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Using Electronic Medical Records in Research Recruitment

Arijit K. Bhaumik, BA, CCRP
Research Administrator
Michigan Alzheimer's Disease Center
University of Michigan

Overview of U-M Approach

- Epic Systems – University of Michigan (2012)
  - MyChart 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

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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

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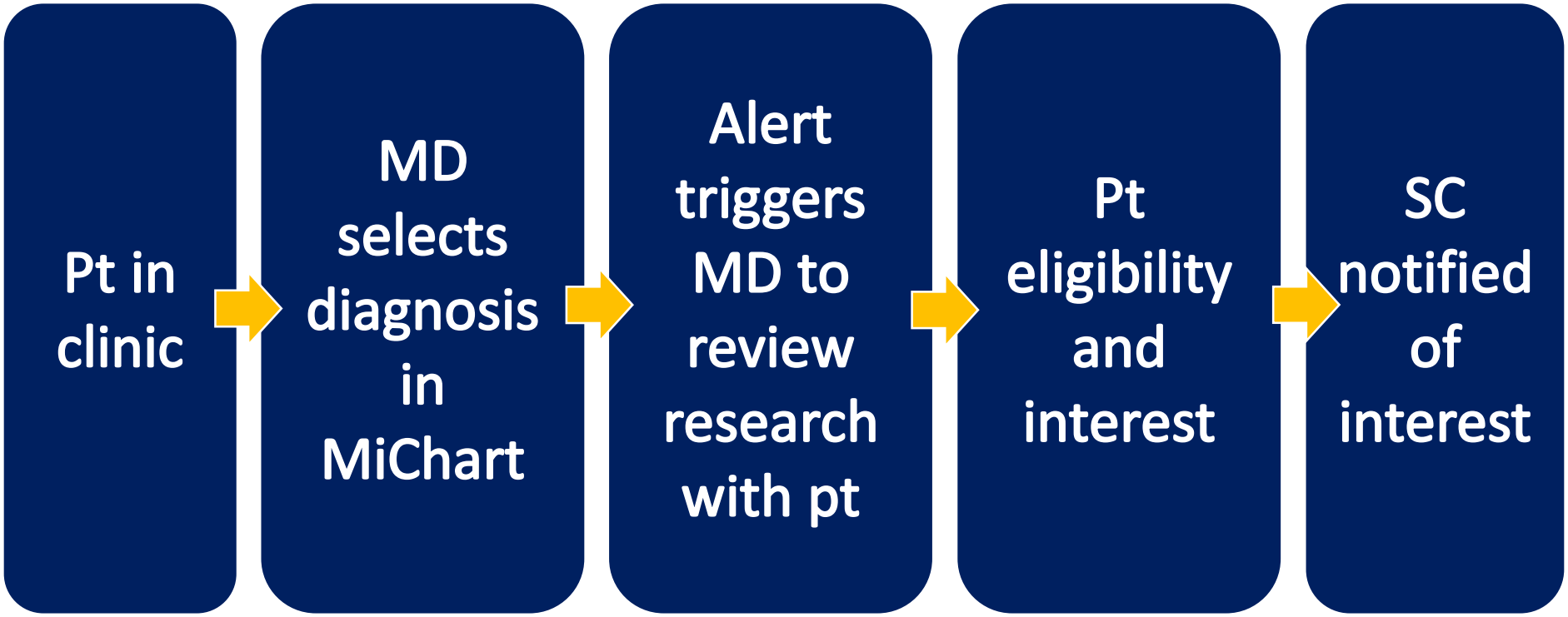
Why use EHR for recruitment?

