

**Re-evaluation of positive depression screen
prevalence and documentation of
intervention in a family medicine residency
and at UnityPoint Methodist Peoria sites.**

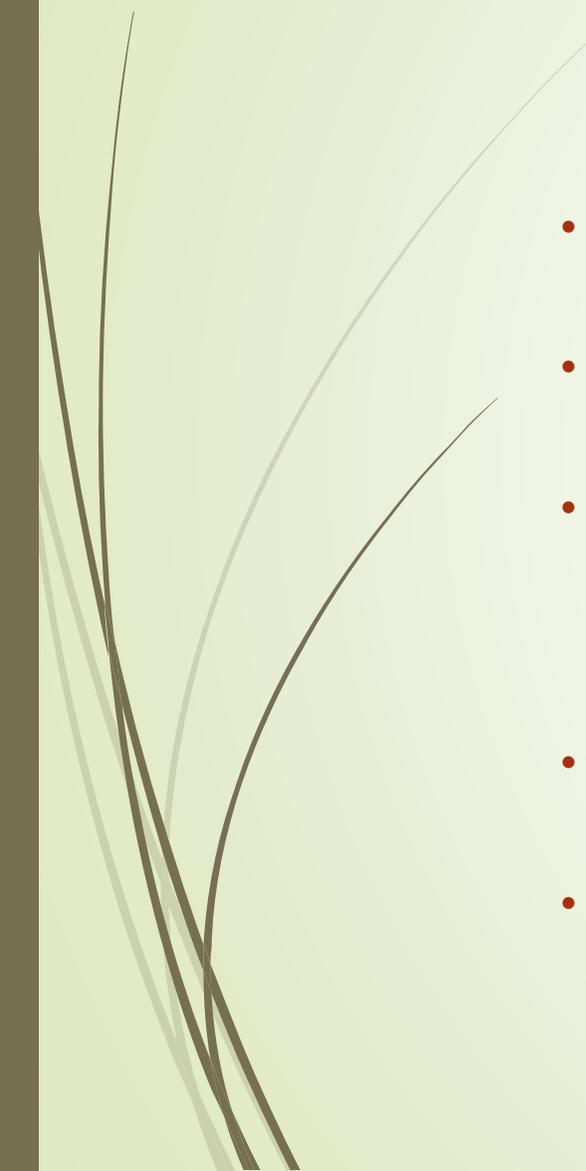
A Retrospective Study

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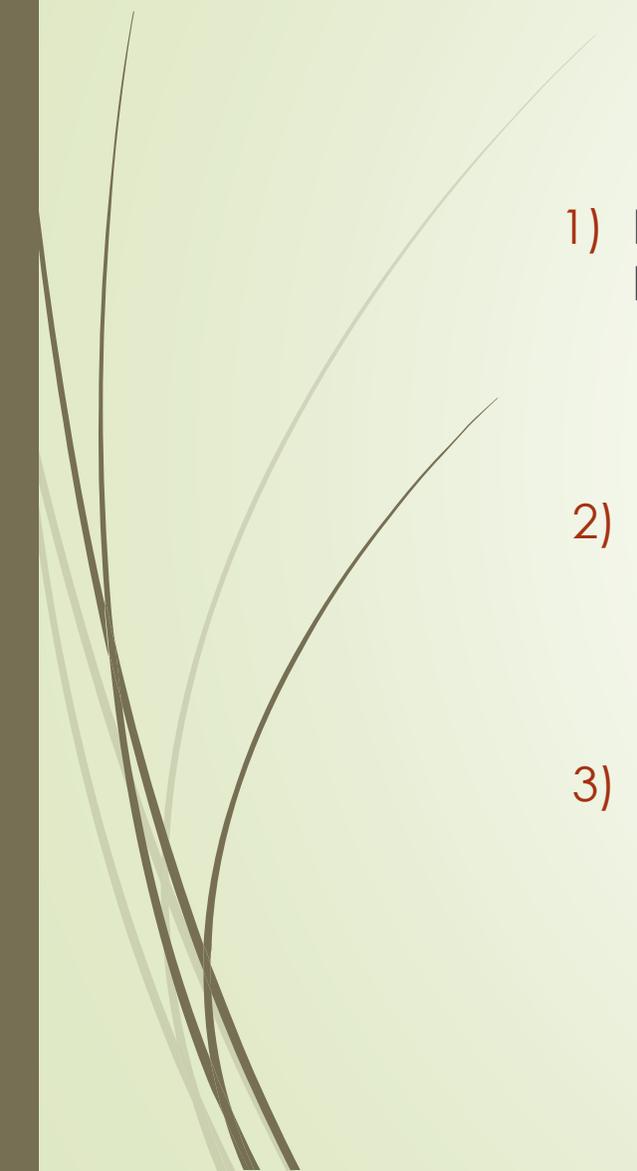
Intro/Background



