

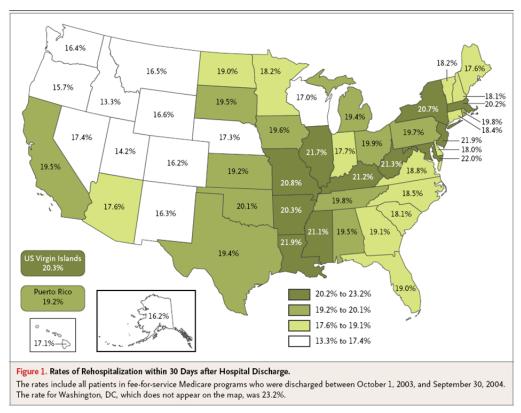
# MN Community Measurement Hospital Readmission and Potentially Avoidable Admissions Impact and Recommendation Document Update May 2011

**Degree of Impact** 

Relevance to Consumers, Employers and Payers Rehospitalization—patient admission to a hospital soon after discharge—is both common and costly. In the majority of situations, hospitalization is necessary and appropriate. However, nearly one in every five elderly patients who are discharged from the hospital is rehospitalized within 30 days. Many of these rehospitalizations are avoidable, and thus suggest a failure in the systems of establishing patients stably and safely in a new setting of care. Avoiding preventable rehospitalizations represents a win-win opportunity for patients and families, payers, health care purchasers, and providers.<sup>1</sup>

A study of over 12 million Medicare fee for service patients<sup>2</sup> discharged in 2003 and 2004, found that 19.6% were readmitted to the hospital within 30 days, and cumulatively 34.0% in 90 days and 56.1% in one year.

- For 50% of patients readmitted within 30 days, there was no bill for a physician visit during that time.
- The rate of re-hospitalization or death within one year of discharge was 68.9% for medical conditions and 53.0% for patients with surgical procedures.
- For patients who returned after a surgery was performed, 70 percent were admitted for a medical condition, such as pneumonia or a urinary tract infection.
- The five most common medical conditions for which hospital readmissions occur are: heart failure, pneumonia, chronic obstructive pulmonary disease, psychoses, and gastrointestinal problems.
- The five most common surgical procedures are: cardiac stent placement, major hip or knee surgery, vascular surgery, major bowel surgery, and other hip or femur surgery.
- The reason for the hospitalization and the length of stay contributed more to readmission than did demographic factors such as age, race, or presence of disability.
- Readmission rates varied greatly from state to state, with the highest five states seeing rates 45 percent higher than the lowest five.
- The estimated cost of unplanned hospital admissions in 2004 accounted for 17.4 billion of the 102.6 billion total hospital payments made by Medicare in that year

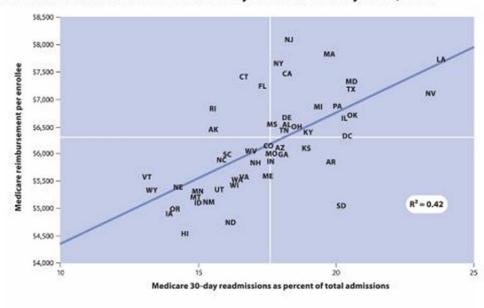


Medicare Reimbursement and 30-Day Readmission by State, 2003<sup>3</sup>

Discharged from an acute care hospital and readmitted to any acute care hospital within 30 days divided by the total number of people who were discharged alive from acute care hospitals. Excluded from the numerator and denominator patients who were transferred on the day of discharge to other acute care hospitals, including patients who were admitted to hospital specialty units, inpatient rehabilitation facilities, and long-term care hospitals (we included all other same-day rehospitalizations in our analyses). We also excluded patients who were rehospitalized for rehabilitation (diagnosis-related group [DRG] 462) within 30 days after discharge.

#### AVOIDABLE HOSPITAL USE AND COSTS

#### Medicare Reimbursement and 30-Day Readmissions by State, 2003



Note: Minnesota is in the lower left quadrant

DATA: Medicare reimbursement – 2003 Dartmouth Atlas of Health Care; Medicare readmissions – 2003 Medicare SAF 5% Inpatient Data SOURCE; Commonwealth Fund State Scorecard on Health System Performance, 2007

#### Degree of Improvability

In 2006, nearly 4.4 million hospital admissions, totaling \$30.8 billion in hospital costs, could have been potentially preventable with timely and effective ambulatory care or adequate patient self-management of the condition. Hospital costs for potentially preventable hospitalizations represented about one of every 10 dollars of total hospital expenditures in 2006. Compared to 2004, there was no substantial change in the total number of admissions or total hospital costs for these potentially preventable conditions.

