To Plan for Community Living, Learn Who Is in Your Nursing Homes: Insights from Preadmission Screening and Resident Review (PASRR) and the Minimum Data Set (MDS)

Ed Kako, PASRR Technical Assistance Center (PTAC)  
Dan Timmel, Centers for Medicare and Medicaid Services

September 17, 2014  
HCBS Conference, Arlington, VA
Two Arms of PTAC: TA & Research

• TA
  • Direct TA to States (phone, email, site visits)
  • Support to CMS (e.g., Regional Office calls)
  • Monthly webinars
  • Website with FAQs, articles, etc. – www.PASRRassist.org

• Research
  • Screening and Evaluation Tools (Level I and Level II)
  • MDS
  • Links between MDS and other administrative datasets
Overview of Talk

• Brief review of PASRR
• History and purpose of MDS
• Relevant sections and items
• Methods for estimating prevalence of MI and ID/RC in nursing homes

• Key Findings:
  • PASRR identifies most individuals with ID/RC
  • PASRR misses many individuals with MI

• Questions and suggestions
Brief Review Of PASRR
Three Purposes of PASRR

1. To ensure that individuals are evaluated for evidence of possible mental illness (MI), intellectual disability (ID), or related condition (RC).

2. To see that community is considered as a placement option.

3. To recommend that they receive the services they need, wherever they are placed.
Design and Implications of PASRR

• Required before admission to a Medicaid-certified nursing facility (NF), regardless of insurance.
• Level I = Rough screen for possible serious MI, ID, or RC.
• Level II = Comprehensive evaluation, and determination of need and appropriate placement.
• Administrative activity at enhanced 75% match.
• Tool for diversion, transition, rebalancing.
• Implications for HCBS, esp. §1915(c) waivers.
The PASRR Process: A Basic Sketch

Level I
- Preliminary Screen
- In-Depth Evaluation
- Legal Document
- Determination & Notification
- Resident Review upon relevant Status Change

Level II
- Community
- NF

Level I initiated if new MI or ID/RC detected
PASRR Indicates
Presence of MI/ID/RC

<table>
<thead>
<tr>
<th></th>
<th>True Negatives</th>
<th>False Positives</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASRR Indicates Absence of MI/ID/RC</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>False Negatives</th>
<th>True Positives</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASRR Indicates Presence of MI/ID/RC</td>
<td>✗</td>
<td>✔️</td>
</tr>
</tbody>
</table>

False Positives indicate that PASRR indicates presence of MI/ID/RC when it is actually absent.

True Positives indicate that PASRR indicates absence of MI/ID/RC when it is actually present.
NF is Not Housing

Medicaid and state agencies must not approve admitting a person with MI or ID to a NF unless evaluated to require NF, and unless MI or ID needs will be met.

NF is **not** housing. The state’s choice:

- Either don’t admit the person to NF; or
- Provide individualized, disability-specific services and supports as required to attain the highest practicable physical, mental, and psychosocial well-being.
Review Of MDS
History of MDS

• Before MDS, the only quality-of-care data on nursing homes were aggregate in nature.

• Advance of MDS was to make available a nationally standardized, person-level database.
Key Dates

• 1987: MDS created as part of Nursing Home Reform Act
  • Social Security Act: 1819(f)(6)(A-B) for Medicare; 1919(f)(6)(A-B) for Medicaid
  • 42 CFR 483.20 and 42 CFR 483.315
• Early 1990s v1.0 tested in 10 states.
• January 1996: v2.0 goes live nationally.
• October 2010: v3.0 goes live nationally.
Purposes of MDS

1. To assess nursing home quality and to help monitor the health and welfare of nursing facility (NF) residents.
2. To generate quality improvement measurements that nursing homes use internally and that state surveyors use in the survey and certification process.
3. To help states assess the cost effectiveness of care protocols.
4. To set long-term nursing home reimbursement rates.
5. To allow prospective residents and families to compare nursing home quality measures (Nursing Home Compare).
Timing of MDS

• MDS assessment forms are completed for all residents in certified nursing homes, regardless of payment type.

