

Hospital Industry Comments and HSCRC Responses to Clinical Assignment and Exclusion Logic of the Maryland Hospital Preventable Readmissions / 3M Potentially Preventable Readmissions (PPRs)

Comments as of October 22nd, 2010 for the November 1st PPR clinical vetting session

COMMENTS AND RESPONSE

1. Clinically Related Readmissions

Comment from Johns Hopkins Health System 9/24/2010: These comments are part of a broader position statement on the HSCRC Readmissions policy proposal

Overview of methodology issues:

While the 3M PPRs are an innovative attempt to determine preventable readmissions by initial APR-DRGs, and associated readmission APR-DRGs, the relationships between these APR-DRGs have not been studied or validated. In this model, readmissions are counted as potentially preventable if they are assumed to be related to the initial diagnosis OR the initial hospitalization. Many diagnoses are linked that in our view cannot be justified as clinically related and would lack face validity among our providers as well as the public. For example, a patient originally admitted for heart failure and then readmitted with “Other Endocrine Disorders” or “Schizophrenia” would be counted as a potentially preventable readmission. In these, as well as numerous other instances, there is no evidence to suggest that there is a reasonable association between the original and subsequent admissions, nor are there outcome studies that define specific interventions which could prevent such a rehospitalization. While the argument exists that all hospitals are judged by the same criteria and therefore no one system is unfairly penalized, we believe the criteria should bear an obvious relationship to care quality.

A preliminary examination of individual readmission encounters reveals oversimplification of the multitude of interrelationships that impact readmissions and influence preventability. In a small sample of cases readmitted in all categories, readmissions were either not related, related but planned, or related but not preventable in 60% of the cases. (Not a statistically significant sample). Examples 1-10 that were provided in the original comment letter are shown in Appendix A.

Discussion:

The fundamental reasons for acute care rehospitalizations include:

- 1. Lack of care coordination (fragmented transitions of care and preparation for self-management)***
- 2. Poor quality of inpatient care (complications of care)***
- 3. Patient characteristics (advanced age, numbers of and kinds of comorbidities, socioeconomic factors, living arrangements, etc)**
- 4. Disease progression (chronic conditions)**
- 5. Failure of the ambulatory environment (lack of community resources, alternative levels of care for an aging population, etc.).**

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Of these, the first two categories are more directly related to the initial hospitalization, and are under more control of systems and processes of the organization. Potentially preventable readmissions logic should be focused in these two areas. In addition, the hospital effect is directly related to the lag time between the index admission and the readmission. Readmissions occurring after 15 days are less likely related to quality of care issues during the index admission. *With any readmission methodology, appropriate risk adjustment, for age, socioeconomic status, access to care, severity of illness, and number and kinds of co-morbid conditions must be used to focus opportunities for improvement.*

Recommendations for initial PPR implementation:

1. Include only the “clinical related categories” that are most likely attributable to the initial admission and can be influenced by improved care coordination and quality processes (i.e. 1, 3, and 5). (This excludes those categories that reflect chronic illness, ambulatory conditions, surgery to address a continuation of a problem, and readmissions for mental illness or substance abuse, 2a, 2b, 4, 6a, 6b, 6c).

- Evaluation of health system data using the PPR software demonstrates that 66 % of readmission chains fall into clinical categories 1, 3 and 5. (Review of encounters in these categories also reveals incongruence with clinical relationships, and questions related to preventability and planned admissions).
- The clinical related categories of 2a, 2b, 6a, 6b, and 6c are reflective of chronic conditions that are within very limited control of the acute care setting especially as organizations have strived to limit hospitalization to the acutely ill.
 - Access to primary care is a significant factor in avoiding preventable hospitalizations related to chronic conditions¹ and Maryland has a growing shortage of primary care physicians. “Maryland is confronting a growing, statewide shortage of practicing primary care and subspecialty physicians, a trend that could lead to much longer waiting times in physician offices while increasing emergency room visits for minor afflictions and ailments.” (MHA and MedChi, 2008).
 - There is a plethora of evidence on the relationship of chronic disease and increased risk of hospitalization from *unmodifiable* causes and “pending an agreed on method to adjust for confounders, global readmission rates are not a useful indicator of quality of care.”^{2,3,4,5}
 - **Examples** of questionable linked diagnoses (per physician faculty review) include: 1) Readmit Diagnosis Hypertension: Index admission Abd. Pain; bipolar disorder, 2) Readmit Diagnosis Connective Tissue Disorders: Index admission Cardiac defibrillation; COPD; CABG; Heart Failure, Other Infectious or Parasitic Diseases, 3) Readmit diagnosis Peptic Ulcer and Gastritis: Index admission Peripheral, Cranial and Autonomic Nervous disorders....

