

Improving Completion and Documentation of Diabetic Foot Exams: A Quality Improvement Project at ECU Family Medicine



Elizabeth Cochran, William Pinson, Christopher Driessen, and Lisa Hager

BACKGROUND

- Diabetic foot exams are important for early detection of diabetic neuropathy and prevention of diabetic foot ulcers. Foot exams also allow early detection and appropriate management of existing ulcers.
- For this reason, it is recommended that diabetic patients have foot exams annually.
- Diabetic foot ulcers are associated with 2.5-fold risk of death compared with diabetic patients without foot ulcers.
- Racial and ethnic minorities admitted to the hospital with diabetic foot infections have significantly higher risk of major amputation and longer hospital stay.

PROJECT AIM

Specific Aim: By January 31, 2021, we will increase the number of diabetic foot exams completed during patients' visits in the ECU Family Medicine Buccaneer Module by 3% by reminding providers of foot exams and appropriate documentation via notecards on each computer.

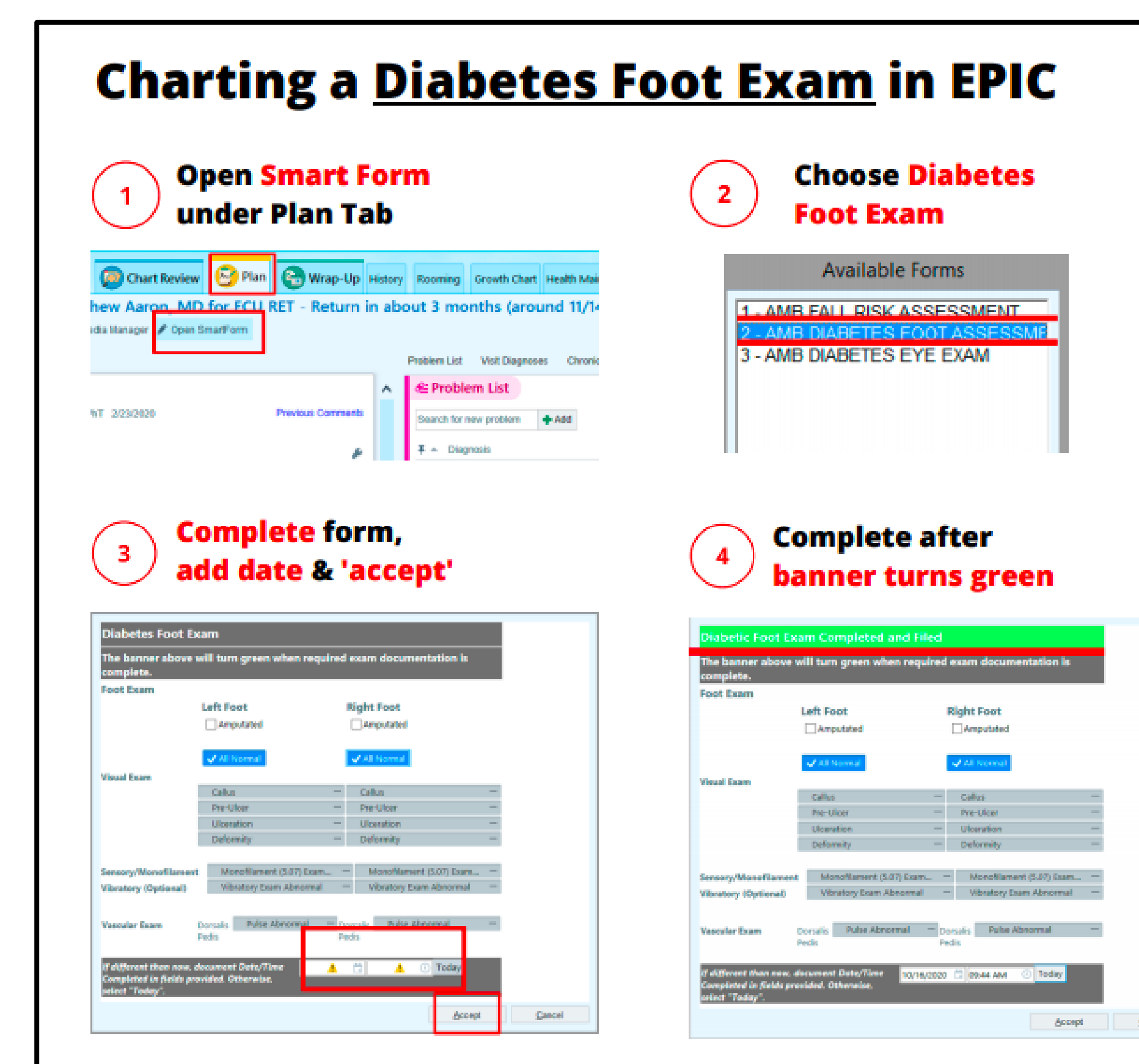
Global Aim: Over the next 6 months, we will increase the number of diabetic foot exams completed during patients' visits to the ECU Family Medicine Buccaneer Module to 75%.

