Medicaid Potentially Preventable Readmission (PPR) Rates by Hospital: Beginning 2011

Overview

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Office of Quality and Patient Safety
Bureau of Health Informatics
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Overview

3M™ Potentially Preventable Readmissions (PPRs)

The Potentially Preventable Readmission (PPR) software created by 3M Health Information Systems, identifies hospital admissions clinically related to an initial admission within a specified time period. For this dataset, readmissions were evaluated within a 30-day time period from the discharge date of the initial hospital admission. A PPR may have resulted from a deficiency in the process of care and treatment at the initial hospitalization or lack of post discharge follow up. PPRs are not defined by unrelated events that occur post-discharge, such as admissions for trauma.

Within this dataset, for each hospital, the total number of at risk admissions, the total number of observed PPR chains, the observed PPR rate, the expected PPR rate, and the risk adjusted PPR rate are presented by year.

At Risk Admissions: Some types of admissions are excluded from consideration due to the nature and complexity of the required follow up care, such as most types of major metastatic malignancies, trauma, burns, many types of obstetrical admissions and newborns, as well as patients whose treatment has abruptly ended (patient left against medical advice or patient was transferred to another hospital). After removing these admissions, the remaining admissions were considered to be at risk to be followed by a PPR.

Observed PPR Chains and Rates (30 Day): A PPR chain is a sequence of PPRs that are all clinically-related to the initial admission. A PPR chain may contain an initial admission and only 1 PPR, the most common situation, or may contain multiple PPRs following the initial admission.

The observed PPR rate (per 100 people) is the number of observed PPR chains divided by the number of at risk admissions. Lower rates represent better results.

Expected PPR Chains and Rates (30 Day): A statewide statistical model was developed to estimate the expected number of PPR chains. For all at risk admissions, the patient's age grouping, mental health status (recorded during the initial admission), severity of illness (SOI), and All Patient Refined Diagnosis Related Group (APR DRG) assignment were used to predict the probability that the at risk admission would be followed by a PPR. The expected number of PPR chains is the sum of these probabilities across all at risk admissions in the hospital. This number represents the number of PPR chains we would expect to see in the hospital based on the characteristics of their patients during the at risk admission.

The expected PPR rate (per 100 people) is the number of expected PPR chains divided by the number of at risk admissions.

Risk Adjusted PPR Rate per 100 people: The risk adjusted PPR rate (per 100 people) for each facility was calculated by dividing the observed PPR rate by the expected PPR rate, multiplied by the statewide observed PPR rate. The statewide PPR rate (per 100 people) is calculated by dividing the total number of observed PPR chains at all facilities by the total number of at risk admissions at all facilities for each discharge year separately.

Data Collection Process

The Medicaid data upon which these analyses were performed were extracts of Medicaid fee-for-service claims and encounter data contained within the Office's Data Mart, which is populated on a monthly basis by the NYS eMedNY data warehouse. Only Medicaid Article 28 inpatient discharges during the Calendar Year were used for calculating rates.

De-Identified Data Use Limitations

The dataset contains hospital counts of types of admissions, and observed and expected PPR rates by year. It does not contain data that is protected health information (PHI) under HIPAA. The health information is not individually identifiable.

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