Dementia Screening in Primary Care: Not Too Fast!

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• Conflict of Interest in the past 12 months
  ➢ None

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Questions?

• Can current primary care practice implement dementia screening without leading to negative unintended consequences?

• Are their potential harms affecting asymptomatic patients undergoing dementia screening in primary care?

• Is there evidence supporting the benefit of early implementation of best practice dementia care among screen-detected cases of dementia?
Question # 1

Can current primary care practice implement dementia screening without leading to negative unintended consequences?
At least four barriers of implementing dementia screening and diagnosis program in primary care:

1. Substantial resources (~ $4,000 per diagnosed case);

2. High false positive rate (20%)

3. High patient’s refusal to undergoing diagnostic assessment following a positive screening test (~ 50%)

4. The need for an educational and counseling program for those patients diagnosed with dementia.
If a typical primary care physician screened 300 older adults for dementia,

- 39 patients would have a positive screen,
- Only 20 patients would accept a formal diagnostic evaluation
- No more than 9 would have a confirmed dementia diagnosis
- Costing the system approximately $39,000.
Questions # 2

Are their potential harms affecting asymptomatic patients undergoing dementia screening in primary care?
## Caregiver and Noncaregiver Attitudes Toward Dementia Screening

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<table>
<thead>
<tr>
<th></th>
<th>CG</th>
<th>NCG</th>
<th>P value</th>
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</thead>
<tbody>
<tr>
<td>Acceptance Scale:</td>
<td>53.9</td>
<td>60.6</td>
<td>0.03</td>
</tr>
<tr>
<td>Benefit</td>
<td>72.8</td>
<td>69.0</td>
<td>0.50</td>
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<tr>
<td>Stigma</td>
<td>32.9</td>
<td>37.5</td>
<td>0.12</td>
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<tr>
<td>Independence</td>
<td>47.6</td>
<td>54.0</td>
<td>0.20</td>
</tr>
<tr>
<td>Suffering</td>
<td>61.6</td>
<td>55.9</td>
<td>0.04</td>
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## Top three barriers for dementia screening

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<tr>
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<th>CG</th>
<th>NCG</th>
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<tbody>
<tr>
<td>Emotional Suffering by Family</td>
<td>86%</td>
<td>75%</td>
</tr>
<tr>
<td>Loss of Driving Privilege</td>
<td>75%</td>
<td>78%</td>
</tr>
<tr>
<td>Becoming Depressed</td>
<td>64%</td>
<td>43%</td>
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Boustani et al, JAGS 2011
Questions # 3

Is there evidence supporting the benefit of early implementation of best practice dementia care among screen-detected cases of dementia?
Effectiveness of Collaborative Care for Older Adults With Alzheimer Disease in Primary Care
A Randomized Controlled Trial

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Anthony J. Perkins, MS
Bridget A. Fulla, MA
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Hugh C. Hendrie, MD, CHD, DSc

Context: Most older adults with dementia will be cared for by primary care physicians, but the primary care practice environment presents important challenges to providing quality care.

Objective: To test the effectiveness of a collaborative care model to improve the quality of care for patients with Alzheimer disease.

Design, Setting, and Patients: Controlled clinical trial of 153 older adults with Alzheimer disease and their caregivers who were randomized by physician to receive collaborative care management (n = 84) or augmented usual care (n = 69) at primary care practices within two primary care practice settings from January 2002 through August 2004. Eligible patients (identified via screening or medical record) met diagnostic criteria for Alzheimer disease and had a self-identified caregiver.

Intervention: Intervention patients received 1 year of care management by an interdisciplinary team led by an advanced practice nurse working with the patient’s family caregiver and integrated within primary care. The team used standard protocols to

The PREVENT Randomized Controlled Trial
The PREVENT Program

**Primary Care Clinician:**
- detect and treat delirium
- detect and treat BPSD
- Enhance cholinergic system by
  - Prescribe ChEIs
  - Discontinue Anticholinergic

**Caregiver Focus:**
- Problem solving skills
- Counseling
- Respite care
- Support group

**Clinical Liaison**

**Expert Team:**
- Geriatrician
- Social Psychologist
- GeroPsychiatrist

**General Environmental Modification:**
- Medication adherence support
- Home safety assessment

Callahan, Boustani et al, JAMA 2006
The Impact of PREVENT

- NNT = 3.7
- Each 1 point decline in NPI = $250-$400 in health care expenses
- PREVENT reached 5 NPI point improvement = $1250-$2000
- Improvement in CG stress

Callahan, Boustani et al, JAMA 2006
From “JAMA” to Aging Brain Care Service Line at Wishard!

ABC Med Home
Opened 2012

Healthy Aging Brain Center
Opened 2008

ABC Med Home
Opened 2010

ABC Med Home
Opened 2012

ABC Med Home
Opened 2012

IU Geriatrics
Are the benefit of offering ABC to screen detected dementia patients outweigh its harms?

- There are no data to demonstrate that providing the collaborative dementia care model to screened detected dementia patients leads to better outcomes than providing this model into currently recognized cases of dementia in primary care.
The Pivotal Data

6000 Primary care patients aged ≥65 yrs; no dementia or MCI diagnosis; no severe mental illness

4000 Pts consent for and complete baseline data collection (HUI + PHQ-9 + GAD-7 + MOS)

Randomized; ratio 1 to 1

2000 Pts into Screening with MIS-T

300 Pts screen positive on MIS-T

200 proceed to diagnosis program

100 Pts screen negative on MIS-T

1700 Pts refuse evaluation

100 Pts receive diagnosis of Normal or MCI

100 Pts receive diagnosis of Dementia and are managed by dementia care program

Telephone-based re-evaluation at 1, 6, and 12 months (HUI + PHQ-9 + GAD-7 + MOS); EHR data acquisition

HUI: Health Utility Index; PHQ-9: Patient Health Questionnaire-9; GAD-7: General Anxiety Disorder screener; MOS: Medical Outcome Study; MIS-T: Memory Impairment Screen-telephone version; MCI: Mild Cognitive Impairment; HER-electronic health record.
Conclusions

• Building a population screening program for dementia in primary care requires a solid foundation of strong data favoring the benefit of such a program over its potential harms.

• Without data, screening should wait and our current limited resources need to be focused on implementing the collaborative dementia care model as a best practice dementia care for those recognized dementia cases within primary care system.