Principles Guiding Measure Selection

• PAC quality measures need to
  • Reflect the primary goals for the population receiving care,
  • Be meaningful to the consumer and provider,
  • Risk adjust for differences in patient populations and acuity,
  • Be more heavily weighted for patient outcome measures than structure or process measures, and
  • Help achieve better outcomes (e.g. are timely and can be used in quality improvement efforts)
  • Be readily available for use now or under development to be used in the near future.
Primary Purpose of PAC Care

- Assist individuals return to their prior living situation as quickly as possible
- Avoid rehospitalization
- Improve the individual’s function related to mobility, self-care (e.g. ADLs), and speech
- Improve their clinical condition (e.g. wounds)
- Complete course of skilled nursing medical care
  - (e.g. IV medications such as antibiotics),
- Learn to manage their disease illness better
  - (e.g. how to administer medications)
Framework for Measure Portfolio

• Grouped measures into those that apply to
  • “short stay” individuals seeking post-acute care
  • “long stay” individuals requiring long term care
• Classify measures using Donabedian’s classic framework
  • Structure (e.g. staffing, equipment, etc)
  • Processes (e.g. treatments, meds, tests, etc)
  • Outcomes (function, disease, satisfaction, etc)
Short Stay: **Structural** Measures

- CMS-State Survey Inspection score
- Staffing component on CMS Five Star
- Baldrige recipient
  - e.g. AHCA Quality Award silver/gold recipients
- Nurse Staff turnover
- Nursing presence
  - e.g., 24 hr RN or Nurse Practitioner available
- Staff satisfaction
Short Stay: **Process Measures**

- CMS nursing home compare QMs
  - % immunized for both influenza and pneumovax
  - Antipsychotics started during first 100 days

- Transitions of care measure
  - modified version for SNF use of the CTM-3 patient interview measure on three items: provider addressed post-discharge needs, understand health instructions; understand purpose of medications)
Short Stay: **Outcome Measures**

- 30d risk-adjusted rehospitalization following admission
- Risk-adjusted % discharged to community
- Improved function in:
  - self-care and mobility – risk adjusted (based on CARE tool)
  - speech/communication based on NOMs
- CMS nursing home compare QMs
  - % new pressure ulcers
  - % with untreated pain
- Resident/Family Satisfaction
Commonly Used PAC Measures

• Five Star
  • Compliance with Medicare requirement of participation (3 yr avg)
  • Staffing levels
    • Total nursing hours per resident day (RN + LPN + nurse aide hours)
    • RN hours per resident day
  • Quality measures (9 measures; 2 apply to PAC population)
    • Pain (rated moderate or severe)
    • Pressure ulcer (new or worse)

• Nursing Home Compare
  • Quality measures (13 long stay; 5 PAC; 3 not included in five star)
    • Influenza vaccination
    • Pneumococcal vaccination
    • Antipsychotic use (newly prescribed following admission)
Data Sources in PAC setting

- Medicare claims (SNF part A, B or D or Hospital part A)
- Minimum Data Set (MDS)
  - >500 clinical, functional, treatment or demographic data elements collected at admission, and regular intervals thereafter for anyone admitted to a nursing home from anywhere.
- Medical Record Review
- Patient interview/survey
- CMS survey inspection results
- Medicare Cost reports
Sample size

- NQF & CMS and basic statistics requires a minimum denominator size for most measures of 25-30 people
  - Smaller sample sizes result in large fluctuations over time due to sample size and patient population rather than changes in care delivery
- Sample size precludes most measures being stratified by
  - Diagnoses
  - Payor
  - Patient characteristics
### # of Facilities vs # of Part A Admissions

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Facilities</td>
<td>% of Total</td>
<td>Number of Facilities</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>15,453</td>
<td>15,449</td>
<td>15,395</td>
</tr>
<tr>
<td>Low volume (≤ 100 stays/ year)</td>
<td>6,766</td>
<td>44%</td>
<td>6,744</td>
</tr>
<tr>
<td>Moderate volume (101-200 stays/ year)</td>
<td>4,678</td>
<td>30%</td>
<td>4,591</td>
</tr>
<tr>
<td>High volume (201-300 stays/ year)</td>
<td>2,061</td>
<td>13%</td>
<td>2,103</td>
</tr>
<tr>
<td>Very high volume (&gt;300 stays/ year)</td>
<td>1,948</td>
<td>13%</td>
<td>2,011</td>
</tr>
</tbody>
</table>
# Part A admissions for Top 15 Hospital DRGs by Facility annual volume of Part A admissions