- 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



- Cognitive Disorders Clinic
- Movement Disorders Clinic

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

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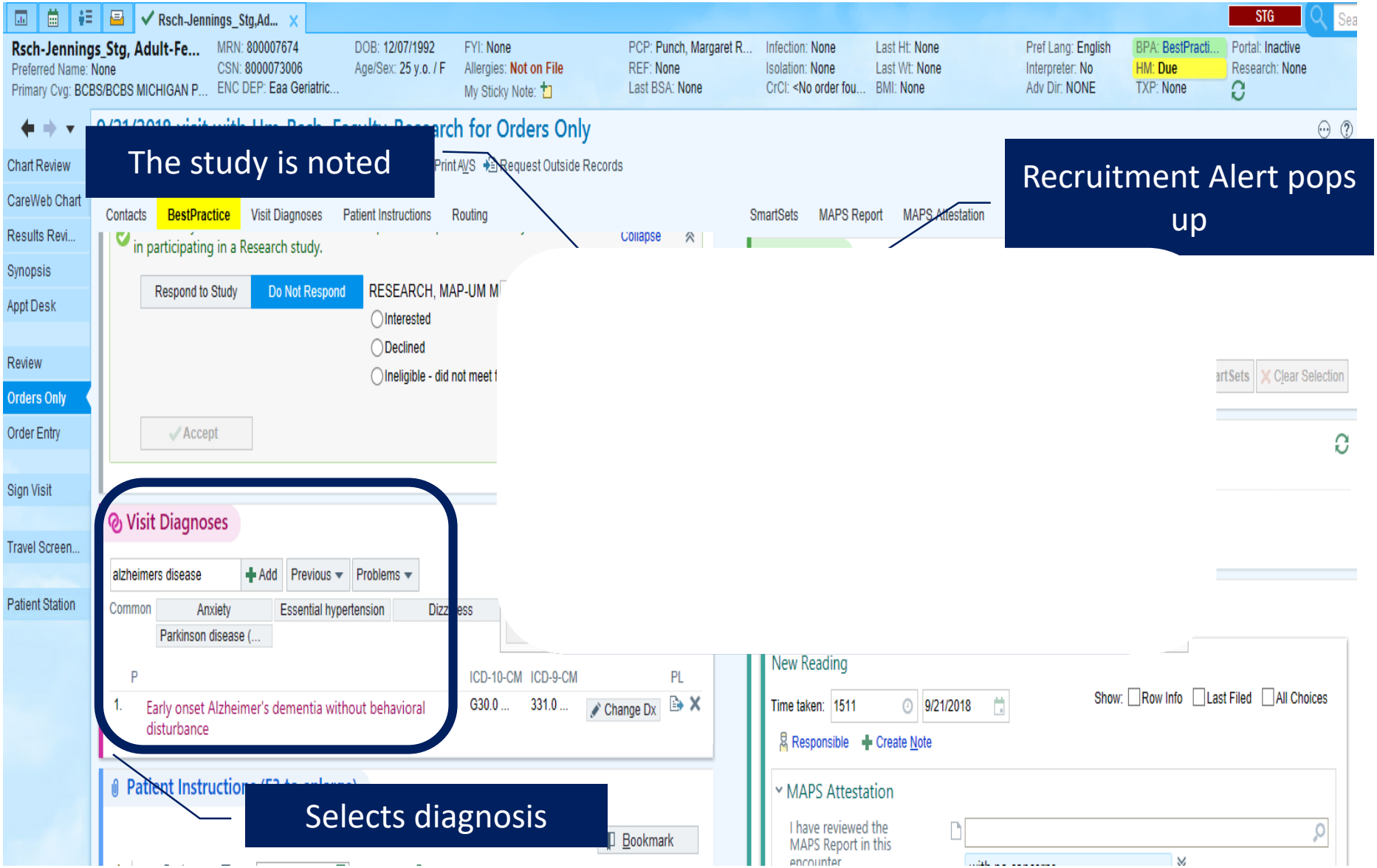
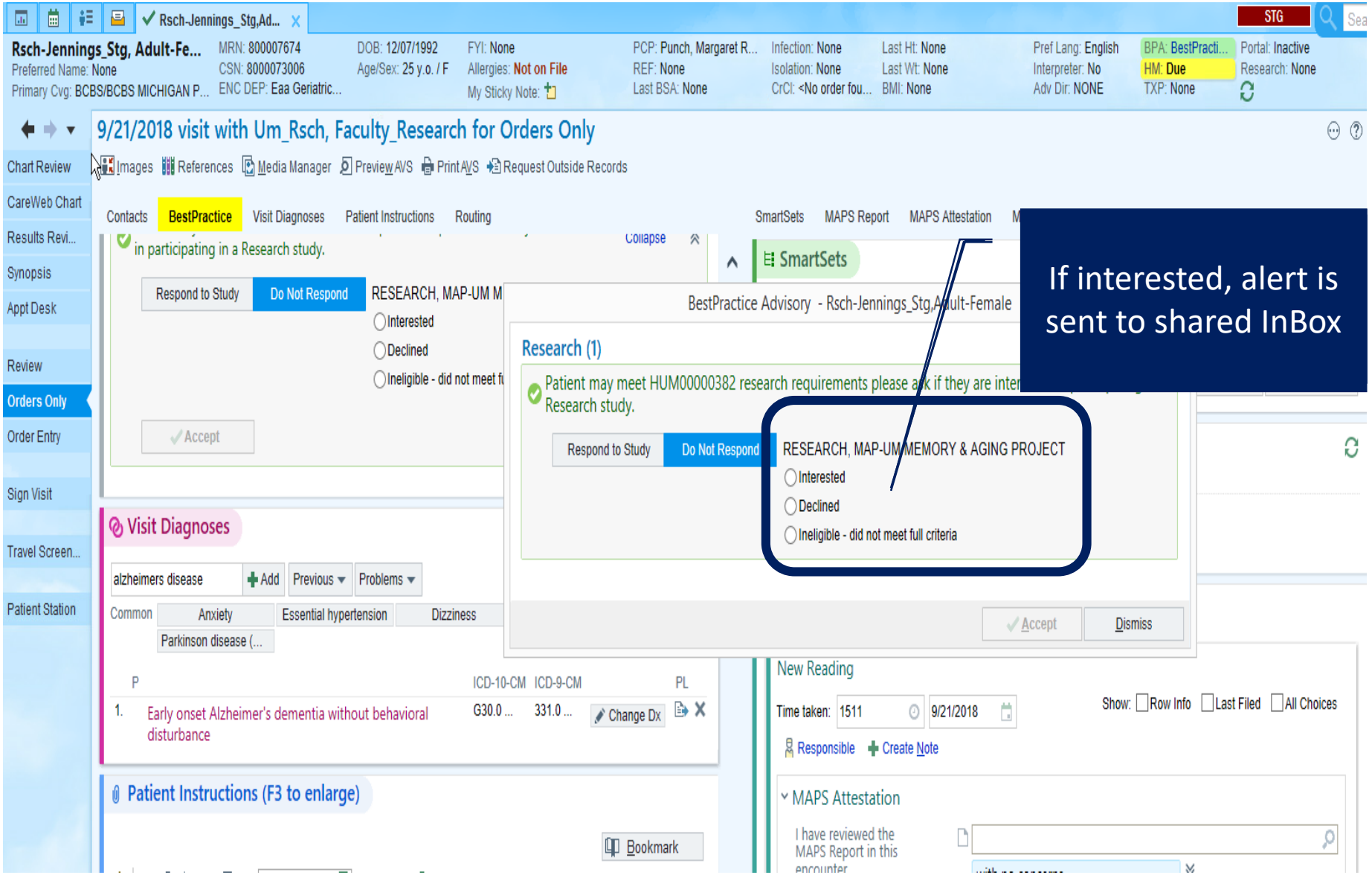
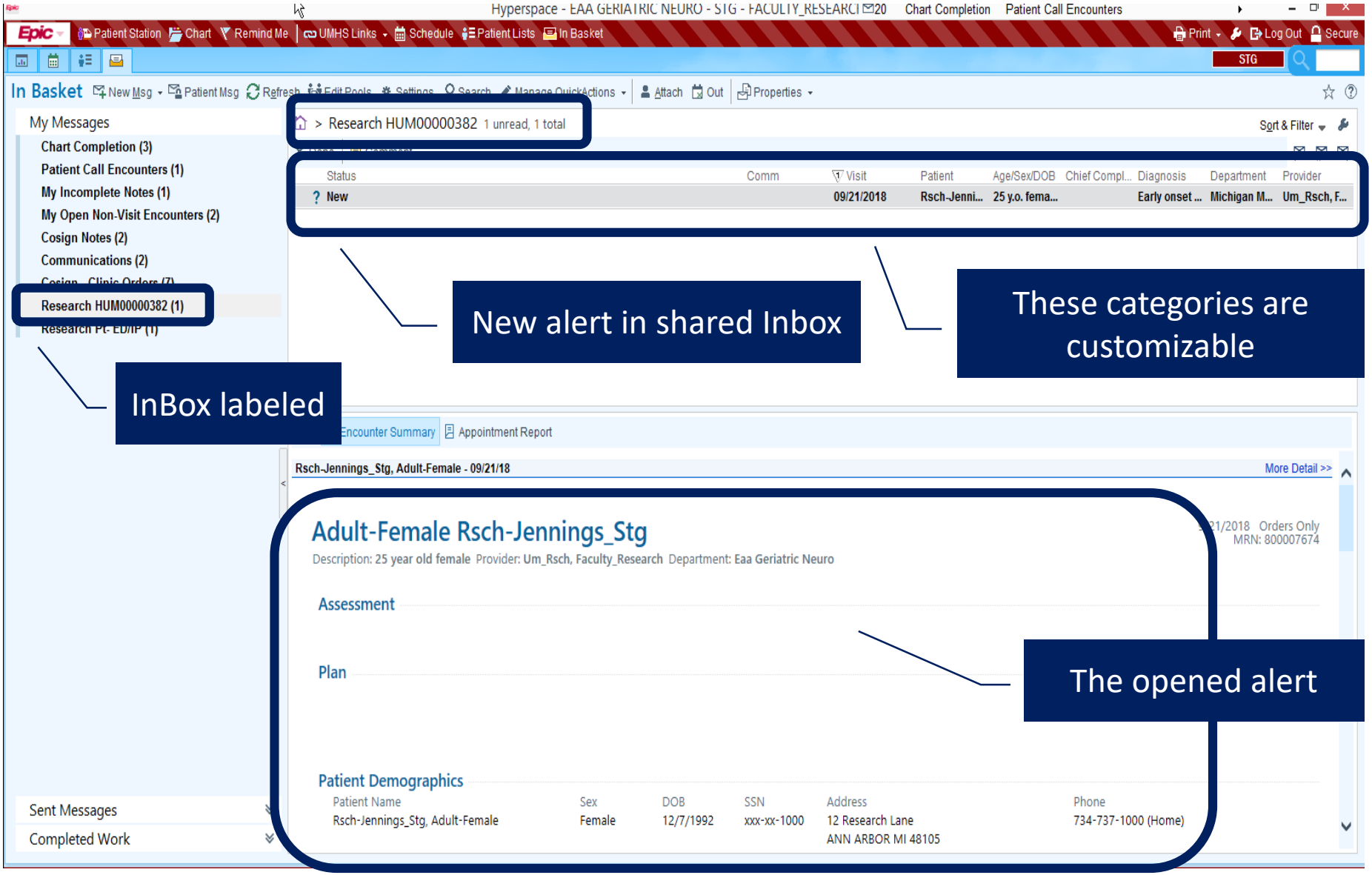
Physician's View