- By 2020, major depressive disorder is projected to become the second leading cause of disability globally.
- In the U.S., associated medical care costs are estimated at \$43 billion, with an additional \$17 billion in lost productivity every single year. ⁽¹²⁾
- In the US, most depressed patients see their PCP. However, a US meta analysis concluded many patients were not identified as being depressed and treatment rates were reported to be low in PCP offices. Often, there was inadequate provision of treatment. ⁽⁹⁾
- It has been shown that use of screening tools improves the recognition of depression by physicians. ⁽⁵⁾
- The United States Preventative Services Task Force (USPSTF) recommended in 2009 that adults be screened for depression when care-supports via staff assistance is in place (Grade B). ⁽¹³⁾



Objectives



- 1) Re-evaluate the rate of annual depression screening at the UnityPoint Clinic Family Medical Center (FMC) ambulatory residency clinic
 - a) determine prevalence of positive depression screens at FMC
 - b) appraise provider documentation of intervention for these patients
- 2) Compare findings to a 2013 pilot study at FMC
 - We hypothesized improvement of screening and intervention documentation rates (post-mandated medical staff education and mandated screening after go-live of new electronic health record (EHR) software).
- 3) Evaluate screening rates cross all UnityPoint Methodist-Proctor ambulatory sites



Methods

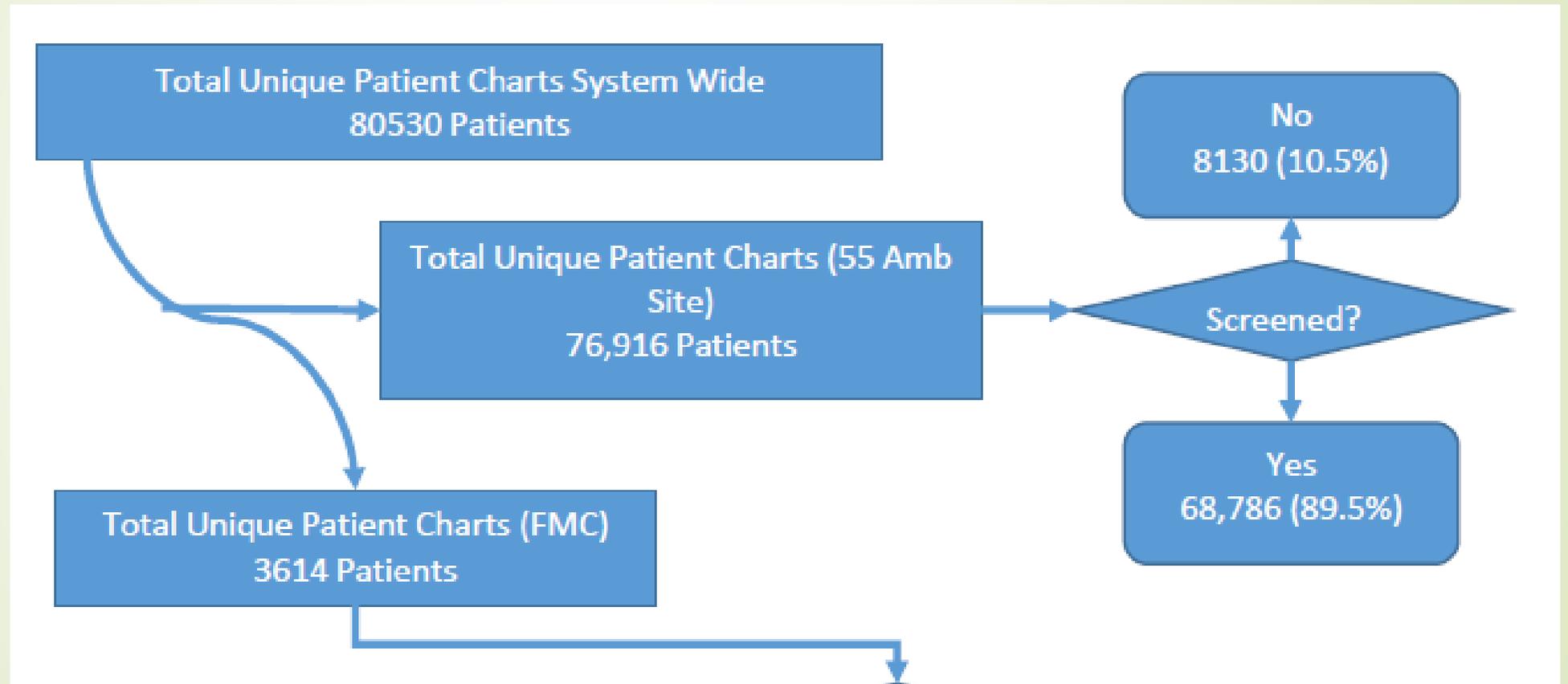
- ▶ Data Retrieval: EPIC electronic health record data was queried utilizing data acquisition software
- ▶ Age Range: 12 years of age or older
- ▶ Date Range: implementation date of EPIC (5/4/2014) to 12/31/14
- ▶ Used flow sheet data of Patient Health Questionnaire (PHQ)-2 and PHQ-9 scores.
- ▶ Positive Scores were determined to be a PHQ-2 of 3 or 6
- ▶ Retrospective chart review was utilized for FMC data to assess correct fulfillment of protocol for initial screenings and documentation of intervention for positive screens