PROJECT DESIGN/STRATEGY

Location: Buccaneer Module of ECU Family Medicine
Duration: October 26, 2020 to present
Interprofessional Team of ECU Students: Medical Student, Physician Assistant Student, Marriage and Family Therapy Student
Outcome Measure: Number of diabetic foot exams

PROJECT DESIGN/STRATEGY CONTINUED

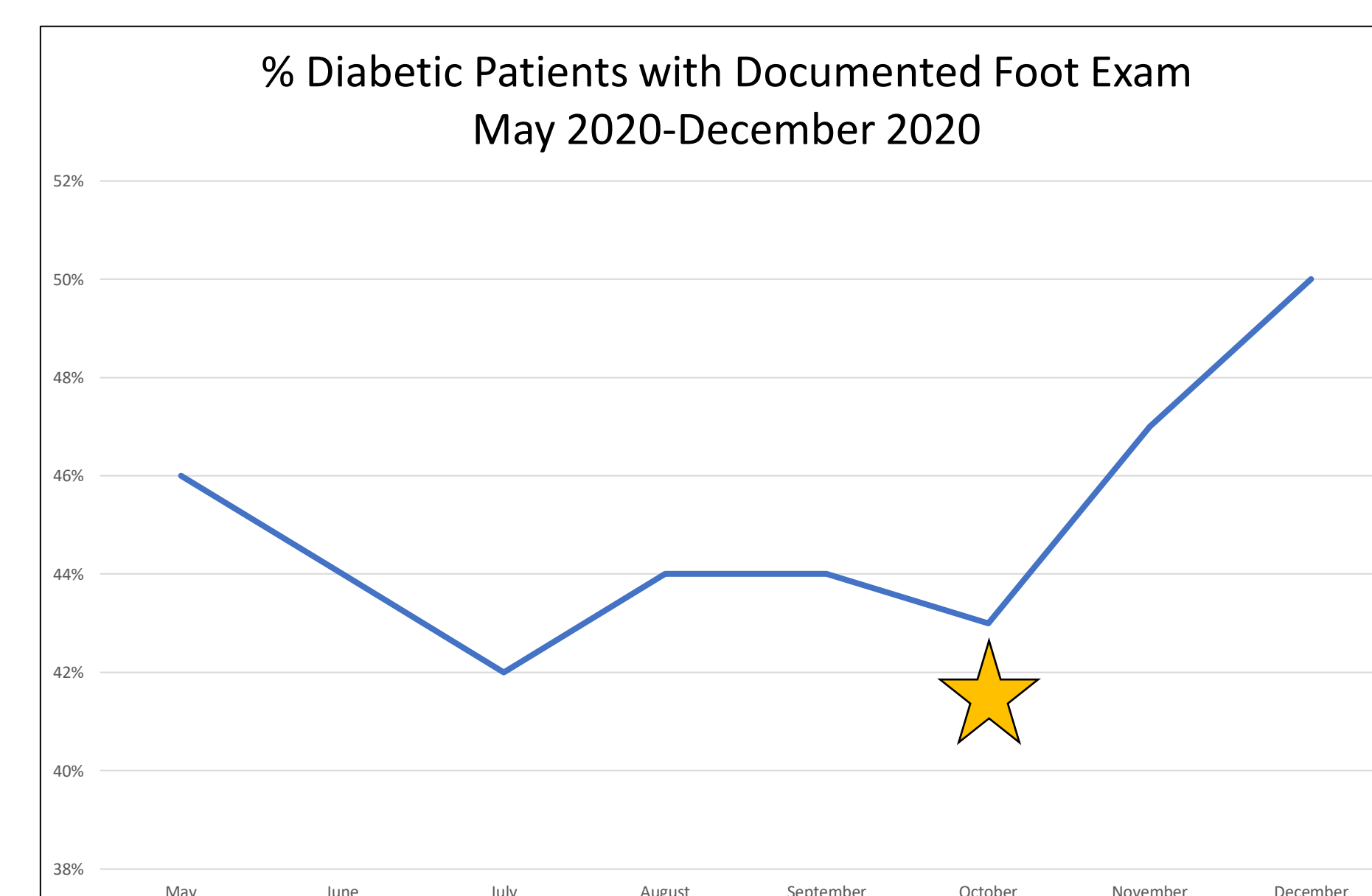
- The Buccaneer Module of ECU Family Medicine is one of four modules in which patients can be seen. Providers include residents, attending physicians, and physician extenders.
- Percentages of completed diabetic foot exams have been decreasing since the start of COVID-19 within the Buccaneer module of ECU Family Medicine.
- This is believed to be secondary to lower numbers of in-person visits, as well as inaccurate documentation within the EHR. While it may be documented within a patient note, it is often not documented within the health maintenance information, which is what is used to track success.
- The method for this quality improvement project will be placing notecards at provider computers reminding all providers to document diabetic foot exams within the health maintenance information in EPIC.



