Cognitive Assessments during Annual Medicare Wellness Visits
Pilot Training and Implementation Program

Allie Miraglia, Project Manager
HealthInsight
Objectives for Today

1. Understand background and landscape around cognitive assessments in Utah
2. Become familiar with state recommendations for assessments
3. Learn how to administer the Mini-Cog quickly and effectively as a first tier assessment tool
4. Understand ways to adopt periodic cognitive assessments into your practice
Background: April - June 2016

- Utah Dept of Health seeks snapshot of current cognitive assessment landscape for Medicare AWVs

- Goals include:
  - Understand what assessment tools are used, how often cognitive health is assessed, how practices bill for the assessment, and providers’ ability and comfort level diagnosing and referring patients.
  - Gathering baseline information on cognitive assessments that can pave the way for a statewide recommendation for a standardized tool.
Key informant interviews conducted with primary care providers on their processes and experiences using cognitive assessment tools during Medicare Annual Wellness Visits.

- Standardized questionnaire developed by Utah Dept of Health, Alzheimer’s Assoc, U of U advisors, HealthInsight
- 16 providers who regularly conduct AWVs were interviewed from diverse geographic regions, health systems, and levels of experience conducting cognitive assessments across Utah
Findings

Assessment During AWV:
- MMSE most commonly used
- Other tools included MoCA, Geriatric Depression Scale, Mini-Cog
- Cognitive screening can be low priority/overlooked during AWV

Gaps & Barriers
- Lack of time is biggest underlying barrier to a thorough assessment
- Need for bi-directional communication across health systems/EMRs
- Need for a registry or ability to track subtle changes over time
- Providers unsure where to refer patients or recommend caregiver support
- Consensus on need for better processes/tools detecting early impairment

Next Steps Needed
- Providers open to development of a statewide standardized tool
- Improved awareness of existing resources
- Improved workflow processes to streamline and track assessments
Statewide Recommendations & Stakeholder Endorsements

• Utah Dept. of Health recommendation letter
• Physician’s Summit
• Health system coordination
• Diverse participation included in next steps
  – Caregiver and family input
• HealthInsight project
Project Description 2017

• Build on findings from environmental scan to form a streamlined, standardized process for conducting cognitive assessments using a “by providers and for providers” approach over a 5 year span.
  – Incorporates firsthand feedback and recommendations from physician offices
  – Intentional integration and collaboration with existing community initiatives to align resources
  – Mini Cog as a first tier assessment, MoCA as secondary screening tool

• Develop training curriculum for office staff and providers on Mini-Cog/MoCA administration and evaluation, referral resources and processes, communication with patients/families, and workflow improvement strategies.
3 Prong Approach

• Conduct brief in-person trainings in primary care offices specifically around administering/scoring/evaluating the mini-cog and MoCA.

• Develop a toolkit on cognitive health and wellness to help guide health professionals through the cognitive assessment process based on UDOH recommendations (including assessment, diagnosis, referrals, and community resources)

• Create a UDOH-supported website that displays information by category and links to all the community resources available, including for patients and caregivers.
Yearly Goals 2017-2021

- **Year 1:** Develop outline for training curriculum with input from steering committee.

- **Year 2:** Pilot training with 20-25 providers in St. George, UT through at least 8 distinct practices.

- **Year 3:** Evaluate changes in clinic workflow, areas for improvement, notable progress, and clinic feedback to be analyzed into report.

- **Year 4:** Begin statewide expansion and work with community partners to advertise UDOH recommendations and implement new processes.

- **Year 5:** Maintain relationships with trained clinics and provide ongoing technical assistance consultation to ensure long term sustainability and success.
Mini-Cog Assessment

• Developed to identify clinically important cognitive impairment in non-specialist settings, not a diagnostic tool

• May be used, reproduced, and distributed WITHOUT permission and should available free of charge to patients.

• Brief administration, effective regardless of level of language or education, can be administered by support staff

• Able to assess multiple functions at once, including memory, language comprehension, visual motor skills, executive function
LET'S DO A MINI-COG! IT'S SIMPLE!

NORMAN L. FOSTER, M.D.
DIRECTOR, CENTER FOR ALZHEIMER'S CARE, IMAGING AND RESEARCH (CACIR)
DEPARTMENT OF NEUROLOGY, UNIVERSITY OF UTAH
The Mini-Cog is a simple 3-item word recall test with clock drawing. The clock is used as an informative distracter between giving the 3 words and the request to recall them.

