# Improving Care of Patients with Diabetes Using a Diabetes Registry



Shiv Patil, Zachary Williams, Alyssa Adams, Jennifer Blizzard, Amber Johnson, Marie Lewis Kay Craven, Jamie Messenger, Jenna Daugherty, CCNC Representative Consultants: Drs. Jason Foltz, Skip Cummings; TQA Mentor: Dr. Donna Lake

Shiv Patil, MD, MPH, BC-ADM
Clinical Assistant Professor
Family Medicine, East Carolina University
Greenville, North Carolina 27858
252-744-2451
patils@ecu.edu

## Introduction

- Population health management relies on the ability to provide patient support between clinical visits and to enhance clinical decision support for more comprehensive care delivery during a clinical visit.
- The new diabetes registry at ECU Family Medicine Center (FMC) includes 3146 patients, 1003 of these are assigned as Accountable Care Organization (ACO) patients.
- NCQA measure defines poor control of diabetes as >15% of patients with hemoglobin A1c (A1c) as >9% during the measurement year. At FMC 22% for all patients and 15% for ACO patients have A1c >9% as per the diabetes registry.
- 81 ACO patients with diabetes did not have A1c done during the measurement year (2016).

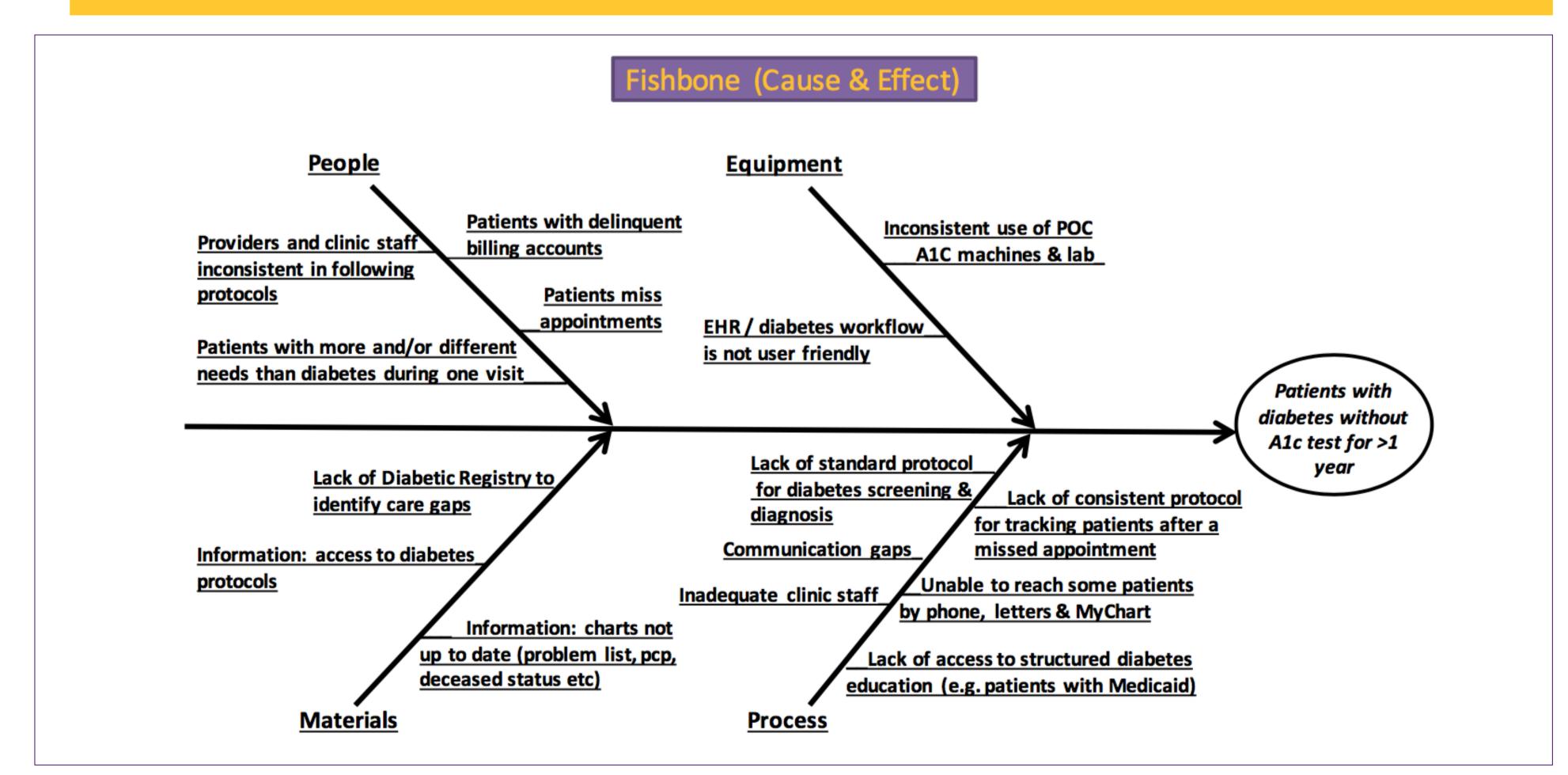
### **Aim Statement**

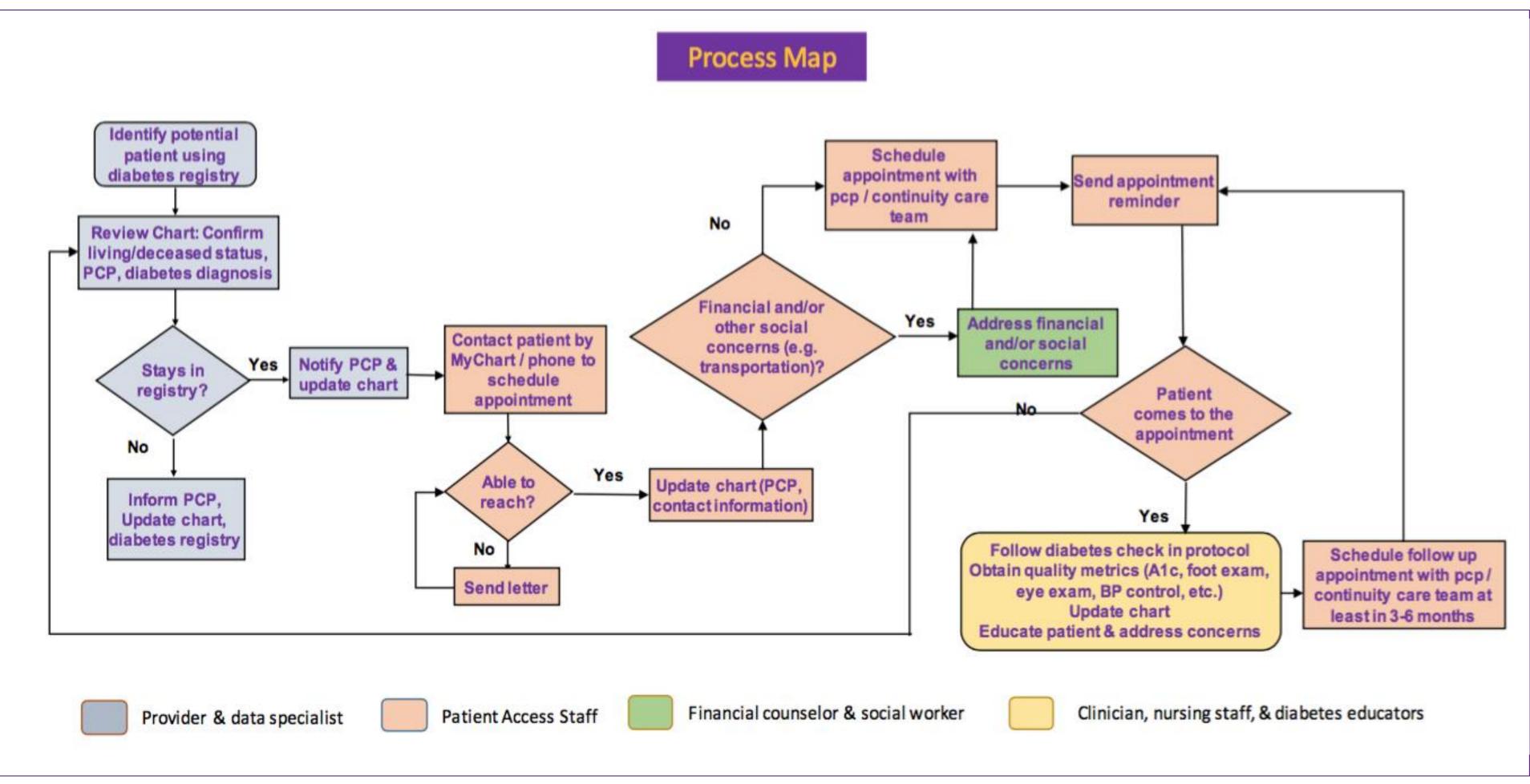
Improve the number of ACO-patients with diabetes at ECU FMC who have not had A1c done in the measurement year 2016 by 85% by May 31<sup>st</sup>, 2017 using a diabetes registry.