• Timing:
  • Within 14 days of admission
  • At quarterly and yearly intervals; annual surveys more detailed
  • Upon significant change in condition
MDS Data Flow

• Completed in NF by multiple staff, overseen by MDS coordinator.
• Uploaded to CMSNet, a national database.
Topics & Sections of MDS

- A: Identification Information
- B: Hearing, Speech, and Vision
- C: Cognitive Patterns
- D: Mood
- E: Behavior
- G: Functional Status
- H: Bladder and Bowel
- I: Active Diagnoses
- J: Health Conditions
- K: Swallowing/Nutritional Status
- L: Oral/Dental Status
- M: Skin Conditions
- N: Medications
- O: Special Treatments, Procedures, and Programs
- P: Restraints
- Q: Participation in Assessment and Goal Setting
- S: Optional State Items
- X/Z: Correction/Admin
Unique Properties of MDS

• Provides snapshot of nursing home residents at point of time.
• Includes characteristics of residents not available from other sources, including persistent conditions and medication types.
• Can be used to understand dynamics/flow of nursing home populations.
MINIMUM DATA SET (MDS) - Version 3.0
RESIDENT ASSESSMENT AND CARE SCREENING
Nursing Home Quarterly (NQ) Item Set

Section A  Identification Information

A0010. Type of Record
- Add new record (Continue to A0100, Facility Provider Numbers)
- Modify existing record (Continue to A0100, Facility Provider Numbers)
- Inactivate existing record (Skip to A0130, Type of Provider)

A0100. Facility Provider Numbers

A0200. Type of Provider

A0310. Type of Assessment

A0310. Type of Assessment - Continued

E. Is this assessment the first assessment (OBRA, Scheduled PPS, or Discharge) since the most recent admission/entry or reentry?
- No
- Yes

F. Entry/discharge reporting
- Entry tracking record
- Discharge assessment return not anticipated
- Discharge assessment return anticipated
- Death in facility tracking record
- None of the above

G. Type of discharge
- Complete only if A0310F = 10 or 11
  - Planned
  - Unplanned

A0410. Submission Requirement

A0500. Legal Name of Resident

A0600. Social Security and Medicare Numbers

A0700. Medicaid Number - Enter "A" if pending, "N" if not a Medicaid recipient

A0800. Gender

A0900. Birth Date

A1000. Race/Ethnicity

- Check all that apply
Population in Nursing Homes

• At any given time, there are \(\sim 1.3\) million individuals in nursing homes nationwide.
  • Medicare, Medicaid, and private pay

• Existing literature suggests \(\sim 250,000\) individuals with mental illness (MI), intellectual disability (ID), or related condition (RC).
PASRR Related Questions in MDS

• MDS 3.0 (October 2010) added A1500: Asks whether the individual has been identified by PASRR as having MI, ID, or RC.

• Subsequent update (April 2012) added A1510: Requires respondents to indicate the Dx of any individual for whom A1500 is "yes" (MI, ID, or RC).

• Use of A1500 was poor in 2010 and 2011 (many missing responses); improved dramatically in 2012.
# MDS PASRR Questions

## A1500. Preadmission Screening and Resident Review (PASRR)
Complete only if A0310A = 01, 03, 04, or 05

<table>
<thead>
<tr>
<th>Enter Code</th>
<th>Is the resident currently considered by the state level II PASRR process to have serious mental illness and/or intellectual disability (&quot;mental retardation&quot; in federal regulation) or a related condition?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0. No → Skip to A1550, Conditions Related to ID/DD Status</td>
</tr>
<tr>
<td></td>
<td>1. Yes → Continue to A1510, Level II Preadmission Screening and Resident Review (PASRR) Conditions</td>
</tr>
<tr>
<td></td>
<td>9. Not a Medicaid-certified unit → Skip to A1550, Conditions Related to ID/DD Status</td>
</tr>
</tbody>
</table>

## A1510. Level II Preadmission Screening and Resident Review (PASRR) Conditions
Complete only if A0310A = 01, 03, 04, or 05

- Check all that apply

<table>
<thead>
<tr>
<th></th>
<th>A. Serious mental illness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B. Intellectual Disability (&quot;mental retardation&quot; in federal regulation)</td>
</tr>
<tr>
<td></td>
<td>C. Other related conditions</td>
</tr>
</tbody>
</table>
Dataset for Current Analysis

• MDS 3.0: October 1, 2010-December 31, 2013
• Focused on 2012 and 2013 – first years with A1510.
Ways Of Counting NF Residents
“Census” Method

• Everyone in a Medicaid-certified NF as of December 31…

• Who has been observed at least once in past 150 days.
“New Admission” Method

- All admissions records for a given year.
- For individuals who have no admissions records in prior years.
Uses of These Methods

• Census method used by CMS and other contractors.
• New admissions method used in academic literature.
Prevalence of Intellectual Disabilities (ID) and Related Conditions (RC)
Section A: Identification Information

