

Proper Screening & Diagnosing of Diabetic Kidney Disease (DKD): A Quality Improvement Initiative in a Primary Care Setting for the Underinsured

Della Hughes Carter, RN, BSN, MSN, BC-GNP, DNP Student & Roberta Hoebeke RN, PhD, FNP-BC

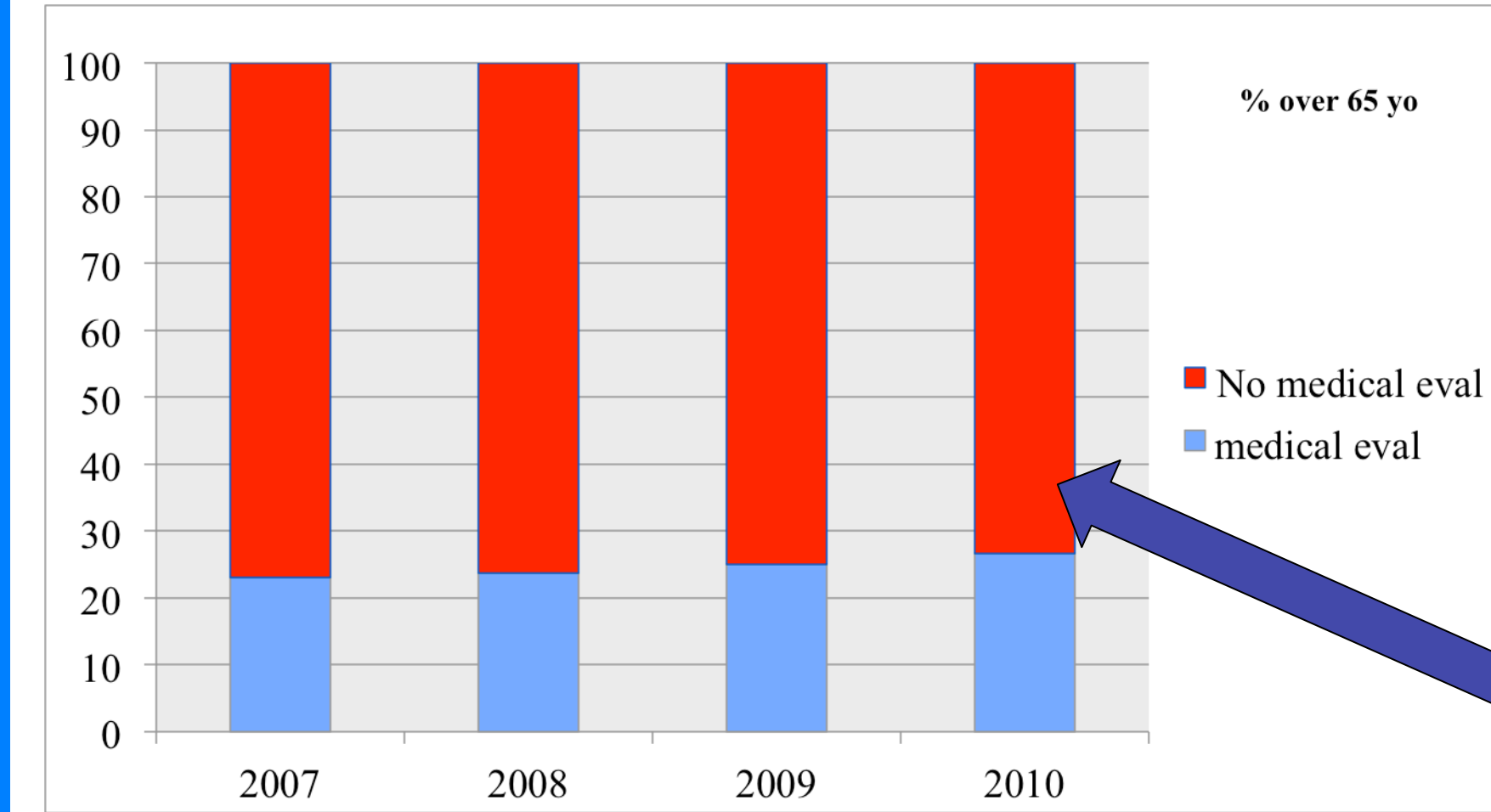
University of Southern Indiana
College of Nursing & Health Professions



Background

Diabetic nephropathy occurs in 20 to 40% of all patients with diabetes and is the single leading cause of end stage renal disease (ESRD) in the United States.

Only 23.1% of diabetics over 65 received evaluation of serum creatinine, microalbuminuria, A1c, lipids and eye examination.



U.S. Department of Health and Human Services. (2013). Healthy people 2020: Chronic kidney disease.

Missed Opportunities in Primary Care

Over 23 million Americans have diabetes.

Primary care settings lack well developed QI infrastructure. The largest national effort has accredited only 10% of primary care settings-National Committee for Quality Assurance (NCQA).

Setting & Methods

Setting:

- ◆ A private, non-profit, primary care setting for the underinsured in Mid-Michigan.
- ◆ Over 5000 patients served.
- ◆ Approximately 10% of the patients have a diagnosis of diabetes.

Methods:

- ◆ Inclusion Criteria: The adult non-pregnant patient diagnosed with type 1 or type 2 diabetes, considered underinsured.
- ◆ Pre and Post intervention one group *t*-test
- ◆ Outcome Measures: Annual microalbuminuria, GFR, creatinine, dilated eye exam, prevalence rate of diagnosis of diabetic kidney disease and HTN, treatment with ACE or ARB, frequency of nephrology referral.

Purpose

To develop a sustained QI process at a local primary care clinic for the underinsured beginning with the appropriate screening and diagnosing of DKD. The clinical question: *Will primary care providers for the underinsured improve screening and diagnosis of DKD after an educational intervention over three months?*

Save Kidneys From Diabetes

Theoretical Framework: Quality Improvement Process in Primary Care



Taylor, e., Genervro, J., Peikes, D., Geonnotie, K., Wang, W., Meyers D. (2013). Building quality improvement capacity in primary care: Supports and resources. *Prevention & Care Management Portfolio Improving Primary Care*, (2), 1-11.

Proposed Project

Identify adult non-pregnant patients with diabetes at a primary care clinic for the underinsured.

Complete a chart audit of proper screening and diagnosis of diabetic kidney disease. Chart audit items include: annual microalbuminuria, GFR, creatinine, dilated eye exam, prevalence rate of diagnosis of diabetic kidney disease and HTN, treatment with ACE or ARB, frequency of nephrology referral.

Facilitate organizational awareness of chart audit data, standards of care and benchmark data. Facilitate organizational goals.

Implement provider education and compliance interventions, based upon American Diabetes Association and the National Kidney Foundation.

Complete second chart audit. Document outcomes.

Implications for Practice

Establish and sustain a quality improvement process at a primary care clinic for the underinsured.

Ensure proper screening for diabetic kidney disease

Improve the prevalence rate of diagnosing diabetic kidney disease

Earlier referral to nephrology and improved collaborative practice between primary care and nephrology.

Slower rate of kidney disease progression and patient suffering.