Items to Discuss

• Overview of the Value of interRAI
• Introduction of interRAI
• Shared Services Model with ADvancing States
Introduction of Speakers

Brant Fries, PhD
Melanie E. Thomasson, MPH
Pearl Barnett, MPA
Steven Lutzky, PhD
Value of Using interRAI Tools

- Capitalize on existing evidence-based items with known reliability and validity
- Compare your state’s HCBS to:
  - Other states’ HCBS
  - Institutional care
- Enhance operations using tools and protocols developed for other states or countries using standardized data:
  - Individualized budgets/resource allocation (e.g., RUG-III-HC)
  - Protocols for guiding support planning and/or care management
  - Normed Quality/Performance Indicators
(Inter)National Standards for Health Assessment: An Introduction to interRAI

Brant E. Fries, Ph.D.
Professor Emeritus/University of Michigan
President/interRAI

Melanie E. Thomasson, MPH
Associate Fellow/interRAI

The Home and Community-Based Services Conference
December 9, 2021
What is interRAI?

- Research collaborative: 115 members/35 nations
- Non-profit corporation, all volunteer
- Key interests
  - Science (e.g., cross-national comparisons)
  - Instrument development
  - Support implementation
- Holds copyright to interRAI assessment instruments
- Licenses governments/care providers in exchange for data
- Licenses software vendors
Goal

• Develop superior assessment systems for vulnerable populations
  • Better assessment ➔ effective care plans ➔ better care
  • Scientific development ➔ practical tools
  • Program data ➔ better policy planning
interRAI Members and Activities

Europe
Iceland, Norway, Sweden, Denmark, Finland, Netherlands, Germany, UK, Switzerland, France, Poland, Italy, Spain, Belgium, Estonia, Lithuania, Czech Republic, Ireland, Russia, Austria, Portugal

Middle East/Asia
Israel, India, Qatar, Lebanon, UAE

Africa
South Africa, Rwanda, Ghana

North America
Canada, USA

South America
Chile, Brazil

Far East/Pacific Rim
Japan, South Korea, Taiwan, Australia, China, Hong Kong, New Zealand, Singapore
Instead of ….
Why are interRAI Assessments Different?

• International developers expert in assessment and health services research, along with subject matter experts for given tool
• Psychometric properties carefully tested
• Link assessment directly with clinical care
• Multiple applications for decision-making
• Compatible systems across health care sectors
Key Elements of interRAI Tools

- Assessment, not only self-report
  - use all possible sources of information
- Full definitions, time delimiters, examples, exclusions
- Cover all relevant domains
  - individuals’ strengths and weaknesses
  - tradeoff of breadth and length
- Training manuals, computer algorithms available
<table>
<thead>
<tr>
<th>interRAI HC Domains</th>
<th>interRAI HC Domains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intake/Initial History</td>
<td>Oral/Nutritional Status</td>
</tr>
<tr>
<td>Cognition</td>
<td>Skin Condition</td>
</tr>
<tr>
<td>Communication/Vision</td>
<td>Medications</td>
</tr>
<tr>
<td>Mood/Behavior</td>
<td>Treatment/Procedures</td>
</tr>
<tr>
<td>Psychosocial Well-being</td>
<td>Responsibility</td>
</tr>
<tr>
<td>Functional Status</td>
<td>Social Supports</td>
</tr>
<tr>
<td>Continence</td>
<td>Environmental Assessment</td>
</tr>
<tr>
<td>Disease Diagnoses</td>
<td>Discharge Potential/Status</td>
</tr>
<tr>
<td>Health Conditions</td>
<td>Discharge</td>
</tr>
</tbody>
</table>
interRAI “Suite”

- Wellness, Check-Up
- Community Health
- Home Care
- Assisted Living
- Nursing Home (LTCF)
- Post-acute Care
- Acute Care
- Palliative Care
- Inpatient Mental Health
- Community Mental Health
- Correctional Facilities
- Intellectual Disability
- Pediatric, Pediatric Mental Health, Pediatric DD, 0-3
- Self-Report Quality of Life
- Caregiver
- Etc.
US States Using interRAI Instruments

Open symbol for Regional/Managed Care, shaded for planned

Statewide:
- HC/CHA
- MDS-HC
- MH
- CMH
- SQoL
- I/DD
- Children I/DD
- Children MH
- Peds HC

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It’s not enough just to measure…..
Questions interRAI Data Can Answer

• Management
  • Whom are we serving?
  • How does the population profile change over time?

• Benchmarking
  • How do we compare with others?
  • How well are we doing compared with last year?