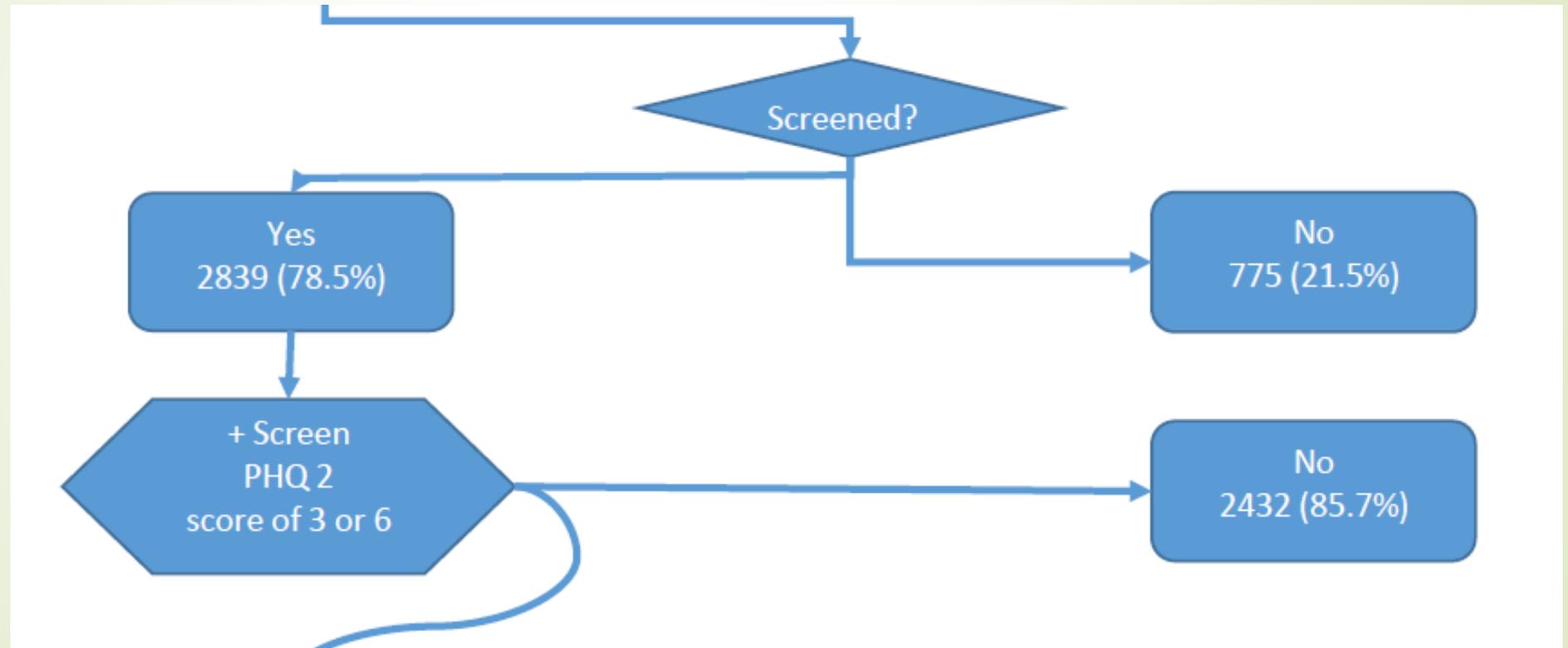
Results

- FMC data
 - 3614 unique charts reviewed (Positive PHQ-2 -> 407 (14.3%))
 - Of those that tested positive with PHQ-2, PHQ-9 follow up was only 70% (285 patients)
 - Intervention for positive screen = 57.5% (234 patients)
- Ambulatory Site Data (55 other UPH Methodist sites)
 - 68,786 of 76,916 patients (89.43%) were screened for depression