<table>
<thead>
<tr>
<th>Section A</th>
<th>Identification Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A1550. Conditions Related to ID/DD Status</strong></td>
<td></td>
</tr>
<tr>
<td>If the resident is 22 years of age or older, complete only if A0310A = 01</td>
<td></td>
</tr>
<tr>
<td>If the resident is 21 years of age or younger, complete only if A0310A = 01, 03, 04, or 05</td>
<td></td>
</tr>
</tbody>
</table>

**Check all conditions that are related to ID/DD status** that were manifested before age 22, and are likely to continue indefinitely

<table>
<thead>
<tr>
<th>ID/DD With Organic Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Down syndrome</td>
</tr>
<tr>
<td>B. Autism</td>
</tr>
<tr>
<td>C. Epilepsy</td>
</tr>
<tr>
<td>D. Other organic condition related to ID/DD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ID/DD Without Organic Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. ID/DD with no organic condition</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No ID/DD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z. None of the above</td>
</tr>
</tbody>
</table>

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### Section I: Other Active Dx

<table>
<thead>
<tr>
<th>Other</th>
<th>18000. Additional active diagnoses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enter diagnosis on line and ICD code in boxes. Include the decimal for the code in the appropriate box.</td>
</tr>
<tr>
<td></td>
<td>A. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]</td>
</tr>
<tr>
<td></td>
<td>B. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]</td>
</tr>
<tr>
<td></td>
<td>C. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]</td>
</tr>
<tr>
<td></td>
<td>D. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]</td>
</tr>
<tr>
<td></td>
<td>E. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]</td>
</tr>
<tr>
<td></td>
<td>F. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]</td>
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<tr>
<td></td>
<td>G. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]</td>
</tr>
<tr>
<td></td>
<td>H. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]</td>
</tr>
<tr>
<td></td>
<td>I. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]</td>
</tr>
<tr>
<td></td>
<td>J. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]</td>
</tr>
</tbody>
</table>

*Active Diagnoses in the last 7 days - Check all that apply*

Diagnoses listed in parentheses are provided as examples and should not be considered as all-inclusive lists.
ICD Codes Included for ID/RC

• 317-319: intellectual disabilities
• 758: chromosomal abnormalities associated with ID/RC)
• V79: certain special screenings for I/DD
## Detection Rates of ID/RC by Different Dx Items: Census

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
<th>A1510B/C (PASRR)</th>
<th>A1510B/C or At Least One A1550</th>
<th>A1510B/C or At Least One I8000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>1,112,692</td>
<td>2.1%</td>
<td>2.3%</td>
<td>3.1%</td>
</tr>
<tr>
<td>2013</td>
<td>1,292,583</td>
<td>2.2%</td>
<td>2.4%</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

PASRR identifies about 2/3 of individuals with ID/RC.
ID/RC: Census

- 2012: 22,917
- 2013: 28,049

A1510 B or C
ID/RC: Census

- 2012:
  - A1510 B or C: 22,917
  - A1550: 2,623

- 2013:
  - A1510 B or C: 28,049
  - A1550: 3,046
ID/RC: Census

<table>
<thead>
<tr>
<th>Year</th>
<th>A1510 B or C</th>
<th>A1550</th>
<th>I8000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>22,917</td>
<td>2,623</td>
<td>8,521</td>
</tr>
<tr>
<td>2013</td>
<td>28,049</td>
<td>3,046</td>
<td>10,522</td>
</tr>
</tbody>
</table>
How Does Dx of ID/RC Change with Age?
Dx Indicating ID/RC (2013, Census)

90 and older

- 73%
- 17%
- 10%

- A1510 B or C
- A1550
- I8000
Dx Indicating ID/RC (2013, Census)

80-89 years

- 67%
- 25%
- 8%
Dx Indicating ID/RC (2013, Census)

70-79 years

- 65%
- 30%
- 5%

- A1510 B or C
- A1550
- I8000
Dx Indicating ID/RC (2013, Census)

60-69 years

- A1510 B or C: 28%
- A1550: 6%
- I8000: 66%
**Dx Indicating ID/RC (2013, Census)**

50-59 years

- 67%
- 26%
- 7%

- A1510 B or C
- A1550
- I8000
Dx Indicating ID/RC (2013, Census)

40-49 years

- 70%
- 23%
- 7%

- A1510 B or C
- A1550
- I8000
Dx Indicating ID/RC (2013, Census)

30-39 years

- 72%
- 22%
- 6%

- A1510 B or C
- A1550
- I8000
Dx Indicating ID/RC (2013, Census)

18-29 years

- 78% A1510 B or C
- 13% A1550
- 9% I8000

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Dx Indicating ID/RC (2013, Census)

0-17 years

- 70%
- 28%
- 2%
Prevalence of Mental Illness (MI)
### Section I: Other MI Dx

**Active Diagnoses**

Active Diagnoses in the last 7 days - Check all that apply

Diagnoses listed in parentheses are provided as examples and should not be considered as all-inclusive lists.

