Mississippi Medicaid
Quality Incentive Payment Program: Potentially Preventable Hospital Returns

Payment Method Development
Government Healthcare Solutions
MSH20074
Topics

1. Overview of the Mississippi Medicaid Quality Incentive Payment Program (QIPP) and Potentially Preventable Hospital Return (PPHR) reporting
2. Review methodology
3. PPHR statewide performance since the beginning of the program
4. Understanding hospital reports
5. QIPP PPHR payments
6. QIPP reporting timeline
7. Looking to the future
8. Completing corrective action plans (CAPs)

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Overview
In 2016, the Centers for Medicare and Medicaid Services (CMS) introduced a requirement that federal pass-through payments transition to accountability-based models within 10 years.

• This includes the Mississippi Hospital Access Program (MHAP)

QIPP is designed to link a portion of MHAP payments to utilization, quality and outcomes.

• QIPP’s goal is to use state and federal funds to improve the quality of care and health status of the Mississippi Medicaid population

• The QIPP program currently disburses 40.4% of all MHAP payments
  - The Division of Medicaid (DOM) will annually evaluate the percentage of MHAP to include in QIPP with the expectation that the QIPP portion will increase as more of MHAP is tied to quality metrics
Overview

Components of QIPP

Current components of QIPP

• Potentially Preventable Hospital Returns (PPHR) – 50% of QIPP allocation
• Health Information Network (HIN) – 50% of QIPP allocation

Coming July, 2021

• Potentially Preventable Complications (Inpatient)
Overview

Impact of COVID-19

• The novel coronavirus (COVID-19) has impacted hospital utilization and payment in Mississippi

• DOM will evaluate the effects of the COVID-19 pandemic on hospital return rates for reports covering the pandemic time period
  - DOM is not anticipating a big impact in the next report covering first quarter of SFY 21
  - DOM is anticipating larger effects starting with the SFY 21 Q3 report covering April-June of 2020

• Inpatient stays and emergency department visits associated with COVID-19 diagnoses will be excluded from consideration in the PPHR program
Overview

What are potentially preventable hospital returns?

Combination of inpatient readmissions and return emergency department (ED) visits
Identified using the 3M Potentially Preventable Readmissions / Return ED visit (PPR/ED) algorithm
• Designed for an all-patient population
• Results are categorical and easy to interpret

Key characteristics:
• All-cause, with some exceptions
• Potentially preventable
• Clinically related: the APR-DRG of the inpatient readmission or return ED visit is plausibly clinically related to the initial inpatient admission
Overview

Measuring hospital returns: 3M PPR/ED algorithm

The 3M PPR/ED approach allows us to measure potentially preventable inpatient readmissions (PPRs) and return emergency department visits (PPEDs).

- PPRs and PPEDs are return visits to the hospital that follow at-risk inpatient discharges within 15 days
- Clinically related to the inpatient admission
- High rates of PPRs and PPEDs can signal problems with premature inpatient discharge, inadequate discharge planning, poor follow-up care, or difficulty accessing care in the community

PPRs and PPEDs are combined into a single measure of potentially preventable hospital returns (PPHRs).

- The PPHR rate measures the number of at-risk inpatient discharges that are followed by one or more PPR and/or PPED
Overview

Measuring hospital returns: all-cause

All-cause inpatient readmissions and return ED visits means that hospital returns are measured for a broad range of conditions that are “at risk” for a hospital return.

Exceptions to at-risk inpatient admissions:

- Obstetric and normal newborns
- High risk conditions:
  - Trauma
  - Metastatic malignancy
  - HIV/AIDS
  - Neonates
  - Sickle cell crisis

- Patient transferred to another hospital
- Patient left against medical advice
- Patient died
Overview

Measuring hospital returns: potentially preventable

Potentially preventable means that not all hospital returns could be avoided, but worse than average performance likely means performance could be improved.

Potentially preventable hospital returns exclude inpatient admissions and return ED visits that are:

- Not clinically related
- Clinically related, not preventable
- Probably planned readmission
- Malignancy
- Trauma
- Obstetrics
- Transplants
- Catastrophic
Overview

Measuring hospital returns: clinical relationships

Basis for clinical relationships in the PPR/ED algorithm:

1. Medical readmissions for a continuation or recurrence of the reason for the initial admission, or for a closely related condition.
2. Readmissions for a surgical procedure to address a continuation or a recurrence of the problem causing the initial admission.
3. Medical readmission for an acute medical condition or complication that may be related to or may have resulted from care during the initial admission or in the post-discharge period after the initial admission.
4. Readmissions for surgical procedure to address a complication that may be related to or may have resulted from care during the initial admission.
5. Ambulatory care sensitive conditions as designated by the Agency for Healthcare Research and Quality (AHRQ).
6. All other readmissions for a chronic problem that may be related to care either during or after the initial admission.
7. Readmissions for mental health reasons following an initial admission for a non-mental health, non-substance abuse reason.
8. Readmissions for a substance abuse diagnosis reason following an initial admission for a non-mental health, non-substance abuse reason.
9. Mental health or substance abuse readmissions following an initial admission for a substance abuse or mental health diagnosis.
Measuring hospital returns: population measurement

Hospital performance is measured compared to a statewide baseline

- Average performance is defined as the Mississippi statewide performance during a baseline year
- Hospital performance is compared to the statewide baseline, adjusted for each hospital’s casemix, age mix, and mental health burden
- Performance is measured using the actual-to-expected ratio
  - Expected rates are calculated separately for general acute care and psychiatric care hospitals (new as of 7/2020)
  - Each hospital’s actual rate is the number of hospital return chains
Review methodology
Review methodology

Identifying readmissions and return ED visits

Initial admission: Inpatient admission that is followed by one or more inpatient readmissions and/or ED visits.

Time window: 15 days after the preceding inpatient admission’s discharge, during which clinically related inpatient admissions are considered PPRs, and ED visits are considered PPEDs.

Readmission: Inpatient admission that is within the time window of an initial admission and is clinically related to the initial admission.

Return ED visit: ED visit that is within the time window of an initial admission and is clinically related to the initial admission.
### Example of a PPHR chain

<table>
<thead>
<tr>
<th>Chain Number</th>
<th>Patient ID</th>
<th>Type of Claim</th>
<th>Admit Date</th>
<th>Discharge Date</th>
<th>Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Initial admission</td>
<td>1/1/2018</td>
<td>1/3/2018</td>
<td>Hospital A</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>Inpatient readmission</td>
<td>1/5/2018</td>
<td>1/7/2018</td>
<td>Hospital B</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>Clinically related return ED Visit</td>
<td>1/10/2018</td>
<td>1/10/2018</td>
<td>Hospital B</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>Clinically related return ED Visit</td>
<td>1/15/2018</td>
<td>1/15/2018</td>
<td>Hospital B</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>Inpatient readmission</td>
<td>1/17/2018</td>
<td>1/19/2018</td>
<td>Hospital B</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Initial admission</td>
<td>2/20/2018</td>
<td>2/25/2018</td>
<td>Hospital C</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Inpatient readmission</td>
<td>3/1/2018</td>
<td>3/3/2018</td>
<td>Hospital C</td>
</tr>
</tbody>
</table>

- PPHR chains can include both PPRs and PPEDs
- Each chain is only counted once in the PPHR rate
- PPR and PPED chains are also reported for your information
Recognizing the complexity in measuring PPHR performance, it is essential to take into account the variability in patient characteristics. These characteristics include:

- **Age (pediatric vs. adult)**
- **Health conditions (Base DRG)**
- **Condition severity (Severity of illness)**
- **Mental health or substance abuse (MH/SA) comorbidities**

Incorporating these variables into the performance measurement process is crucial. This involves adjusting for the mix of patients at a given hospital, which is known as casemix adjustment. The diagram illustrates how different care categories (MCC) affect the potentially preventable hospital return (PPHR) rates. It provides a visual representation of how various conditions and their severities impact return rates, allowing for a more nuanced understanding of performance.
Review methodology

Casemix adjustment

Step 1: Calculate PPHR rates for each DRG/severity of illness and age category

Step 2: Calculate the PPHR rate separately for patients with and without MH/SA comorbidities

Step 3: Calculate the MH/SA adjustor as the ratio of the overall PPHR rate for pediatric and adult patients with and without MH/SA comorbidities

Step 4: Calculate the expected PPHR rate for a given hospital based on the number of patients with each DRG, severity of illness, age category, and level of MH/SA comorbidities