#### References

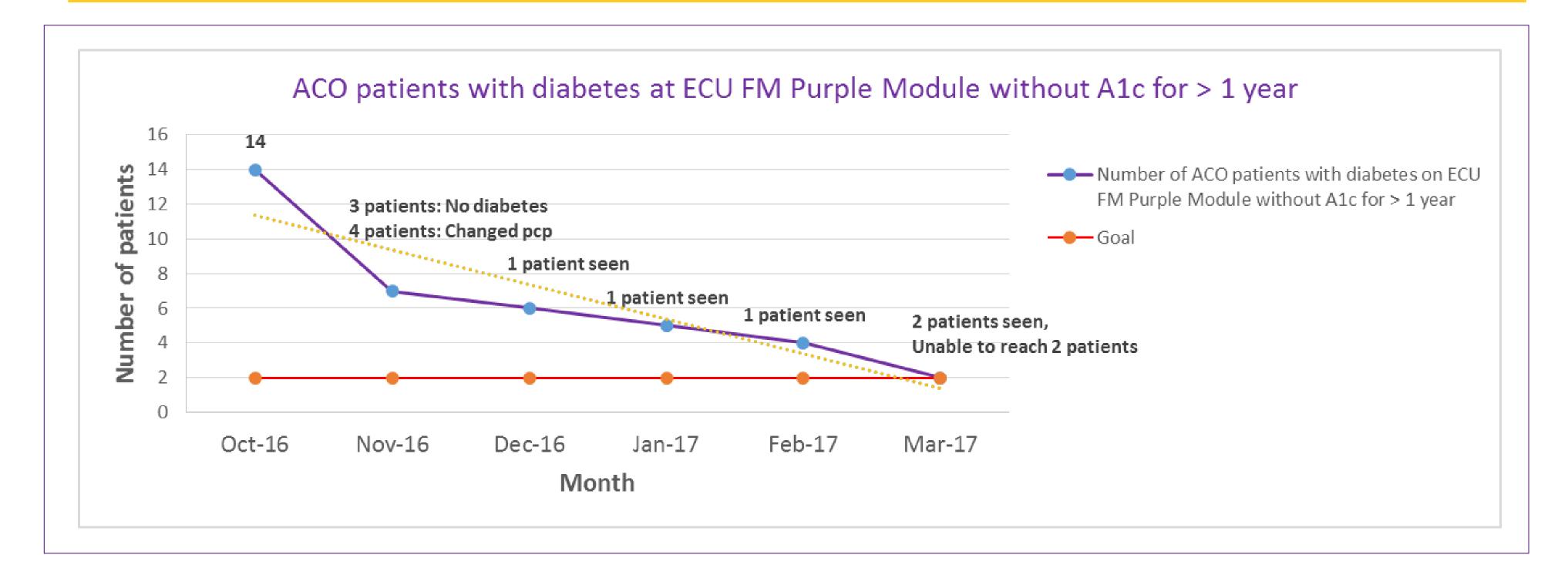
- Holzmueller CG et al. A framework for encouraging patient engagement in medical decision making. J Patient Saf. 2012;8(4):161-4.
- https://www.niddk.nih.gov/healthinformation/health-communicationprograms/ndep/health-careprofessionals/practice-transformation/practicechanges/populationmanagement/Pages/default.aspx
- www.clinicalmicrosystem.org
- www.ihi.org
- Splaine, Mark E (2012). Practice-based learning & improvement: a clinical improvement action guide (3rd ed). Joint Commission Resources, Oakbrook Terrace, III

## Methods





# Results of the first PDSA cycle



### Discussion

- By the end of the first PDSA cycle we achieved our goal by improving the number of ACO patients with diabetes without an A1c within last year by 12 (85%).
- Currently we are in our second PDSA cycle in which we are targeting remaining 67 ACO patients at the entire FMC who did not have A1c done in last year.
- This diabetes registry is created by IT services by running a report in EHR using 5 different criteria which is then exported in Excel. We plan to use this registry to identify diabetes care gaps, track quality measures and target high risk populations (e.g. A1c > 9%) to achieve better control
- A few patients have diabetes but it is not reflected in the problem list which resulted in lack of diabetes follow up (e.g. point of care A1c, foot exam, eye exam etc.).
- Patients without diabetes are entered in the diabetes registry. We plan to update the diabetes registry accordingly and create protocol for screening for diabetes and prediabetes to avoid future errors.
- Updating information in EHR periodically is critical (e.g. to assign patients to correct practice / pcp.)
- Lessons learned: Teamwork is critical to achieve improvement. Leveraging optimal use of EHR in a systematic approach can have transformative impact on quality of care.

# Conclusion

- For a successful practice it is important to know who their patients with diabetes are, and regularly mine the data to ensure they receive the care they need.
- Diabetes registry provides the ability to identify and track patients in this era of value-based care.

# Acknowledgements

The Teachers of Quality Academy program was developed with financial support from the American Medical Association as part of the Accelerating Change in Medical Education Initiative.

This poster was prepared with financial support from the American Medical Association.

