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Microalbuminuria Screening in a Primary Care Setting and the Impact of an Electronic Health Record Prompt

Abstract

Background: Type 2 diabetics comprise a large portion of the patients seen in primary care. Diabetic kidney disease is the leading cause of end stage renal disease in the United States. In the early stages of diabetic kidney disease, increased excretion of albumin in the urine may be the only marker of kidney damage. For this reason, the American Diabetes Association recommends microalbuminuria screening at the time of diagnosis and then annually in all Type 2 diabetics.

Project Objective: The purpose of this project was to improve provider compliance with yearly microalbuminuria screening in diabetic patients in a primary care setting, utilizing a computer prompt within the electronic health record (EHR).

Methods: The Plan-Do-Study-Act (PDSA) Cycle was used to implement this evidence-based project. An EHR computer prompt was created and initiated in this primary care office to notify providers that the diabetic patient was due for microalbuminuria screening at the time of their office visit. A detailed chart review was performed pre- and post-intervention.

Results: During the intervention period a total of 812 type 2 diabetic patients were seen. 40.6% (330/812) of this patient population was up to date on microalbuminuria screening. 59.4% (482/812) of the target population was due for microalbuminuria screening at the time of their visit. Of these, 49.8% (240/482) were actually screened, per ADA guidelines, compared with 21.5% (143/666), pre-intervention. The remaining 50.2% (242/482) of patients seen in the office during this time were due for microalbuminuria screening, but were not screened.
**Conclusion:** In conclusion, this project demonstrated that implementation of an EHR computer prompt is a simple way to increase microalbuminuria screening in a primary care setting. Future studies may want to expand the time frame of implementation to gain a better understanding of the long-term effects of this prompt. In using computer prompts, it is important not to over use, as this can cause pop-up fatigue, however, utilizing computer prompts judiciously can be an invaluable way to assist in adherence to evidence-based practice guidelines.