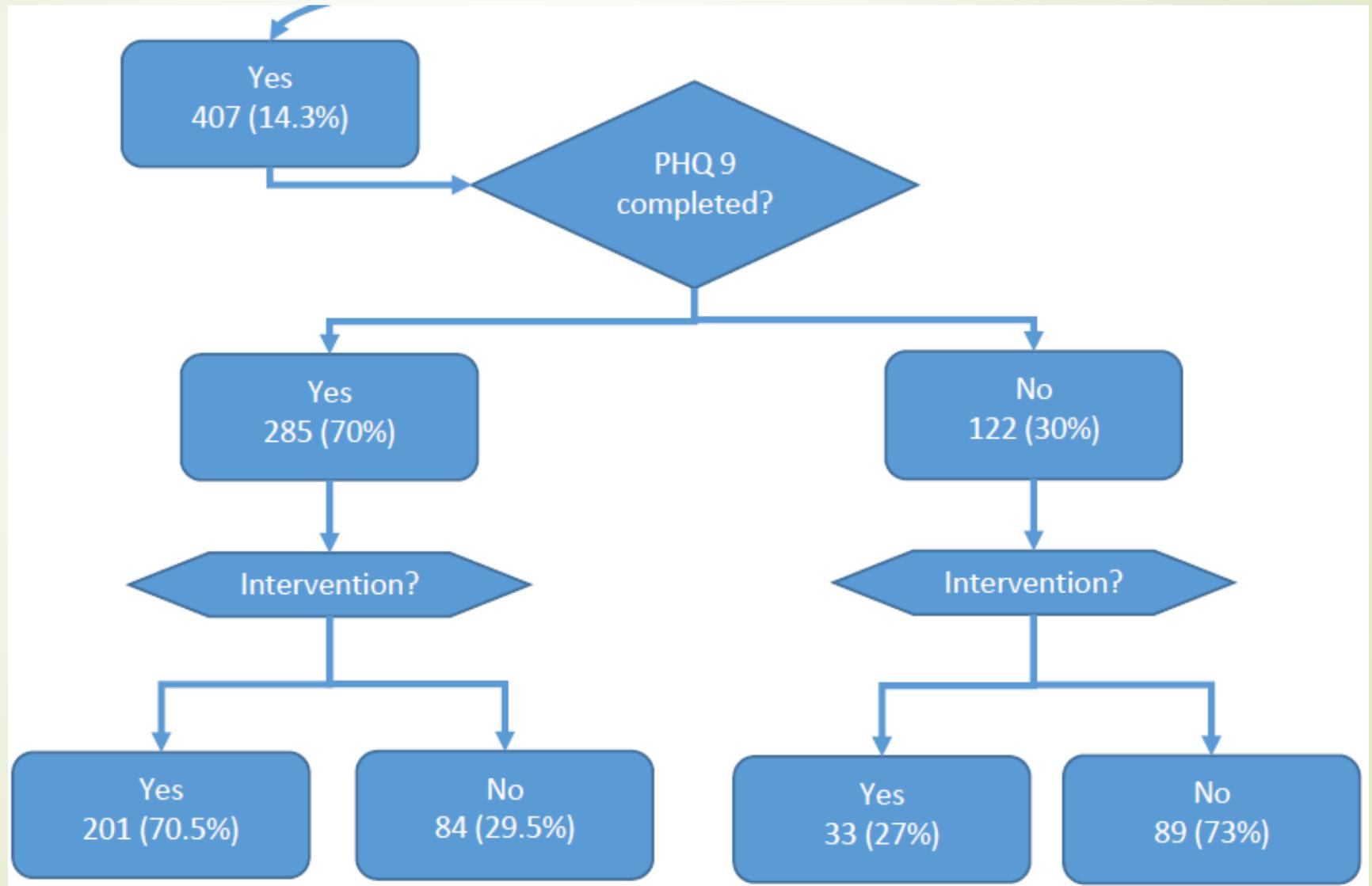
Results



