

The effects of office-based interventions to increase patient enrollment in an online electronic medical record portal

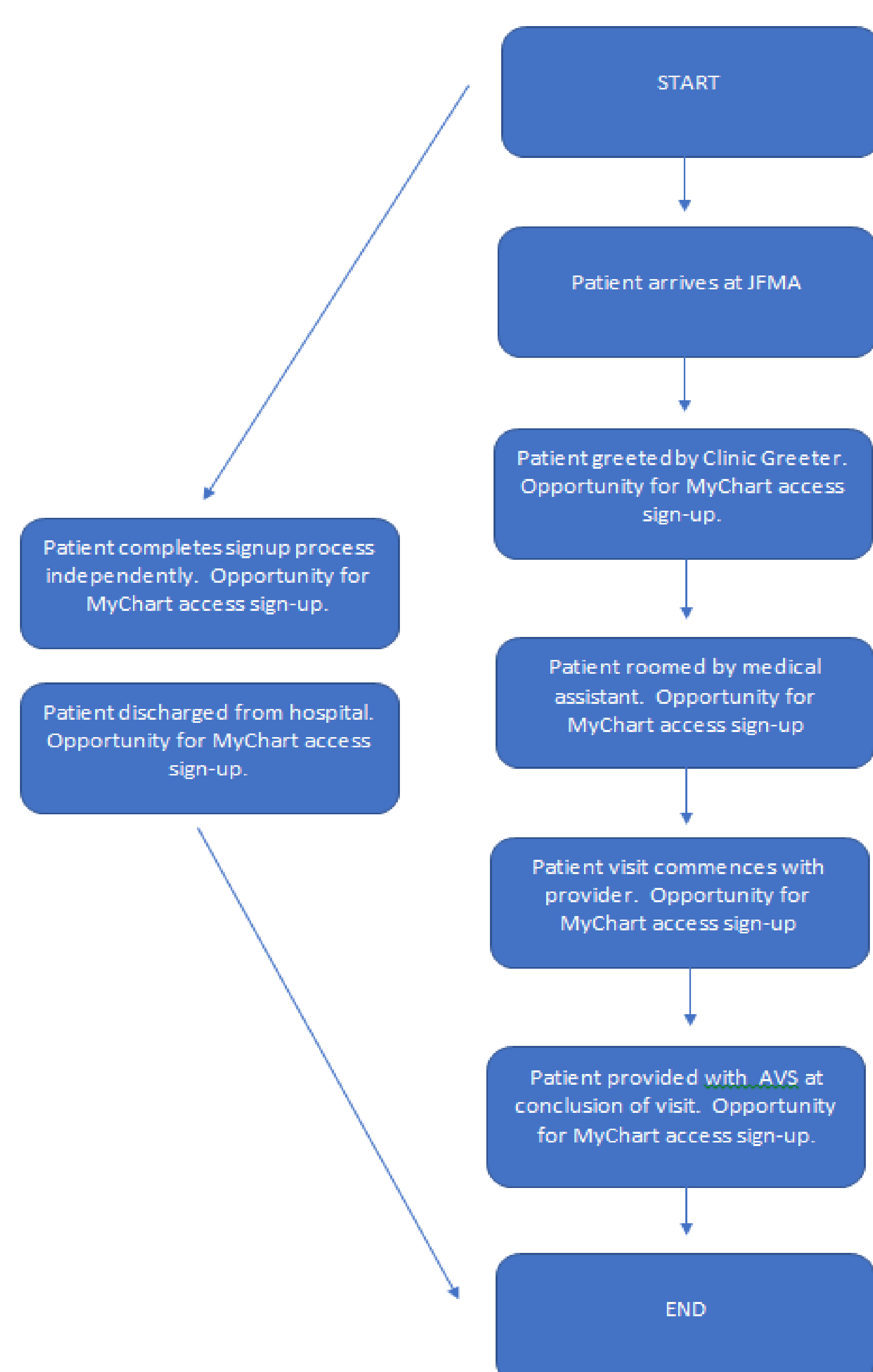
Lionel McIntosh M.D., Allison Rague M.D., Claire Thesing M.D., Amy Lachewitz M.D., Gillian Love M.D., Daniel Sizemore M.D., Zachary Klock M.D., Aimee McMullin M.D., Zeynep Uzumcu M.D., R. Patrick McManus M.D.
Thomas Jefferson University Family and Community Medicine Residency Program

