Partners Connected Health Innovation Improves Patient Recruitment from EPIC

Automatic, real-time alerts decrease enrollment efforts by up to 75%

One of the biggest challenges for doctors running research trials is patient screening and recruitment, so Partners Connected Health Innovation devised an automatic solution that can deliver results four times faster than current, largely manual, efforts.

Typically, Research Coordinators spend hours manually searching through the EPIC Reporting Workbench and reviewing admission notes to determine whether patients meet eligibility criteria for a study. Emily Caplan, a Senior Research Analyst at Connected Health Innovation, felt there had to be a better way: Her plan was to utilize the silent best practice alert (BPA) functionality to automatically notify research staff when eligible patients were admitted to the hospital in real-time.

Before working with the Partners eCare Research Core (PeRC) to develop this functionality, research coordinators spent hours every morning pulling admitted patient lists from EPIC and scanning them for those meeting eligibility criteria. Because patients are admitted throughout the day, Caplan felt it would be more efficient to monitor admissions in real-time.

Recruitment rates were low, so she analyzed the issue for areas her team could directly influence. “We didn’t have control over the types of patients we were recruiting,” Caplan recalled, “but we did have control over our recruitment process, so I focused on this one aspect we could change.

“The key was getting notified in real-time when someone that meets our criteria is admitted,” she continued. “This would save us hours every day, which would enable us to be more efficient and spend more time focusing on the patient, which increases retention.”

As it turns out, the BPA system had previously been used clinically to notify physicians of important patient updates, and it simply needed to be modified for research purposes.

With the new tool in place, potential candidates are now flagged in real-time when they meet pre-selected criteria provided by a research team. For a COPD-related clinical trial at PCH, criteria included: patients admitted for COPD related ICD-10 code diagnoses (e.g. dyspnea, shortness of breath); presence of COPD on the EPIC problem list; prescription of COPD-related medications (e.g. prednisone, albuterol); and patient class (inpatient). Potential inpatients were flagged upon admission to three Partners hospitals if they met two-thirds of pre-selected criteria with the goal of flagging all potentially eligible patients.

The silent BPA screening method proved to be four times faster than the previous screening method, and is projected to save 442.5 person-hours over the duration of the COPD study. Partners Connected Health Innovation is also utilizing this function for a study related to Congestive Heart Failure (CHF) re-admissions, and it is showing similarly positive results.

Dr. Jethwani heralded the advancement. “Recruitment is the biggest challenge for many research groups,” he said. “The ability to automate this process has been extremely helpful, and offering this

service to all investigators and study staff across Partners would expedite recruitment and ultimately reduce the overall time needed to conduct a study, ensuring innovations can be brought to clinical care faster."

Silent BPA screening is now available as a PeRC service to all research teams using EPIC for subject recruitment. Interested researchers should contact PeRC at PeCResearchTeam@Partners.org to learn more about adopting this patient-recruiting strategy.

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