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- Including readmissions for “surgery to address a continuation of a problem,” may inadvertently increase hospital costs as well as patient risk by increasing diagnostic studies and invasive procedures in order to avoid rehospitalization after a “watch and wait” period. Evaluation of the JHHS data reveals up to 57% of the readmissions in clinical category 4 were for “elective” admissions. This does not include those admissions that were “urgent” but also planned or staged.
- The current proposal includes almost all hospital readmissions for mental health and substance abuse as potentially preventable, regardless of cause. Evidence related to clinically effective treatment for psychiatric and substance abuse illnesses lags behind that of the non-behavioral illnesses, e.g. heart failure. Recent large studies demonstrate that current medications for schizophrenia, bipolar disorder and major depression are no more effective than ones used 30 years ago. Most studies suggest that it takes a number of years to get the correct diagnosis, and years more before the patient accepts the treatments being recommended. Only a minority of patients start care with a commitment to stay in care and comply with the healthcare team recommendations. In a recent study of Medicaid beneficiaries with mood disorders, it was found that 24% of patients were rehospitalized after discharge. “Those with co-morbid substance abuse accounted for 36% of all baseline admissions, and half of all readmissions.”⁶
 - The New York Medicaid program has excluded the behavioral health conditions from its adoption of PPRs. We believe these should be excluded from the proposed Maryland program as well.
 - Evaluation of JHHS readmission data using AHRQ co-morbidity software indicates an average 30 day readmission rate for patients with psych and substance abuse co-morbid conditions of 15.9% and 16.4% at JHH and JHBMC respectively. This is a 21% and 34% difference in rates of those patients NOT having a psych or substance abuse co-morbid condition (12.5% and 10.7%). The % of patients at JHH and JHBMC with a psych or substance abuse diagnosis is 18% and 31% respectively.

2. The time interval to measure hospital attribution for readmissions should be no longer than 15 days.

- The literature is disparate on the time interval that most closely correlates to problems evolving from an initial hospitalization. Consensus is that the further the re-admission is from the index hospitalization, the more likely it is attributable to chronic disease progression, socio-economic factors, and failure of the outpatient environment. Hospital readmissions cluster shortly after discharge (1-7 days) and decline thereafter.⁷ Evaluation of the PPR readmission rates for JHHS show that

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66% of the readmissions occur within 15 days of the initial hospitalization, with the largest bolus of readmission being in the 1—7 day period.

3. Eliminate “elective” readmissions as a proxy for “planned.”

- “Elective” admissions are considered to be planned, and should be excluded from the methodology⁹ based on HSCRC “nature” of admission. In the JHHS PPR analysis up to 7% of the readmission chains were “elective.” In the clinical related category #4 (readmissions for a surgical procedure to address a continuation or a recurrence of the problem causing the initial admission), the rate was as high as 57%. This does not include the “urgent” nature of admission which also reflects many cases that are planned.

References provided in the original comment letter can be found in Appendix B

3M Response :

It will always be possible to identify individual cases for which the readmission was a) probably planned or b) probably not preventable (leaving aside issues of how often chart reviewers can agree on preventability). Identifying exceptions to the PPR logic misses the point of a system that is based on rates, and seeks to identify deviation from expected performance based on peer-hospital rates. It is precisely because of the impossibility of specifying all possible rules, exceptions, and details for what constitutes a preventable readmission that the PPR system is built upon the comparison of rates.

The guiding principle in identifying combinations of initial admissions and readmissions that might be potentially preventable was the following:

If a hospital has a rate of a particular kind of readmission that is substantially (and statistically significantly) higher than its peer hospitals, then reasonable clinicians would be concerned that a problem with the quality of patient care existed.

Unless an initial admission – readmission APR DRG pair that constitutes a potentially preventable readmission can be demonstrated to be *typically* planned or unpreventable, then the existing logic, which was the product of an intensive iterative process of clinical hypothesis generation and testing, should stand.

If, as generally accepted, patient mix influences readmission then the relative risk associated with variation in patient mix requires adjustment to standardize hospital comparison. The APR DRG method has been shown to provide a highly effective and reliable risk adjustment mechanism incorporating severity of illness and presence of comorbid conditions.

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The important clinical drivers influencing readmission risk include 1) the reason for the initial admission and 2) patient severity of illness during the initial admission. Severity of illness includes both the severity of the underlying condition responsible for admission as well as the presence of comorbid acute and chronic conditions. While readmission (and admission generally) over a lengthier time horizon is influenced by chronic conditions, acute conditions are the more important drivers of short term readmission.

All Patient Refined Diagnosis Related Groups (APR DRG) are designed to differentiate patients by severity and nature of illness. They classify patients into similar groups differentiated at the time of discharge. The classification system utilizes both chronic and acute diagnoses for classification but is predominantly oriented towards acute descriptions. It was hypothesized early in the development of PPR logic that the APR DRG system could adequately adjust for short term readmissions precisely due to the fact that short term readmission risk is dominated by acute conditions - namely the preceding hospitalization.

Just as comparing APR DRG severity of illness for hospital financing is dependent upon base DRG so is the likelihood of readmission. When we test for validity of the risk adjustment tool we should expect to see that, in general, the rate of readmission upon which adjustment is being based ($IA / (IA + OA)$) is consistent over time. It should also be expected that readmissions increase monotonically within base APR DRGs. Obviously, as with hospital financing, small cell sizes and random events can influence this result but this should be a general finding.

Testing over time, conducted both by 3M and other researchers, across numerous data sets has shown that the likelihood of readmission has been extremely well predicted by APR DRG. In our most recent study utilizing Florida all-payer data, the State level prediction made using rates constructed from 2005 data correlates at 99.76% with the observed readmission pattern in 2007. This once again offers strong support for the use of APR DRG classification as the basis for short term (30 day) readmission risk.