<table>
<thead>
<tr>
<th>DRG Categories</th>
<th>Low Vol (&lt;100/yr)</th>
<th>Mod Vol (100-200/yr)</th>
<th>High Vol (200-300/yr)</th>
<th>Very High Vol &gt;300/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SNF stays 2009</td>
<td>% of All SNF Stays</td>
<td>SNF stays 2009</td>
<td>% of All SNF Stays</td>
</tr>
<tr>
<td>TOTAL</td>
<td>451,119</td>
<td>2,230,389</td>
<td>637,920</td>
<td>2,230,389</td>
</tr>
<tr>
<td>1. Orthopedic surgery on lower extremity</td>
<td>55,309 (2.5%)</td>
<td>81,156 (3.6%)</td>
<td>65,495 (2.9%)</td>
<td>135,074 (6.1%)</td>
</tr>
<tr>
<td>2. Respiratory</td>
<td>67,714 (3.0%)</td>
<td>83,695 (3.8%)</td>
<td>50,532 (2.3%)</td>
<td>67,725 (3.0%)</td>
</tr>
<tr>
<td>3. Cardiac surgery</td>
<td>9,884 (0.4%)</td>
<td>15,817 (0.7%)</td>
<td>12,679 (0.6%)</td>
<td>25,233 (1.1%)</td>
</tr>
<tr>
<td>4. Cardiac medical management</td>
<td>37,728 (1.7%)</td>
<td>54,067 (2.4%)</td>
<td>35,906 (1.6%)</td>
<td>54,766 (2.5%)</td>
</tr>
<tr>
<td>5. GI hospitalizations (surgical and medical)</td>
<td>31,422 (1.4%)</td>
<td>44,580 (2.0%)</td>
<td>30,825 (1.4%)</td>
<td>48,380 (2.2%)</td>
</tr>
<tr>
<td>6. Renal failure</td>
<td>11,820 (0.5%)</td>
<td>17,963 (0.8%)</td>
<td>11,627 (0.5%)</td>
<td>16,826 (0.8%)</td>
</tr>
<tr>
<td>7. Amputations</td>
<td>3,704 (0.2%)</td>
<td>5,228 (0.2%)</td>
<td>3,346 (0.2%)</td>
<td>4,973 (0.2%)</td>
</tr>
<tr>
<td>8. Spinal surgery</td>
<td>2,663 (0.1%)</td>
<td>4,258 (0.2%)</td>
<td>3,880 (0.2%)</td>
<td>8,484 (0.4%)</td>
</tr>
<tr>
<td>9. Other major musculoskeletal surgery</td>
<td>4,916 (0.2%)</td>
<td>8,181 (0.4%)</td>
<td>6,811 (0.3%)</td>
<td>13,105 (0.6%)</td>
</tr>
<tr>
<td>10. Other musculoskeletal medical mgmt</td>
<td>23,126 (1.0%)</td>
<td>34,940 (1.6%)</td>
<td>25,768 (1.2%)</td>
<td>44,136 (2.0%)</td>
</tr>
<tr>
<td>11. Multiple significant trauma</td>
<td>1,242 (0.1%)</td>
<td>1,797 (0.1%)</td>
<td>1,226 (0.1%)</td>
<td>1,977 (0.1%)</td>
</tr>
<tr>
<td>12. Infections &amp; parasitic dis. (plus sepsis)</td>
<td>52,428 (2.4%)</td>
<td>74,247 (3.3%)</td>
<td>47,122 (2.1%)</td>
<td>64,947 (2.9%)</td>
</tr>
<tr>
<td>13. Psychiatric</td>
<td>6,146 (0.3%)</td>
<td>7,509 (0.3%)</td>
<td>4,233 (0.2%)</td>
<td>5,298 (0.2%)</td>
</tr>
<tr>
<td>14. Stroke and related conditions</td>
<td>18,863 (0.8%)</td>
<td>26,840 (1.2%)</td>
<td>17,522 (0.8%)</td>
<td>25,819 (1.2%)</td>
</tr>
<tr>
<td>15. Other</td>
<td>124,154 (5.6%)</td>
<td>177,642 (8.0%)</td>
<td>120,301 (5.4%)</td>
<td>187,334 (8.4%)</td>
</tr>
</tbody>
</table>
### Average volume Medicare Admissions per SNF for #1 Admitted diagnosis

