

Improving screening for diabetic retinopathy in an ambulatory resident clinic

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INTRO

While 60% of Americans with diabetes are screened for diabetic retinopathy, the residents in the Jefferson Internal Medicine Associates (JIMA) ambulatory clinic had a lower screening rate (roughly 50%).(1) Our project aimed to increase that screening rate.

METHODS

- QlikSense and EpicReports were used to establish baseline and monthly diabetic retinopathy screening rates.
- A Pre- and post-educational survey about appropriate times to screen patients with diabetes with a retinal camera and input for reasons for low screening rates was administered
- Provided in-clinic whiteboard algorithm of method to screen in resident work area
- Process walked a patient receiving a retinal camera exam and residents ordering a screen
- Individuals with the lowest screening rates (9 residents) were directly messaged regarding their screening rates

RESULTS

- Resident screening rates ranged from 47% to 53%
- There appeared to be a slight change of about 6% after the post survey and direct messaging although this may reflect normal variance as the screening did not exceed the baseline rate.
- Resident knowledge did not change following educational intervention between pre- and post- surveys (ex. same number of residents thought that retinal camera could be used as first screen when full ophthalmology exam is recommended by ADA). (2)
- Residents who were directly messaged responded to the message 33% of the time (3/9)

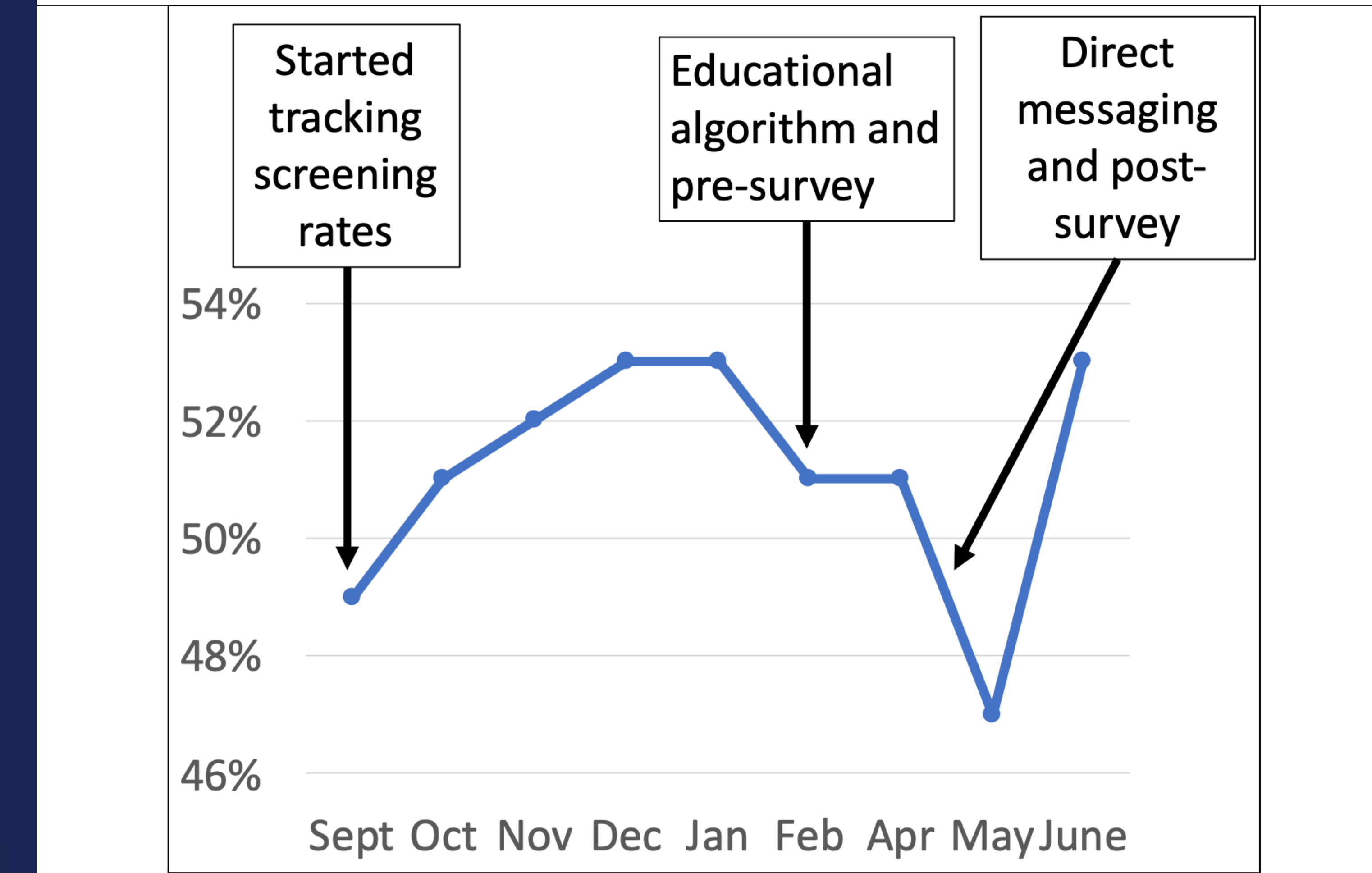
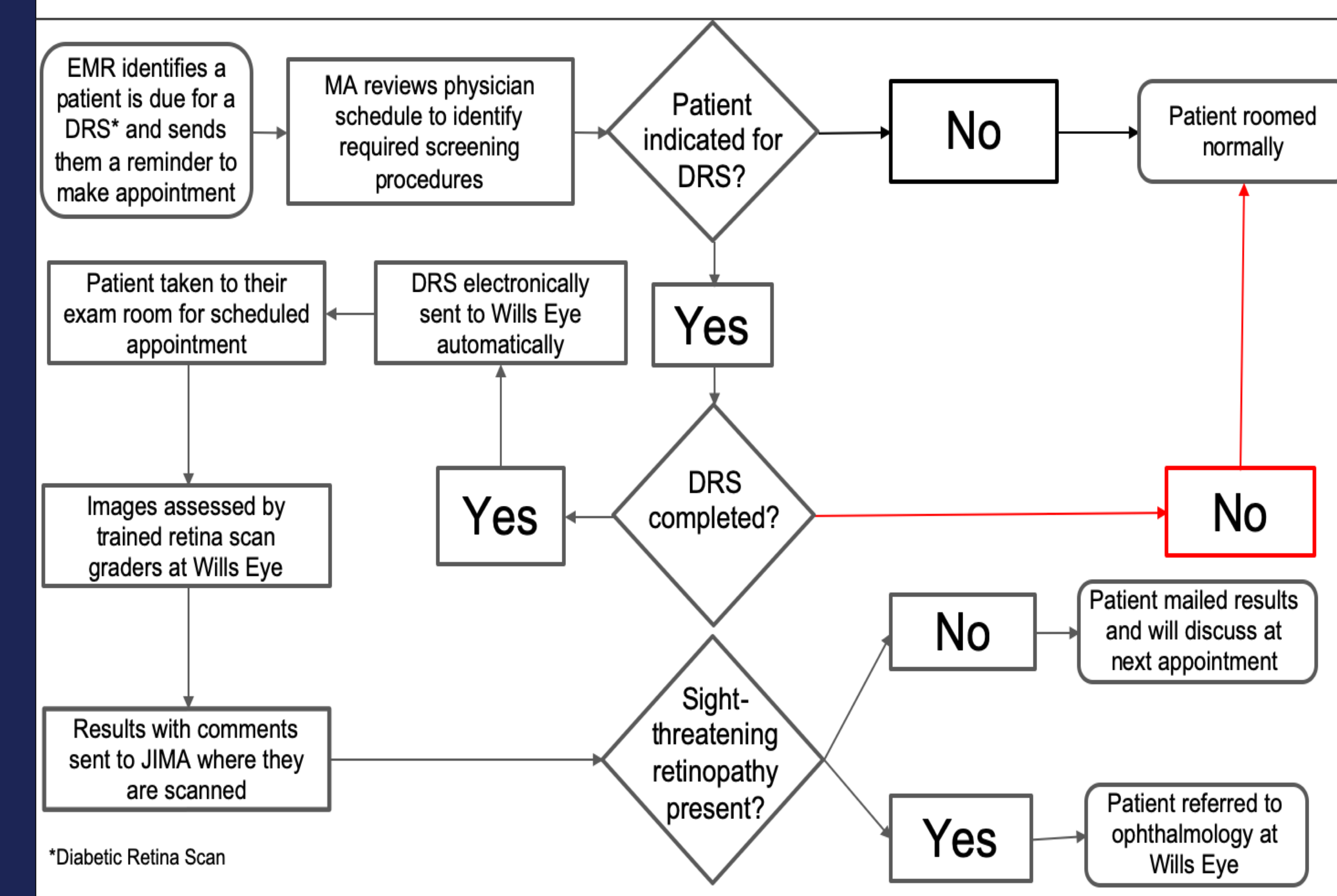
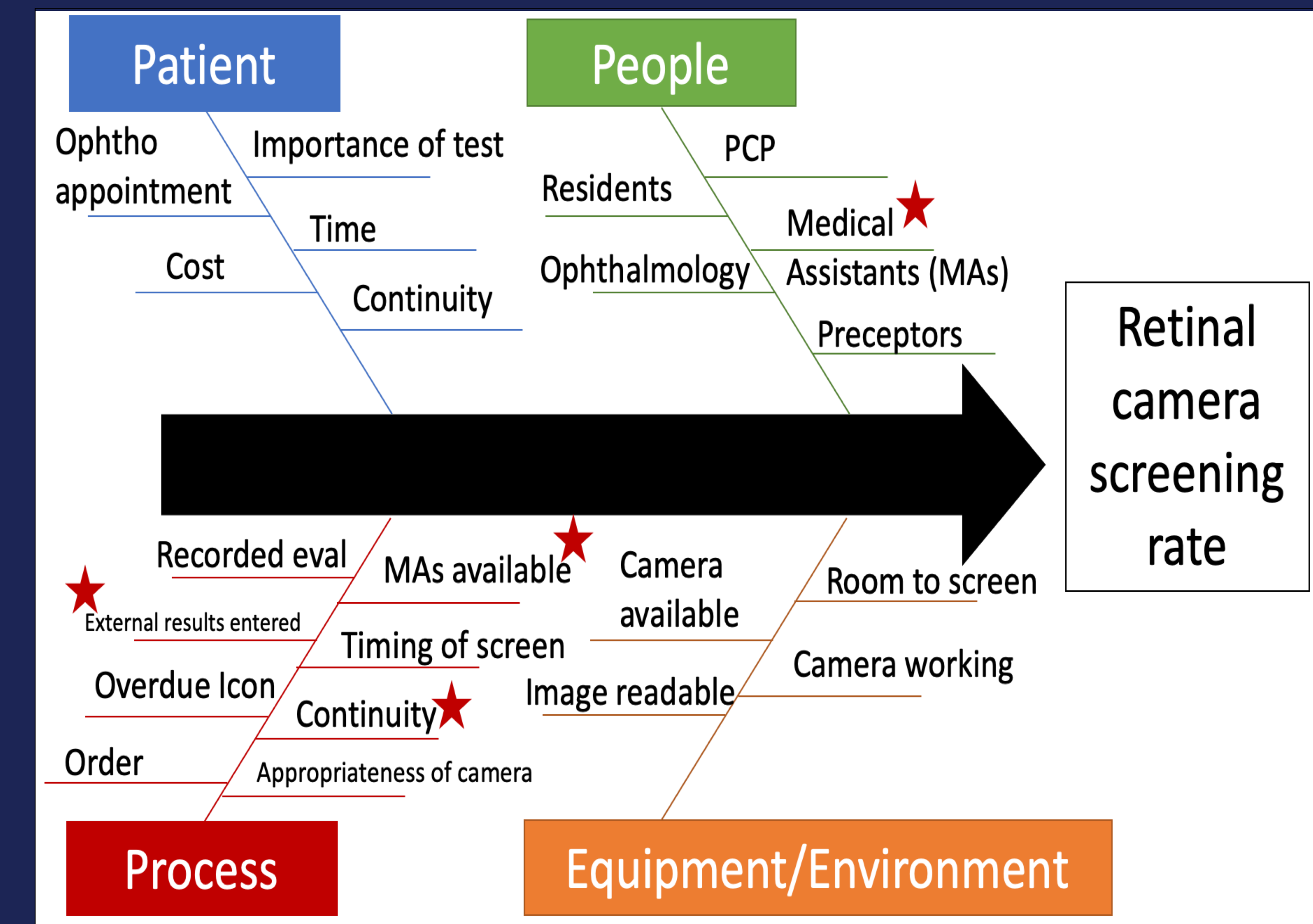
DISCUSSION

- Education and direct targeted messaging did not significantly change diabetic retinopathy screening rates.
- Multiple factors contribute, including lack of resident awareness of EPIC notifications on clinic schedule, knowledge of appropriate guidelines, a lack of notification system for patients eligible but not screened, lack of bulk letter ordering function available to attendings but not residents, and lack of continuity in follow-up with patients with diabetes.
- Further PDSA cycles with different interventions and more in-depth RCAs are needed to improve screening rates.

Education and direct targeted messaging are not sufficient to improve diabetic retinopathy screening rates in an ambulatory resident clinic.



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References: 1. Solomon SD, Chew E, Duh EJ, et al. Diabetic Retinopathy: A Position Statement by the American Diabetes Association. Diabetes Care. 2017;40(3):412-418.
 2. Cuadros J., Martin C. (2012) Diabetic Retinopathy Screening Practice Guide. In: Yogesana K., Goldschmidt L., Cuadros J. (eds) Digital Teleretinal Screening. Springer, Berlin, Heidelberg. 11-30.
 3. Graham-rowe E, Lorencatto F, Lawrenson JG, et al. Barriers to and enablers of diabetic retinopathy screening attendance: a systematic review of published and grey literature. Diabet Med. 2018;35(10):1308-1319.

