

PPR Overview

Department of Healthcare and Family Services

Potentially Preventable Readmissions Policy

Preventable inpatient hospital readmissions is a recognized issue at both a federal and state level affecting the patients' health and costing taxpayers unnecessary dollars. Medicare and states such as New York, Massachusetts, Texas and others¹ have created policies to reduce these unnecessary inpatient hospital readmissions thus improving the quality of care to the patient. In CMS findings using Medicare data as a national standard, *Chicago had the highest readmission rate in the country* at 26.7%, which is approximately 40% higher than the national average of 19.3%. With over half of the state's Medicaid population residing in Chicago and Cook County, the department believes that continuing a readmissions policy is essential in maintaining the quality of care for the Medicaid client and lowering the cost of inpatient hospital admissions. Beginning state fiscal year 2013 as required by legislation (Public Act 097-0689), the state of IL also developed a policy of reducing readmissions by using 3Ms Potentially Preventable Readmissions (PPR) software to calculate each hospital's readmission rate. The PPR policy is a healthcare quality initiative that is designed to focus on those inpatient hospital readmissions that are considered potentially preventable by the hospital. It requires hospitals to review their discharge planning and post-discharge planning care to determine if clients are being discharged too quickly too sick, if there is poor discharge planning or poor follow-up care.

The law states (d) ...“In the instance of readmissions, the Department shall adopt policies and rates of reimbursement for services and other payments provided under this Code to ensure that, by June 30, 2013, expenditures to hospitals are reduced by, at a minimum, \$40,000,000.”

How does it work?

The Department is using one State Fiscal Year (SFY) inpatient hospital claims data submitted by Illinois hospitals and 3Ms Potentially Preventable Readmission (PPR) software to calculate a readmission rate for each hospital known as the hospital's “actual” rate. The “actual” rate of readmission is calculated at the APR DRG Severity of Illness (SOI) level which is compared to a calculated statewide “target” rate for the same APR DRG SOI. The target rates are specific to each hospital based on the hospital's case mix and adjusted for the patients SOI and further risk adjusted by age and a secondary diagnosis of behavioral health (*a patient with a secondary diagnosis of BH is expected to have a higher rate of readmission*). Both rates are rolled into an aggregate to determine an overall rate that measures the hospital's readmission performance. The readmissions data is a compilation of all IL hospitals Medical Assistance claims data² submitted to the Department on an annual basis. Although the goal is to see overall hospital

¹ Medicare adopted a policy that looks at only 3 conditions that have a high rate of readmission for the Medicare population. The states are implementing very different policies using 3M developed software that determines a readmission rate for the hospitals

² Certain standard and global exclusions are built into the 3M PPR software logic and are excluded from the analysis because of the complexity of the patient and the low likelihood that a readmission can be prevented or because the patient died or left against medical advice. Examples of these include trauma, burn victims, certain HIV DRGs, etc. The Department has also opted to exclude the following from the analysis Obstetrical, MCO, Dual Eligibles and Detox readmissions. LTACHs are excluded because EQ Health approves both the admission and discharge of the patient. For a full list of exclusions, please refer to Appendix A in the presentation.

readmissions decrease, each hospital is responsible for its own performance because each hospital is unique to the clients it serves and therefore a measurement of readmission must be specific to that hospital.

As the Department is not able to predict how a hospital will perform in a prospective year, historic data is used to set the hospital's "actual" and "target" PPR rates to evaluate a hospital's readmission performance. This is consistent with any rate setting or payment methodology (e.g. assessment, static payments). SFY 2010 was the most current, fully adjudicated data available at the time of implementation and therefore is the base year. A trending analysis was done on SFY 2009, 2010 and eleven months of 2011 which showed a consistent PPR rate across all three years.

What is a PPR?

A PPR is an inpatient hospital readmission that occurs within a specified timeframe that is "clinically" related to an initial admission (*state has chosen a 30 day policy*). The software tracks the patient's readmissions across hospitals to capture all readmissions not just those at the initiating hospital. The initiating hospital is responsible for the readmission regardless of where the readmission occurred. For example, Hospital A has the Initial Admission (IA), the Readmission (RA) occurs at Hospital B within 30 days, then Hospital A assumes responsibility. If a patient has a readmission within 30 days, and it is determined to be a PPR, then the 30 day clock resets and begins again. Regardless if a patient has one readmission or five, it is considered a readmission chain and is only counted as **one** in the calculation of the hospital's readmission rate; therefore the hospital is not penalized for multiple readmissions as it is the initial admission that is being evaluated and what could have been done at that time to prevent the subsequent readmissions.