Again, the HSCRC have calculated an R-Sq value of .75 when matching hospital specific readmission rates to the expected rate of readmission generated through indirect rate standardization.

The inclusion of independent patient specific factors, allowed by the clinical categorical model, permits users to enhance the risk-adjustment model without reducing the underlying power and transparency. In both Maryland and Florida data it should be noted that the inclusion of age, mental health and payer adjustments explains only fractional amounts of across hospital variation (at most 3%) indicating that the reason for index admission and the severity of illness at admission are the driving factors in predicting short-term readmission. Additional risk adjustment based on socioeconomic status and age can be incorporated into the basic PPR model if they are determined to have important effects on the results.

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With regard to global readmission rates, we agree that they are not a useful indicator of quality of care. PPR were developed to address this concern by creating highly specific linkages of specific types of admissions and readmissions, and by excluding clinically unrelated re-hospitalizations from the PPR logic.

In response towards a 15 day readmission window, the PPR method allows the user to determine the readmission time interval; this is a state-level policy decision. (We at 3M have advocated a 15-day interval as a first step, with expansion to 30 days when one starts to get into bundled payment retrospectively applied to the primary care setting/outpatient setting as a later possibility).

2. Planned Readmission for APR DRG 173 and 304, clarification of DRG 301

Comment from MHA 10/21/2010: "...submit the following APR DRG pairs as having been identified as 'planned surgical readmissions' by clinical staff. Also, in the written response to APR DRG 301 Hip Replacement as a planned procedure, it was indicated that this pair (initial of 301 and readmission of 301) would be excluded in future PPR versions, but Dr. Goldfield's remarks addressed only hip replacement revisions and did not indicate that any change would be made. Can you please clarify?"

173	Other Vascular Procedures	173	Other Vascular Procedures	Some patients cannot physiologically tolerate enough contrast and require 2 different vascular bypass procedures in order to perform multiple grafting
304	Dorsal and Lumbar Fusion	304	Dorsal and Lumbar Fusion	These fusion procedures may be done in a staged process requiring 2 separate planned admissions

Response:

For APR DRG 173 "Other Vascular Procedures, readmissions in APR DRG 173 for with implant of graft abdominal aorta will be considered a planned readmissions and not assigned as a PPR. The example provided above is not only an unusually rare group of patients but should be randomly distributed between hospitals. Thus this consideration does not merit excluding the

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entire group of readmissions, many of which are potentially preventable and should be adequately addressed in a rate bases system.

For APR DRG 301 Hip Replacement revision, we have re-examined the data for hip replacements APR DRG 301 on the contralateral side and in the next version hip replacements on the contralateral side will be a planned readmission.

For patients with an IA of 301, readmission to 301 WILL be considered a PPR if one of the following procedures is performed during the readmission

0070	Rev hip repl-acetab/fem	Revision of hip replacement, both acetabular and femoral components
0071	Rev hip repl-acetab comp	Revision of hip replacement, acetabular component
0072	Rev hip repl-fem comp	Revision of hip replacement, femoral component
0073	Rev hip repl-liner/head	Revision of hip replacement, acetabular liner and/or femoral head only
8153	Revise hip replacemt NOS	Revision of hip replacement, not otherwise specified

For patients with an IA of 301, readmission to 301 will NOT be considered a PPR if one of the following procedures is performed during the readmission

0085	Resrf hip,total-acet/fem	Resurfacing hip, total, acetabulum and femoral head
0086	Resrf hip,part-fem head	Resurfacing hip, partial, femoral head
0087	Resrf hip,part-acetabulum	Resurfacing hip, partial, acetabulum
8151	Total hip replacement	Total Hip Replacement
8152	Partial hip replacement	Partial Hip Replacement

For APR DRG 304 Dorsal and Lumbar Fusion, based on consult with orthopedists about this situation, staging is rarely done for dorsal and/or lumbar fusions.

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APPENDIX A

Example 1: 12 Year old child with APR-DRG 115 OTHER EAR, NOSE, MOUTH, THROAT & CRANIAL/FACIAL DIAGNOSES and readmitted with APR-DRG 346 CONNECTIVE TISSUE DISORDERS (clinical category 2B). Child has underlying stage IV severe Lupus nephritis; index admission with Sialoadenitis with airway obstruction; readmitted for PLANNED dialysis catheter placement and hemodialysis (after failing courses of Rituximab, and steroids). Questionably **Related, PLANNED; not preventable**

Example 2: 13 year old patient admitted with APR-DRG 201 CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS; readmitted with same diagnosis (clinical category 1). Patient has complex congenital cardiac disease; awaiting heart transplant; recent admission for atrial tachycardia managed by medication. In follow-up clinic appointment, noted continued atrial flutter (although stable), PLANNED readmission for cardioversion. **Related, not preventable.**

Example 3: 67 year old post bilateral Mastectomy patient admitted and readmitted as PLANNED for staged 363 BREAST PROCEDURES EXCEPT MASTECTOMY (free DIEP Flap). (Clinical category 4) **Related, Planned.**