- “I am going to say 3 words that I want you to remember. The words are “Banana”, “Sunrise” and “Chair”. Please say them for me now.
- “Please draw a clock. Start by drawing a circle. Put all the numbers in the circle. Now set the hands to show 11:10
- “What were the 3 words I asked you to remember?”
MINI-COG SCORING AND INTERPRETATION

- **Word recall**: 1 point for each word recalled without cueing (0-3 points possible)
- **Clock draw**: 2 points for normal clock, 0 points for any error - sequence, position, or time indicated (0 or 2 points possible)
- **Total score**: 0-5 points
- **Interpretation**
  - Abnormal, cognitive impairment 0-3 points
  - Normal, screen negative 4-5 points
PERIODIC ASSESSMENT OF BRAIN HEALTH IN UTAH – RATIONALE AND OUTCOMES

NORMAN L. FOSTER, M.D.
DIRECTOR, CENTER FOR ALZHEIMER’S CARE, IMAGING AND RESEARCH (CACIR)
DEPARTMENT OF NEUROLOGY, UNIVERSITY OF UTAH
IMPACT OF COGNITIVE SCREEN ON CARE

**PCPs – UW study**
- Age >65, no cog dx
- 198 Screened
- Mini-cog +: 18%

**PCPs – DelpHi-MV study**
- Age >70
- 4064 Screened
- DemTech +: 17%

**Neurologists – Minnesota Study**
- Age >70, no cognitive dx, 646 screened
- Mini-cog +: 37%

Borson et al., J Gen Int Med, 2007
Eichler et al., J Alz Dis, 2014
Rosenbloom et al., Neurol Clin Prac, 2016
EFFECT OF SCREENING ON PCP ACTIONS

<table>
<thead>
<tr>
<th>UW Study</th>
<th>DelpHi-MV study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cog dx, specialist referral or AD meds</strong></td>
<td><strong>For Patients with Positive screen</strong></td>
</tr>
<tr>
<td>▪ No screen 1%</td>
<td>▪ 40% cognitive dx</td>
</tr>
<tr>
<td>▪ Negative screen 1%</td>
<td>▪ 30% AD meds</td>
</tr>
<tr>
<td>▪ Positive screen 14.5%</td>
<td>▪ 37% without dx</td>
</tr>
</tbody>
</table>

**For Patients with Positive screen**
- 40% cognitive dx
- 30% AD meds
  - 37% without dx
## Memory Complaint Doesn’t Predict Screen Result

<table>
<thead>
<tr>
<th>Subjective Memory Symptoms, n (%)</th>
<th>Mini-Cog Screen-negative</th>
<th>Mini-Cog Screen-positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>96 (23.8)</td>
<td>71 (29.3)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Follow-up Cognitive Assessment, n (%)</th>
<th>Mini-Cog Screen-negative</th>
<th>Mini-Cog Screen-positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional screening (e.g., MMSE/MoCA/STMS)</td>
<td>11 (2.7)</td>
<td>76 (31.5)</td>
</tr>
<tr>
<td>Neuropsychology testing referral</td>
<td>10 (2.5)</td>
<td>19 (7.9)</td>
</tr>
<tr>
<td>Neuroimaging order (dementia indication), n (%)</td>
<td>0</td>
<td>10 (4.1)</td>
</tr>
<tr>
<td>Referral to dementia subspecialty clinic, n (%)</td>
<td>13 (3.2)</td>
<td>15 (6.2)</td>
</tr>
<tr>
<td>Dementia/MCI diagnosis entered in EMR, n (%)</td>
<td>15 (3.7)</td>
<td>32 (13.2)</td>
</tr>
<tr>
<td>Prescription for dementia medication ordered, n (%)</td>
<td>5 (1.2)</td>
<td>4 (1.7)</td>
</tr>
</tbody>
</table>
PROVIDERS MAY NOT RECOGNIZE COGNITIVE IMPAIRMENT

- Physicians fail to recognize about 50% of patients in their practice with significant cognitive impairment
- We can’t depend on patients and families to tell us
- In a public health survey in Utah, 12.7% of those over 60 reported worsening memory problems
  - 81% of them hadn’t consulted a health professional for the problem

Boustani et al, Ann Intern Med 2003; 138:927-937
Utah Behavioral Risk Factor Surveillance System Survey, 2011
Health Risk Assessment
• ADL
• IADL

Physical Assessment
• Vital signs
• “Detection of any cognitive impairment”

Counsel Beneficiary
• List of risk factors and recommendations
Alzheimer’s Association recommendations for operationalizing the detection of cognitive impairment during the Medicare Annual Wellness Visit in a primary care setting