3M uses a panel of clinicians to determine what readmissions are potentially preventable. They developed a matrix that maps APR DRGs to determine whether or not the readmission is clinically related to the initial admission. 3M's software also excludes certain types of services such as HIV and rehabilitation claims, (see footnote 2 above). Transfers and appropriate, planned readmissions are not classified as PPRs. If Hospital A transfers a patient within the same day to Hospital B this breaks the chain and Hospital B then has the initiating admission. If a patient is readmitted for a heart assist device (APR DRG 161) after an initial admission for Chronic Heart Failure (APR DRG 194) this is considered a planned readmission and therefore not a PPR.

The State recognizes that not all PPRs are preventable which is why a rate based approach is used to measure a hospital's performance. Reasons a preventable readmission could occur could be due to the following:

- Patient being discharged too early
- Poor discharge planning
- Poor follow up care

Hospital Specific PPR Reports, Data Files and the Quality of Care of Our Clients

Navigant Consulting along with the department created Hospital Specific PPR Reports detailing the number of admissions, exclusions, chains, readmissions (both at the facility and at other facilities) and all other pertinent information to see how a hospital's PPR rate and payment reduction (if applicable) was

calculated. The second page of the report gave each hospital their top 5 APR DRGs with the largest actual to target variance in PPR rates and the number of chains above the target. For example, one of the children's hospitals had an expected rate of readmission for appendectomy of 2% where the actual rate of readmission was 8%. Number of chains above the target was 7. This information gives hospitals specific problem areas for which to begin their analysis. Hospital Specific Claim Data Files were also generated and sent to those hospitals that requested it with claim specific information such as admission date, discharge date, APR DRG SOI, diagnosis code and other claim detail along with whether or not the claim was an OA, IA, RA etc. In the above appendectomy example, the claim data files showed that in 80% of the cases the reason for the readmissions were due to **gastrointestinal infection** which means there is an obvious issue with this specific procedure within this specific hospital. Other hospital specific examples include:

- Hospital A – 90% of the readmissions for the ventricular shunt procedure were due to malfunction of the shunt (same hospital as the appendectomy example)
- Hospital B - 38% higher PPR rate for Septicemia. 56% of the readmissions were due to either the same diagnosis or Cellulitis with Other Bacterial Skin Infections. The department sampled four of the patients who were readmitted with Septicemia and all four patients *died within a year*.
- 125% higher readmission rate for Craniotomy without Trauma. 57% of the readmission chains were due to Post-Operative Post-Traumatic Other Device Infections or Septicemia. Craniotomies with Trauma are primarily excluded from the PPR analysis, so to see such a high readmission rate primarily in the children's facility for Craniotomy Except for Trauma is very rare. For instance, there may be an issue with bacteria in the room in which the procedure is being performed.

It is apparent based on the department's perfunctory review of the data files why this policy is necessary. It is really a quality of care issue that is the primary objective and better care of the clients creates better health outcomes which in turn reduces costs in **all** areas of our client's care.

Payment Reductions/Penalty Calculations

Those hospitals whose "actual" PPR rate is higher than their "target" PPR rate have a payment reduction amount calculated that is based on the cost of the excess readmissions. The payment reduction is calculated by multiplying the average cost of the readmissions per PPR chain (the initial admission is not in the total) by the number of PPR chains over the target.

For example if the average cost per PPR chain for Hospital A is \$5,000 and the number of PPR chains above the target is 10, then $\$5,000 \times 10 = \$50,000$.

The average cost of readmissions includes any readmission costs related to the initial admission regardless of where the readmission occurred. In the implementation year, the department capped the payment reduction amounts at 7% of the hospitals' total claims based payments (statics payments are out of the calculations). For SFY 2014 and forward the hospitals payment penalty amounts are capped at 3% of the **total** hospital payments including any static and assessment payments net what the hospitals pay in the assessment tax.