Example Calculation of the Actual-to-Expected Ratio

<table>
<thead>
<tr>
<th>APR-DRG</th>
<th>Description</th>
<th>Age Category</th>
<th>Mental Health Comorbidities</th>
<th>Statewide Norm</th>
<th>MH/SA Adjustor</th>
<th>Hospital A At-Risk Stays</th>
<th>Hospital A Actual PPHRs</th>
<th>Expected PPHRs</th>
</tr>
</thead>
<tbody>
<tr>
<td>139-1</td>
<td>OTHER PNEUMONIA</td>
<td>Adult</td>
<td>Yes</td>
<td>7.32%</td>
<td>1.22</td>
<td>25</td>
<td>2</td>
<td>2.23</td>
</tr>
<tr>
<td>139-1</td>
<td>OTHER PNEUMONIA</td>
<td>Ped</td>
<td>Yes</td>
<td>4.44%</td>
<td>1.77</td>
<td>25</td>
<td>1</td>
<td>1.96</td>
</tr>
<tr>
<td>139-1</td>
<td>OTHER PNEUMONIA</td>
<td>Adult</td>
<td>No</td>
<td>7.32%</td>
<td>0.93</td>
<td>100</td>
<td>6</td>
<td>6.83</td>
</tr>
<tr>
<td>139-1</td>
<td>OTHER PNEUMONIA</td>
<td>Ped</td>
<td>No</td>
<td>4.44%</td>
<td>0.97</td>
<td>100</td>
<td>5</td>
<td>4.30</td>
</tr>
<tr>
<td>750-1</td>
<td>SCHIZOPHRENIA</td>
<td>Adult</td>
<td>N/A</td>
<td>17.28%</td>
<td>N/A</td>
<td>50</td>
<td>10</td>
<td>8.64</td>
</tr>
<tr>
<td>750-1</td>
<td>SCHIZOPHRENIA</td>
<td>Ped</td>
<td>N/A</td>
<td>14.29%</td>
<td>N/A</td>
<td>50</td>
<td>6</td>
<td>7.14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>31.12</strong></td>
</tr>
</tbody>
</table>

Notes:
1. Hospital A PPHR rate = 30/350 = 8.6%
2. Average MS hospital = 31.12/350 = 8.9%
3. Hospital A actual-to-expected ratio = 8.6%/8.9% = 0.97
Review methodology

Calculating the actual-to-expected ratio

The actual-to-expected ratio (A/E ratio) compares the number of PPHRs at a given hospital to the number of expected PPHRs for an average Mississippi hospital with the same casemix.

\[
\frac{\text{Actual PPHRs}}{\text{Expected PPHRs}} = \text{Actual-to-Expected Ratio}
\]

A/E ratio:

\[= 1\] The measured hospital has the same number of PPHRs as an average Mississippi hospital

\[< 1\] The measured hospital has fewer hospital returns than an average Mississippi hospital

\[> 1\] The measured hospital has more hospital returns than an average Mississippi hospital

A/E ratios are not measured for hospitals that have fewer than 10 actual or expected PPHRs
Expected rates are now measured separately for general acute care and psychiatric hospitals

- Readmission rates for mental health stays at general acute care hospitals tend to be significantly higher than at psychiatric hospitals
- Length of stay also varies dramatically

Calculating expected rates separately for general acute care and psychiatric hospitals makes comparisons between hospitals more equitable
Statewide performance
Inpatient readmissions and return ED visits have both been increasing since the baseline year.
Statewide performance

PPHR rate by Medicaid Care Category

- The hospital return rate has gone up in all Medicaid Care Categories except pediatric mental health and pediatric miscellaneous
Mississippi hospital performance ranges from 0.54 to 1.61.

- 20 hospitals have an A/E ratio greater than 1.07 and are required to submit Corrective Action Plans by September 1, 2020.
- 15 hospitals have an A/E ratio less than 1.00, which means they performed better than the statewide average.

**Statewide performance**

**PPHR rate by Medicaid Care Category**

**Hospital Performance, Q1 SFY 2021**
Understanding hospital reports
• Reports now include two “cycles” of QIPP PPHR reporting
  − Each cycle includes three years of reporting, all using the same version of the PPR/ED algorithm
    • Baseline year
    • Corrective action plan year
    • Performance incentives year
  − Each year a new cycle starts with the baseline year
    • The PPR/ED algorithm is updated to the latest version
    • New expected rates are calculated based on Mississippi statewide averages
• The current report shows details for the corrective action plan year of the first cycle and the baseline year of the second cycle
Understanding hospital reports

Cycles of QIPP PPHR reporting

Cycle one

- 7/2019: Baseline and expected performance level determined
- 7/2020: Corrective action plan requirement identified
- 7/2021: Performance incentives allocated

Cycle two

- 7/2020: Baseline and expected performance level determined
- 7/2021: Corrective action plan requirement identified
- 7/2022: Performance incentives allocated

Cycle three

- 7/2021: Baseline and expected performance level determined
- 7/2022: Corrective action plan requirement identified
- 7/2023: Performance incentives allocated
Understanding hospital reports

Additional changes for July, 2020 reports

- Expected rate is now calculated separately for general acute care and psychiatric hospitals (all cycles)
- Corrective action plan requirement for cycle one is identified on the Cover tab of the hospital report
- Psychiatric transfers:
  - In cycle one, psychiatric transfers were handled as “non-events” and not considered as initial admissions or readmissions
  - In cycle two, psychiatric transfers are handled the same way as general acute care transfers and can be considered initial admissions for a clinically related readmission
Understanding hospital reports

Understanding the hospital reports

Overview and summary tabs:

Cover Overview information including an indication of whether your hospital needs to submit a corrective action plan and a glossary of key terms.