• Best Practices
  • Does this service/approach make any difference in the health and well-being of participants?
  • Who is doing an outstanding job?

• Risk Assessment
  • Which person is most likely to have a preventable decline?
  • What interventions will best support Mrs. Jones?

• Consumers
  • Where should I get care?
Applications of interRAI Data

ASSESSMENT

Care Planning
Policy
Screening
Case-Mix
Quality
Example Applications: *Care Planning*

- Clinical Assessment Protocols (CAPs) and Status/Outcome Scales
- Research-based
- Highlight areas to focus on & foster collaborative decision-making
# Personal Health Summary

**Name:** John Doe  
**Assessment Reference Date:** March 14, 2008

| Personal Information |  
|----------------------|---|---|---|---|---|
| Age | 90.5 | BMI | 26.5 | Sex | Male | Marital status | Married |

## Health Profile

### Mental Health

- **Cognitive Performance Scale (CPS)**  
  - 0-6 range: Intact, Borderline, Mild, Moderate, Severe, Very Severe  
  - 5 out of 6 / Severe Impairment

- **Depression Rating Scale (DRS)**  
  - 0-14 range: Score of 3 or greater suggests possible depression  
  - 3 out of 14 / Possible Depression

### Communication and Vision

- **Making self understood**  
  - Often understood

- **Ability to understand others**  
  - Sometimes understands

- **Hearing**  
  - Moderate Difficulty

- **Vision**  
  - Adequate

### Social Functioning, Social Support & Home Situation

- **Concern with Caregiver Distress**  
  - 0-3 range: Caregiver unable to continue, Caregiver distress, Caregiver overwhelmed  
  - 3 out of 3 / Caregiver Distressed

- **Lives Alone**  
  - No

- **Home Environment Concerns**  
  - 0-5 range: House disrepair, Inadequate conditions, Poor heating/cooling, Unsafe, Poor access  
  - 3 out of 5 / Environmental Concerns Present

### Physical Functioning

- **ADL Self-performance Hierarchy**  
  - 0-6 range: Early, middle, & late ADLs: Hygiene, Toileting, Locomotion & Eating  
  - 4 out of 6 / Extensive Assistance Required

- **Transfer**  
  - Maximal assistance

- **Locomotion in home**  
  - Walking, no assistive device

- **IADL Assistance Needed**  
  - 0-8 range: Meal, Housework, Money, Medication, Stairs, Shopping, Transportation  
  - 8 out of 8 / IADL Dependence

### Pain

- **Pain Scale**  
  - 0-4 range: No pain, Less than daily, Daily not severe, Daily severe, Daily excruciating  
  - 2 out of 5 / Daily Pain But Not Severe

### Continence

- **Bladder Continence**  
  - Incontinent

- **Bowel Continence**  
  - Infrequently incontinent

### Fall Risk

- **Falls**  
  - Two or more falls in last 30 days

### Symptom Review:

- Unsteady gait, hallucinations, diarrhea, difficulty falling asleep

### Medications:

- **Restoril 15mg PO Bedtime**, **Tolbutamide 500mg PO TID**, **Hydrochlor 25mg PO Daily**

### Disease Diagnoses:

- Alzheimer's, COPD, CHF, Anxiety, Diabetes Mellitus
## Personal Health Summary

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### Health Profile

#### Mental Health

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#### Communication and Vision

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</thead>
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<td>Sometimes understands</td>
</tr>
<tr>
<td>Hearing</td>
<td>Moderate Difficulty</td>
</tr>
<tr>
<td>Vision</td>
<td>Adequate</td>
</tr>
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</table>

#### Social Functioning, Social Support & Home Situation

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</tr>
</tbody>
</table>
Example Applications: Quality

- Research-based Quality Indicators
  - home care, institutional care, mental health
- Identify areas for improvement
- Allow comparison across providers/agencies
HCQIs
Agency “A”

Inadequate meals
Injuries
Neglect/abuse
Hospitalization
Weight loss
Dehydration
No med review
Fail improve incontin
Fail improve decubiti
No locomotion devices
No rehab therapy
Fail improve ADL
Fail improve home locom
Fail improve ADL
Fail improve cogn decline
Social Isolation
Falls
Delirium
Freq/intense pain
Disruptive pain
Pain
Fail imp. Comm.
Negative mood

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Example Applications: *Case-Mix*

- Evaluate and compare expected resource use
- Can inform service plans, resource allocation, population comparisons
Comparing Persons Served in Two Arkansas Settings, 2010

Nursing Home
Home Care
Lighter Care
Example Applications: Policy

• Level of Care / Medical Eligibility
• Key issues solved by interRAI:
  • Strong item validity & reliability
  • Consistent application of LOC across individuals
  • Can evaluate impact of individual items, proposed changes to criteria or cut-offs
  • Ability to compare criteria & policy impact across jurisdictions
“Must require total dependence or extensive assistance in one area or limited assistance in two areas or have a diagnosis of Alzheimer's or related dementia and require substantial supervision from another person…” (Arkansas Intermediate III-C criteria)
What is the impact of the LOC’s logic?