Implementation Year

In negotiations with the hospital community it was agreed that the department would recoup only 25% of the payment reduction amount (\$40M) in SFY 2013 and the hospitals would have a chance to reduce their PPRs therefore “cost avoiding” a portion or all of the remaining amount owed (75%). For those hospitals above their target, 25% of the payment reduction amount was estimated and recovered via a payment reduction factor that was applied as a percentage to all inpatient hospital claim payments received from the hospital by the department between March 1, 2013 and June 30, 2013. Once all SFY 2013 inpatient hospital claims data was submitted for payment the department did an analysis of the data to determine if those hospitals that still owed a payment reduction were able to cost avoid any or all of their payment reduction amount. Of the remaining \$34M owed, approximately \$18M was cost avoided by the hospitals with a total of 65 hospitals out of the 147 (that had payment reduction amounts) cost avoiding their entire payment reduction. Those hospitals that still owe a portion or all of their payment reduction amounts will pay the department directly. Any payments not received the department will create adjustments to recoup against future claims and will be applied to the hospital’s inpatient payments until the total amount owed has been paid. Hospitals will never owe more than their original payment reduction amount. (*See Provider Notice 20140903 and SFY 2013 Reconciliation Amounts on the PPR website for further information*)

Cost Avoidance

The cost avoidance calculations use the same version of the PPR software to calculate PPR rates to compare against the base year to see if a hospital was able to reduce their actual to target variance in their PPR rates and the average cost per PPR chain. The fiscal year for which the rates were set (for example SFY2013) is compared to the base year for which the prospective rates were set (SFY 2010). The fiscal year for which the rates were set is adjusted for claim volume and case mix to normalize the base year and the prospective year so that the calculation comparisons are consistent (a sample of the calculations is available for review). Cost avoidance is the department’s goal for the hospitals. If hospitals are able to cost avoid their payment penalty amount then it means they are addressing PPRs and improving the quality of care to the patient.

SFY 2014 and Beyond

For the SFY 2014 policy (and subsequent years) the department along with several members of the hospital community revised the PPR Policy to meet an “achievable goal” as opposed to a monetary target of \$40M.

- Adjusting the PPR rates for those children’s hospitals that were considered a Tier I Pediatric Intensive Care Unit (PICU), since these children have a higher expected rate of readmission;
- Children’s psychiatric behavioral health services were removed;
- Lowering the PPR average to .85 for acute services and .9 for adult behavioral health services instead of establishing a monetary target of \$40M. The .9 for adult behavioral health recognizes a higher expected rate of readmission than .85 for acute services;
- Applying no payment reductions within the year, giving hospitals one year to reduce their readmissions before any payment penalty is collected; and
- Reducing the payment penalty to half the amount owed for the state portion of Medicaid since it was argued that federal CMS would not recoup its federal match for payment penalties.

Note: As more than 50% of the Medicaid clients will be enrolled in some type of Managed Care or Coordinated Care the department the goal is to include MCO encounter data into the analysis possibly by SFY 2016..

Recap

The department's goals by implementing a readmission's policy using 3M's Potentially Preventable Readmissions software is to reduce unnecessary hospital readmissions which is part of the larger objective of the agency to improve quality of care and thereby improve the health outcomes of our Medicaid clients. The department looks forward to continuing to work with hospital community as there have been several hospitals that have been very proactive since the beginning of the PPR policy implementation and we are already seeing positive results from their efforts as reflected by the SFY 2013 reconciliation.

FAQ:

1.) What are the PPR rules and how are they defined?

Refer to www.aprdrassign.com for PPR Definitions Manual

2.) Q: What about patients who are discharged to a Nursing Home

R: Medicare and Medicaid (dual eligible) patients are excluded from the calculations. For those patients who are only Coordination with different providers should be part of hospitals' strategies to reduce PPRs, and 3M's experience in other states has been that remarkable results have followed meetings between a hospital's discharge planning staff and the management of individual nursing facilities. Additionally, the 3M PPR logic includes an exception process called a non-event to address the challenges with attribution associated with patients being admitted to extended care settings like skilled nursing facilities (often viewed as an extension of the care received by the patient in the initial admission). The PPR logic evaluates the discharge status on a claim to see if it reflects a transfer to a skilled nursing facility. If so, if the next hospital admission for the patient is within a day of the previous hospital admission's discharge date (whether different or same facility), then the logic will consider the second admission a non-event and ignore it.

3.) a. What is a readmission chain? b. How long does a readmission chain last?

- a. A readmission chain is a sequence of PPRs that are all clinically-related to the Initial Admission. A readmission chain may contain an Initial Admission and only one PPR, which is the most common situation, or may contain multiple PPRs following the Initial Admission.