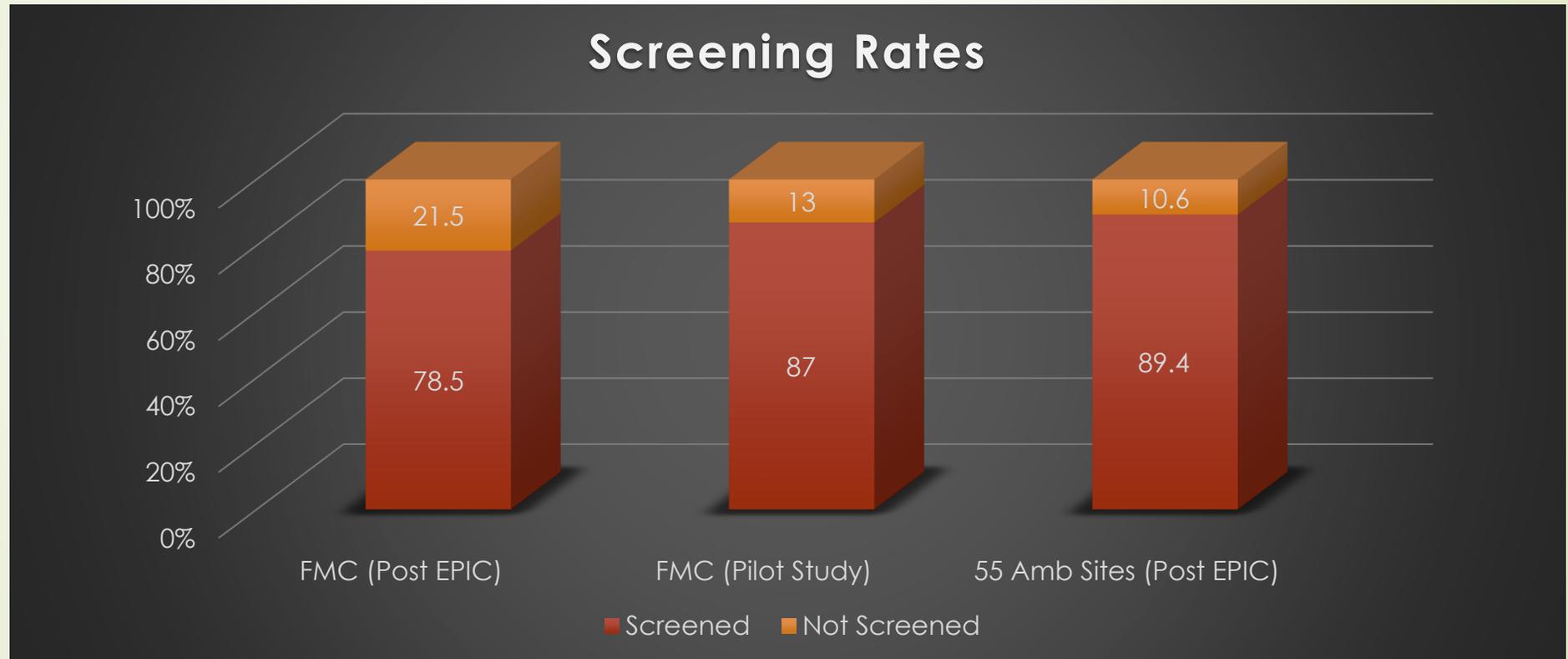
Results (FMC)