<table>
<thead>
<tr>
<th></th>
<th>Low Vol (&lt;100/yr)</th>
<th>Mod Vol (100-200/yr)</th>
<th>High Vol (200-300/yr)</th>
<th>Very High Vol &gt;300/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong># of SNFs (%)</strong></td>
<td>7,773 (50%)</td>
<td>4,449 (29%)</td>
<td>1,784 (12%)</td>
<td>1,389 (9%)</td>
</tr>
<tr>
<td><strong>DRG Categories</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>81,156</td>
<td>3.6%</td>
</tr>
<tr>
<td>Avg # of Medicare Admissions per year</td>
<td>7.1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
AHCA DEVELOPED PAC QUALITY MEASURES
AHCA Developed PAC Measures

- PointRight Pro 30 Rehospitalization (now available)
- Discharge Back to the Community (now available)
- Length of Stay (Feb 2015)
- Improvement in Functional Status* (Jan 2015)
  - Mobility (based on CARE tool)
  - Self-Care (based on CARE tool)
- Customer Satisfaction** (Jan 2015)

* Requires use of CARE tool linked with MDS admission data
** Requires use of AHCA CoreQ satisfaction questionnaire
Use of AHCA PAC Measures

- AHCA PointRight Pro 30 Rehospitalization measure endorsed by NQF Dec 2014
- ACOs/MCOs currently using this measure
  - 3 MA Pioneer ACOs (Rehosp & Satisfaction)
  - 1 MA dual-eligible MCO (Rehosp)
  - 1 NJ ACO (Rehosp & DC back to Community & LOS)
  - 1 SC Care Management Co (Rehosp)
  - 1 large national PAC management co (Rehosp & DC to Community)
WHERE DO I GET MY DATA?
Your Member Resource

- Survey History
- Resident Characteristics
- Staffing Information
- AHCA Post-Acute Measures
- CMS Five Star Rating

www.ltctrendtracker.com
Run a report

Configure your Report Criteria

Choose a Report:

- CASPER Citation Report: Combined Health Survey
- CASPER Citation Report: Complaint Health Survey
- CASPER Citation Report: Life Safety Survey
- CASPER Citation Report: Standard Health Survey
- CASPER Resident Report
- CASPER Staffing Report
- Cost Report
- Discharge to Community AHCA Measure Report
- Five Star Overall Rating Report
- Five Star Quality Measure Rating Report
- Five Star Staffing Rating Report
- Length of Stay Report
- Length of Stay by Region Report
- Quality Measure (All) Report
- Rehospitalization Rate AHCA Measure Report
- RUGS Medicare Utilization Report
- Staff Turnover and Retention Report

- Limit my Centers for which:
- Limit Centers by Member:

Limit my Peer results Geographically:

- DC to community
- LOS
- Rehospitalization
MEASURING HOSPITAL READMISSIONS
• **Readmissions** = all patients admitted to a SNF from a hospital for SNF Part A services who are sent back to any hospital for any reasons within the next 30 days for either inpatient admission or observation status.

\[
\left( \frac{\text{Actual Rehospitalization}}{\text{Expected Rehospitalization}} \right) \times \text{National Average} = \text{Risk Adjusted Rate}
\]

Actual to Expected Ratio is key
Ratio is >1 you rehospitalized more people than expected
How to interpret your results

- How do I compare to others? – look at risk adjusted results
- Are you getting better? – look at your actual results
- Are you admitting sicker patients? – look at your expected
- Are you admitting more or less than expected? – look at your actual to expected ratio

<table>
<thead>
<tr>
<th></th>
<th>Jun-13</th>
<th>Sep-13</th>
<th>Dec-13</th>
<th>Mar-14</th>
<th>Jun-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Rehospitalization</td>
<td>21.10%</td>
<td>21.00%</td>
<td>23.60%</td>
<td>22.60%</td>
<td>20.90%</td>
</tr>
<tr>
<td>Expected Rehospitalization</td>
<td>22.10%</td>
<td>22.30%</td>
<td>23.50%</td>
<td>22.70%</td>
<td>22.10%</td>
</tr>
<tr>
<td>Ratio (actual/expected)</td>
<td>0.95</td>
<td>0.94</td>
<td>1.00</td>
<td>1.00</td>
<td>0.95</td>
</tr>
<tr>
<td>Risk Adjusted Rehospitalization</td>
<td>18.60%</td>
<td>18.40%</td>
<td>17.90%</td>
<td>17.70%</td>
<td>16.70%</td>
</tr>
</tbody>
</table>
State Avg SNF Rehospitalizations 2014 Q2

New Jersey
SNF NJ AHCA Members
Rehospitalization Rates

National Average
15.6%

At risk for
• 2% payment penalty;
• Dropped from MCO/ACO Networks
MEASURING DISCHARGE BACK TO COMMUNITY
New Measure Available

Discharge Back to Community

**Numerator:** # of admissions who were discharged back to the community and remained out of any SNF for at least 30 days.

