Using Electronic Medical Records in Research Recruitment

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Overview of U-M Approach

• Epic Systems – University of Michigan (2012)
  • Recruitment Alert
  • Fully integrated – patient centric EHR system
  • Stable & secure platform with over 26,000 Michigan Medicine users
  • Supports research and health information management
  • Available for research purposes at no additional cost

• Recruitment Alert function activated in U-M Cognitive Disorders Clinic in 2013 and Movement Disorders Clinic in 2015
What is a Recruitment Alert?

• A recruitment strategy that identifies patients in clinic who might qualify for a research study based on screening criteria input into the MiChart system
• Real time: Once clinician clicks on ‘Interested,’ message is sent directly to shared InBox in MiChart
• Partial IRB waiver to review and screen PHI for recruitment only
Why use EHR for recruitment?

• Rapid recruitment
  • Phone call ~ 5 days after clinic visit

• Cost effective in managing study coordinator’s time

• Clinician discussion of research
  • Reminder is convenient at a busy clinic
Summary

Pt in clinic

- Cognitive Disorders Clinic
- Movement Disorders Clinic

MD selects diagnosis in MiChart

- e.g. diagnoses: MCI, possible/probable AD, EOAD, DAT, LBD, FTD, PD, PDD, HD, etc. (ICD-10-CM-Diagnosis codes)

Alert triggers MD to review research with pt

Pt eligibility and interest

SC notified of interest
Physician’s View

The study is noted

Recruitment Alert pops up

Selects diagnosis
If declined interest, alert will pop up at next visit. If ineligible based on MD discussions with pt, the alert will deactivate. If interested, alert is sent to shared InBox.
Study Coordinator’s View

In Basket
- New alert in shared Inbox
- These categories are customizable
- InBox labeled
- The opened alert
InBox items are automatically marked ‘New’

A status is changed to ‘Pend’ when comments are added

A status marked ‘Done’ is removed automatically when system refreshes (every few minutes)
Alert Follow-Up

Timeline from MiChart notification to enrollment:

~ 2-6 weeks
Typically 5-8 alerts per week
Recruitment results from EHR (5/17 – 8/18)

329 referred via Recruitment Alert

200 joined MINDSET registry

47 enrolled in longitudinal cohort

326 total pts in longitudinal cohort (43% AA)
Other Recruitment Channels

Longitudinal Cohort 5/17 – 8/18 (n=326)
Positive Feedback

• Pros of this system
  • Doesn’t affect clinical practice
  • Easy to edit / update with clinician feedback
  • Quick turnaround and contact of patient

Additional assets of the Clinical Core include… the presence of a best practice alert within the electronic medical record to facilitate recruitment of research volunteers across a wide spectrum of cognitive impairment,”

– Sanjay Asthana, MD, FACP, Chair, MADC EAB
Challenges

• Buy-in from key stakeholders (clinic directors, MiChart review board, IRB, etc.)
• Annual training of new clinicians and residents
• Peer-pressure to express interest at clinic, then lack of interest upon follow-up
• Timely follow-up after clinic visit (phone tag)
• Confusion between clinic and research (oftentimes, same clinician)
• Lost interest upon review of RVF and commitment
Future Directions

- Integration of InBox with MADC supported studies
- Integration of research visit scheduling system into MiChart
Thank you!

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