Implementation of a continuous glucose monitoring workflow in a complex primary care clinic

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Abstract

Background: Continuous glucose monitoring (CGM) data is inconsistently used by providers for clinical decision-making due to a lack of systematic integration with the electronic health record as well as other factors.

Purpose: This quality improvement project aimed to implement a CGM workflow in a complex primary care clinic to increase the use of CGM data in clinical decision-making.

Methods: Using the Plan-Do-Study-Act methodology, workflow processes for clinic nurses, providers, and clinical pharmacists were examined and improved to support the project goals. Process outcome data included clinical documentation of CGM metrics, provider analysis and interpretation of CGM data, and a CGM-specific current procedural terminology (CPT) code. Additional data included type of visit, staffing patterns for the clinic day, and team member satisfaction with the CGM workflow process.

Results: Ambulatory glucose profiles (AGP) were uploaded to pre-charting in 43 of 45 patients (96%) with active CGM. Providers discussed CGM in 38 (88%) of these cases, using it correctly 100% of the time. Billing for CPT code 95251 was completed in 35 (92%) of the applicable visits. Nurses uploaded CGM logs in 28 (65%) patient encounters, while providers (MD, NP) uploaded 12 (28%) and the clinical pharmacist uploaded three (7%).

Conclusions: Interprofessional teamwork to implement clinic workflow process improvements supports the delivery of guideline-driven diabetes care for adults using CGM. Ongoing clinic efforts to further increase CGM data uploading by nurses to 85% (currently 65%) will improve provider time and efficiency for engaging in direct patient care and will also support workflow sustainability.

Keywords: continuous glucose monitors, primary care, nursing workflow, quality improvement