**Denominator:** # of all individuals admitted to a center from a hospital (regardless of payor or diagnosis) and who were not in a center in the prior 100 days.
National Discharge to Community Rates Among AHCA members

Distribution of rate_adj

- Mean: 60.64369
- Median: 62.2
State Avg DC Back to Community Rate
(risk-adjusted)

National Avg = 60.6%

New Jersey
CUSTOMER SATISFACTION
CoreQ Questionnaire: Short Stay Discharges

Identified set of core questions that can provide enough information for an aggregate measure to assess satisfaction

CoreQ Short Stay Discharges

1. In recommending this facility to your friends and family, how would you rate it overall?
   ① Poor ② Average ③ Good ④ Very Good ⑤ Excellent

2. Overall, how would you rate the staff?
   ① Poor ② Average ③ Good ④ Very Good ⑤ Excellent

3. How would you rate the care you receive?
   ① Poor ② Average ③ Good ④ Very Good ⑤ Excellent

4. How would you rate how well your discharge needs were met?
   ① Poor ② Average ③ Good ④ Very Good ⑤ Excellent
CoreQ Short Stay Administration & Quality Measure

- Within 2 weeks of discharge
- Need minimum # of respondents (>30 respondents)
- Need minimum response rate >25%
- Can be added to existing survey vendor’s questionnaire

CoreQ: Quality Measure Specifications

- Aggregate each person’s responses to 4 questions
- Transform to 0-100 scale
- Calculate the average rating
- Count all respondents with a rating = satisfied (e.g. 3, 4 or 5)
- Divide by number of respondents
- Percent overall satisfaction
CoreQ Long Stay Residents: Scores in Pilot
MEASURING LENGTH OF STAY (LOS) IN SNF
LOS Metric

- LOS is a popular measure, particularly among payors (e.g. MCOs) and in new payment models (e.g. ACOs)
- LOS is **not** a quality measure;
  - Rather, LOS can be used as an efficiency measure, which needs to be interpreted in the context of other quality measures, for example
    - You can lower your LOS by
      - Hospitalizing more patients
      - Discharging them home sooner, sicker and with less improvement
    - You can have higher LOS because
      - You do not hospitalize patients very often
      - You spend more time increasing their function so they have better outcomes and use less resources after discharge
- There are **multiple** ways to calculate LOS
Issues to consider when measuring LOS

• What is end date?
  • What do you do with individuals who are rehospitalized?
  • Do you include individuals who die?
  • How do you count LOS for people who don’t go home?
• How do you deal with patients who are an outlier with very long LOS that can skew the results?
• How many people must be included in the measure to have stable results over time?
• How do you risk adjust for differences in patient acuity?
  • “My patients are sicker than yours.”
Calculating AHCA’s Length of Stay (LOS)

- Calculated only for **new** admissions to a nursing center from a hospital.
  - New admissions are defined as any admission from a hospital with no prior SNF stay in the 100 days prior to the admission MDS assessment. (this matches the discharge to community measure)
- Each person’s LOS is calculated based on the number of days between their admission and “**final**” discharge from the Center.
  - Final discharge is defined as being discharged back to the community
  - If they are not discharged from the center within 120 days from admission they are assigned a LOS of 120 days no matter how long they stay past 120 days.
What happens when a person is rehospitalized?

- When an individual has an interruption in service (e.g. rehospitalization) that is **10 days or less**, their LOS before and after rehospitalization are added together.

- When an individual has an interruption in service that is **greater** than 10 days; their LOS ends on the day of interruption (e.g. discharge to the hospital).
  - The LOS following their readmission is not counted in these cases.
What happens when a person dies?

• When an individual dies during their SNF stay:
  • They are not counted in the LOS metrics
Calculating LOS: 5 examples

Res 1: 120 days, LOS Count 120

Res 2: 20 days + hospital 6 days + 94 days, LOS Count 114

Res 3: 35 days + DC to home, LOS Count 35

Res 4: 10 days + hospital >10 days + 40 days + DC to home, LOS Count 10

Res 5: 17 days + Died, Excluded

Max LOS >120 Days

1 Second admission is excluded because the person has a prior SNF stay within 100 days of admission
How do you count LOS for people who don’t go home?

