



# Creating a Diabetic Registry in a Rural Community Health Center's "Medical Home"

Meg Preissler, UMass Medical School Class of 2015

## Project Summary

The Harrington Family Health Center (HFHC) is a Federally Qualified Health Center providing medical, dental, and mental health services to patients in Washington County, Maine. With a goal of obtaining Patient Centered Medical Home recognition, the practice has been expanding its procedures for managing the care of patients with chronic illness. This included the creation of a registry of the center's diabetic patients. The project was completed over a period of five weeks in the summer of 2012.

### Registry Goals

- Identify patients in the practice with a diagnosis of diabetes
- Monitor patients using standardized measures of care
- Evaluate the effectiveness of patient care
- Target patients for outreach



### Methods

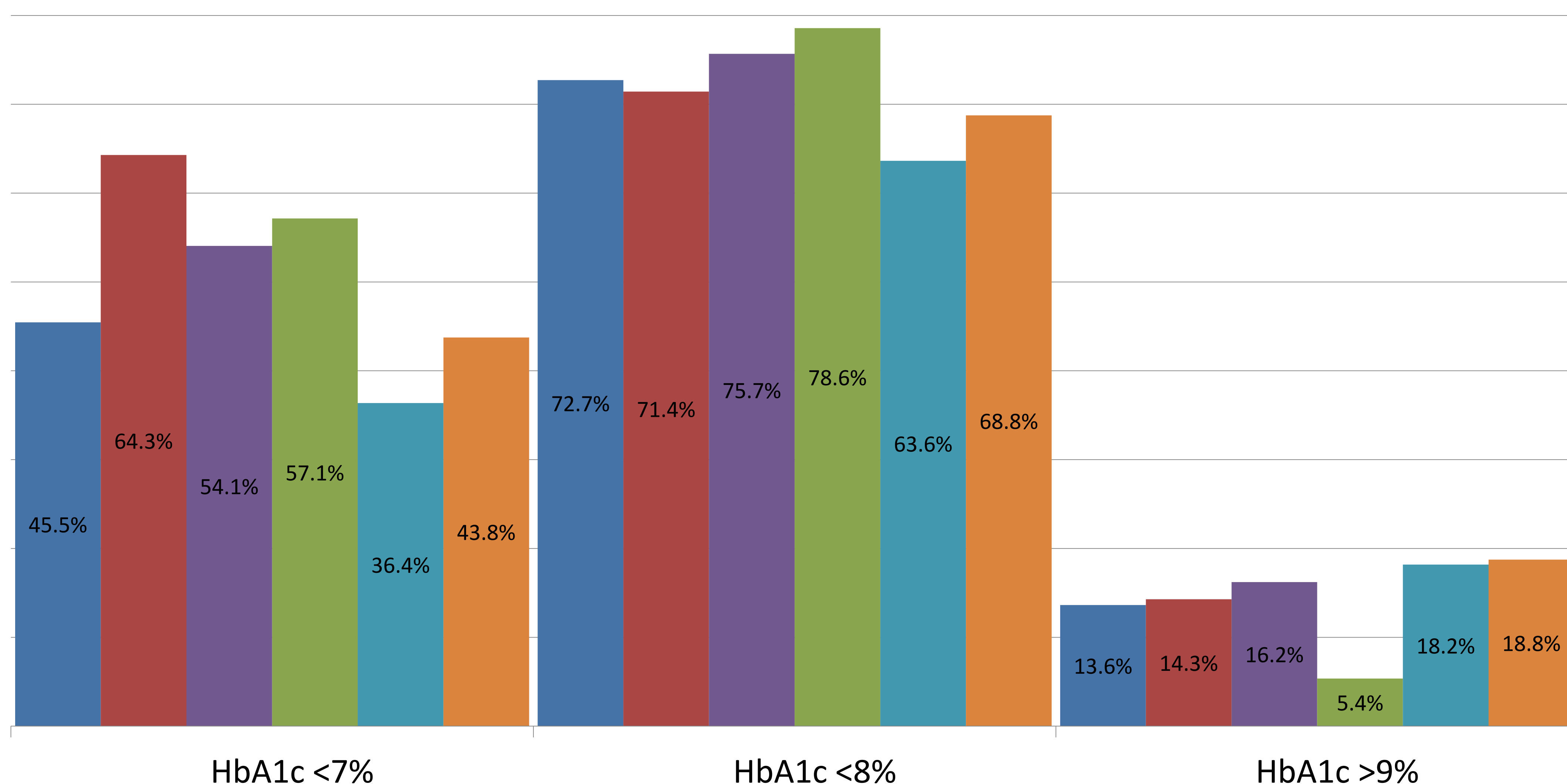
Patients who had been seen by the practice for diabetes within the calendar year were identified by searching billing data via diagnosis code. Using this list of patients, the practice's EMR was mined for documentation of twelve different measures of care. Ten of these were the "Comprehensive Diabetes Care" performance measures outlined by the Health Information and Data Set (HEDIS). Two additional measures, smoking status and smoking cessation counseling, were included at the request of HFHC's Quality Improvement team.

### Measures of Care

Percentage of members 18–75 years of age with diabetes (type 1 and type 2) who had each of the following

- Hemoglobin A1c (HbA1c) testing
- HbA1c poor control (>9.0%)
- HbA1c control (<8.0%)
- HbA1c control (<7.0%)
- Eye exam (retinal) performed
- LDL-C screening
- LDL-C control (<100 mg/dL)
- Medical attention for nephropathy
- Blood pressure (<130/80 mm Hg)
- Blood pressure (<140/90 mm Hg)
- Smoking status
- Smoking cessation counseling

Figure 1. Hemoglobin A1c Control in Diabetic Patients by Provider



### Sample Data

The figure above shows data gathered on patients' HbA1c level. A search of all of the patients' charts revealed that 98% had HbA1c levels checked within the last year. Those without can now be targeted for follow up. The patients with HbA1c results were divided into groups by level of control (<7%, <8%, and >9%). Patients with HbA1c levels >9% can now be targeted for additional treatment and support.

### Lessons Learned

- There is wide variability in the reporting capabilities of EMRs
- It is important to establish standard operating procedures for entering data on measures of care
- Reports generated by the EMR are only as useful as the data entered