Physician's View



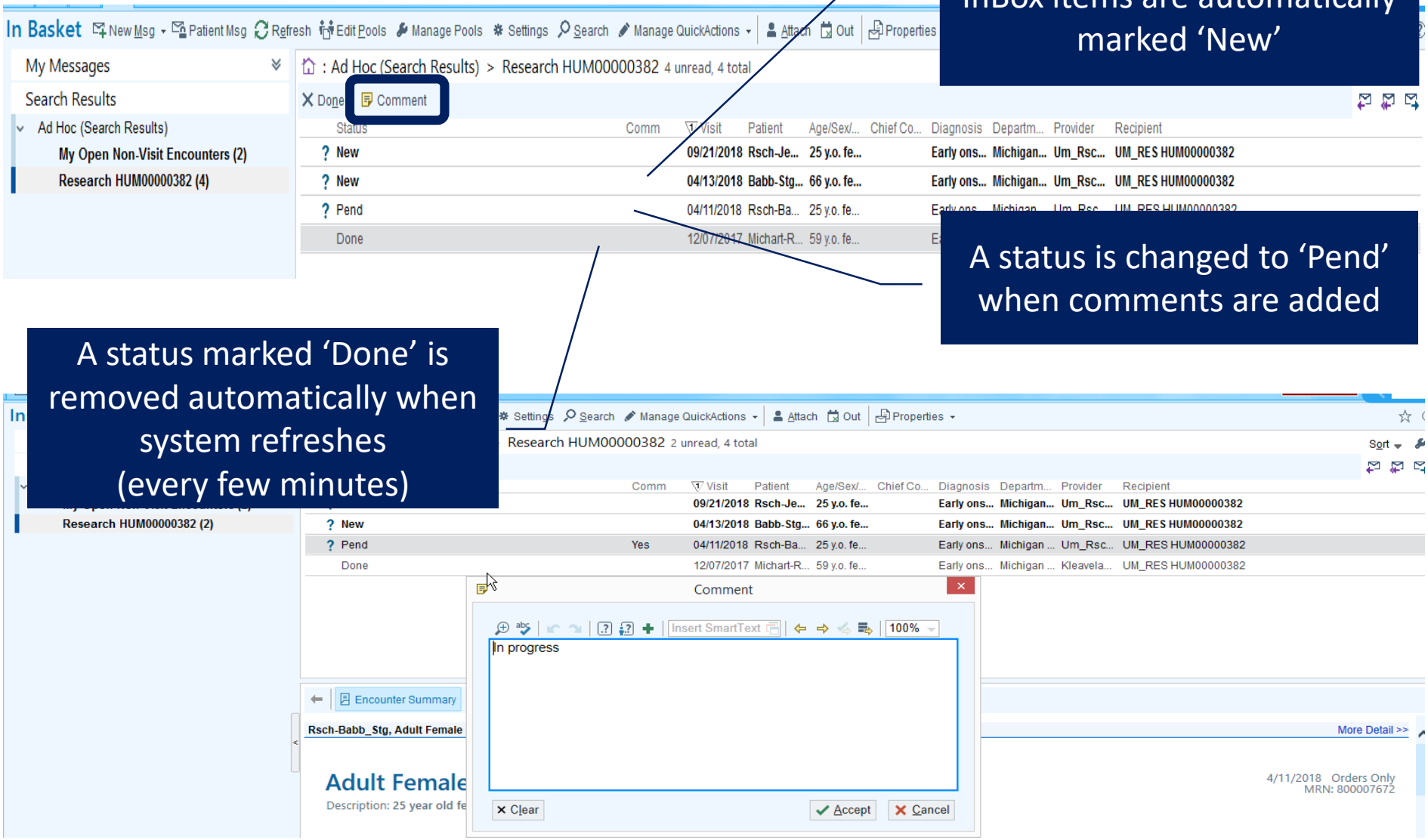
Study Coordinator's View



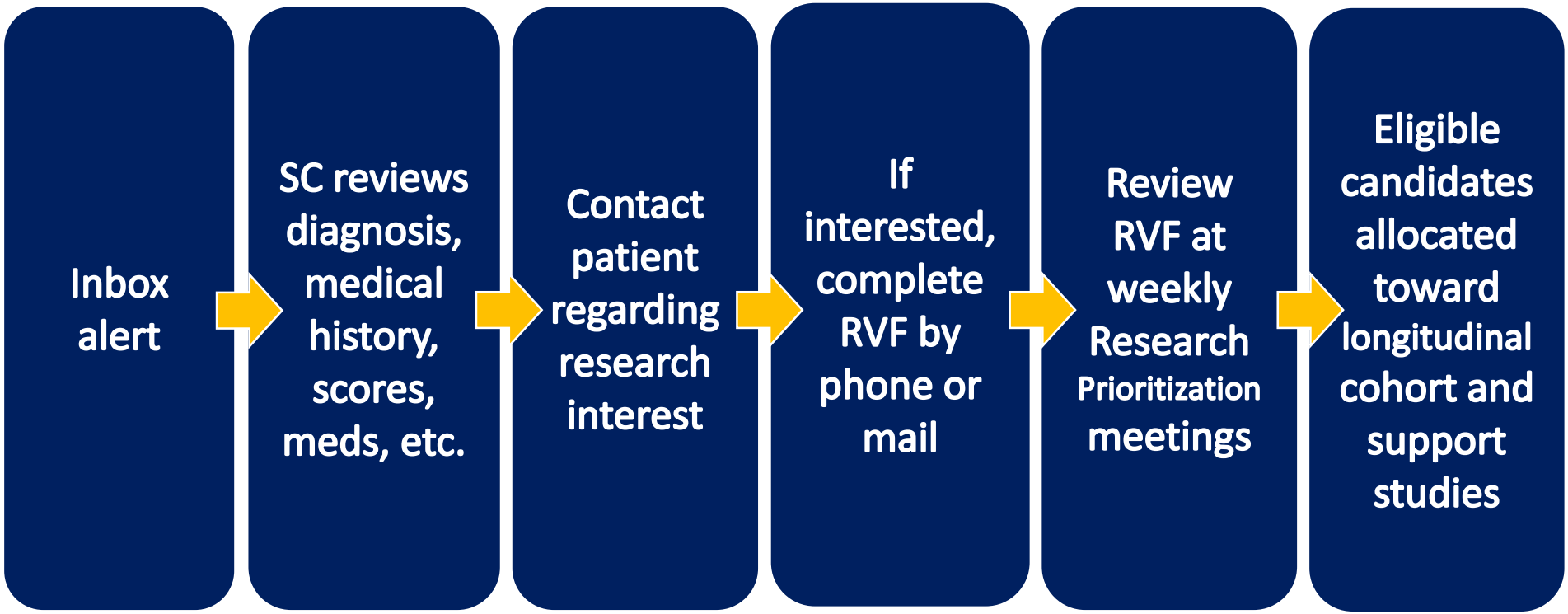
InBox items are automatically marked ‘New’