CHANGES MADE (PDSA CYCLES) AND RESULTS

PDSA Cycle 1: Notecards with instructions for provider documentation of diabetic foot exams in EPIC posted within eyesight of computers where documentation is completed.

- Implemented on October 26, 2020
- Improvement of 7% to date since the implementation of notecards



Data for Buccaneer Foot Exams:

- May 46%
- June 44%
- July 42%
- August 44%
- September 44%
- ★ October 43%
- November 47%
- December 50%

LESSONS LEARNED

- Reminders about documentation made significant improvement within a short period of time, suggesting that foot exams were completed but not documented.
- Upcoming EPIC updates require planning in case documentation methods would change and thus reminder notecards would need to be altered.
- New residents and employees should be instructed on documentation at orientation.

NEXT STEPS

- It has been observed that clinical nursing staff may not instruct diabetic patients to remove shoes and socks upon being roomed.
- Thus for our next intervention, we have placed signs in exam rooms within the Buccaneer module instructing diabetic patients to remove socks and shoes in preparation for their visit in order to improve efficiency and completion of diabetic foot exams.
- While we have achieved our Specific Aim, we hope that this added intervention will maintain our progress and continue the positive trajectory towards our Global Aim.

ACKNOWLEDGEMENTS

Thanks to the SHAPE Scholar Leadership, including Lisa Hager and Hannah Barnett, for their help and guidance in completing the project. Additionally, thanks to the Buccaneer Module at ECU Family Medicine for cooperating with our suggestions.

Elizabeth Cochran
 Brody School of Medicine at East Carolina University
 Greenville, North Carolina
 cochrane17@students.ecu.edu