NIA IMPACT COLLABORATORY
TRANSFORMING DEMENTIA CARE

Update on IMPACT Funded Pilot Studies

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Housekeeping

- All participants will be muted
- Enter **all questions** in the Zoom **Q&A** or **chat box** and send to All Panelists and Attendees
- Moderator will review questions from chat box and ask them at the end
- Want to continue the discussion? Look for the associated podcast released about 2 weeks after Grand Rounds.
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Adaptation of the Care Ecosystem intervention for individuals with dementia in a high risk, integrated care management program

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Learning Objectives

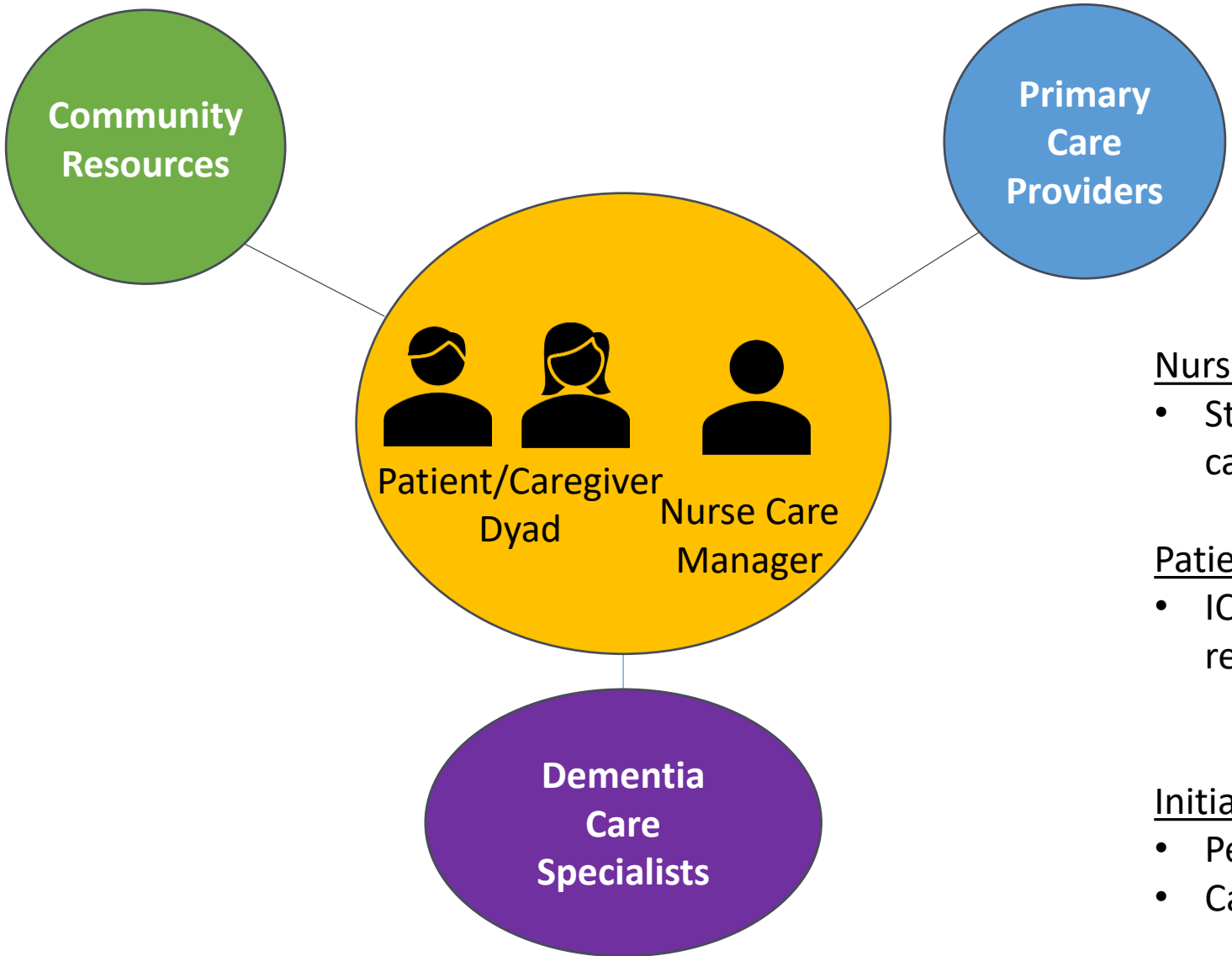
- To understand the rationale and design of our adaptation of the Care Ecosystem model to train nurse case managers to deliver telephone-based collaborative dementia care.

- To appreciate the successes and challenges encountered in stakeholder engagement, adaptation of the Care Ecosystem training program and implementation of the model.

- To describe updates on pilot progress to date and plans for a larger embedded pragmatic clinical trial.