Cyndy B. Cordell\textsuperscript{a,*}, Soo Borson\textsuperscript{b,c}, Malaz Boustani\textsuperscript{d,e,f}, Joshua Chodosh\textsuperscript{g,h}, David Reuben\textsuperscript{h}, Joe Verghese\textsuperscript{i}, William Thies\textsuperscript{a}, Leslie B. Fried\textsuperscript{j,k}; for the Medicare Detection of Cognitive Impairment Workgroup

<table>
<thead>
<tr>
<th>Tool</th>
<th>Time</th>
<th>Tool</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDT</td>
<td>\leq 1 min</td>
<td>STMS</td>
<td>5 min</td>
</tr>
<tr>
<td>Mini-cog</td>
<td>2 - 4</td>
<td>SLUMS</td>
<td>7</td>
</tr>
<tr>
<td>SPMSQ</td>
<td>3 - 4</td>
<td>MMSE</td>
<td>7 - 10</td>
</tr>
<tr>
<td>MIS</td>
<td>4</td>
<td>MoCA</td>
<td>10 - 15</td>
</tr>
</tbody>
</table>
WHAT TO DO WHEN THE MINI-COG IS <4

- Make another, separate appointment solely to assess cognitive health status
- Identify a lead care partner to attend and be a knowledgeable informant about symptoms and function
- Perform a MoCA
  - If memory <2/5 or score <26 = cognitive impairment (document in problem list)
- Are medications causing or aggravating symptoms
  - Beers list of contraindicated medications in the elderly
  - Anti-cholinergics, benzodiazepines, narcotics, sedatives
- Is there an obvious cause?
  - Mood, sleep disturbance, vision or hearing loss
- If so, then treat and then re-assess with repeat MoCA
- If cognitive impairment continues, initiate a cognitive evaluation
Possible Score 0-30
Abnormal <26

See our VA MoCA training Video DVD for detailed instructions
WHAT TO DO WHEN A COGNITIVE DEFICIT IS IDENTIFIED

- Involve a lead care partner in medical care
- Determine the severity and type of deficit
  - Is there immediate danger?
  - Assess whether there is a mismatch between needs and environment
- Determine the cause of the deficit
- Base treatment on the cause(s) identified
- Provide patient and family support
- Refer to a cognitive specialty team clinic if you are unable to provide these services
SIGNIFICANCE OF RECOGNIZING COGNITIVE DEFICITS FOR MEDICAL CARE

- Increased risk of cognitive side effects of medication
- Increased risk of delirium presentation with acute illness or procedures
- Interferes with treatment adherence
  - Missed appointments
  - Medication problems
  - Poor diabetes management
  - Anticoagulants
- If deficits unrecognized or if patient is unsupported then the provider becomes frustrated
Almost 100,000 preventable hospitalizations are due to adverse drug events

Half in those over age 80

Four medication classes implicated in 2/3

- Warfarin – 33%
- Insulin – 14%
- Oral anti-platelets – 13%
- Oral hypoglycemics – 11%

Likely that many have unrecognized cognitive impairment

Budnitz et al., NEJM 2011;365:2002-12
HOW PROCARE (EARLY REFERRAL) DIFFERS FROM CURRENT COGNITIVE CLINIC REFERRALS

- MoCA score at time of first visit to the Cognitive Clinic
- 290 new patients, over 65 years in 2013
- MOCA score: average 16.8 ± 7.2
- MOCA range: 0 - 30
WHAT CAN BE ACHIEVED

New Patients UH Cognitive Specialty Team Clinic in 2013: 264

- Family support visit: 77%
- Inappropriate drugs: 9%
- Referred for driving evaluation: 30%
- Advanced directive in chart: 27%

Patients with Recognized Cognitive Impairment UH Primary Care Community Clinics in 2013: 496

- Family support visit: 4.2%
- Inappropriate drugs: 36%
- Referred for driving evaluation: 0.81%
- Advanced directive in chart: 24%
AWV ACCOMPLISHMENTS UTAH HEALTH COMMUNITY CLINICS - 2016

- Eligible patients receiving AWV up to 44.6% (clinic range 44.6 – 9.1, mean 22.8) vs. national average of <10%
- AWV with Mini-Cog up to 77.8% (clinic range 77.8 – 14.4, mean 46.1)
- Abnormal Mini-Cog identified in 16.4% - very similar to rate found in state survey
- Rates of AWV and Mini-Cog steadily increasing in all clinics
SUMMARY

Annual Objective Assessments of Cognitive Health with the Mini-Cog are:

- Important
- Easy
- Brief
- Can be incorporated into the Medicare AWV
- Actionable
- Results in improved patient care