Example 4: 51 year old women with end-stage liver disease (secondary to autoimmune hepatitis), admitted for 362 MASTECTOMY PROCEDURES; and readmitted with 279 HEPATIC COMA & OTHER MAJOR ACUTE LIVER DISORDERS. Pt initially admitted for mastectomy for early stage breast cancer which did not preclude her from being on the liver transplant list. She was at baseline until 2 days prior to admission when she became increasingly lethargic and readmitted with hepatic encephalopathy (rising ammonia). Patient treated and evaluated for causes of decompensation of hepatic disease. (Multiple other co-morbid conditions including venous stasis, recurrent cellulitis, etc.). (Clinical category 2b). **Unrelated; not preventable**

Example 5: 53 year old with multiple end stage organ diseases, including ESRD, congestive hepatopathy, Diabetes, COPD, Hepatitis C; hypoglycemia, (and more), admitted with 460 RENAL FAILURE and readmitted with 194 HEART FAILURE. Patient readmitted after missing 2 hemodialysis sessions, as he felt his “legs didn’t work.” Patient has history of noncompliance and continues to be readmitted due to failure to keep dialysis appointments. (Pt. has had significant family and social services support to understand issues surrounding non-compliance with dialysis). (Clinical category 2a) **Related; not preventable.**

Example 6: 62 year old with long history of bipolar disorders, non-compliance with meds, and multiple co-morbid conditions (COPD, Hypertension, Peptic Ulcer Disease, Diabetes, Morbid Obesity, etc.) admitted for 463 KIDNEY & URINARY TRACT INFECTIONS and readmitted for 753 BIPOLAR DISORDERS. Initially admitted for Acute Renal Failure and UTI. Patient

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had not been taking meds, was depressed and expressed suicidal ideation. Psychiatry consulted; lithium restarted. Patient refused admission/transfer to Psych. Discharged to nieces home. Readmitted 2 days later “floridly thought disordered and psychotic.” (Clinical related category 6a) **Questionably related; not preventable**

Example 7: Patient Undergoes Planned Additional PCI within Month post-NSTEMI. IK is a 78 year old woman with a history of chronic renal insufficiency and coronary artery disease who experienced an NSTEMI and underwent PCI of two vessels on 4/20/09. She had coronary disease in another vessel as well, but this was deferred electively because of her renal dysfunction. On 5/19/09 she returned for elective PCI of the remaining vessel. Admitted with 175 PERCUTANEOUS CARDIOVASCULAR PROCEDURES W/O AMI and readmitted for same APR-DRG. (Clinical category 4, nature of admission emergency due to original planned observation status). **Related; Planned**

Example 8: Patient Has a Bleed While Taking Needed Medications Post-PCI. DM is a 43 year old gentleman who was admitted with a non-ST elevation myocardial infarction (174 PERCUTANEOUS CARDIOVASCULAR PROCEDURES W AMI) and underwent stenting of the culprit lesion on 12/8/09. He was discharged on dual antiplatelet therapy and GI prophylaxis. He presented on 12/24/09 with GI bleeding (254 OTHER DIGESTIVE SYSTEM DIAGNOSES). He was without a GI bleed history (and H Pylori negative). (Clinical category 3.) **Related; Unpreventable**

Example 9: Patient is Readmitted for Depression After Admission for Chest Pain. KH is a 46 year old gentleman with a history of hypertension, sternotomy secondary to gunshot wounds, depression (on therapy), alcohol abuse who presented on 9/14/09 for chest pain (203 CHEST PAIN). He stayed in ED for observation for the day (never admitted to a medical care team) and underwent stress test which was negative for ischemia. He was discharged and then returned to the hospital on 10/14/09 with depression (754 DEPRESSION EXCEPT MAJOR DEPRESSIVE DISORDER) and was discharged on the same depression medications and doses as had been discharged from ED observation. (Clinical category 6a). **Unrelated; Unpreventable**

Example 10 : 80 year old man with APR DRG 464 WOUND DEBRIDEMENT WITH SKIN GRAFT EXCISION for musculoskeletal/connective tissue disease WCC and readmitted with APR DRG 905 SKIN GRAFT FOR INJURIES W/O CC/MCC. Patient has a long standing history of vascular disease, osteoarthritis with total knee replacement, chronic obstructive pulmonary disease, stroke, hypertension, Type II Diabetes Mellitus who had the first of several femoral artery bypass grafts in August 2006. Due to the patient’s chronic and progressive debility, multiple gangrenous toes and secondary infections, decubitus ulcers on the feet and heels, the patient was readmitted ELECTIVELY for amputation and skin grafting. Clinical

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category #5; case is evidence of both disease progression and scheduled procedure and NOT preventable. **Related; Planned; Not Preventable**