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

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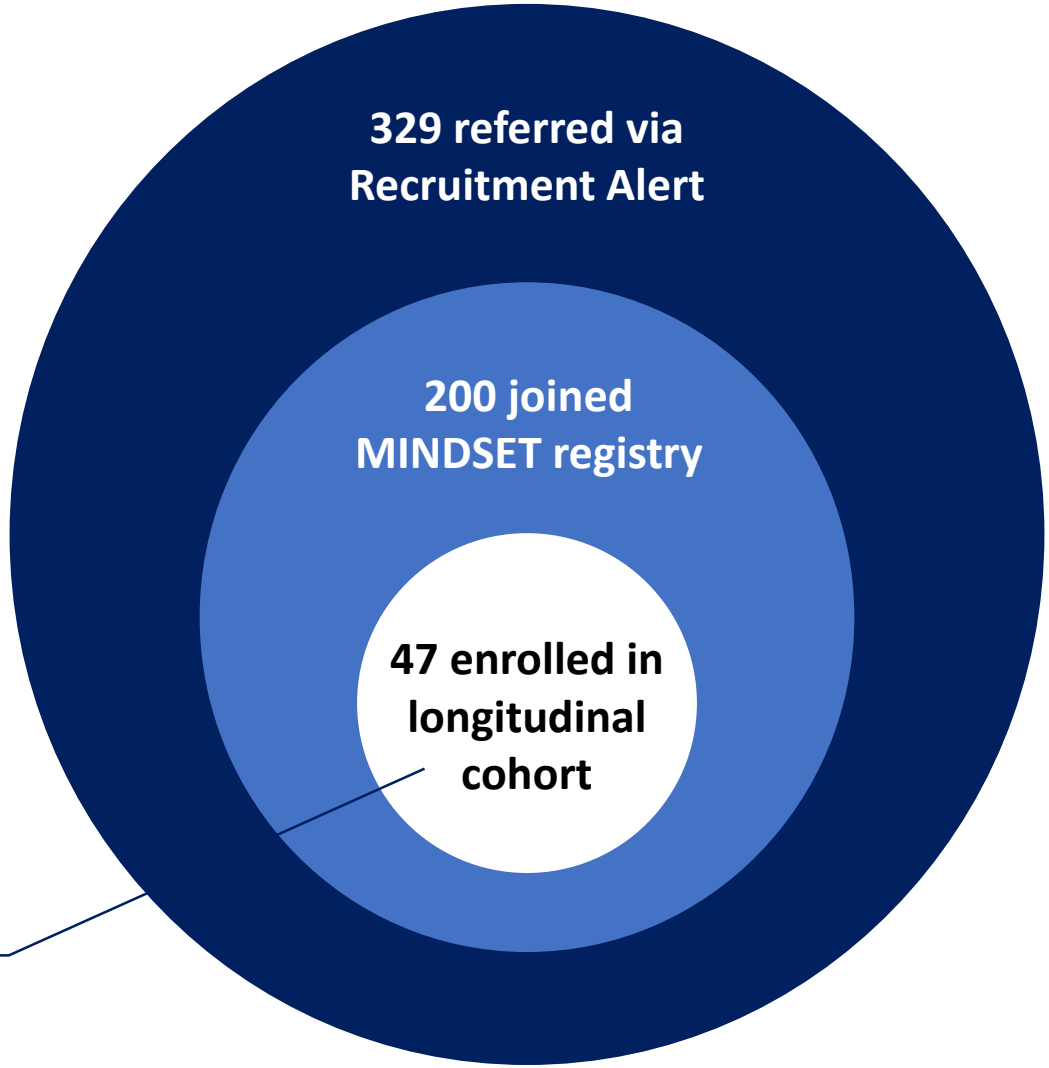
Recruitment results from EHR (5/17 – 8/18)



