Chronic Kidney Disease Care Quality Improvement – A WREN Project

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Context: Implementation of the National Kidney Foundation guidelines for management of CKD by primary care physicians can delay CKD progression and reduce mortality; however, adoption and implementation of these recommendations is inconsistent and incomplete despite the availability of NKF guidelines since 2002. This project employs a multi-component strategy as an approach to encourage change in practice (includes academic detailing, performance feedback, practice facilitation, and information technology support), which is well supported and has been used successfully in practice-based research network settings. The main objective is to use this implementation strategy to help primary care practices implement NKF CKD guidelines and thereby improve their processes and outcomes for care for patients with CKD.

Design & Setting: This is a QI project that will involve eight practices during a six month intervention phase (Phase I). During Phase II, WREN will work with each of the eight practices to recruit two additional practices who are also interested in improving care for CKD patients. The three practices will work together in monthly local learning collaborative meetings for six months. Inclusion criteria include WREN and Wisconsin family medicine practices willing to take part and receive lab data electronically in a searchable format, see >350 patients with diabetes within a year, can meet regularly with a WREN Regional Research Coordinator for 6 months, willing to help recruit 2 additional practices at the end of the facilitation period and meet monthly for 6 months. Exclusion criteria include practice units that have participated in a QI project on CKD in 2010 and/or have residents in training.

Instruments & Outcome measures: 1) Practice Enrollment Form: provides information about overall practice characteristics. 2) Change Process Capability Questionnaire (CPCQ): used to measure change process. 3) Practice Systems Survey: measures practice systems; developed by the NCQA to guide QI efforts. 4) Interview guide: used to explore factors associated with implementing CKD guidelines, practice characteristics and change capability, and practice changes associated with interventions. Retrospective chart abstractions of 80 randomly selected patients with CKD will be completed post-intervention in all 24 practices. Implementation will be measured for each of ten key action steps outlined in the NKF guidelines. These include: 1) diagnosis of CKD; 2) diagnosis of anemia; 3) avoidance of unsafe medications; 4) use of indicated medications (ACE or ARB); 5) use of low dose aspirin; 6) Measurement of HgbA1c; 7) Measurement of Hgb; 8) BP <130/80; 9) HgbA1c <7; and 10) LDL cholesterol <100.

Results & Conclusion: This QI project is currently in progress. We will evaluate the impact of the implementation and diffusion strategies on the three components of the practice change model. Additionally, assuming all 96 participating practices nationwide implement the guidelines, this intervention can be expected to improve the care of approximately 20,000 patients with CKD.