RRTC/OM partners and funding

- **Primary Partners**
  - University of Minnesota – Institute on Community Integration
  - University of California–San Francisco
  - Temple University
  - The Ohio State University
  - National Council on Aging

- **Additional Partners**
  - HSRI

- **Funded by:**
  - *National Institute on Disability, Independent Living and Rehabilitation Research* NIDILRR
To improve the way we measure the quality of home and community based services for adults with all disabilities.
RRTC/OM: A Series of Research Studies

- **Study 1**: Soliciting broad stakeholder input – NQF Measurement Framework
- **Study 2**: Gap analysis – NQF Measurement Framework & Current Instruments
- **Study 3**: Identification of high quality/fidelity implementation practices
- **Study 4**: Refinement and development of measures
- **Study 5**: Ascertaining Reliability, Validity & Sensitivity to Change of Measures
- **Study 6**: Identification & testing of risk adjusters
Study 1: Obtaining Stakeholder Input

NQF Domains & Subdomains
National Quality Forum Framework

NQF FRAMEWORK FOR HOME & COMMUNITY BASED SERVICES OUTCOME MEASUREMENT

11 Domains
2-7 Subdomains
Study 1: Questions

- Do stakeholder groups generally agree with the domains and subdomains outlined by the NQF?
- Do stakeholder groups or disability populations differ in how they prioritize NQF domains and subdomains?

- Stakeholder feedback re: domains and subdomains present in NQF framework?
  - Operational Definitions
  - Gaps/missing domains/subdomains
  - Do subdomains accurately reflect what we are measuring at domain level (concept saturation)

- How important is to measure each given element of the framework to truly capture the quality of your HCBS services? What is most important to measure?
- How do these elements of service quality impact the disability community?
- Importance weightings: 0-100 Scale
Participants: Study 1
Note: $n = 277$
### PPDM Priority Ratings for NQF Domains

<table>
<thead>
<tr>
<th>Domain</th>
<th>$M$</th>
<th>$SE$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person-Centered Service Planning and Coordination</td>
<td>94.9</td>
<td>0.62</td>
</tr>
<tr>
<td>Service Delivery and Effectiveness</td>
<td>94.9</td>
<td>0.60</td>
</tr>
<tr>
<td><strong>Choice and Control</strong></td>
<td>94.9</td>
<td>0.59</td>
</tr>
<tr>
<td>Human and Legal Rights</td>
<td>94.5</td>
<td>0.56</td>
</tr>
<tr>
<td>Workforce</td>
<td>92.8</td>
<td>0.89</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td>92.6</td>
<td>0.70</td>
</tr>
<tr>
<td><strong>Holistic Health and Functioning</strong></td>
<td>91.9</td>
<td>0.67</td>
</tr>
<tr>
<td>Community Inclusion</td>
<td>91.5</td>
<td>0.69</td>
</tr>
<tr>
<td>System Performance and Accountability</td>
<td>89.8</td>
<td>0.98</td>
</tr>
<tr>
<td>Consumer Leadership in System Development</td>
<td>89.3</td>
<td>0.87</td>
</tr>
<tr>
<td>Caregiver Support</td>
<td>89.0</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Note: $n = 277$
System Performance & Accountability

NQF Sub-domains

Financing and service delivery structures: 96
Data management and use: 91
Evidence-based practice: 89

Error Bars: 95% CI

on home and community based services outcome measurement
Workforce

Average Importance Weightings

- Demonstrated competencies, when appropriate: 94
- Person-centered approach to services: 94
- Adequately compensated, with benefits: 92
- Sufficient workforce numbers, dispersion, and availability: 92
- Safety of and respect for the worker: 89
- Culturally competent: 88
- Workforce engagement and participation: 88

NQF Sub-domains

Error Bars: 95% CI
Choice and Control by Stakeholder Type

- Families rated as average.
- All other groups rated as above average.
Human and Legal Rights by Stakeholder Type

- Families rated as average.
- All other groups rated as above average.
Main Takeaway - Study 1

- Provides evidence of social validity of the NQF framework
  - Some additions at domain and subdomain level recommended for inclusion by numerous groups e.g.,
    - Employment
    - Workforce turnover;
    - Transportation
  - Differences in importance weightings suggest that the framework may apply differently to various disability populations
- Results meant to drive measure development and improvement of measures deemed of greatest importance
- Webinars under development
Study 2: Gap Analysis

Between NQF Domains & Subdomains and Existing Measures
Gap Analysis Method

• Deconstructed 132 assessment instruments across the 5 target population (out of 195 reviewed)
• 7,893 items coded across all surveys
  – Items coded into NQF domains / subdomains
  – Items were coded by two researchers
• 6,673 codes were assigned to items
  – Some items (2,342) not assigned to a domain
    • Demographic questions, N/A
  – Some items (1,127) received multiple subdomain codes
• Development of interactive web data-base
Community Inclusion 23%
Choice and Control 18%
Service Delivery and Effectiveness 11%
Holistic Health and Functioning 16%
Person-Centered Planning and Coordination 8%
Workforce 10%
Human and Legal Rights 9%
Caregiver Support 3%
Equity 1%
Consumer Leadership in System Development 0%
System Performance and Accountability 1%
Community Inclusion 23%
Note: Numbers represented percent of total items coded (n = 6673)
Study 3: Implementation Fidelity Case Studies