Congestive heart failure and bacterial pneumonia were the two most common reasons for potentially preventable hospitalizations, accounting for half of the total hospital costs for all preventable hospitalizations.

One in five (18 percent) Medicare admissions was for a potentially preventable condition. In fact, Medicare patients contributed to \$20.1 billion (67 percent) of total hospital costs for potentially preventable hospitalizations among adults.

Hospitalization rates for potentially preventable conditions were highest among residents in poorer communities but lowest among residents from wealthier communities. This disparity was particularly evident for diabetes without complications, where the admission rate in the poorest communities was more than 400 percent higher than the rate in the wealthiest communities. <sup>4</sup>

## Degree of Inclusiveness

Readmission can occur for any hospitalized patient, but underlying health problems can increase the likelihood of readmission. AHRQ's analysis of 2007 Medicaid data demonstrate that Medicaid patients are 70% more likely to be readmitted within 30 days as compared to the privately insured.  $^{5}$ 

Top Five Conditions for 30 Day Readmission:

Medicare Medicaid (excluding maternity)

Heart Failure HIV/AIDS

Pneumonia Blood related disorders

COPD Alcohol or substance abuse

Psychoses Kidney and urinary tract disorders

Gastrointestinal Gall bladder/liver/ pancreatic disease

Potential elements for risk adjustment include insurance product, gender, comorbidities, and past medical history. CMS has defined a sophisticated hierarchical risk adjustment model for remission measures based past medical history and comorbidities using CMS's Condition Codes (CCs) <sup>6</sup>

#### Fit with National, Regional, and Local Priorities

#### **National Priorities Partnership**

One of the six priorities and goals established by the National Priorities Partnership is to ensure patients receive well-coordinated care within and across all healthcare organizations, settings, and levels of care. "All healthcare organizations and their staff will work collaboratively with patients to reduce 30-day readmission rates."

#### Proposed Health Reform Payment Penalties for Readmissions <sup>7</sup>

All base DRG payment amounts (excluding IME, DSH, outliers) in hospitals with excess readmissions are reduced by a factor determined by the level of "excess, preventable readmissions". This is effective for FY 2013 for acute MI. heart failure and pneumonia with the intent of adding COPD, CABG, PTCA and "other vascular" in 2015.

#### **Local Initiatives**

- MMA/ MN Council of Health Plans Readmission Collaborative
- ICSI Readmission Collaborative

### Performance Variation

Data for Medicare patients is published on Hospital Compare. In Minnesota the rates for the following conditions vary among the reporting hospitals

30 Day Readmission Rates (readmit for the same condition) range of MN hospitals		
Minnesota	National	
Heart Attack- 17.8% to 24.0%	15.3% to 29.4%	
Heart Failure- 20.1% to 29.0%	15.9% to 34.4%	
Pneumonia- 15.1% to 22.6%	13.15 to 27.6%	

## Existing Measures at a National and Local Level

#### **Readmission Measures**

Not a wealth of existing measures for either readmission or care coordination. Readmission measures are generally looking at a time frame of 30 days post discharge and have evolved from "readmission for the same condition" to "all-cause readmission".

#### Readmission and

#### **NOF Measures**

#### **Care Coordination**

30-Day All-Cause Risk Standardized Readmission Rate Measures
Hospital-specific 30-day all-cause risk standardized readmission rate following
hospitalization for Medicare beneficiaries aged 65 years or older at the time of index
hospitalization. [Centers for Medicare & Medicaid Services]

Acute Myocardial Infarction NQF # 0505 Heart Failure (principal diagnosis) NQF # 0330 Pneumonia NQF # 0506

All-Cause Readmission Index (risk adjusted) Overall inpatient 30-day hospital readmission rate [United Health Group NQF # 0329]

**Discharge Care Transition Composite** 

This measure scores a hospital on the incidence among its patients during the month following discharge from an inpatient stay having a primary diagnosis of heart failure for three types of events: readmissions, ED visits and evaluation and management (E&M) services. [Centers for Medicare & Medicaid Services]

Acute MI NQF # 0698 Heart Failure NQF # 0699

#### **Hospital Compare**

Consumer website for public reporting measures related to medical conditions or surgical procedures for Medicare beneficiaries (fee-for-service). Can compare up to 3 sites for one measure at a time, rates are explained as a comparison to the national average (above, below, same). For readmission, 30 day all-cause rates for the index hospitalizations for the conditions of Acute MI, Heart Failure and Pneumonia are reported.

