



# Home Health Within-Stay Potentially Preventable Hospitalization Measure

Measure Applications Partnership

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# Rationale for PPH Measure



- As part of CMS's Meaningful Measures framework, our goals are to ensure that potential measures are:
  - relevant
  - meaningful to patients
  - outcome-focused
  - actionable
  - not burdensome for providers
  - aligned with other programs
- Stakeholders did not support adding an Emergency Room Measure to the Home Health Quality of Patient Care Star Rating since HHAs have limited ability to affect a patient's emergency room use.
- Measure developers received stakeholder feedback on the importance of capturing potentially preventable outcomes

# Rationale for PPH Measure



## Comparison of Numerator Specifications across Home Health Claims-Based Measures

| Measure   | Numerator Details              |                                |  |
|---|--------------------------------|--------------------------------|--|
|   | Observation Window             | Condition Type                 | Setting                                      |
| Acute Care Hospitalization                                  | During first 60 days of HH     | All Cause Unplanned            | IP Admissions                                |
| ED-Use without Hospitalization                              | During first 60 days of HH     | -                              | Emergency Department                         |
| Post-Discharge Potentially Preventable Readmissions         | 30 days post-discharge from HH | Potentially Preventable        | IP Readmissions                              |
| <b>Within-Stay Potentially Preventable Hospitalizations</b> | <b>Within stay</b>             | <b>Potentially Preventable</b> | <b>IP Admissions &amp; Observation stays</b> |

# Overview of Potentially Preventable Conditions, Grouped based on Clinical Rationale



| Potentially Preventable Condition                      | AHRQ Ambulatory Care Sensitive Conditions/Performance Quality Indicators | Within Stay Definition | Thirty day Post Discharge Definition |
|--|--|------------------------|--------------------------------------|
| <b>Inadequate management of chronic conditions</b>     |  |                        |                                      |
| Congestive heart failure (CHF)*                        | X  | X                      | X                                    |
| Chronic obstructive pulmonary disease (COPD)*          | X  | X                      | X                                    |
| Diabetes short-term complication*                      | X  | X                      | X                                    |
| Hypertension*/Hypotension                              | X  | X                      | X                                    |
| Adult asthma*  | X  | X                      | X                                    |
| <b>Inadequate management of infections</b>             |  |                        |                                      |
| Septicemia (except in labor)                           |  | X                      | X                                    |
| Urinary tract infection*/Kidney infection              | X  | X                      | X                                    |
| Bacterial pneumonia*                                   | X  | X                      | X                                    |
| Skin and subcutaneous tissue infections                |  | X                      | X                                    |
| C. difficile infection                                 |  | X                      | X                                    |
| Influenza  |  | X                      | X                                    |
| <b>Inadequate management of other unplanned events</b> |  |                        |                                      |
| Acute kidney failure*                                  | X  | X                      | X                                    |
| Dehydration*/ Electrolyte imbalance                    | X  | X                      | X                                    |
| Arrhythmia   |  | X                      | X                                    |
| Anticoagulant complications                            |  | X                      | X                                    |
| Deep vein thrombosis/Pulmonary embolism                |  | X                      | X                                    |
| Aspiration pneumonitis; food/vomitus                   |  | X                      | X                                    |
| Deficiency and other anemia                            |  | X                      | X                                    |
| Pressure ulcers  |  | X                      | X                                    |
| Intestinal impaction                                   |  | X                      | X                                    |
| Acute delirium   |  | X                      | X                                    |
| <b>Inadequate injury prevention</b>                    |  |                        |                                      |
| Head injury  |  | X                      | X                                    |
| Fractures  |  | X                      | X                                    |

\*Ambulatory Care Sensitive Conditions (ACSCs)/Performance Quality Indicators (PQIs)

# Within-Stay Potentially Preventable Hospitalization (PPH) Measure Review



## ■ Within-Stay Potentially Preventable Hospitalization

Start of HH Care



### – Measure Details

- measure reports a home health agency-level rate of risk-adjusted potentially preventable hospitalization (PPH) or observation stays
- measure calculates a standardized risk ratio - the predicted number of unplanned, potentially preventable hospital admissions or observation stays at the HHA divided by the expected number of admissions or observation stays for the same patients if treated at the average HHA
- Excludes “planned” hospitalizations, patients less than 18, patients without Medicare Part A FFS Medicare, LUPA claims, patients with visits from multiple HHAs in a stay, and stays with information required for risk adjustment

# Measure Testing



- **Risk Adjustment:** Age and sex, Enrollment status, Activities of daily living scores (ADL), Care received during a prior proximal hospitalization, Other care received within one year of the HH stay – consistent reliable results; predictive ability at low and high deciles [**C-statistic (c=0.727)**]
- **Socio-Demographic Status (SDS) Testing:** Race, Urban/Rural, Medicaid Dual Enrollment Status, Area Deprivation Index (ADI) – did not dramatically improve model results
- **Reliability: Split-sample testing-** moderate internal consistency; overall ICC is .60 (95% CI .59-.62), indicating a good level of reliability.
- **Validity:** Tested the HH Within-Stay PPH measure with Acute Care Hospitalization During the First 60 Days of HH (NQF #0171), Discharge to Community (DTC)-Post Acute Care (PAC) HH QRP, Emergency Department (ED) Use without Hospitalization During the First 60 Days of HH (NQF #0173), and the Re-hospitalization During the First 30 Days of HH (NQF #2380) Measures