

Title:

Proper Screening and Diagnosing of Diabetic Kidney Disease: A Quality Improvement Initiative in Primary Care Setting for the Underinsured

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Session Title:

Rising Stars of Nursing Invited Posters - Group 1

Slot (superslotted):

RSG STR 1: Thursday, September 25, 2014: 9:45 AM-10:30 AM

Slot (superslotted):

RSG STR 1: Thursday, September 25, 2014: 2:30 PM-3:15 PM

Keywords:

Diabetic Kidney Disease, Guidelines for screening and Quality Improvement

References:

Akbari, A., Swedko, P., Clark, H., Hogg, W., Lemelin, J., Magner, P., . . . Ooi, D. (2004). Detection of chronic kidney disease with laboratory reporting of estimated glomerular filtration rate and and educational program. Archives of Internal Medicine, 164(16), 1788-1792. American Diabetes Association. (2014). Standards of medical care in diabetes: 2014. Diabetes Care, 37(1), 14-67. National Committee for Quality Assurance. (2014). HEDIS Proposed changes to existing measure for HEDIS 2015: Comprehensive diabetes care. from <http://www.ncqa.org/HEDISQualityMeasurement.aspx> U.S. Department of Health and Human Services. (2013a). Healthy people 2020: Chronic kidney disease. from <http://www.healthypeople.gov/2020/Data/Chart.aspx?pgid=1&topicid=6&objective=CKD-4.2&years=2007,2008,2009,2010&showCI=False&showSE=False> U.S. Department of Health and Human Services. (2013b). Healthy people 2020: Diabetes. 2014, from <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=8>

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE	TIME ALLOTTED	FACULTY/SPEAKER	TEACHING/LEARNING METHOD	EVALUATION/FEEDBACK
Example Critique selected definition of the term, "curriculum"	Example Definitions of "curriculum" Course of study Arrange	Example 20 minutes	Example Name, Credentials	Example Lecture PowerPoint presentation Participant feedback	Example Group discussion: What does cultural training mean to you?

	<p>ments of instructional materials</p> <p>The subject matter that is taught</p> <p>Cultural "training"</p> <p>Planned engagement of learners</p>				
Describe a theoretical framework for implementing a quality improvement process in primary care for the underinsured.	Define quality improvement, describe a theoretical framework used in quality improvement, discuss unique characteristics of the underinsured clinic and implications for advanced practice nursing.	10 minutes	Della Hughes Carter RN, BSN, MSN BC-GNP, DNP Student	PowerPoint and discussion	What is quality improvement? Why is a theoretical framework needed? What are unique issues of the underinsured primary care setting for measuring quality?
Explain the background and	Epidemiology of diabetes and	10 minutes	Della Hughes Carter RN, BSN, MSN BC-GNP, DNP Student	PowerPoint and discussion	Group discussion: What does epidemiology of

epidemiology of diabetic kidney disease	diabetic nephropathy, prevalence rate of proper screening and diagnosis, review of Healthy People 2020 Objectives CKD-4, CKD-4.2, CKD 5				diabetic kidney disease mean to you?
Discuss and apply the practice guidelines for screening and diagnosis of diabetic kidney disease	Review the American Diabetes Association 2014 Standards of Medical Care and the National Kidney Foundation Kidney Disease Outcome Quality Initiative (KDOQI) Clinical Practice Guidelines in screening and diagnosing diabetic	20 minutes	Della Hughes Carter RN, BSN, MSN BC-GNP, DNP Student	PowerPoint, discussion and case study	Group discussion: How easy is it to understand and apply the guidelines for diabetic kidney disease?

	kidney disease.				
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Abstract Text:

Background / significance of problem. Over 23 million Americans have diabetes. Diabetic nephropathy, the single leading cause of end stage renal disease, occurs in 20 to 40% of all patients with diabetes. In primary care settings, rates for screening and diagnosis of diabetic kidney disease are low, and infrastructure is lacking that could improve patient outcomes.

Clinical question/project objectives. Will implementation of a quality improvement process in a primary care clinic for the underinsured improve screening, diagnosis, and treatment of diabetic kidney disease? The project will address three objectives: 1) develop and implement a sustainable quality improvement process in a primary care setting; 2) evaluate diabetic kidney disease screening and; 3) evaluate the prevalence rate of diabetic kidney disease diagnosis.

Search of literature / best evidence. According to Healthy People 2020 (2013), only 23.1% of diabetics over age 65 received appropriate evaluation for diabetic kidney disease. Akbari et al. (2004) improved the evaluation of diabetic kidney disease from 22.4% to 85.1% with provider education within a primary care clinic. Quality improvement is well established in acute care settings with favorable outcomes but is lacking in primary care settings (Talyor, Peikes, Genevro, & Meyers, 2013); only 10% of primary care settings are accredited by the National Committee for Quality Assurance. Incorporating a quality improvement process in primary care could provide the best opportunity for proper screening and diagnosis of diabetic kidney disease.

Integration into practice. Diabetic kidney disease screening and diagnosis data will be collected from 503 adult non-pregnant patients with type 1 and type 2 diabetes pre and post intervention via medical records audit. A quality improvement theoretical framework will be utilized to implement an educational intervention to improve practice. A decision tree, developed from current practice guidelines of the American Diabetes Association and the National Kidney Foundation, will guide primary care providers in ordering urine microalbumin, GFR, serum creatinine, and dilated eye exam to appropriately diagnose diabetic kidney disease.

Implications for practice. Dependent t-tests on outcome variables will determine if the intervention was successful in improving provider screening and diagnosing of diabetic kidney disease. The educational intervention has the potential to address the Healthy People 2020 chronic kidney disease goals and the clinical guideline objectives of proper screening and diagnosis of diabetic kidney disease in primary care.