

Increasing Standardization and Documentation of the Diabetic Foot Exam in the Primary Care Setting

Introduction

Adequate documentation of exam findings in coordination with appropriate screening practices show a significant reduction in mortality risk in patients with chronic diseases. Part of the physician's burden in documentation is to ensure adequate translation of findings into the medical record for future providers to monitor disease progression adequately.

Diabetic foot complications are a significant cause of morbidity and mortality for patients with Diabetes Mellitus. Often times, there is insufficient documentation of the foot exam, which brings into question the accuracy of the exam itself. The purpose of this study is to decrease the burden of adequate and accurate documentation from the physician through the implementation of a standardized template design for all physicians. Through implementation, we hope to increase the rate of screening diabetic foot exam and accuracy of of risk stratification.

Methodology

Study type: A two-center retrospective quality improvement study

Timing: This study was conducted from July 2018 -December 2018.

Population Studied: This study includes patients from RUHS/UCR Family Medicine Residency Clinics within RUHS Family Care Clinic 1 and Moreno Valley Community Health Center.

A total of 535 patient charts were reviewed, which included all patients with Diabetes Mellitus who were seen for diabetic follow up visits.

Study design: This study evaluated the adequacy of documentation of foot screening per the American Diabetes screening practice Guidelines. Patient charts were evaluated for 3 months prior to, and following the integration and subsequent teaching of a standardized template accessible to providers in each clinical location within the EPIC EMR interface.

Atish Vanmali, MD, Arjun Kumar, MD, Sedona Valentine, MD, Daniela Zurita, MD, Shunling Tsang MD RUHS/UCR Family Medicine Residency

Analysis

Of the 535 charts reviewed, 497 were included in the study.

Inclusion criteria: Adult patients (>18 years old) diagnosed with Type II Diabetes.

Exclusion criteria: Type I Diabetes, pregnancy, <18 years old, followed by Endocrinology or Podiatry. **Analysis:** A chi-squared independence test and an

ANOVA were used in analysis of the data collected Quarter 3 was prior to the intervention and Quarter 4 was following the intervention.

Standardized Foot Exam Template -

Diabetic Foot Exam

osalis pedis Pulse: [NORMAL/ABNORMAL default normal:25301. "No osterior tibial Pulse: [NORMAL/ABNORMAL default normal:25301. " Monofilament

	Monofilament site:	Vibratory Sense:
AO OD	1: [NORMAL/ABNORMAL default	[Vibratory Sense 28404]
KELD I LED	normal:25301::"Normal"]	
ALO OVO AL	2: (NORMAL/ABNORMAL default	
2001000	normal:25301_"Normal"]	
0~1~0	3:(NORMAL/ABNORMAL default	
	normal:25301:"Normal"]	
	4: [NORMAL/ABNORMAL default	
	normal:25301::"Normal"}	
	5: (NORMAL/ABNORMAL default	
	normal 25301 "Normal"]	
	6:[NORMAL/ABNORMAL default	
	normal 25301 Normal]	
\sim	7:[NORMAL/ABNORMAL default	
	normal 25301 Normal }	
	6. (NORMAL/ABNORMAL detault	
	normal 25301. Normal }	
	Stronger 25204 "Normal"	
	10-INOPUAL (APNOPUAL)	
	Hofewill marginal 25201 "Normal"	
	11-/NORMAL/ABNORMAL	
	default normal 25301 "Normal"	
	12-INORMAL/ABNORMAL	
	default normal 25301 "Normal"	

Risk score and timing of foot exams: (Blank multiple: 19196::"N ICD 10 code placed in patients chart (E11.9)? [YES/NO 20467]







- 26.7% (Q3) and 37.8% (Q4) of patients had completed diabetic foot exams (p value 0.009). - Of completed exams, 31.9% (Q3) and 36.1% (Q4) had accurate documentation (with and without template use). 10% (Q3) and 27.1% (Q4) had accurate documentation using the template (p value <0.001).

The importance of the diabetic foot exam is not only for identification of current ulcers or infection, but also for the purpose of risk classification, prevention, referral, and follow up. This study showed that standardization of the diabetic foot exam leads to a clinically significant increase in accuracy of documentation, and a statistically significant increased screening by primary care providers. Although these results are statistically significant on analysis, results may be skewed due to observer bias and small population of patients studies. Further evaluation is necessary with more widespread adaptation of in more clinical settings and full year long analysis for better determination of the quality of this intervention.

considerations: consider long term, Future longitudinal follow- through with screened patients to evaluate for relative risk reduction of development and progression of diabetic foot complications, due to appropriate screening and intervention practices with use of a standardized template.



School of

Results

Conclusion