The Adapted Care Ecosystem Model

The Nurse Care Manager is at the Center



Nurse Selection:

- Stakeholder engagement with care management leadership

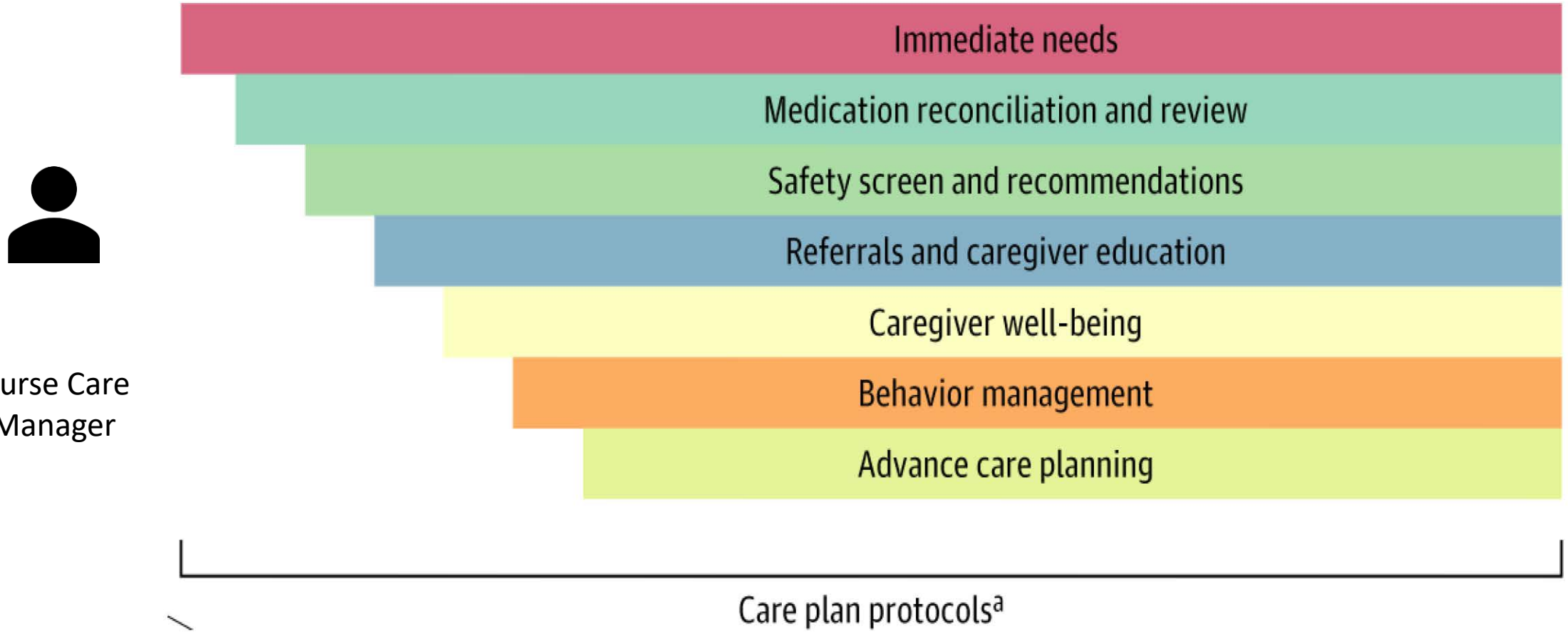
Patient Identification:

- ICD-10 codes and clinician referral

Initial Assessment:

- Person Living with Dementia
- Caregiver

The Adapted Care Ecosystem Intervention



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Possin et al., JAMA Internal Medicine, 2019

Design of Pilot

- Adaptation of the Care Ecosystem model which trains Integrated Care Management Program (iCMP) nurse case managers to deliver telephone-based collaborative dementia care.
  - Training and intervention adapted with help from a group of experienced, retired nurse care managers

- Nurse care managers randomly assigned to early versus delayed Care Eco training and intervention (15 per group), Waves 1 and 2.
  - First wave December 2020 and second wave to be implemented August 2021.

Outcomes

- Primary outcome:
  - Feasibility of collecting emergency department visits among the PLWD cared for by the primary care practices (EMR, Claims data)

- Secondary outcomes:
  - Caregiver strain (Caregiver Strain Index)
  - Behavioral symptoms of dementia (Neuropsychiatric Interview, NPI-Q)
  - Healthcare expenditures (EMR, Claims data)

- Surveys with Caregivers and Nurses to collect qualitative data on program implementation and impact

Challenges and what was done to overcome challenges

- Modifications of the training
- Technical and Clinical Challenges
- Caregiver Identification and Participation
- Workflow
- Risk for study contamination

Challenges and what was done to overcome challenges

Training:

- Synchronous Training was “too fast-paced” for the density of the material.
  - *We have doubled the synchronous training hours from 3 to 6 for Wave 2.*
- Some participants were challenged by the technology used for training and other meetings, as well as documenting patient encounters.
  - *Before Wave 2 Training, we will be offering an optional session focused on learning on Microsoft Teams, Epic, and the online training platform.*

Challenges and what was done to overcome challenges

Workflow:

- NCMs expressed a need for an explicit checklist of steps to take, including where to begin with each dyad.
  - *We have added a third synchronous training session to Wave 2, which will focus on workflow and guidance through the protocols in their entirety.*
- Intake Assessment was lengthy, led to exhaustion and confusion for patients making completion difficult.
  - *Worked with NCMs to pare down the assessment, clarified and re-wrote sections that can be completed across phone visits.*
- No clear next steps.
  - *Reviewed purpose of the assessments, how to interpret cognitive, functional and behavioral ratings and recommendations to PCPs.*
  - *Communicated goals of pilot to PCPs to prepare them for upcoming recommendations regarding diagnosis disclosure, treatment and referrals for specialty care.*

Challenges and what was done to overcome challenges

Other Challenges:

- Lack of support from Clinical RN Leads, not involved with the pilot/training.
  - *For Wave 2, all clinical leads will be invited to attend training, providing a perspective on the clinical material, workflow and time commitment.*
- Impact of the COVID-19 pandemic and working with a dementia population:
  - *Aligns well with the telephonic delivered intervention.*
  - *However, NCMs periodically re-deployed to address the Winter 2020-21 surge and clinical demands across the healthcare system.*
  - *Managing workload: Felt like additional work for new referrals despite longstanding relationships with these patients.*
  - *Due to remote work, not all NCMs had access to printers, binders prepared with paper copies of each protocol and mailed them to NCMs at home.*

Current status

- Asynchronous video training for Wave 1 RN care managers: December, 2020
- Synchronous virtual training with Wave 1 RN care managers: January, 2021
- Weekly office hours for Wave 1 trained nurses
- Wave 1 nurses using assessment and protocols
- Semi-structured interviews of nurse care managers, March 2021
- Survey of Wave 1 patient caregivers completed
- Train Wave 2 nurse care managers: August, 2021

Plans for larger ePCT

- Scale of adapted Care Eco to several health systems with nurse care management programs

- Multi-site, stepped-wedge, pragmatic, randomized trial of adapted Care Eco on health care utilization, quality of life for persons with dementia, behavioral symptoms of dementia and caregiver strain

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Pathway to Detection & Differentiation of Delirium & Dementia in the Emergency Department (PD4ED)

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Yale School of Medicine

Yale University
School of Medicine

Learning objectives

1. To describe the Pathway to Detection & Differentiation of Delirium & Dementia in the Emergency Department (PD4ED) pilot.
2. To share challenges and solutions of implementation with an embedded pragmatic trial (during a pandemic and institution move).
3. To provide updates on the status of the PD4ED pilot study implementation.

Background

- "*The ED visit rate was highest for infants under age 1 year followed by adults aged 75 and over (52 per 100 persons)(1 in 2 older adults).*"
  (National Center for Health Statistics, 3/9/21)
- Persons with dementia with higher rates of ED utilization and revisits.
  (Lamantia et.al. Alzheimer's Dementia, 2016)
- Recognizing undiagnosed cognitive impairment in the ED has public health implications – safety, guide patient care, potential to improve health outcomes
- …BUT dementia not routinely assessed in the ED

OPPORTUNITY!!!

Background

- In the ED, must first recognize *DELIRIUM ("brain attack")*
- *Delirium missed >75% of the time in the ED* (Han et.al. Acad Emerg Med, 2009)

Challenge: Can we get ED clinicians to screen for

Delirium +

Dementia +

Refer for outpatient testing

as part of routine care*?*

Goals of this pilot

To test and establish the feasibility of a pragmatic intervention that embeds cognitive impairment screening into the routine care of older patients in the ED setting and refers those identified as needing formal cognitive evaluation for outpatient assessment