326 total pts in longitudinal cohort (43% AA)

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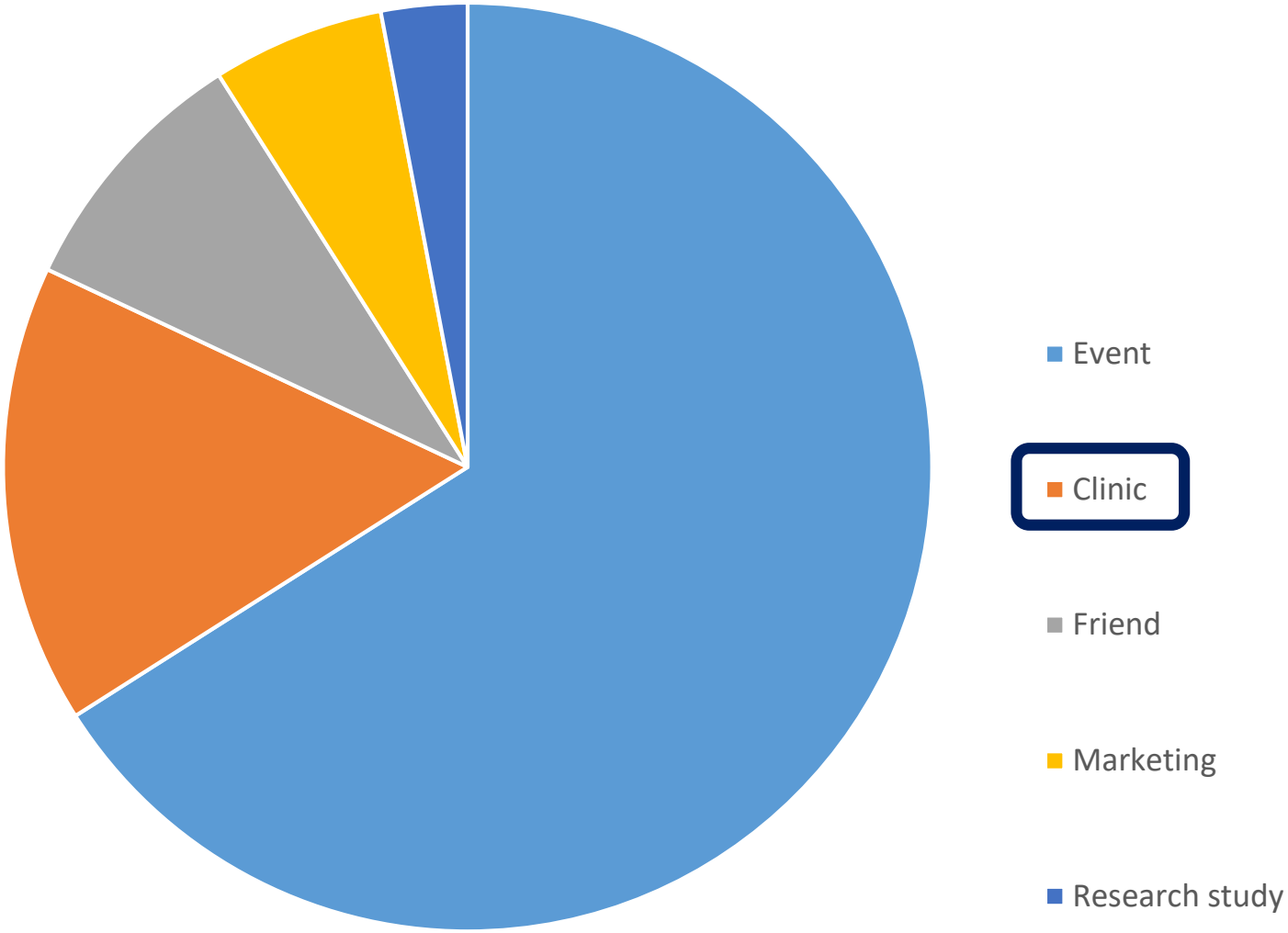
Other Recruitment Channels