Performance Measurement Indicates the dates and criteria that will be used for each current cycle of QIPP PPHR performance measurement.

Hospital summary Overview of hospital performance for all current cycles, including performance metrics for PPHRs, PPRs, and PPEDs. The PPHR actual-to-expected ratio is the metric that will be used to measure each hospital’s performance relative to its peers. Information on PPR and PPED rates and actual-to-expected ratios are provided to help each hospital understand its pattern of hospital returns.
Understanding hospital reports

Understanding the hospital reports

Charts:

Chart Hospital Return Rate: Charts showing PPHR, PPR and PPED rates over time (solid lines), compared to the expected rate based on casemix-adjusted statewide performance during the baseline year (dashed lines). A separate set of charts is available for each reporting cycle.

Chart Performance: Charts showing the PPHR, PPR, and PPED actual-to-expected ratio over time. The PPHR actual-to-expected ratio is the metric used to measure overall hospital performance.
Hospital return detail tabs:

**Hospital detail**
Listing of individual claims for PPHR chains initiated in each hospital. Each PPHR chain is only counted once in the PPHR rate, regardless of how many hospital returns are included in the chain. Separate hospital detail tabs are available for cycle one and cycle two. The two cycles are based on the same underlying data, but there may be slight variations in the identification of readmissions and return emergency department visits based on the version of the PPR/ED algorithm and other changes to the PPHR program.

**Secondary readmissions**
Listing of individual readmission and ED visit claims that were preceded by an inpatient admission at your hospital, but which belong to a PPHR chain initiated at a different hospital. These are provided for the hospital’s use in a data-driven approach to understanding practices and approaches that may help reduce future readmissions and return ED visits. Separate secondary readmission tabs are available for cycle one and cycle two.
QIPP PPHR payments
QIPP PPHR Payments

At-risk funds

For all performance-related payments, the proportion of each hospital’s QIPP PPHR payments that are at-risk depends on the hospital’s PPHR actual-to-expected ratio:

<table>
<thead>
<tr>
<th>Actual-to-expected ratio:</th>
<th>Low Range</th>
<th>High Range</th>
<th>At Risk % of QIPP PPHR Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;= 1.07</td>
<td>&lt;= 1.07</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>&gt;1.07</td>
<td>&lt;= 1.17</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>&gt;1.17</td>
<td>&lt;= 1.27</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>&gt;1.27</td>
<td>&lt;= 1.37</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>&gt;1.37</td>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
QIPP PPHR Payments

QIPP PPHR payment requirement: one

- All years: complete the PPHR certification form to attest that the hospital has received and reviewed the QIPP PPHR report
  - Attestation is due 30 days after QIPP PPHR reports are distributed to hospitals
  - If attestation is not received within 30 days of QIPP PPHR report delivery, 100% of the QIPP PPHR funds will be withheld
QIPP PPHR Payments

**QIPP PPHR payment requirement: two**

Requirement for the corrective action plan year:

- Hospitals with an actual-to-expected ratio greater than 1.07 on the July report of the corrective action plan year will be required to complete the corrective action plan template
  - Corrective action plans are due by September 1 of the corrective action plan year
  - If a corrective action plan is not received by the deadline:
    - That quarter’s at-risk funds may be withheld
    - If the corrective action plan is still not received by subsequent quarters’ attestation deadlines, those quarters’ at-risk funds may be withheld
- Hospitals are still required to submit the PPHR certification form to attest that they have received and reviewed their report
QIPP PPHR Payments

QIPP PPHR payment requirement: three

Performance incentive year (starting July, 2021):

• Hospitals that were required to submit a corrective action plan by September 1, 2020 will be required to improve their performance in the following year to receive their at-risk funds
  
  − Either:
    • Improve performance to below the 1.07 threshold to receive at-risk payments, or
    • Improve performance by 2% relative to the July, 2020, report of the corrective action plan year to receive 100% of their QIPP at-risk funds, or
    • Improve performance by 1% relative to the July, 2020, report of the corrective action plan year to receive 50% of their QIPP at-risk funds

• Hospitals are also required to meet all other requirements for that report to receive their funds:
  