#### **NCOA**

Proposed new measure "Plan All-Cause Readmission" within 30 days for HEDIS 2011 for Commercial and Medicare (non-fee-for-service) with a pilot for Medicaid.

Ages 18 - 89, continuously enrolled with an acute inpatient stay during the measurement year. Exclusions include death, disposition against medical advice and maternity discharge diagnosis.

#### **NQMC**

Venous thrombembolism- all hospitalized patients 30 day readmission (ICSI)

Heart Failure; primary diagnosis readmit with HF in 30 days (ICSI)

Hysterectomy, prostatectomy, AMI, Asthma readmission in 1 year (Canada)

TURP, Ophthalmology readmission in 28 days (Australia)

Surgical site infections: abd hyst, colectomy, fem-pop bypass, AAA, C-section, Hip, Knee, CABG in six months (Australia)

#### **Care Coordination Measures**

Newer area of measurement, with room to grow. Many measures are obtained by patient survey based on patient experience. This is a process, so would expect that process measures are used.

#### NQF

Timely start or resumption of home health services NQF # 0526

Percentage of practices functioning as a medical home NQF # 0494

3-Item Care Transition Measure (CTM-3) [University of Colorado Health Sciences Center NQF # 0228] Self-reported survey that measures the quality of preparation for care transitions.

- The hospital staff took my preferences and those of my family or care giver into account in deciding what my health care needs would be when I left the hospital.
- o When I left the hospital, I had a good understanding of the things I was responsible for in managing my health.
- When I left the hospital, I clearly understood the purpose for taking each of my medications.

#### AMA/ PCPI

Reconciled medication list received by discharged patients

Transition record with specified elements received by discharged patients (Inpatient discharges; ED discharges). Elements include: 1) Principal diagnosis and problem list, 2) Medication list (reconciliation) including OTC/ herbals, allergies and drug interactions, 3) Clearly identifies the medical home/transferring coordinating physician/institution and their contact information, 4) Patient's cognitive status, 5) Test results/pending results

Timely transmission of transition record (to facility or primary physician for follow up Care

#### **HCAHPS Survey**

Questions related to care coordination:

During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?

During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?

#### **NQMC**

Member survey: (just a sample of the 14 measures) NCQA Health Plan Survey

- easy to get prescription medicines for their children with chronic conditions.
- easy to get specialized services for their children with chronic conditions.
- experiences in getting needed information for their children with chronic conditions.
- received assistance with coordination of care and services for their children with chronic conditions.
- parents or guardians who reported their experiences with shared decision-making for their enrolled children with chronic conditions.

STEMI or new LBBB who receive primary PCI with ER physician initiating communication with cardiology intervention services within 10 minutes

New occurrence of melanoma who have a treatment plan documented in the chart that

#### Potentially Avoidable Admissions

was communicated to the physician(s) providing continuing care within one month of diagnosis.

Percentage of patients aged 18 years and older with the diagnosis of ischemic stroke or intracranial hemorrhage for whom consideration of rehabilitation services is documented.

Well-child visits in the first 15 months of life: percentage of members who turned 15 months old during the measurement year and who had the following number of well-child visits with a primary care practitioner (PCP) during their first 15 months of life: zero, one, two, three, four, five, six or more.

#### **Potentially Preventable Admissions Measures**

#### **AHRQ**

Prevention Quality Indicators for Ambulatory Sensitive Conditions

These are conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.

Conditions include diabetes, heart failure, hypertension, asthma, COPD, bacterial pneumonia, dehydration, urinary tract infection and perforated appendix.

# Enhance the patient/ provider relationship

Measures that support coordination of care by reducing readmission can only support and enhance the patient-provider relationship. Patients who experience comprehensive transitions and hand-offs are less likely to experience readmission. Patients who are engaged in their care are more likely to have increased satisfaction and a positive relationship with their provider.

#### Considerations for Recommendation

#### Feasibility (resources, barriers, culture)

Hospital readmission is problematic for the patient, hospitals and payers. Most patients do not want to be in the hospital longer than necessary and a return to the hospital with complications is not a desired goal. Hospitals in the past may have benefited somewhat from increased admissions, now stand to receive less reimbursement and potentially avoidable admissions are "costly" for all; recovery for the patient and economic impact.

It is not just a hospital problem, everyone plays a part, but hospitals do have a significant role in the first hand-off following discharge. Many projects are currently underway to improve care transitions and reduce readmission rates: Project RED (Re-engineered Discharge) in Massachusetts, Project BOOST (Better Outcomes for Older Adults through Safer Transitions) in Detroit, the STAAR Initiative (STate Action on Avoidable Rehospitalizations) and CMS's Care Transitions Project.

