates with the PCC to finalize the care plan. The RN then contacts the patient for an initial diabetes review (Supplemental Appendix), and facilitates implementation of the delineated care plan, modified to patient needs. RNs then follow longitudinally until D5 metrics are met. In addition to real-time RN panel management, PCCs and RNs meet monthly to discuss progress and challenging situations.

LEARNING

The enhanced care team RN program is a proactive longitudinal care delivery model, which encourages RNs working to the top of their licensure with multidisciplinary team support. Within 6 months of rollout, 1,940 of 7,215 (26.9%) eligible patients were enrolled and 546 of 1,940 (28.1%) patients converted to meeting all D5 metrics. This brought the composite D5 metric from 39.3% to 43.1% in the eligible population.

RNs appreciated increased engagement and responsibility, but not the complexity of the intervention and added workload. Following the rollout, RN champions were identified at each site to help facilitate the process. Most PCCs welcomed the RN role, while advocating for process improvements to support team members and flexibility of care in response to patient goals/situation. Our group plans to solicit patient feedback to optimize the process. We welcome any inquiries.

Author affiliations, supplemental figure, table, and appendix, funding support statement, acknowledgments, and references are available at https://www.AnnFamMed.org/content/18/5/463/suppl/DC1.

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CORRESPONDING AUTHOR
Joseph R. Herges, PharmD
200 First St SW
Brackenridge Building 2-17
Rochester, MN 55905
Herges.Joseph@mayo.edu