Design of Pilot

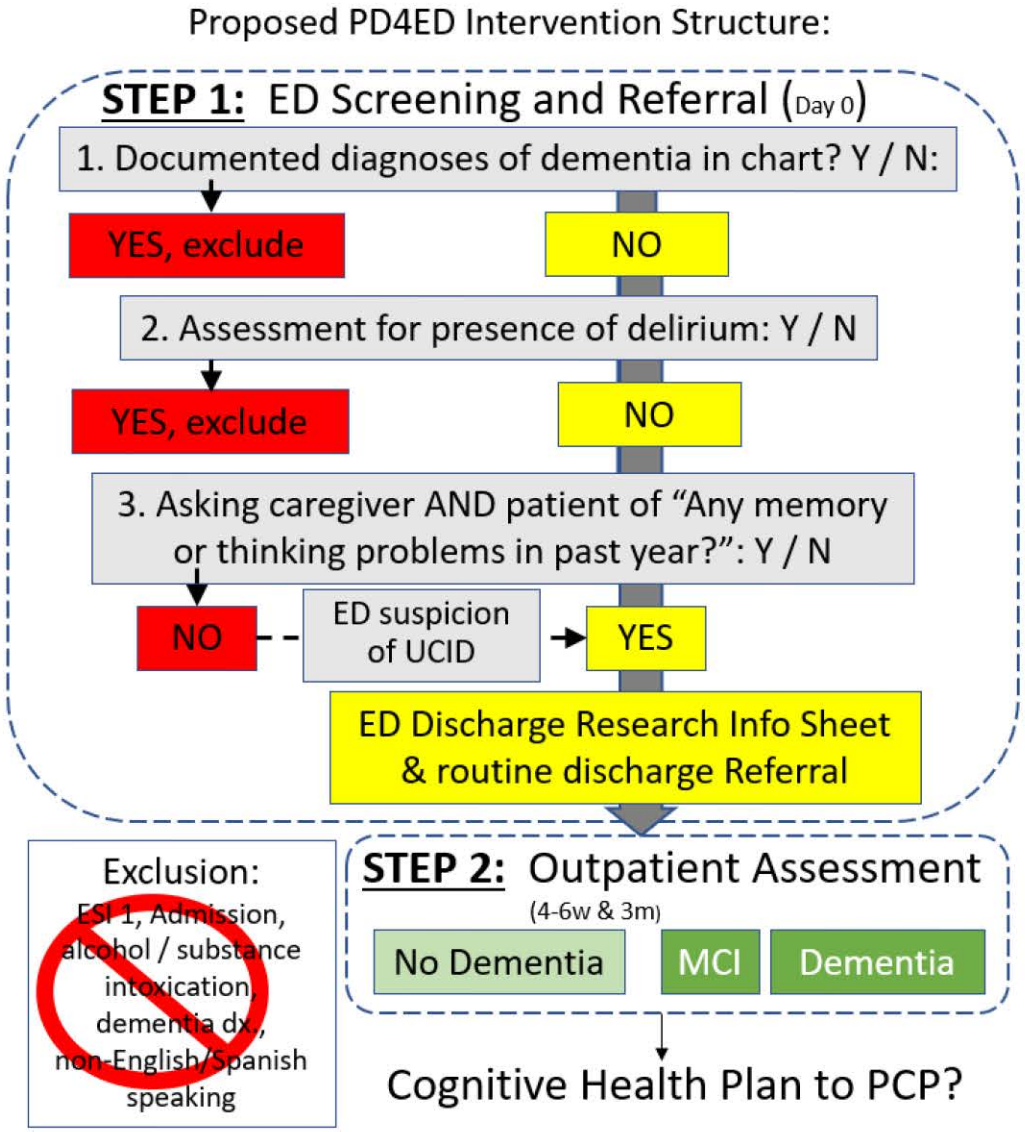
Design: Intervention arm, ePCT

Setting: 2 health systems

- Northwestern
- Mount Sinai → Yale

2 settings

- ED
- Outpatient



Design of Pilot

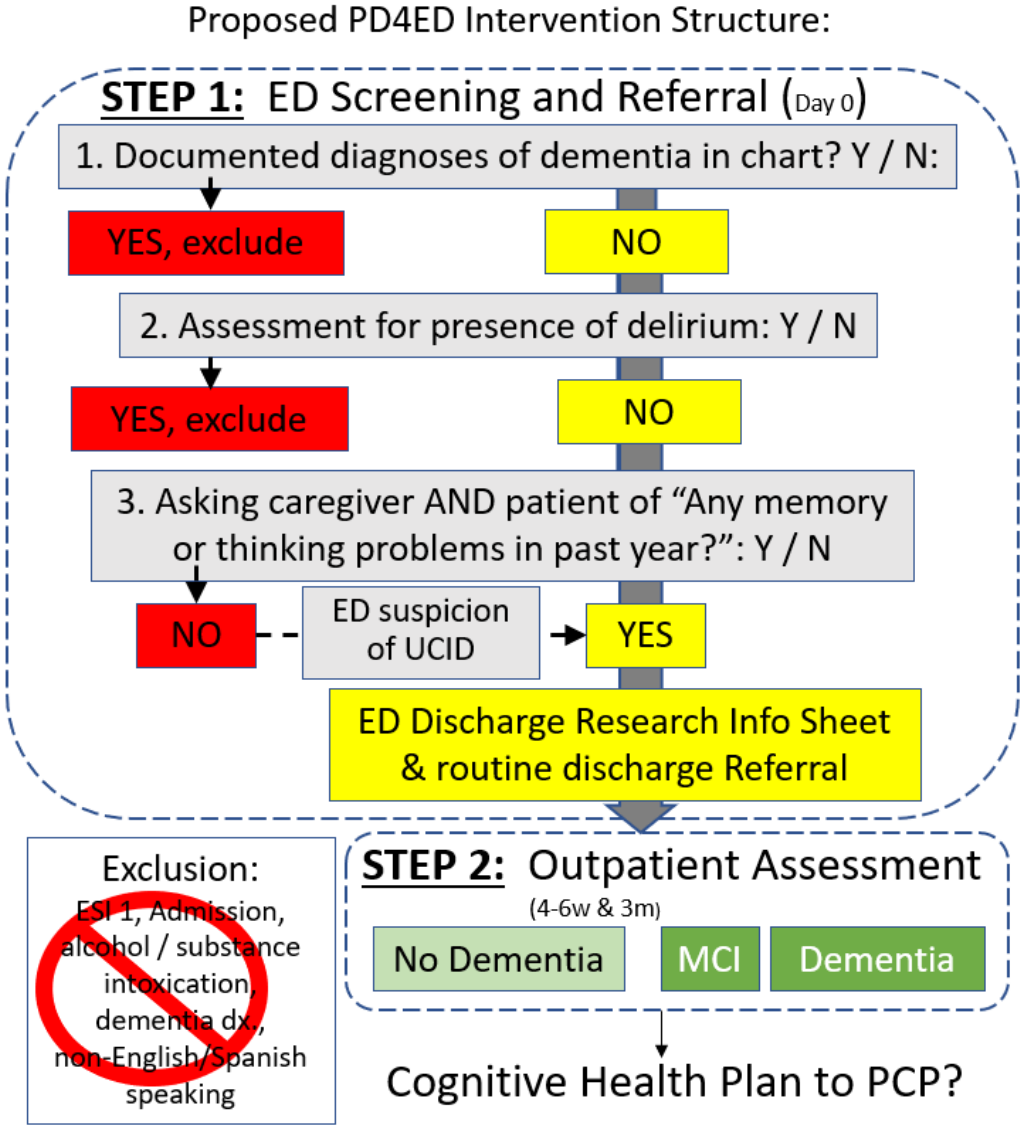
Population: 100 pilot subjects (50 / site)