Three of the six recommendations from the STAAR work to date include areas of measurement:<sup>9</sup>

- Focus on All Readmissions Not Just Heart Failure Readmits
- Form a Cross-Continuum Team
- Start Measuring your all-Cause 30-Day Readmission Rate
- Determine Your Baseline, Then Track Over Time
- Focus First on Improving Current Processes
- Stimulate the Financial Impact of Reducing Readmissions

Barrier to implementation is a technical issue related to the lack of a common patient identifier across hospitals/ care systems. There are a few sources of data, but none solve this problem. An analysis conducted by the Pittsburg Regional Health Initiative found that only 78% of readmitted patients returned to the same facility.<sup>10</sup>

- MHA inpatient data had a medical record number that could link a patient's visits together, but only within a care system.
- HEDIS measure (in development) "Plan All-Cause Readmission" would include Medicare Advantage patients but would <u>not include Medicare fee for service</u> patients. The highest readmission rates are for Medicare patients.
- CMS data is available for Medicare beneficiaries for three conditions on the
- HospitalCompare website.
- Minnesota submits data to the Healthcare Cost and Utilization Project (HCUP), but does not submit patient identifiers (SSN) like some states do. HCUP results are not measures in terms of 30 day readmission, rather the average number of inpatients stays over a two year period; i.e. Medicare is 1.9 inpatient days.
- Need a master patient index for all patients that will allow linking of a patient's
  hospital admissions across facilities and care systems OR need enough information
  to logistically match patients. SSN ideal but can be hazardous, 26 states do submit
  SSN to HCUP. Additional elements could include name, address, county, gender,
  date of birth, medical record number and can be used with probabilistic linkage
  software.

Recommend that measure development around 30 day readmission rates be approved and a group formed to explore technical options for measurement and reporting.

Suggested measures include:

Inpatient 30 day readmission rate (all patients, all conditions)

Select clinical conditions as the index inpatient stay and then 30 day all-cause readmission rate.

Need to consider level of reporting: Hospital and/or Medical group if can be attributed to a provider (attending physician)

Recommendation to explore existence and feasibility of measures for potentially avoidable admissions.

Page | 7

<sup>&</sup>lt;sup>1</sup> Effective Interventions to Reduce Rehospitalizations: A Survey of the Published Evidence. Cambridge, MA: Institute for Healthcare Improvement; Boutwell, A. Hwu, S. 2009

<sup>&</sup>lt;sup>2</sup> Rehospitalizations Among Patients in the Medicare Fee-for-Service Program S. Jencks, M.Williams, E. Coleman NEJM April 2009

<sup>&</sup>lt;sup>3</sup> Medicare Reimbursement 2003 Dartmouth Atlas of Healthcare; Medicare Readmissions 2003 SAF 5% Inpatient data Source: Commonwealth Fund State Scorecard on Health system Performance 2007

<sup>&</sup>lt;sup>4</sup> Jiang, H.J. (AHRQ), Russo, C.A. (Thomson Reuters), and Barrett, M.L. (M.L. Barrett, Inc). Nationwide Frequency and Costs of Potentially Preventable Hospitalizations, 2006. HCUP Statistical Brief #72. April 2009. U.S. Agency for Healthcare Research and Quality, Rockville, MD. http://www.hcup-us.ahrq.gov/reports/statbriefs/sb72.pdf.

<sup>&</sup>lt;sup>5</sup> For 1 in 10 Medicaid Patients, It's Back to the Hospital in Less Than a Month. AHRQ News and Numbers, April 14, 2010. Agency for Healthcare Research and Quality, Rockville, MD.

<sup>&</sup>lt;sup>6</sup>www.hospitalcompare.hhs.gov/Hospital/Static/InformationforProfessionals/

<sup>&</sup>lt;sup>7</sup> American Association of Medical Colleges Health Care Reform Teleconference: Hospital-Related Provisions Patient Protection and Affordable Care Act(as amended by the Health Care and Education Reconciliation Act of 2010)

<sup>&</sup>lt;sup>8</sup> Compare hospitals on heart attack, heart failure and pneumonia www.usatoday.com/news/health/hospitals-graphic.htm

 $<sup>^9</sup> www.patients first ma.org/improving-patient-care/readmissions/state-action-on-avoidable-rehospitalizations-initiative-staar.aspx$ 

<sup>&</sup>lt;sup>10</sup> PRHI Readmission Briefs Pittsburg Regional Health Initiative March 2010