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

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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

BE A LINK: VOLUNTEER FOR RESEARCH

Clinical Drug Trials

PRESENCE: Evaluating the safety and efficacy of LY3154207 (positive allosteric modulator of the D1 receptor) on cognition in patients with mild-moderate Parkinson's disease dementia. Study is looking for adults with Parkinson's disease and dementia age 40-85, with well-controlled blood pressure and a reliable caregiver who is able to be present for certain visits. Contact Braden DeWeese at deweeseb@med.umich.edu or 734-615-5495 for more information.

Memory Training Studies

Promoting adaptive neuroplasticity in mild cognitive impairment (Merit): Examining the benefits of two types of treatments for memory impairment – cognitive rehabilitation and electrical brain stimulation. Study is looking for adults with mild cognitive impairment over the age of 50. Contact Julia Laing at laingjul@med.umich.edu or 734-764-4709.

Neuroimaging and Biomarker Studies

Examination of the earliest symptoms and biomarkers of FTLD MAPT carriers: Investigating the earliest clinical features of frontotemporal dementia in an effort to improve early detection of the disease. Study is looking for adults age 18 and older with a family member who has frontotemporal dementia. Contact Stephen Campbell at stepcamp@med.umich.edu or 734-763-2361.

Lewy Body Dementia Biomarkers: Investigating new brain imaging approaches that investigators hope will identify protein accumulations in the brain of individual patients with PD-related dementia. This study is looking for adults age 55 and older with Parkinson's disease dementia (PDD), Dementia with Lewy Bodies (DLB), or AD with at least one symptom of DLB. Contact Christine Minderovic at cmindero@med.umich.edu or 734-998-8420.

Risk Evaluation and Education of Alzheimer's Disease – the Study of Communicating Amyloid Neuroimaging (REVEAL-SCAN): The purpose of this study is to learn about the best ways to communicate educational information about amyloid imaging brain scans and risk information about the chance of developing AD. Study is enrolling cognitively normal adults ages 65 to 80, have/had at least one first-degree relative (i.e., parent or siblings) with Alzheimer's disease. Contact the study team at revealstudy@umich.edu or 734-615-2422. **This study team sees participants in Ann Arbor and Detroit.**

Lifestyle Intervention Studies

Adaptive Coping Engagement with Caregivers of Black Older Adults with Dementia (ACE Project): The ACE Project is investigating caregiver mental health, physical health, and social supports with the aim of developing culturally tailored programming. This study is seeking African American/ Black caregivers of persons with dementia or cognitive impairments to complete a survey. Contact Dr. Sheria Robinson-Lane at grices@med.umich.edu or 734-764-9280. **This study team will meet participants in the home.**

Alzheimer's Disease Neuroimaging Initiative 3 (ADNI 3): The purpose of this observational study is to determine the relationships among clinical, cognitive, imaging, genetic, and biomarker characteristics of the entire spectrum of AD as it progresses from a preclinical stage to very mild symptoms to mild cognitive impairment (MCI) to dementia. Study is looking for adults age 55-90 with normal cognition, MCI, or mild AD. Contact Lisa Zbizek-Nulph at lzbizek@med.umich.edu or 734-232-1199.

Alzheimer's Prevention Trials (APT) Webstudy: The APT Webstudy is an online memory and thinking research tool aimed at accelerating enrollment into Alzheimer's clinical trials by identifying and tracking individuals who may be at higher risk for developing Alzheimer's. The study is looking for adults over age 50. Contact the study

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Thank you!

Scott Roberts
Outreach & Recruitment
Core Leader

Kathleen Jennings
Senior Business Analyst
(HITS)

Nan Barbas
Co-Investigator

Joan Illardo
Co-Investigator

Renee Gadwa
Outreach & Recruitment
Program Manager

Laura Rice-Oeschger
Wellness Coordinator

Edna Rose
Minority Recruitment Specialist

Holly Bunker
Outreach & Recruitment
Coordinator

Erin Fox
Community Relations &
Events Coordinator