Example 11:- 76 year old patient hospitalized for APR DRG – 623 SKIN GRAFT AND WOUND DEBRIDEMENT for endo, nutrit, metabolic disease wcc and readmitted for APR DRG – 240 AMPUTATION FOR CIRCULATORY SYSTEM DISORDER EXCEPT UPPER LIMB AND TOE W/CC . The patient is well known to the hospital with 5 admissions in the past 5 months. The patient is known to have Coronary artery disease, diabetes Mellitus Type II, MI with coronary artery bypass graft, gastrointestinal bleed, Syncope, chronic renal failure. The patient suffered a fall 5 months prior with resulting pneumothorax, cellulitis with open foot wounds that required amputation of the toes and plantar artery bypass grafting. A note from the attending physician....“WILL NEED A TRANS METATARSAL AMPUTATION OF THE FOOT BUT THIS WILL NEED TO BE SCHEDULED FOR A LATER DATE AS THE PATIENT’S ...spouse...IS VERY ILL AND HAS BEEN PLACED IN HOME HOSPICE. Patient discharged home with open areas on foot to be readmitted later for surgery.” The patient was readmitted for definitive, ELECTIVE readmission for below the knee amputation after the spouse expired. Clinical category #5 The readmission was not preventable due to the progression of long standing vascular disease. This case demonstrates the patient’s right to choose when and how they will be treated. **Related; Planned; Not preventable.**

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APPENDIX B

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APPENDIX C

Response presented at the PPR Clinical Vetting Session September 24th 2010

This document provides an overview of the comments received by HSCRC to date as well as general and specific responses to the issues raised as of September 16th, 2010.

COMMENTS AND RESPONSE

1. Adequate Risk Adjustment and Impact of Chronic Conditions

Comment from Hopkins 8/31/2010 : “Provided a few articles, but the one of real interest is by Friedman. We discovered in our analysis, that JHBMC had 20% more chronic conditions in their index population than JHH who had a higher SOI. (The chronic conditions were measured using the AHRQ co-morbidity software). One problem with the PPRs (other than the questionable relationships), is that many are not preventable and without a risk method, the measure cannot be standardized. In the case of using SOI....this is a utilization indicator and does not reflect the numbers of chronic conditions in the severity levels. Higher SOIs are more reflective of major organ dysfunction. I would be happy to have a more in-depth discussion if you are interested. (This is the reason that STaar is using an all cause readmission rate with some exclusionary criteria).”

Response :

A. Number of chronic conditions as a predictor of the risk of readmission

There is no evidence that the number of chronic conditions is the best predictor of short-term readmissions, and the Friedman paper presents no such evidence. The Friedman paper certainly demonstrates that a greater number of chronic conditions is associated with an increasing probability of readmissions over an average follow-up period of 6 months. It should be emphasized that PPRs examine 15 and 30-day readmissions rates, which the Friedman paper does not address as it focuses on readmissions over a year’s period of time.

Furthermore, the Friedman paper found that APR DRG SOI levels of 3 and 4 were strongly associated with readmissions and total costs. This is hardly evidence of the superiority of a simple count of chronic conditions for risk adjustment.

B. Adequacy of the PPR risk-adjustment methodology

The PPR risk-adjustment methodology, using APR DRG SOI classes, actually addresses the presence of chronic conditions substantially.

First of all, chronic conditions are embedded throughout the SOI logic, and the interaction of chronic conditions with acute illness drives the SOI class assignment. The SOI logic makes

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explicit provision for the fact that not all chronic conditions are the same, and that the impact of chronic conditions may differ depending on the reason for admission.

Second, certain chronic conditions, particularly major and metastatic malignancies, cause the patient to be excluded from the PPR logic.

Third, the proposed Maryland readmissions policy includes further adjustments for age over 65, the presence of a major mental health condition, and the percentage of Medicaid patients. One of the advantages of a clinical categorical model is that these types of adjustments can be applied independently and transparently, instead of being buried in a regression model.

Fourth, there is considerable data on the effectiveness of SOI for risk-adjusting readmission rates that allows fair comparison of PPR rates across hospitals. At a minimum, the monotonic increases in readmission rates with increasing SOI class in nearly all DRGs provides powerful evidence of predictive power.

The use of a PPR rate specific to each APR DRG / SOI combination has been shown in Maryland and other states to “explain” a great deal of variation in readmission rates across hospitals. The HSCRC have calculated an R-Sq value of .75 when matching hospital specific readmission rates to the expected rate of readmission generated through indirect rate standardization.

The inclusion of independent patient specific factors, allowed by the clinical categorical model, permits users to enhance the risk-adjustment model without reducing the underlying power and transparency. In both Maryland and Florida data it should be noted that the inclusion of age, mental health and payer adjustments explains only fractional amounts of across hospital variation (at most 3%) indicating that the reason for index admission is the driving factor in predicting short-term readmission.

C. Many of the PPRs are not preventable

One of the strengths of the PPR logic is that it recognizes that many individual readmissions are not necessarily preventable (or that it is difficult to get consensus on the preventability of individual cases). The near impossibility of obtaining consensus about which individual readmissions should be considered preventable is the reason that the PPR methodology focuses on types of “potentially” preventable readmissions in order to compare risk-adjusted rates across hospitals. Further, the PPR logic includes the concept of chains, so that patients who are admitted repeatedly for a chronic illness such as sickle cell disease will not cause a hospital to have an unduly high readmission rate.

A secondary concern is the policy issue of whether readmissions for deterioration of chronic conditions soon after discharge should be considered in the appraisal of hospital quality of care. The developers of PPR believe that readmissions that could be related to inadequate post-discharge care should as a general rule be considered markers of hospital performance.