- **NF 1**
  - Meets any
  - 156 Eligible

- **NF 5**
  - Not 1+
  - 250 Not Eligible
  - (sum of NF2-4)

- **NF 7**
  - 3+
  - 86 Eligible
  - Not 3+
  - 17 Not Eligible
  - (sum of NF5-6)

Illustrative example from previous implementation
How important are specific characteristics?

• For persons who become eligible:
  – 63% are eligible based only on their ADLs
  – 2% are eligible based only on Section A & B nursing services
  – None are eligible based only on cognition or behavior
  – Of the remaining 35% of eligible people, eligibility is based on combinations of these items and others

Illustrative example from previous implementation
What’s the impact of changes in criteria or thresholds?

Illustrative example from previous implementation
How do individuals in different programs compare?

<table>
<thead>
<tr>
<th>SUMMARY STATUS MEASURES</th>
<th>EDA</th>
<th>PCA</th>
<th>LTCPCS</th>
<th>NH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adm</td>
<td>Prev</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADL Hierarchy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>27%</td>
<td>36%</td>
<td>32%</td>
<td>8%</td>
</tr>
<tr>
<td>Supervision</td>
<td>8%</td>
<td>3%</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Limited Assistance</td>
<td>16%</td>
<td>18%</td>
<td>14%</td>
<td>21%</td>
</tr>
<tr>
<td>Extensive Assistance I</td>
<td>17%</td>
<td>19%</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>Extensive Assistance II</td>
<td>12%</td>
<td>9%</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Dependent</td>
<td>10%</td>
<td>10%</td>
<td>14%</td>
<td>24%</td>
</tr>
<tr>
<td>Total Dependence</td>
<td>10%</td>
<td>5%</td>
<td>7%</td>
<td>15%</td>
</tr>
<tr>
<td>Cognitive Performance Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intact</td>
<td>41%</td>
<td>44%</td>
<td>31%</td>
<td>29%</td>
</tr>
<tr>
<td>Borderline Intact</td>
<td>18%</td>
<td>17%</td>
<td>18%</td>
<td>15%</td>
</tr>
<tr>
<td>Mild Impairment</td>
<td>9%</td>
<td>13%</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>Moderate Impairment</td>
<td>15%</td>
<td>17%</td>
<td>19%</td>
<td>22%</td>
</tr>
<tr>
<td>Moderately Severe Impairment</td>
<td>3%</td>
<td>5%</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>Severe Impairment</td>
<td>7%</td>
<td>3%</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>Very Severe Impairment</td>
<td>7%</td>
<td>2%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>Communication Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear</td>
<td>52%</td>
<td>60%</td>
<td>44%</td>
<td>54%</td>
</tr>
<tr>
<td>Adequate</td>
<td>13%</td>
<td>11%</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Minimal Difficulty</td>
<td>19%</td>
<td>19%</td>
<td>26%</td>
<td>14%</td>
</tr>
<tr>
<td>Somewhat Difficulty</td>
<td>5%</td>
<td>3%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Moderate Difficulty</td>
<td>6%</td>
<td>6%</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>Highly Impaired</td>
<td>2%</td>
<td>1%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Severely Impaired</td>
<td>3%</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>Pain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Pain</td>
<td>34%</td>
<td>34%</td>
<td>33%</td>
<td>55%</td>
</tr>
<tr>
<td>Mild Pain</td>
<td>21%</td>
<td>10%</td>
<td>11%</td>
<td>22%</td>
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<td>Moderate Pain</td>
<td>26%</td>
<td>20%</td>
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<td>19%</td>
<td>36%</td>
<td>35%</td>
<td>3%</td>
</tr>
<tr>
<td>Depression Rating Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Depression</td>
<td>61%</td>
<td>29%</td>
<td>36%</td>
<td>60%</td>
</tr>
<tr>
<td>Mild Depression</td>
<td>21%</td>
<td>21%</td>
<td>23%</td>
<td>27%</td>
</tr>
<tr>
<td>High Depression</td>
<td>14%</td>
<td>40%</td>
<td>33%</td>
<td>13%</td>
</tr>
</tbody>
</table>

One page from Program Profile for State of Louisiana, Circa 2007
Cognitive Status among Persons Served in Three Louisiana Programs

EDA
PCA
LTCPCS

Very Severe impair
Severe impair
Mod-severe impair
Mod impair
Mild impair
Borderline intact
Intact
How do state LOCs compare?