• If you only count people who go home,
  • you make your LOS look shorter

• If you also count people who do not go home,
  • what is their end date for counting their LOS?
  • They will have a very long LOS that will skew your results

• Three ways to address this
  • Count all people but truncate LOS after a certain time for those who do not go home (e.g. after 120 days)
  • Calculate the Median LOS not the Average (or Mean) LOS
  • Calculate % of people who stay fewer than a certain number of days (e.g., % who stay 14 days or fewer)
Median vs Average LOS

• When you have individuals with outlier LOS, they can skew the average.
  • Example:
  • You have 5 patients, with LOS of 8, 12, 20, 40, 120 days
    • **Average** is \((8+12+20+40+120)/5 = 40\) days
    • **Median** is 8, 12, 20, 40, 120  ➔ 20 days

  Midpoint value where half have a LOS less and half have a LOS greater
AHCA LOS Metrics

#1 Total Median LOS in days for all admissions

#2 Another way to look at LOS besides calculating the total LOS in days is to look at how many people stay for certain periods of time

• How many have LOS of 7 or fewer days
• How many have LOS of 14 or fewer days
• How many have LOS of 20 or fewer days
• How many have LOS of 45 or fewer days
% Staying 7, 14, 20 or 45 days or fewer

- Each metric [staying ≤7, ≤14, ≤20, and ≤45 days] is calculated by

  **Numerator:** number of individuals with a LOS of XX days or fewer

  **Denominator:** All residents admitted from an acute hospital to a center over the prior 12 months and who did not have a prior stay in a nursing center for the prior 100 days; and did not die before XX days following admission.

- XX = either 7, 14, 20, or 45 days
- Example: The percentage staying 14 days or fewer is calculated by dividing the number of individuals with LOS 14 days or fewer by the total number of admissions from a hospital that did not have a prior stay in a SNF within the 100 days of admission and did not die before 14 days
% Admissions Staying “x” days of fewer

Distribution of All\(^1\) SNF Stays in 2011

1\(^{\text{All Part A SNF admissions excluding those with hospitalization or death}}\)
Risk Adjustment

• The risk-adjusted LOS is calculated by…

\[
\frac{Actual \ Rate}{Expected \ Rate} \times National \ Observed \ Rate = Risk \ Adjusted \ Rate
\]

• Common formula that looks at the ratio of what is actually happening compared to the “expected” which is based on the experience similar patients have on average across the country.
Data Available in LTC Trend Tracker

- Insert screen shot for drop down menu for creating report showing LOS report
## LOS Report in LTC Trend Tracker

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Median Length of Stay - Risk Adjusted</td>
<td>25.2</td>
<td>25.4</td>
<td>24.7</td>
</tr>
<tr>
<td></td>
<td>22.0</td>
<td>21.4</td>
<td>21.1</td>
</tr>
<tr>
<td>Discharge to Community - Risk Adjusted</td>
<td>61.2%</td>
<td>60.5%</td>
<td>60.0%</td>
</tr>
<tr>
<td></td>
<td>70.0%</td>
<td>69.9%</td>
<td>68.9%</td>
</tr>
<tr>
<td>30 Day Rehospitalization (OnPoint 30) - Risk Adjusted</td>
<td>15.7%</td>
<td>15.9%</td>
<td>17.5%</td>
</tr>
<tr>
<td></td>
<td>14.2%</td>
<td>14.4%</td>
<td>16.2%</td>
</tr>
</tbody>
</table>

## Summary of Risk Adjusted Length of Stay Metrics

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Number of Centers</td>
<td>8,529</td>
<td>8,665</td>
<td>8,444</td>
</tr>
<tr>
<td>Overall Median Length of Stay</td>
<td>25.2</td>
<td>25.4</td>
<td>24.7</td>
</tr>
<tr>
<td>% Staying for 7 or Fewer Days</td>
<td>10.4%</td>
<td>10.6%</td>
<td>10.7%</td>
</tr>
<tr>
<td>% Staying for 14 or Fewer Days</td>
<td>22.7%</td>
<td>23.2%</td>
<td>23.4%</td>
</tr>
<tr>
<td>% Staying for 20 or Fewer Days</td>
<td>38.7%</td>
<td>39.1%</td>
<td>39.1%</td>
</tr>
<tr>
<td>% Staying for 45 or Fewer Days</td>
<td>68.6%</td>
<td>68.7%</td>
<td>68.7%</td>
</tr>
<tr>
<td></td>
<td>78.2%</td>
<td>78.7%</td>
<td>78.9%</td>
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</tbody>
</table>
Contact Information

David Gifford MD MPH
SR VP for Quality & Regulatory Affairs
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