Background

- Electronic Medical Records (EMR) have become a necessary component of patient care
- Research shows the utilities presented by patient portals through an EMR such as increasing patient engagement and making the patient-provider communication more efficient
- At our large academic family medicine practice (JFMA), a new EMR (Epic) with a patient portal (MyChart) was implemented in the 8 months preceding this project
- MyChart allows patients to request medical appointments directly, shorten registration time with electronic check in, receive and view test results, request prescription renewals, and have secure direct communication with their healthcare teams
- Our identified problem was the limited number of patients who were signed up for the patient portal, thus not getting the benefits of the portal
- **We aimed to increase the number of JFMA patients signed up with MyChart by 50% over a 5 month time frame** by educating providers and staff on ways to implement patient portal sign up into the office visit as well raising awareness of the portal for both providers and patients



Process Map



- **Stakeholder engagement:** patients and physicians have multiple opportunities to increase MyChart sign-up at multiple points throughout a visit

- **Interventions:** Residents brainstormed and prioritized changes that would work within our system using existing resources

- **Intervention testing:** We evaluated Epic sign-up access points and identified limitations based on computer security and computer availability.

Methods

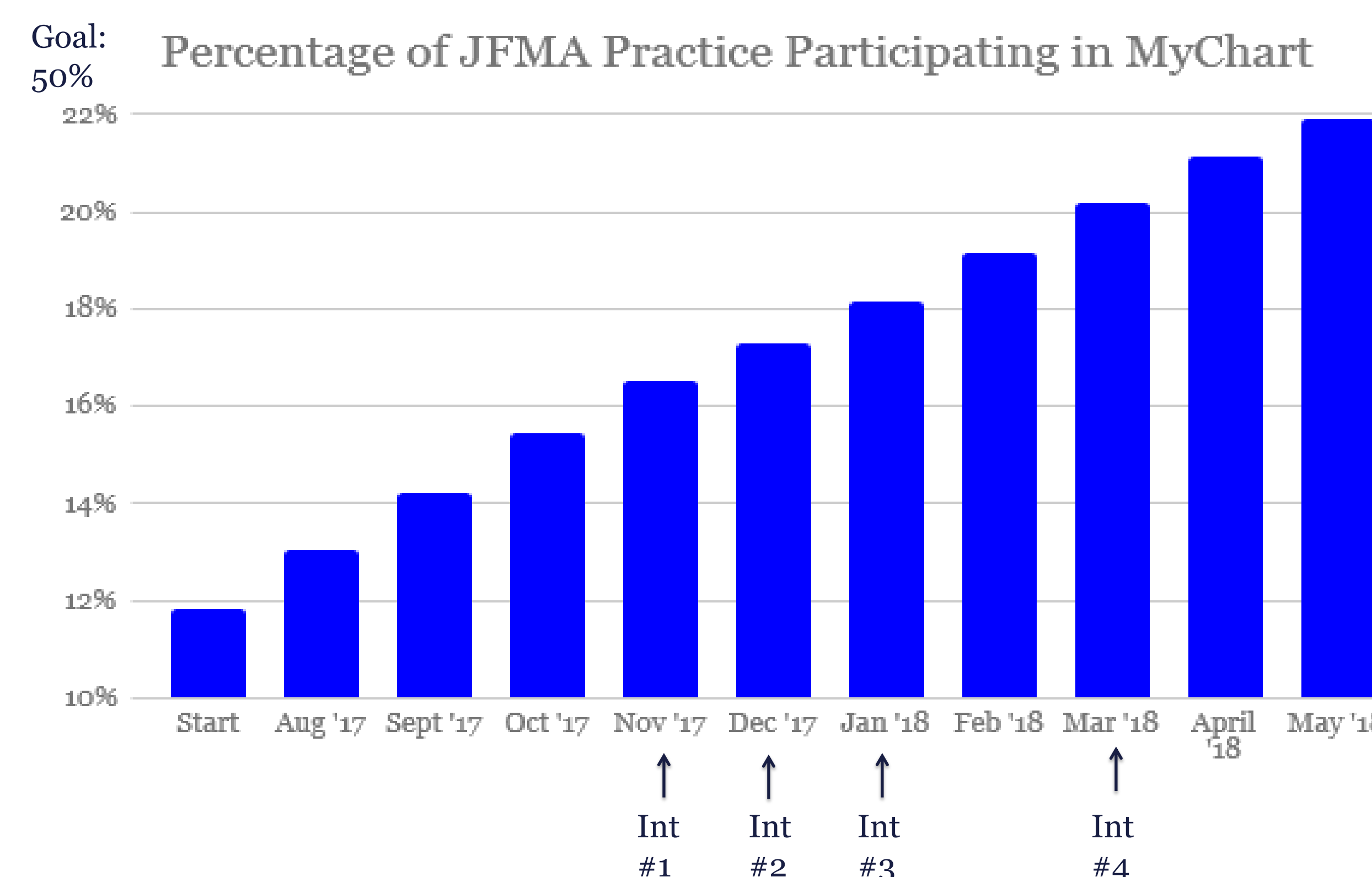
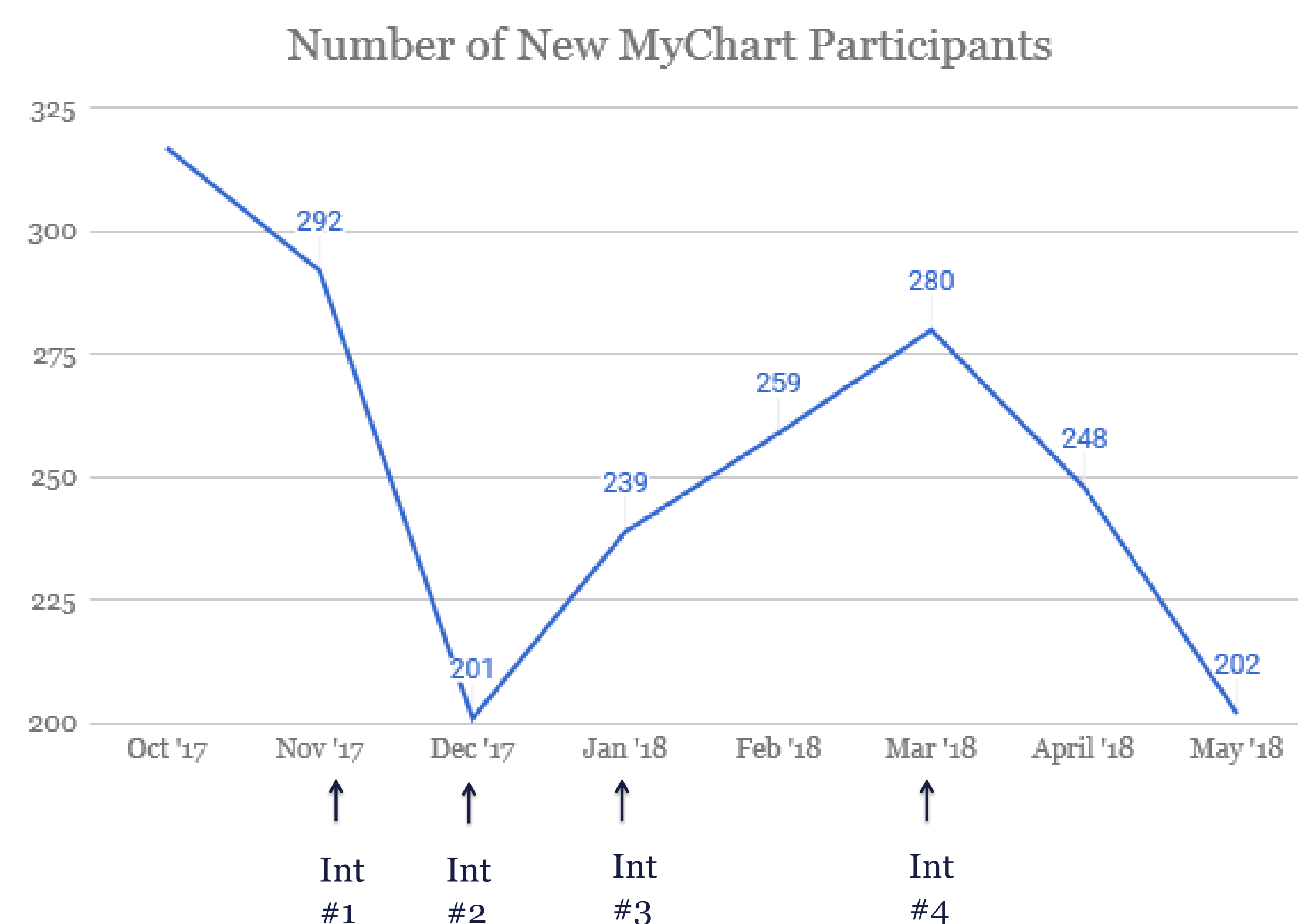
Interventions