Admission 1 (discharged home)	3 days after discharge	Admission 2 (discharge home)	28 days after discharge	Admission 3 (discharged to home health)
APR DRG 133 Pulmonary Edema and Resp. Failure		APR DRG 139 Other Pneumonia		APR DRG 140 COPD
Initial Admission		PPR		PPR

Table 1- An example of a readmission chain

- b. **Terminating a readmission chain-** A readmission that is not clinically-related to the Initial Admission in a readmission chain terminates the readmission chain. A readmission that has a discharge status of transferred to an acute care hospital, left against medical advice or died terminates a readmission chain. The occurrence of an Excluded Admission also terminates a readmission chain. Or the subsequent admission is greater than the readmission time interval,

this will terminate the chain. For example if a the patient in Table 1 has a fourth admission which shows up 45 days after the Admission #3, then the readmission chain would be broken . Another example would be if there was a 4th admission in the example in table 1 again but patient came in a 4th time 10 days after the discharge of Admission #3 and the Admission 4 was classified as APR DRG 020 Craniotomy due to trauma, the readmission chain would be broken because the Craniotomy is not clinically related to the Pulmonary Edema in the Initial Admission.

4.) What about End Stage Renal Disease and Other Chronic Disease Categories

3M's PPR logic reflects the specific needs of individuals with chronic diseases. Because a hospital's overall readmission rate is derived by indirect standardization, the effect of a particular condition is held constant. This means, for example, that an individual hospital's sickle-cell readmission rate is compared with all other hospitals' risk-adjusted sickle cell readmission rates. A hospital will not be penalized unless its readmission rate for sickle cell patients is higher than the rates of other hospitals with sickle cell disease patients.

3M PPR logic begins with grouping the records into an APR-DRG category, which includes a severity of illness assignment. The severity of illness accounts for chronic co-morbid conditions and non-operating room procedures, such as renal dialysis, as well as operating room procedures. Thus, the PPR rate which each hospital is compared against is adjusted for these higher severities as a part of the risk adjustment. Specifically with regard to end stage renal disease (ESRD), a patient with a co-morbid condition of end stage renal disease, and therefore with a secondary diagnosis of ESRD (and often a procedure code for dialysis) will be assigned to severity level 4 within the patient's DRG. Severity level 4 assigns a much higher level of expected costs/resource use, and a higher probability of readmission.

Claims related to chronic renal failure and patients who are on dialysis are evaluated against 3M's readmission matrix. If a renal failure admission were found to be both clinically relevant and preventable according to the readmission matrix, then it would be classified as a PPR. However, if the readmission matrix found that this admission for renal failure was not clinically related or was not considered preventable then it will not be part of a PPR chain. Additionally, if a patient came in with renal failure and had no other admissions and was discharged as living then this admission would be counted in the at-risk/denominator population but not the actual/numerator.

5.) Are freestanding rehabilitation facilities included in the PPR rate calculations and payment reductions?

No, both freestanding rehabilitation facilities and LTAH acute care services are excluded from the analysis

6.) Why are Psych Admissions Included?

It is the Department's position that psych admissions should be included when evaluating hospital readmission rates. Of particular note:

- The use of a rate-based approach means that hospital performance is compared to the statewide average performance for each APR-DRG, including psych APR-DRGs. Part of the Department's rate-based approach is to make an additional adjustment to the statewide APR-DRG PPR rate for patient age and presence of a behavioral health secondary diagnosis.

Therefore, the expected rate that a hospital is compared with is adjusted for hospital-specific case mix, severity of illness, age and behavioral health. As such, the Department is not holding hospitals with psych discharges to a higher standard than hospitals that do not deliver this type of care. Hospital PPR rates associated with psych APR-DRGs are compared to the statewide average PPR rates for those same APR-DRGs. Therefore, a hospital is only penalized if its readmission rate for a particular psych APR-DRG is higher than the target rate for that APR-DRG, which is a percentage of the statewide average. All hospitals that provide that service are held to the same standard.

7.) Non-compliance – 3M’s PPR logic does not use diagnosis codes indicating non-compliance as a global exclusion for three main reasons:

- 3M reviewed coding patterns and determined that the codes for non-compliance are not used consistently and therefore cannot be relied on as individual codes.
- It is 3M’s experience that inherent in the non-compliance behavior is an opportunity for improvement of care coordination.
- The development of PPR rates at the APR-DRG level (including a severity of illness designation) means that the increased prevalence of non-compliance for mental health and substance abuse APR-DRGs should be reflected in those APR-DRG-specific rates. The Department’s additional inclusion of an age and behavioral health adjustment factor further supports PPR rates that reflect each hospital’s patient mix.

8.) Why are OB claims Excluded from the Analysis?

The OB claims have been excluded from the analysis because they have very few readmissions due to the type of service that is provided. The PPR software risk adjusts OB claims for a low rate of readmission and therefore have minimal to no impact on a hospital’s “actual” to “target” variance. The goal of this project is to work with hospitals to identify areas where they can reduce their readmissions, therefore OB claims are omitted.