  − Submit the PPHR certification form to attest that they have received and reviewed their report
  − Submit a corrective action plan for the second cycle on the report (if required)
QIPP reporting timeline
QIPP reporting timeline

QIPP PPHR dates of interest

- **July 8, 2020:** Quarterly update report distributed to hospitals (calendar year 2019)
  Hospitals required to submit a corrective action plan for cycle one identified
- **August 7, 2020:** Hospital deadline to attest receipt and review of the quarterly report
- **September 1, 2020:** Corrective action plan (cycle one) deadline
- **October 6, 2020:** Quarterly update report distributed to hospitals
- **November 6, 2020:** Hospital deadline to attest receipt and review of the quarterly report
- **January 7, 2021:** Quarterly update report distributed to hospitals
- **February 8, 2021:** Hospital deadline to attest receipt and review of the quarterly report
- **April 6, 2021:** Quarterly update report distributed to hospitals
- **May 6, 2021:** Hospital deadline to attest receipt and review of the quarterly report
- **July 7, 2021:** Quarterly update report distributed to hospitals (calendar year 2020)
  Hospitals required to submit a corrective action plan for cycle two identified
  Performance improvement payments allocated for hospitals required to submit a CAP in cycle one
- **August 6, 2021:** Hospital deadline to attest receipt and review of the quarterly report
- **September 1, 2021:** Corrective action plan (cycle two) deadline
In SFY 2020, QIPP payments will be made quarterly by the coordinated care organizations to hospitals who meet QIPP PPHR requirements.

For each quarter in SFY 21:
- The Health Information Network (HIN) portion of QIPP will be paid the first month of the quarter
- The PPHR portion of QIPP will be paid the last month of the quarter
  - September, 2020
  - December, 2020
  - March, 2021
  - June, 2021
Looking to the future
Looking to the future

1. Each hospital is required to complete the PPHR Certification form and email it to QIPP@Medicaid.ms.gov by August 7, 2020 to attest that they have received and reviewed their July 8, 2020 quarterly report.

2. For hospitals with an actual-to-expected ratio greater than 1.07 on their July 8, 2020 report, corrective action plans will be due September 1, 2020.

3. Next reports will be released October 6, 2020.

4. For questions or copies of QIPP documents (including the methodology supplement and this presentation) email QIPP@Medicaid.ms.gov, or go to the QIPP website: https://medicaid.ms.gov/value-based-incentives/.

5. DOM plans to begin posting statewide and hospital-specific data for the reporting period of calendar year 2019 on its website, including:
   - PPR percentages
   - PPED percentages
   - Actual-to-expected ratios

6. Starting in SFY 22, DOM expects to add a second hospital quality metric, Potentially Preventable Complications (PPCs), to QIPP reporting. More information on this will be provided soon.
Completing corrective action plans
Completing corrective action plans

The Division of Medicaid has developed a template for corrective action plans to guide hospitals that need to submit a plan.

Hospitals are expected to complete and submit the corrective action plan template by September 1, 2020.

Questions about completing the corrective action plan should be directed to the QIPP mailbox at QIPP@Medicaid.ms.gov.
Appendix
Glossary

**Actual-to-expected ratio:** Performance metric that compares a given hospital to an average Mississippi hospital with the same casemix.

**At-risk stays:** Inpatient admissions that may or may not be followed by an inpatient readmission or return ED visit, but are not excluded from analysis per the requirements.

**Casemix adjustment:** Mathematically adjusting the expected PPHR rate for the mix of patient characteristics at a given hospital.

**Corrective action plan (CAP):** Document that describes strategies for reducing potentially preventable hospital returns.

**Initial admission:** Inpatient admission that is followed by one or more inpatient readmissions and/or ED visits.

**Potentially preventable ED visit (PPED):** Return ED visits that are clinically related to a preceding inpatient admission with a discharge within a specified time period (15 days in this analysis).

**Potentially preventable hospital return (PPHR):** Hospital returns refer to both inpatient readmissions and return ED visits, the PPHR rate refers to the rate of inpatient admissions that are followed by either an inpatient readmission, or a return ED visit, or both.

**Potentially preventable readmission (PPR):** Inpatient readmissions that are clinically related to a preceding inpatient admission with a discharge within a specified time period (15 days in this analysis).

**PPHR chain:** The series of an initial admission and one or more inpatient readmissions and/or return ED visits, each chain is only counted once in the PPHR rates.

**Quality Incentive Payment Program (QIPP):** Mississippi Medicaid program designed to link MHAP funds to care quality.

**Time window:** 15 days after the preceding inpatient admission's discharge, during which clinically related inpatient admissions are considered PPRs, and ED visits are considered PPEDs.
For further information

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