Inclusion:

- ED patients
- 65+ years age
- discharged from ED

Exclusion:

- Emergency Severity Index 1
  (1=acutely ill to 5 = non-urgent)
- Intoxicated
- non-English/Spanish
- dementia diagnosis
  (documented history OR medications
  (memantine, rivastigmine, galantamine, donepezil))



Design of Pilot

Intervention:

In the ED: Day 0

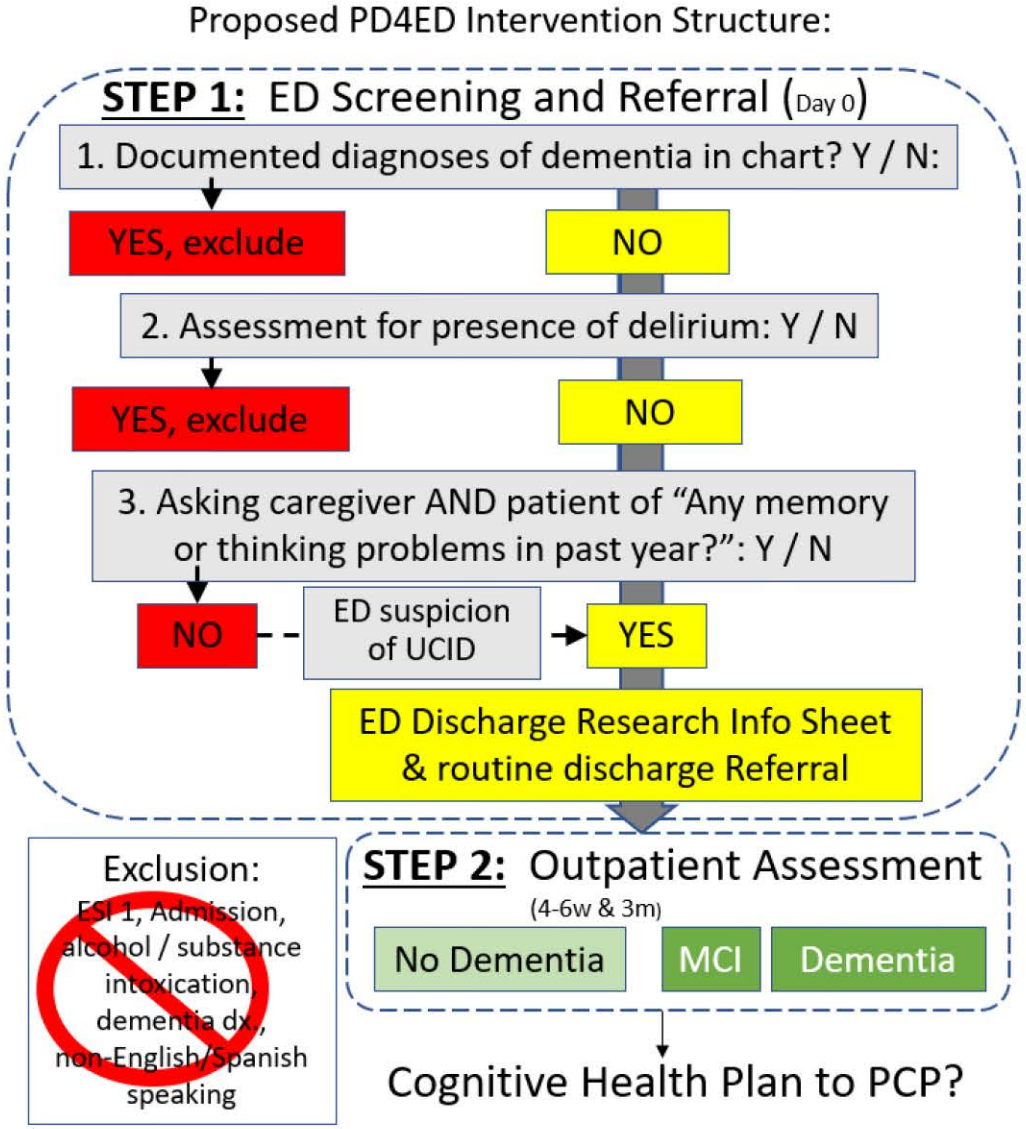
Screening *(cognitive impairment vs. delirium)*
Referral of suspected *UCID*