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2. Kidney Transplantation

Comment from MHA PPR Clinical Workgroup 9/15/2010 : Currently, Kidney Transplant (APR DRG 440) as an initial admission has 107 clinically related readmission APR DRGs associated with it. By contrast, Liver/Intestine Transplant (APR DRG 001), Heart/Lung Transplant (APR DRG 002), Bone Marrow Transplant (APR DRG 003), and Pancreas Transplant (APR DRG 006) have between 5 and 8 associated clinically related readmission APR DRGs which are specific to direct complications of the transplant. Under the current methodology, clinically related readmissions for the initial admission of kidney transplant include APR DRGs such as: Asthma, Eating Disorders, Chronic Obstructive Pulmonary Disease (COPD), Migraine, and Cardiomyopathy. It is inappropriate that the associated list of readmissions for the initial admission of kidney transplant is so much more inclusive than the list of clinically related readmissions for the other organ transplants. The reasons why patients with transplants having a higher risk of readmission – major surgery, major illness preceding surgery, and most importantly, long-term immunosuppression – are present for all organ transplants. In a study of kidney-pancreas transplants, the most common causes of readmission were bleeding, thrombosis and infections.¹ Given the complexity of the transplantation and the subsequent immunosuppression, it is inappropriate to consider these readmissions preventable. We recommend that the list of clinically related readmissions for the initial admission of kidney transplant should reflect only those APR DRGs that are clearly related to a complication of the transplant:

- 004 ECMO or trach with MV with extensive procedure
- 005 Trach with MV without extensive procedure
- 440 Kidney transplant
- 791 O.R. procedure - other complications of treatment
- 813 Other complications of treatment

Response : Kidney transplants are established operations and are performed in many institutions. Many patients with kidney transplants have diabetes as the causative factor. In one study,, diabetes-related readmissions within one year post-transplant were 7% for patients in the case management, as compared to a 93% diabetes-related readmission rate for patients not enrolled. Another study documented significant differences in 30 day readmission rates across hospitals using Medicare data and proposed a collaborative to address the challenge. Since the discharge APR DRG and SOI is used for risk adjustment (not the admission SOI that is used for PPCs), the methodology takes into account the vast majority of secondary diagnoses that indicate, for example, immune compromise.

Reference:

Hospital Industry Comments and HSCRC Responses to Clinical Assignment and Exclusion Logic of the Maryland Hospital Preventable Readmissions / 3M Potentially Preventable Readmissions (PPRs)

Patsy Obayashi, Ms, Rd, Cde Anna Simos, Mph, Cde A Multi-Disciplinary Transplant Diabetes Education And Self-Care Program Improves Glycemic Control And Decreases Diabetes-Related Hospital Readmissions, Stanford Ca

Moghani Lankarani M, Noorbala Mh, Assari S. Causes Of Re-Hospitalization In Different Post Kidney Transplantation Periods. Ann Transplant. 2009 Oct-Dec;14(4):14-9.

3. Ventilator Dependence

Comment from MHA PPR Clinical Workgroup 9/15/2010 : In review of hospital cases, patients dependent on a ventilator are often readmitted for conditions that are out of the control of the discharging hospital. Appropriate ventilator care and prophylaxis are dependent on the facility to which the patient is discharged. Ventilator dependent patients with a tracheostomy may require regular changing of the tracheostomy cannula, which is a planned readmission to the hospital. We recommend that patients with the ICD-9 code V46.11 be excluded from the PPR methodology.

Response : Tracheostomy cannulas have to be changed about every 3 months, but it doesn't require inpatient admission, and can be done in the outpatient setting. The only time inpatient admission would be required is if the patient has an extra long tracheostomy cannula, which is necessary in maybe 5% of patients.

4. End-Stage Chronic Conditions

Comment from MHA PPR Clinical Workgroup 9/15/2010 : Patients with End Stage Renal Disease (ICD-9 code 585.6) have been found to have higher than average readmissions. Readmissions related to cardiac, renal and volume issues in these patients are not preventable due to the nature of the disease and the necessity of dialysis. We recommend that patients with the ICD-9 code of 585.6 be excluded from the following readmission APR DRGs:

- 194 Heart failure
- 197 Peripheral & other vascular disorders
- 199 Hypertension
- 200 Card structure& valve disorders
- 204 Syncope & collapse
- 205 Cardiomyopathy
- 207 Other circulatory system disorder
- 422 Hypovolemia/related electrolyte disorders
- 424 Other endocrine disorders
- 425 Electrolyte disorders except hypovolemia
- 447 Other kidney/urinary tract & related procedures
- 460 Renal failure

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- 462 Nephritis & nephrosis
- 463 Kidney/urinary tract infect
- 465 Urinary stones & acquired upper urinary tract obstruction
- 466 Malfunction/reaction/complication of GU device/procedure
- 468 Other kidney/urinary tract diagnosis

Response: End stage chronic kidney disease patients do have a high readmission rate; the actual to expected SOI using APR-DRGs discharge SOI takes this into account. The table below shows the expected PPR rate for APR DRG 460 Renal Failure from the statewide Florida 2007 dataset. The SOI levels help ensure fair comparisons among hospitals; therefore a higher readmission rate may indicate a problem with quality of care of end stage renal disease patients.