- 1st intervention: Nov 2: **Email to all JFMA providers including a step-by-step instructions in graphic and text format**
- 2nd intervention: Dec 1: **Met with our medical assistants to add MyChart sign-up to their rooming process, to be done by the patient while in the room**
- 3rd intervention: Jan 2: **Informational fliers in JFMA patient rooms**
- 4th intervention: Mar 1: **Informational slides on TVs in JFMA waiting room**

Data collection

- Used *Qlik* program, incorporated within Epic, to gather MyChart participation rates on a monthly basis.
- Follow-up survey: May 24: emailed to all JFMA providers. Survey asked 8 questions gauging provider's comfort level with signing patients up for MyChart and utilizing its capabilities to communicate with patients.

Results



Results

"MyChart Attitudes and Usage Survey" Results: 31 respondents

Providers who...	% of providers
Know how to get their patients signed up	90
Have had patients sign up during visits	58
Have communicated with patients via MyChart	77
Have hesitations/concerns about MyChart	19

Most providers described their concerns as related to computer accessibility for patients.

To the question, "What barriers do you see that keep your patients from signing up?" common themes of responses included lack of computer access, lack of email address, computer and smartphone literacy, and forgetting to do it during the visit.

Discussion

- The number of new patient enrollments each month ranged from 200 to 260 and peaked during March. The first month of data collection showed a nadir of about 12%. Most recently, in May the percentage increased to 22%.
- There continued to be a steady increase in the percent of JFMA patients that signed up for MyChart both before and after our interventions. Our interventions had no noticeable impact on the number of patients signing up for MyChart – suggesting that other approaches are needed to approach our aims in this project.
- Survey results show that most providers know how to sign up patients for MyChart and use it to communicate with patients.
- Limitations include the decreasing target population of patients overtime, as more patients signed up.
- Data gathering was limited by our inability to analyze data on a scale smaller than a monthly basis. Also, as more patients signed up for MyChart, the number of possible enrollments decreased.
- Future projects may investigate more effective interventions. Possible interventions may include a computer or tablet in the JFMA waiting room. Pre- and post-intervention surveys of providers may provide more insight on education-based interventions. We hope that increased patient and provider participation in the portal will improve provider-patient collaboration in patient healthcare.

References

- Bouayad, Lina, Anna Ialynytchev, and Balaji Padmanabhan. "Patient health record systems scope and functionalities: literature review and future directions." *Journal of medical Internet research* 19.11 (2017).
- Hibbard, Judith H., and Jessica Greene. "What the evidence shows about patient activation: better health outcomes and care experiences; fewer data on costs." *Health affairs* 32.2 (2013): 207-214.
- Irizarry, Taya, Annette DeVito Dabbs, and Christine R. Curran. "Patient portals and patient engagement: a state of the science review." *Journal of medical Internet research* 17.6 (2015).
- Kruse, Clemens Scott, Katy Bolton, and Greg Freriks. "The effect of patient portals on quality outcomes and its implications to meaningful use: a systematic review." *Journal of medical Internet research* 17.2 (2015).