(undiagnosed cognitive impairment and dementia)

Outpatient Assessment: 4-6 weeks

Evaluation of Cognitive Impairment

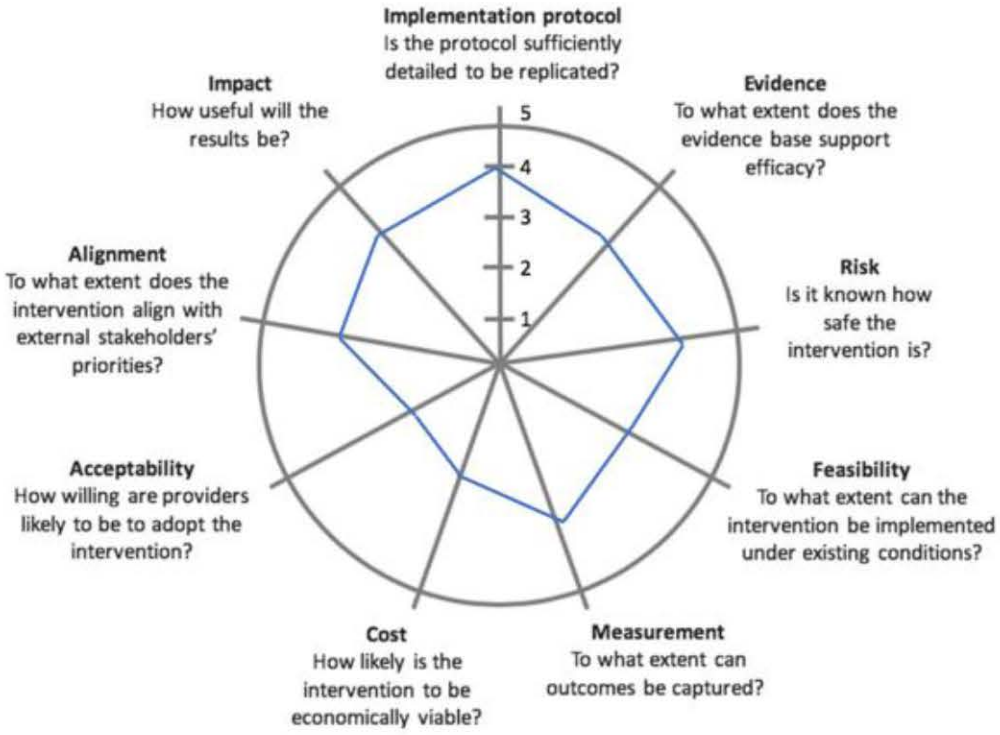
(Diagnosing: Dementia vs. MCI vs. No Dementia)



Optimizing the Intervention to be more Pragmatic

PRECIS-2 wheel:

Yale & Northwestern



Outcomes

Primary: - Rate of referred ED patients completing outpatient cognitive evaluation

Secondary:
- Subject screening rates
- Validation of ED cognitive screening
- Acceptability of workflow among ED clinicians (based on screening completion, referral rates)
- Disposition and reasons for not completing outpatient evaluation of targeted intervention subjects after ED referral

Outcomes

Primary: - Rate of referred ED patients completing outpatient cognitive evaluation

(waiver of consent, intervention part of routine ED care)(EHR)