AprDrg v27.0	AprSoi v27.0	Initial Discharge with PPR (Numerator)	At Risk for PPR (Denominator)	PPR Rate
460	1	31	299	0.1037
460	2	199	1,583	0.1257
460	3	804	5,995	0.1341
460	4	100	473	0.2114

5. Planned Readmissions

Comment from MHA PPR Clinical Workgroup 9/15/2010 : During hospital case review, the following APR DRG pairs were found to be planned readmissions for subsequent surgical intervention. We recommend that these readmission APR DRGs be removed as ‘clinically related’ from the initial admission APR DRGs.

Initial Admission APR DRG	Description	Readmission APR DRG	Description	Reason
301	Hip joint replacement	301	Hip joint replacement	Planned hip replacement on contralateral hip
022	Ventricular Shunt Procedures	022	Ventricular Shunt Procedures	Planned shunt revisions/adjustments

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Comment from LifeBridge Health 9/16/2010: Are planned re-admissions for different sides for hip and knee replacement excluded in the expected calculation rate? For hospitals with acute rehab units, is the rehab patient factored in the hospital's expected calculation rate for the specific APR-DRG? The severity of illness index does not necessarily address this scenario. In Maryland, acute rehab units in an acute hospital do not have a different hospital identifier.

Example: Patient is posted for both a right and left hip replacement 10 days apart. The patient is admitted for left hip replacement and discharged from the acute medical hospital. The patient is admitted to our acute rehab unit (1st readmission) for 4-5 days. The patient is electively readmitted to the acute medical hospital for right hip replacement (2nd readmission) is discharged from acute medical hospital. The same patient is readmitted to acute rehab (3rd readmission) for rehab of right hip and continuation of left hip.

Response: A knee replacement (APR DRG 302) followed by an other knee replacement (APR DRG 302) is considered a planned readmission, thus will not impact the PPR rate. We have re-examined the data for hip replacements on the contralateral side and in the next version hip replacements on the contralateral side will be a planned readmission.

Admissions to rehab units are not considered PPRs in the way that the current proposed Maryland HSCRC policy. If the first admission for the hip replacement has coded the patient discharge status of 62 “discharge to rehab unit/facility”, then the subsequent discharge (if the admission date is within a day of the prior hospitalization discharge date) will be considered a non-event and be ignored by the PPR methodology. For more information on this methodology, see the PPR definition manual, PPR overview guide, and PPR training material provided to the HSCRC.

With respect to ventricular shunt procedures, we have discussed this issue with neurosurgeons for the adult population and pediatricians have done chart reviews and planned ventricular shunt procedures are less than 10% of the readmission population.

6. Sickle Cell Anemia

Comment from MHA PPR Clinical Workgroup 9/15/2010 – Patients with Sickle Cell Anemia have a lifelong condition requiring frequent medical attention. Similar to HIV/AIDS, Sickle Cell Anemia is very difficult to manage in the ambulatory setting and often requires regular readmission to the hospital to prevent further morbidity or mortality. Sickle cell crises and other complications are not necessarily preventable through ambulatory care interventions and during a crisis, patients require hospitalization.¹ We recommend that the APR DRG for Sickle Cell Anemia Crisis (662) be excluded as both an initial admission and a clinically related

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readmission. Admissions in APR DRG 662 are not equally distributed throughout the state. Six hospitals treat almost 50% of the sickle cell admissions in the state (see table below). While in the proposed methodology, these hospitals will have an increased expected value due to having cases in these DRG cells, the expectation for reduction of these readmissions is very low.

Comment from LifeBridge Health 9/16/2010 : APR-DRG 662-Sickle Cell Anemia Crisis Patients with Sickle Cell need frequent hospitalization or Emergency care.

- Who can predict how much time should pass between admission with a painful sickle cell crisis?
- Unintended consequences of unrelieved pain-Quality of life & Symptom burden
- The harmful effects of unrelieved pain are many & involve multiple symptoms and all body systems
- Access to care for adequate pain management-not all Maryland hospitals provide this service
- Supportive care requires hospitalization to prevent morbidity & mortality, such as fluid & electrolytes management, oxygen therapy and titration of pain

Response: With respect to sickle cell crises and readmissions pertaining to pain: The National Association of Children's Hospitals (NACHRI) and the Centers for Medicare and Medicaid Services (CMS) recently introduced 30-day hospital readmission rate as a quality care indicator in children with sickle cell disease (SCD). A recently published study, among many, documented that a multi-modal intervention was successful in decreasing 30-day hospital readmission rate for children with SCD and pain. Provider education was the most important component of the multi-modal intervention. Again, the PPR logic includes the concept of chains, so that patients who are admitted repeatedly for a chronic illness such as sickle cell disease will not cause a hospital to have an unduly high readmission rate. Also, hospitals admitting sickle cell patients will be compared with other hospitals admitting sickle cell patients.