<table>
<thead>
<tr>
<th>Psychiatric/Mood Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>15700. Anxiety Disorder</td>
</tr>
<tr>
<td>15800. Depression (other than bipolar)</td>
</tr>
<tr>
<td>15900. Manic Depression (bipolar disease)</td>
</tr>
<tr>
<td>15950. Psychotic Disorder (other than schizophrenia)</td>
</tr>
<tr>
<td>16000. Schizophrenia (e.g., schizoaffective and schizophreniform disorders)</td>
</tr>
<tr>
<td>16100. Post Traumatic Stress Disorder (PTSD)</td>
</tr>
</tbody>
</table>
# Section I: Other Active Dx

### Active Diagnoses

**Active Diagnoses in the last 7 days - Check all that apply**

Diagnoses listed in parentheses are provided as examples and should not be considered as all-inclusive lists.

<table>
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<th>Other</th>
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<td>I8000. Additional active diagnoses</td>
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</table>

Enter diagnosis on line and ICD code in boxes. Include the decimal for the code in the appropriate box.

|   |   |   |   |   
|---|---|---|---|---
| A |   |   |   |   |
| B |   |   |   |   |
| C |   |   |   |   |
| D |   |   |   |   |
| E |   |   |   |   |
| F |   |   |   |   |
| G |   |   |   |   |
| H |   |   |   |   |
| I |   |   |   |   |
| J |   |   |   |   |
Two Categories of Mental Illness: Narrow and Broad

• Narrow:
  • Schizophrenia
  • Bipolar Disorder
  • Other psychotic disorder

• Broad
  • Types of MI in Narrow definition
  • *Plus* all other types in Section I and ICD codes:
    • 295-302
    • 306-314
Detection Rates of Narrow MI by Different Dx Items

<table>
<thead>
<tr>
<th>Year</th>
<th>Census</th>
<th>A1510A (PASRR)</th>
<th>A1510A Or At Least One I5700-6100</th>
<th>A1510A Or At Least One I5700-6100 Or At Least One I8000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>1,112,692</td>
<td>3.6%</td>
<td>11.0%</td>
<td>31.0%</td>
</tr>
<tr>
<td>2013</td>
<td>1,292,583</td>
<td>4.1%</td>
<td>11.9%</td>
<td>29.6%</td>
</tr>
</tbody>
</table>

PASRR identifies less than 20% of individuals with narrow MI.
## Detection Rates of Broad MI by Different Dx Items

<table>
<thead>
<tr>
<th>Year</th>
<th>Census</th>
<th>A1510A (PASRR)</th>
<th>A1510A Or At Least One I5700-6100</th>
<th>A1510A Or At Least One I5700-6100 Or At Least One I8000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>1,112,692</td>
<td>3.6%</td>
<td>59.4%</td>
<td>69.4%</td>
</tr>
<tr>
<td>2013</td>
<td>1,292,583</td>
<td>4.1%</td>
<td>60.2%</td>
<td>69.0%</td>
</tr>
</tbody>
</table>

PASRR identifies about 5% of individuals with broad MI.
Dx Indicating Narrow MI, Census

![Bar chart showing the increase in cases from 2012 to 2013.](image)

- 2012: 39,516 cases
- 2013: 52,460 cases

A1510A
Dx Indicating Narrow MI, Census

- 2012:
  - I5700-6100 (no A1510A): 39,516
  - A1510A: 83,275

- 2013:
  - I5700-6100 (no A1510A): 52,460
  - A1510A: 101,053
Dx Indicating Narrow MI, Census

- 2012:
  - I8000 (no A1510A, no I5700-6100): 261,835
  - I5700-6100 (no A1510A): 83,275
  - A1510A: 39,516

- 2013:
  - I8000 (no A1510A, no I5700-6100): 281,227
  - I5700-6100 (no A1510A): 101,053
  - A1510A: 52,460
Dx Indicating Broad MI, Census

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>39,516</td>
</tr>
<tr>
<td>2013</td>
<td>52,460</td>
</tr>
</tbody>
</table>