Secondary: - Subject screening rates *(EHR)*

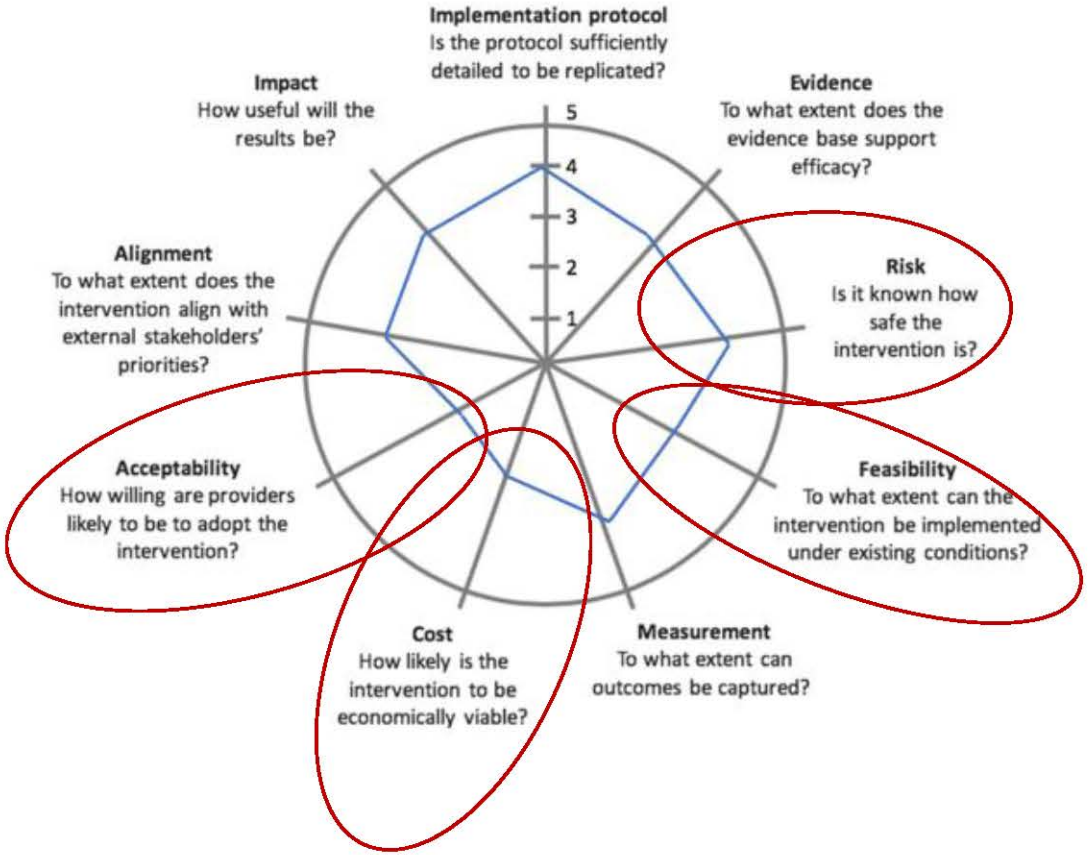
- Validation of ED cognitive screening *(EHR)*
- Acceptability of workflow among ED clinicians (based on screening completion, referral rates) *(EHR)*
- Disposition and reasons for not completing outpatient evaluation of targeted intervention subjects after ED referral *(telephone follow-up – 4-6 weeks, 3 months)*

Optimizing the Intervention to be more Pragmatic

PRECIS-2 wheel

- Risk
- Cost
- Feasibility
- Acceptability

Yale & Northwestern



Challenges and what was done to overcome challenges

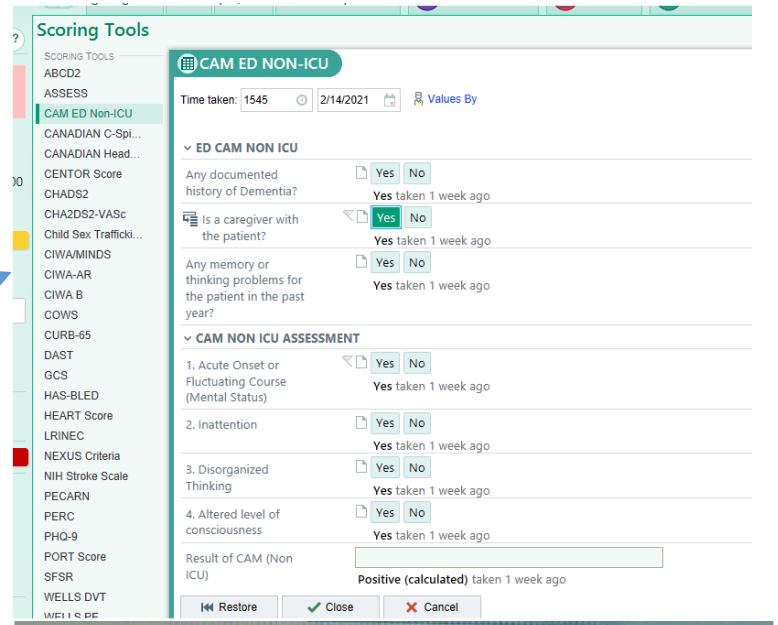
- COVID-19
  - Limited F2F interactions
  - ED and hospital clinical operation upheaval
  - Patient, clinician, research staff safety
  - *More efficient outpatient scheduling*
- Centralized Institutional Review Board (Advarra)
  - Theory and ideal: Standardized principles of implementation and protocol
  - Differences across different systems:
    - 2 health care systems – different policies with CIRB
    - 2+ settings – ED to outpatient (geriatrics, neuropsychiatry, etc.)
  - *Plan way ahead and assume may have more layers and longer than usual human subjects protocol reviews*