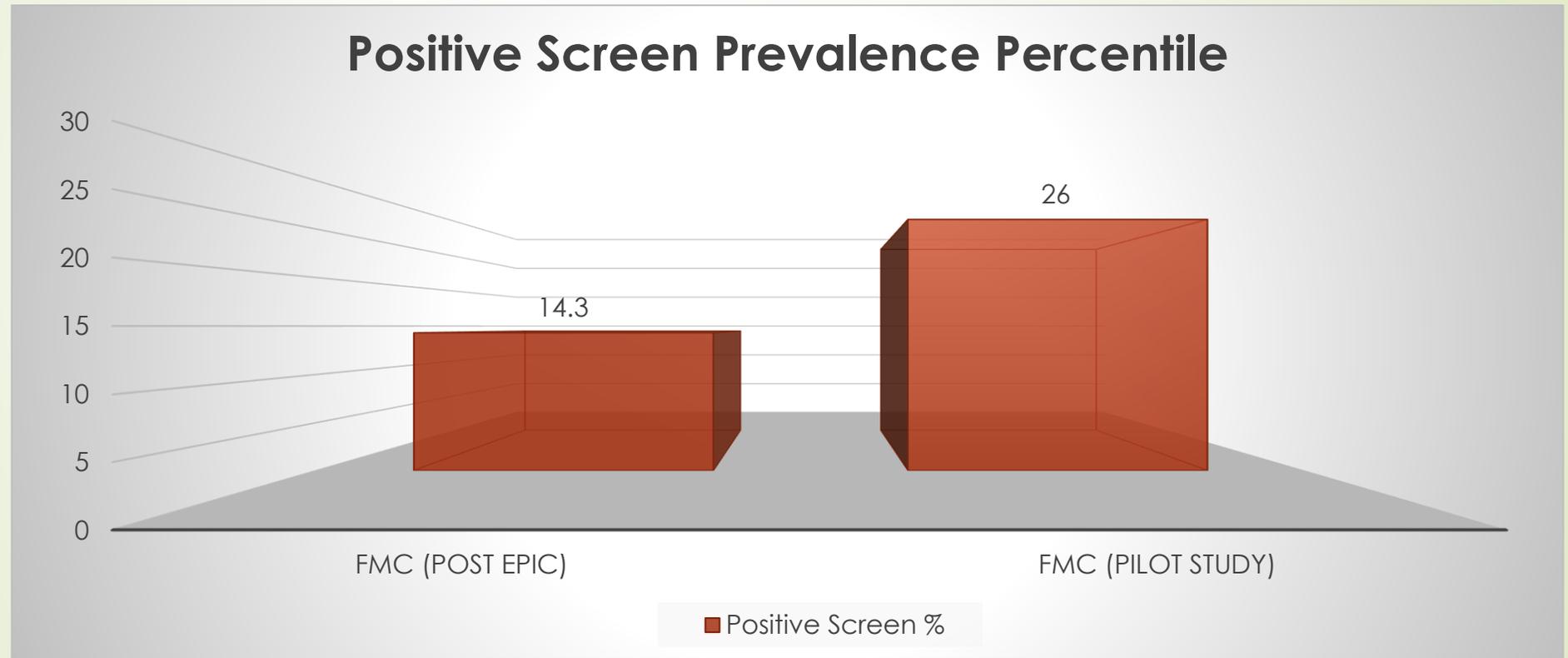
Results (FMC)