A1510A
Dx Indicating Broad MI, Census

- 2012: 621,725
- 2013: 725,666

- A1510A
- I5700-6100 (no A1510A)
Dx Indicating Broad MI, Census

<table>
<thead>
<tr>
<th>Year</th>
<th>18000 (no A1510A, no I5700-6100)</th>
<th>I5700-6100 (no A1510A)</th>
<th>A1510A</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>150,006</td>
<td>621,725</td>
<td>39,516</td>
</tr>
<tr>
<td>2013</td>
<td>166,606</td>
<td>725,666</td>
<td>52,460</td>
</tr>
</tbody>
</table>
How Does MI Dx Change In Relation to Age?
Dx Indicating Narrow MI (2013, Census)

90 and older

- 86%
- 4%
- 10%

- A1510A (might have Section I)
- I5700-6100 (might have I8000)
- I8000 only
Dx Indicating Narrow MI (2013, Census)

80-89 years

- 77% 18000 only
- 18% I5700-6100 (might have I8000)
- 5% A1510A (might have Section I)
Dx Indicating Narrow MI (2013, Census)

70-79 years

- 63%: I8000 only
- 29%: I5700-6100 (might have I8000)
- 8%: A1510A (might have Section I)
Dx Indicating Narrow MI (2013, Census)

60-69 years

- A1510A (might have Section I)
- I5700-6100 (might have I8000)
- I8000 only
Dx Indicating Narrow MI (2013, Census)

50-59 years

- 51%: I5700-6100 (might have I8000)
- 35%: I8000 only
- 14%: A1510A (might have Section I)

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Dx Indicating Narrow MI (2013, Census)

40-49 years

- 49% I5700-6100 (might have I8000) and I8000
- 35% I8000 only
- 16% A1510A (might have Section I)

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Dx Indicating Narrow MI (2013, Census)

30-39 years

- A1510A (might have Section I)
- I5700-6100 (might have I8000)
- I8000 only
Dx Indicating Narrow MI (2013, Census)

18-29 years

- 45% A1510A (might have Section I)
- 33% 15700-6100 (might have 18000)
- 22% 18000 only
Dx Indicating Narrow MI (2013, Census)

0-17 years

- 82%
- 13%
- 5%

- A1510A (might have Section I)
- I5700-6100 (might have I8000)
- I8000 only
Dx Indicating Broad MI (2013, Census)

90 and older

- 81%: I5700-6100 (might have I8000)
- 18%: A1510A (might have Section I)
- 1%: I8000 only
Dx Indicating Broad MI (2013, Census)

80-89 years

- 82% for I8000 only
- 16% for I5700-6100 (might have I8000)
- 2% for A1510A (might have Section I)
Dx Indicating Broad MI (2013, Census)

70-79 years

- 79% I8000 only
- 16% I5700-I6100 (might have I8000)
- 5% A1510A (might have Section I)
Dx Indicating Broad MI (2013, Census)

60-69 years

- 71% for I8000 only
- 19% for I5700-6100 (might have I8000)
- 10% for A1510A (might have Section I)
Dx Indicating Broad MI (2013, Census)

50-59 years

- 64% I8000 only
- 22% I5700-6100 (might have I8000)
- 14% A1510A (might have Section I)
**Dx Indicating Broad MI (2013, Census)**

**40-49 years**

- 61%: I8000 only
- 23%: I5700-6100 (might have I8000)
- 16%: A1510A (might have Section I)
Dx Indicating Broad MI (2013, Census)

30-39 years

- **54%**: I8000 only
- **27%**: I5700-6100 (might have I8000)
- **19%**: A1510A (might have Section I)
Dx Indicating Broad MI (2013, Census)

18-29 years

- 34% A1510A (might have Section I)
- 23% I5700-6100 (might have I8000)
- 43% I8000 only
Dx Indicating Broad MI (2013, Census)

0-17 years

- 57%
- 40%
- 3%

- A1510A (might have Section I)
- I5700-6100 (might have I8000)
- I8000 only
Summary

• PASRR does a decent (if imperfect) job identifying individuals with ID/RC.

• PASRR does a poor job of identifying individuals with serious MI.

• Among individuals with Dx of MI, detection by PASRR is more likely among young adults and the middle-aged.
Possible Explanations

1. Nursing home residents accurately record PASRR status, but PASRR programs fail to identify individuals with MI, because (e.g.) Level I screens are too restrictive.

2. Nursing home assessors are not accurately recording PASRR status.

Not mutually exclusive.
Questions for Future Research: Examples

• How do outcomes for people with MI compare for when detected by PASRR vs. not detected by PASRR?

• Do claims data show any evidence of individuals receiving services we might classify as Specialized Services?
QUESTIONS?

SUGGESTIONS?

What would you like to see in your MDS Fact Sheet?

What would be useful?