The New Brief Cognitive Assessment Tool (BCAT):
The Role of Cognitive Assessment in Improving Health Outcomes

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Aging Population Driving Demand for LTC

- Over 65 population projected to double from 36 million in 2003 to 72 million in 2030, and will increase from 12% to 20% of the total population.

- Over 85 population also projected to double from 4.7 million in 2003 to 9.6 million in 2030.

- Alzheimer’s disease (AD) affects over 5 million Americans, with people 85 and older at the highest risk.

- It is estimated that by 2050, 13 million Americans will have AD.

- Current prevalence rates of dementia in SNF and ALF is at or above 50%.

- Estimated cumulative costs associated with AD alone will exceed $20 trillion between 2010 and 2050.
The Cognitive Continuum

- What are normal cognitive changes?
- What is MCI?
- How do you recognize dementia?
- Common causes of dementia
- Differentiating dementia or MCI form Delirium
Utility & Value of Cognitive Screening Measures: Some Important Questions

- What is a cognitive screening tool?
- Who should be screened?
- Who should do the screening?
- What is “early detection”
Utility & Value of Cognitive Screening Measures: Some Specifics

- Manage expectations: patient, family, caregiver, professional
- Expand treatment options: medications, non-pharmacological, residential
- Limit “crisis to crisis” pattern
- Slow down LTC placement
- Possibly save money: short-term versus long-term
- Many patients won’t agree to formal or comprehensive testing
“Always better to manage from a plan rather than from a crisis”
Why a New Cognitive Screening Tool?

- Mini-Mental State Examination (MMSE)
- Short Test of Mental Status (STMS)
- Montreal Cognitive Assessment (MoCA)
- St. Louis University Mental Status Examination (SLUMS)
- Brief Interview for Mental Status (BIMS)
The Brief Cognitive Assessment Tool (BCAT) Key Characteristics

- Can be administered by professionals and paraprofessionals
- 21 items, 50-point scale
- Can be administered in 10-15 minutes
- Has a “cut” score separating dementia from Mild Cognitive Impairment (MCI)
- Has scores ranges for MCI, mild dementia, & moderate dementia
- Contains a multi-level verbal memory component
- Contains a broadly complex executive functions component
- Predicts Instrumental Activities of Daily Living (IADL)
- The BCAT website has an automated scoring program
BCAT: The 3 Clusters

1. Contextual Memory

- Immediate Story Recall
- Delayed Story Recall
- Story Recognition
- Orientation

example

“Carol borrowed $10 from her brother Jack last week. She couldn’t pay him back because she bought a delicious ice cream cone at the circus.”
BCAT: The 3 Clusters

2. Executive Functions

- Verbal Trails (OTMT)
- Mental Control (days of the week, backward)
- Judgment
- Arithmetic Reasoning
- Digits Backward

example

“Suppose you have a 1 PM appointment with your doctor. It takes 45 minutes to get there. What time is the latest you can leave to get there at 1 PM?”
BCAT: The 3 Clusters

2. Executive Functions

- Verbal Trails (OTMT)
- Mental Control (days of the week, backward)
- Judgment
- Arithmetic Reasoning
- Digits Backward

example

“You have $25 to spend at the grocery store. You buy milk for $3. You buy 2 apples for a $1. How much money do you have left?”
BCAT: The 3 Clusters

3. Attentional Capacity

- Immediate Word List
- Naming
- Letter List

example

Banana... Justice... Sara... Bridge...
Introducing the BCAT Website – www.thebcat.com
BCAT Impact of “Skilled” / Rehab Residents

- Relationship between cognitive functioning and IADLs
- The “Cognitive Task Manager”
- Assist in discharge planning: Can the resident go home?
- Provide information to enhance outcomes for rehab therapies
- Educate and counsel families & caregivers
- Track change in mental status from baseline (Delirium)
Interpreting BCAT Scores

- “Cut” score separating dementia from Mild Cognitive Impairment is 37/38

- How to interpret the Contextual Memory Cluster

- How to interpret the Executive Functions Cluster

- How to interpret the Attentional Capacity Cluster
Published BCAT Research

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