Results

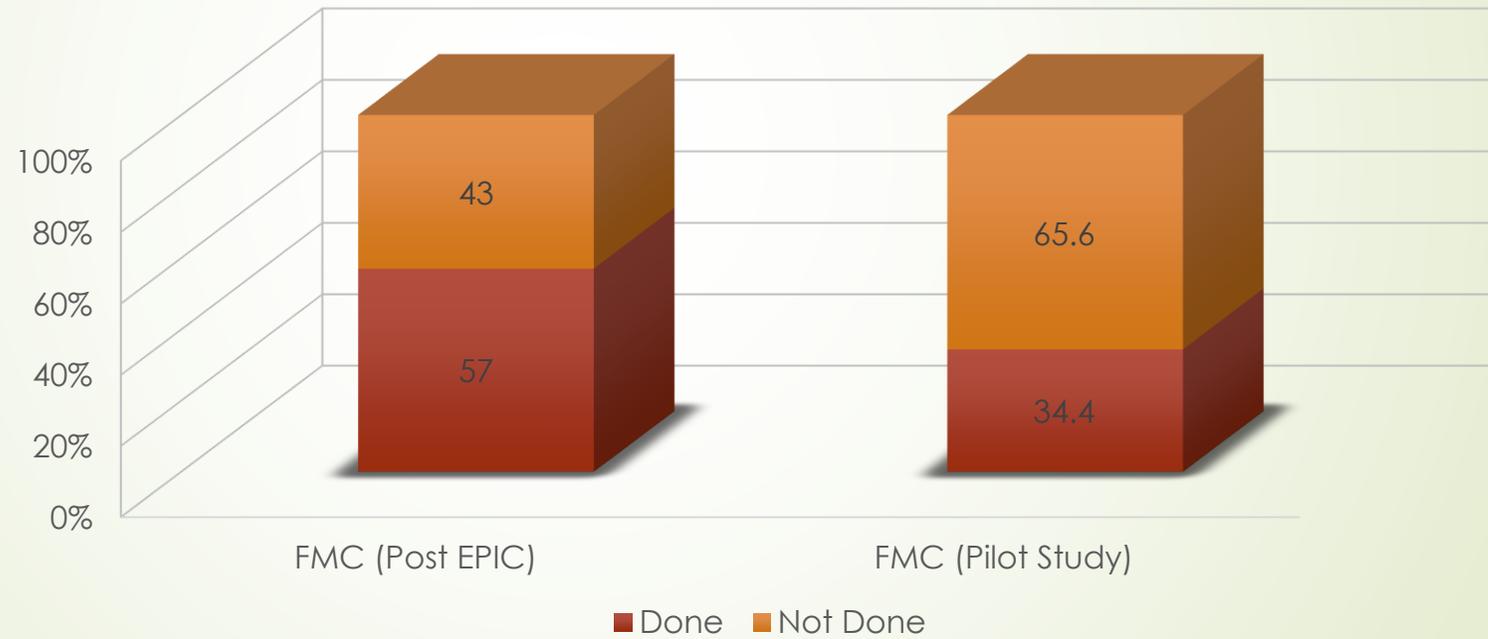


Results (FMC)



Results

Intervention On Positive Screen





Conclusions

- ▶ This follow up retrospective chart review to the 2013 pilot study reveals the estimated prevalence of positive depression screens at FMC was 14.3%, down from 26% from the pilot data. This could be secondary to new system/training of individuals vs time frame in which study was done
- ▶ Analysis of screening implementation shows that screening rates at FMC fell short of the 90% goal, but were very nearly at goal across the 55 other sites. Screening rates also fell by 8.5% compared to previous study
- ▶ Protocol PHQ-9 documentation for positive PHQ-2 score was inadequate at 70%, well below the 100% expected .
- ▶ Documentation of intervention for positive depression screens at FMC significantly improved, nearly doubling. The pilot study screening protocol included only PHQ-2. Our study revealed higher rates of provider intervention documentation with appropriate follow up PHQ-9 administration. However, a large cohort of patients remained without known provider recognition of positive screening.



Discussion

- ▶ Advantages over Pilot study:
 - ▶ longer study period (1 month versus 7 months)
 - ▶ inclusion of adolescent patients ages 12-18 (according with USPSTF recs)
 - ▶ expansion of screening compliance review to involve all UPHMP ambulatory sites
 - ▶ Screening protocol included follow up PHQ-9 for positive PHQ-2.



Discussion

- ▶ Limitations

- ▶ The pilot study investigated results of mandated screening that occurred in an EHR system that was well established versus our study, in which both the new EHR EPIC Go-live and screening implementation occurred together.
- ▶ There may have been some initial difficulties with appropriate intervention documentation due to learning curve associated with new EMR on the level of nursing staff and physicians.
- ▶ Although we assessed screening rates across all clinics, we were not able to assess prevalence data or documentation of intervention on this scale.



Discussion

- ▶ Limitations

- ▶ We only queried the first screening performed during our time frame. Many repeat screenings were performed that may have included appropriate PHQ-9 administration for a positive PHQ-2 whereas an initial positive PHQ-2 score was found to not have appropriate follow up testing. In addition, there were instances where initial screens did not have documentation of intervention whereas repeated screen during time interval did document intervention.
- ▶ Patients with negative initial screens at times had positive repeat screenings during the study time interval. These screens may have been prompted by the patient presenting with a complaint of depression. Initial screenings at yearly intervals will not pick up all cases of depression as onset can be at any time depending on many factors in patient's life.
- ▶ We recommend further retrospective chart review utilizing a date range that does not include the first several months after EHR go-live. Employees of new systems are in the training phase of new EMR rollout. Hence, this may have contributed to the decline in the data we observed.

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