Eligibility Rates
Among Initial Assessments in Common Database (n=34,231)

<table>
<thead>
<tr>
<th>State LOC</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas LOC</td>
<td>15,287</td>
<td>45.0%</td>
</tr>
<tr>
<td>Maryland LOC</td>
<td>15,579</td>
<td>45.8%</td>
</tr>
<tr>
<td>Michigan LOC</td>
<td>16,979</td>
<td>49.9%</td>
</tr>
<tr>
<td>New Jersey LOC</td>
<td>7,695</td>
<td>22.5%</td>
</tr>
<tr>
<td>New York LOC</td>
<td>24,191</td>
<td>71.0%</td>
</tr>
</tbody>
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*Disclaimer: Results do not reflect the eligibility rates for these states - just a comparison using a common database.*
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NJ is more strict
AR, MD, and MI are middle-of-the-road
NY is more generous
How does our state compare to others?

Proportion of applicants deemed eligible in each LOC

Illustrative example from previous implementation
Multiple Uses of Data

- Efficient: “collect once, use many”
- Focuses attention on proper assessment
- Offsetting incentives encourage accuracy
- Organizations adopt our systems for one reason, often end up with many uses
Thank you!

Questions?

Melanie Thomasson: mthomasson@uams.edu
Brant Fries: brant.fries@interRAI.org
How ADvancing States fits in?

A Shared Services Model
Challenges States Face in Taking Full Advantage of interRAI

- Determining how to integrate items within access processes (intake, triage, eligibility determination, resource allocation, support planning)
- Training staff
- Using data
- Keeping up on emerging practices
- Figuring out how to update assessment processes while minimizing disruptions to the system
Model for ADvancing States-interRAI Collaboration

**Infrastructure**
- Financing State contributions
  - Basic
  - Enhanced
- Reporting use of individual level interRAI data
- Designated ADvancing States staff
- Pool of contracted interRAI researchers

**Core Package**
- interRAI licenses (optional)
- Core training on interRAI tools
- Updates on interRAI and promising practices using interRAI tools
- Guidance on using data to improve program operations
- Cross-State collaboration, facilitation, conferences, and workgroups
- Standard reports comparing each state to other states and countries
- Access to a database of tools and reports

**Enhanced Supports**
- Enhanced training on use of interRAI
- Customized TA and data analyses
- Training on use of interRAI data
- Customized reports

**Updates on**
- interRAI and promising practices using interRAI tools
Approach for Training

Flexible, online training system for core training
- Some degree of customization to reflect how your state is using interRAI
- Include competency-based examinations

Enhanced training options
- Greater customization of online system
- In-person training
- Support in building additional state-based training infrastructure
Additional Technical Support

Core Package
- Standardized reports to allow for easy comparisons across states
- Information written for state programmatic staff
- Curated to keep staff up-to-date with a minimum of effort
- Working group of states to discuss promising practices and challenges

Enhanced Support
- Develop database of researchers and consultants with extensive experience using interRAI tools
- Assistance in changing business processes
- Guidance on how to use data to improve operations and policy
- Customized data analyses
ADvancing States is Proposing to Build Shared Infrastructure that Will Ease Burden on States

Modeled after ADvancing States’ support for the National Core Indicators for Aging and Disabilities

NCI-AD – Shared Services Model

Envision that participating states may receive:

• A core package that includes training
• Option to purchase interRAI license directly
• Access to a pool of researchers and experts for more intensive support
How Much Will it Cost

- Price of Core Package will depend upon the number of initial states that sign up.
- State Shared Services interRAI licenses will be based on the number of participants in the programs for which the assessments are used.
- Enhanced services based on hourly rates, anticipate being flexible on contract structure (e.g., fixed prices, hourly up to a cap, etc.).
- Will work with states to maximize use of ARPA eFMAP funds.
For more information:

If your state is interested in participating
Use the QR Code to Sign Up
Or head to
http://www.advancingstates.org/
Select Opportunities
Leadership, innovation, collaboration for state Aging and Disability agencies