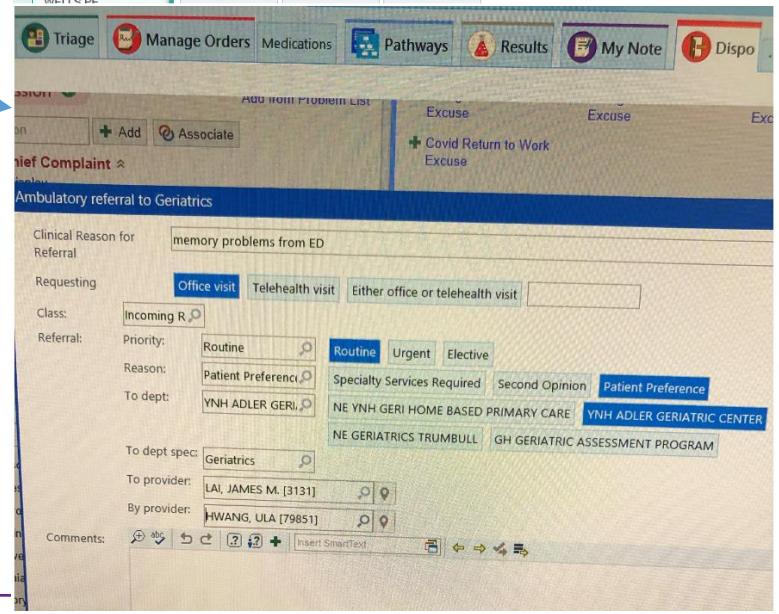
Challenges and what was done to overcome challenges

- PI move to new institution
  - Identify collaborators and partners. Foster new relations, new co-Is
  - Learn new clinical operations, ED workflows, outpatient options and resources, new referral patterns
  - *Learning with any new study site*
- No Geriatrics ED care at new institution
  - *Using the pilot to start a foundation for geriatric emergency care*
  - *EHR to embed screening tools*
  - Clinician buy in of additional screening assessments (during a pandemic)
  - Partnering with other department leads and champions *(geriatrics nurse educator)*
  - Leveraging existing assessments in other hospital setting *(using the CAM non-ICU from inpatient setting)*

Current status

- Advarra Central IRB approved protocol
- Pending site-level approval of protocol
- Creation of ED cognitive impairment and delirium screening tools in EHR
- Coordinating ED nursing training of delirium screen
- Pilot tested ED referral of patient to outpatient
- Pending creation of EHR reports of above screening and referral rates
- Feasibility data collection via telephone survey & chart review
- (Quiet) launch end of March 2021, data collection for 6 months





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Pilot data leading to plans for future larger ePCT

- Results from this pilot will inform the design and strengthen the feasibility of a larger-scale study
- Goal: multicenter ePCT, what is best study design?...
- Collaborative networks for larger trial:
  - Sister hospitals of current health systems (Yale New Haven Health System, Northwestern Memorial System)
  - Geriatric ED Collaborative (GEDC) hospitals (44 Geriatrics ED's across the US) (academic/community, urban/rural, critical access hospitals)
- Partnerships and sharing of research priorities
  - Geriatrics Emergency care Applied Research network 2.0 – Advancing Dementia Care (GEAR 2.0)

The Geriatric Emergency care Applied Research Network 2.0

Advancing Dementia Care (**GEAR 2.0 – ADC**) – since 10/2020

RFA –AG-20-026: A Collaborative Network to Optimize Emergency Care of Older Adults with Alzheimer's Disease and Related Dementias (AD/ADRD) (R61/R33 Clinical Trials Optional)

Mission: Advance the science supporting emergency medical care for people with cognitive impairment (CI) or dementia (ADRD) by engaging with a wide variety of stakeholders, with emphasis on people with dementia and their care partners.

R61: Identify and prioritize research gaps (***Care Transitions***, ***Detection***, ***Communication & Shared Decision Making***, ***ED Practices***) in emergency care for people who have CI or ADRD (Phase 1, Yr 1-2).

Goals: Transdisciplinary and inter-organizational partnership growth

9 partnered research grants (Phase 2, R33)

IMPACT: Partnership with IMPACT Collaboratory by sharing mutually informed efforts and dissemination of information

GEAR 2.0 Representation on the IMPACT Health Care Systems Core

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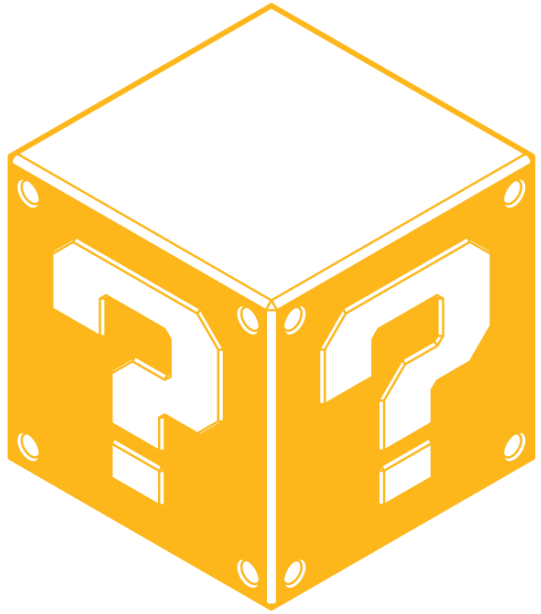
QUESTIONS?



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