Various HCBS Outcome Measurement Programs
Study 3: Purpose

• Identify existing outcome measurement programs used in which identified HCBS outcome measures are being implemented.
• Conduct case studies of varied existing quality measurement approaches and programs
• Identify the similarities and differences across procedures and mechanisms used
Study 4: Revision, Refinement, & Development of HCBS Outcome Measures
## Combined Stakeholder Input *and* Gap Analysis

<table>
<thead>
<tr>
<th>Domain</th>
<th>PPDM Rating</th>
<th># Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person-Centered Service Planning and Coordination</td>
<td>94.9</td>
<td>485</td>
</tr>
<tr>
<td>Service Delivery and Effectiveness</td>
<td>94.9</td>
<td>653</td>
</tr>
<tr>
<td><strong>Choice and Control</strong>(^T)</td>
<td>94.9</td>
<td>1088</td>
</tr>
<tr>
<td><strong>Human and Legal Rights</strong>(^P)</td>
<td>94.5</td>
<td>521</td>
</tr>
<tr>
<td>Workforce</td>
<td>92.8</td>
<td>602</td>
</tr>
<tr>
<td>Equity</td>
<td>92.6</td>
<td>85</td>
</tr>
<tr>
<td><strong>Holistic Health and Functioning</strong>(^T)</td>
<td>91.9</td>
<td>949</td>
</tr>
<tr>
<td><strong>Community Inclusion</strong>(^P)</td>
<td>91.5</td>
<td>1415</td>
</tr>
<tr>
<td>System Performance and Accountability</td>
<td>89.8</td>
<td>40</td>
</tr>
<tr>
<td>Consumer Leadership in System Development</td>
<td>89.3</td>
<td>31</td>
</tr>
<tr>
<td>Caregiver Support</td>
<td>89</td>
<td>208</td>
</tr>
</tbody>
</table>
Subdomain Prioritization Process

• All subdomains based on NQF framework
• New subdomains based on feedback from Study 1
• Rated on three criteria by:
  – RRTC/OM Leadership Group
  – National Advisory Group
    ❖ Feasibility
    ❖ Usability
    ❖ Importance
Additional Criteria

• Scope of the RRTC/OM
• Minimizing redundancy with work of others
  – Measure developers, partners (HSRI)
• Domain & Subdomain coverage
• System-level vs. Individual-level measures
• Person-centeredness
### 12 Prioritized NQF Subdomains for Measure Development

<table>
<thead>
<tr>
<th>Subdomain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal choices and goals</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
</tr>
<tr>
<td>Choice of services and supports</td>
</tr>
<tr>
<td>Meaningful activity</td>
</tr>
<tr>
<td>Person's needs met and goals realized</td>
</tr>
<tr>
<td><strong>Self-direction</strong></td>
</tr>
<tr>
<td>Social connectedness and relationships</td>
</tr>
<tr>
<td>Freedom from abuse and neglect</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
</tr>
<tr>
<td><strong>Workforce/Direct Care Staff Turnover</strong></td>
</tr>
<tr>
<td>Person-centered planning</td>
</tr>
<tr>
<td>Access to resources</td>
</tr>
</tbody>
</table>

*Note:* bold type indicates a new subdomain provided by stakeholders in study one qualitative data.
Study 4 Methodology

• Iterative process to develop or revise items addressing gaps in items/measures identified in studies 1 and 2.
  – Items prioritized based on input of stakeholders in study 1 & 2.
  – Extensive review of existing conceptual frameworks for measure concepts to be developed (when available)
  – Development of operational definitions for key components of measure concepts based on existing frameworks
Study 4 Methodology

• Items from Study #2 mapped onto the construct definitions
• Staff with content expertise develop or revise items.
• Iterative validation process of item and response format
  – Content expert review
  – Cognitive testing w/ all disability groups
  – Pilot study N = 100
Study 5: Ascertaining Reliability, Validity & Sensitivity To Change of HCBS Outcome Measures
Study 5: Ascertaining Psychometric Quality of Measure Constructs

- Multi-site investigation of psychometric properties of prioritized HCBS measure concepts based on previous RRTC/OM studies including:
  - **Reliability** (inter-rater, test-retest, inter-source, internal consistency)
  - **Validity** (concurrent, predictive, discriminant, content, construct, inter-source)
  - **Measure discrimination**
  - **Sensitivity to change**

- Stratified random sample of 1,000 individuals (16+ years) receiving HCBS drawn from the target populations with PD, IDD, TBI, MH challenges, and ARD