Reference:

Frei-Jones MJ, Field JJ, DeBaun MR. Multi modal intervention and prospective implementation of standardized sickle cell pain admission orders Pediatr Blood Cancer. 2009 Sep;53(3):401-5

7. Multiple Sclerosis/Other Demyelin D

Hospital Industry Comments and HSCRC Responses to Clinical Assignment and Exclusion Logic of the Maryland Hospital Preventable Readmissions / 3M Potentially Preventable Readmissions (PPRs)

Comment from LifeBridge Health 9/16/2010 : The implications of prolonged and yet necessary corticosteroid treatment, placing patient at high risk for readmission, complication and or mortality.

Response: Multiple Sclerosis is treated no differently from any other chronic illness in the PPR logic. The clinical course of illness of this disease waxes and wanes and coordinated care can result in decreased readmissions. The PPR logic includes the concept of chains, so patients who are admitted repeatedly will not cause a hospital to have an unduly high readmission rate.

8. Admission Source

Comment from MHA PPR Clinical Workgroup 9/15/2010 : Patients being admitted (or readmitted) to the hospital directly from a long term care facility, such as a skilled nursing facility, chronic hospital, or long term acute care facility are generally being admitted or transferred for an admission/readmission for a complication or disease exacerbation that occurred in the long term care facility. The complication or exacerbation of disease that necessitated the unplanned readmission to the hospital is likely a direct result of care provided at the long term care facility, not as a result of discharge planning or care management from the hospital. The care of the patient in the long term facility is not under the control of the hospital, nor under control of the patient. We recommend that patients with admission sources of 5 (Transfer from Skilled Nursing Facility) and 6 (Transfer from Another Healthcare Institution) be excluded as readmissions.

Response: There is excellent data to support the hypothesis that increased coordination between acute care hospitals and long term care facilities can result in decreased readmissions. According to SNF interviewees in one study that in fact occurred, in part, in Maryland, the most successful communities create higher levels of interaction between SNFs and hospitals, such as the Suburban Health System of Maryland's hospital-SNF transition of care task force; however, many institutions have integrated smaller intra-facility policy changes to facilitate safer transitions. As this same document pointed out it is important to "Incentivize SNF transition colleagues in community to attend length of stay meetings. In the conclusion of this document, "For their part, hospitals can do better in finding ways to increase communication with SNFs—perhaps through more on-site engagement— as a way to give SNFs a clearer picture of patient status and need in the post acute period. For SNFs and hospitals, one of the great challenges moving forward could be in working locally with physicians and staff members to ensure smooth transitions between shifts and greater scrutiny of patients preadmission."

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Reference:

Jennifer Tjia, MD, MSCE1, Alice Bonner, PhD, RN2, Becky A. Briesacher, PhD1, Sarah McGee, MD, MPH1, Eileen Terrill, PhD, ANP-BC2, and Kathleen Miller, EdD, RN Medication Discrepancies upon Hospital to Skilled Nursing Facility Transitions J Gen Intern Med (24)5:630–5

Anne Pedersen, RN; Michael Yanuck, MD; Lynn Veith, RN; Bryan Cote, MA Reducing 30-Day Hospital Readmissions. Case Management Monthly Page 15

9. Type of Admission

Comment from LifeBridge Health 9/16/2010: How will the type of admission such as Urgent, Elective, or Emergent be integrated into the PPR methodology?

- APR-DRG 361-Skin graft-skin & subcu dx-patients undergo these procedures as elective, staged procedures
- APR-DRG 380-Skin Ulcers-Patient with a resurfaced pressure ulcer in the hospital is discharged to skilled or nursing home and returns for now opened pressure ulcer-should be excluded from the PPR?
- APR-DRG 510-Pelvic Evisceration, Radical Hysterectomy & Other Radical Gyn Procs: Patient is referred to a hospital that can provide this complex service and returns to the same hospital, not all hospitals in Maryland offer this service-should be excluded from the PPR?
- Medical Oncology patient admitted for Chemotherapy-would this be counted as a PPR regardless of the type of admission?

Response :

- APR DRG 361 - Skin graft-skin & subcu dx-patients : We are in the process of re-examining this data and will respond more fully as soon as this re-examination is completed.
- APR DRG 380 - Skin Ulcers- Skin and subcutaneous procedures: If a patient is hospitalized for a skin ulcer and then hospitalized for a skin procedure that procedure does not count as a readmission.
- APR DRG 510- Evisceration, Radical Hysterectomy & Other Radical Gyn Procs - This should not be an excluded category. As is true for any APR-DRG, and in this case, for major surgeries, there are four levels of severity of illness. We would not want to exclude

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common causes for readmissions such as wound infections. The table below shows the expected PPR rate for APR DRG 510 from the statewide Florida 2007 dataset.

AprDrg v27.0	AprSoi v27.0	Initial Discharge with PPR Numerator	At Risk for PPR Denominator	PPR Rate
510	1	20	348	0.0575
510	2	25	273	0.0916
510	3	7	62	0.1129
510	4	9	22	0.4091

- APR DRG 693 - Patients admitted for Chemotherapy are globally excluded from the PPR methodology

10. Major Mental Health Secondary Conditions

Comment from MHA PPR Clinical Workgroup 9/15/2010 : We recommend that the 3M list of major mental health diagnoses be expanded because many hospitalized patients do not require or appropriately do not receive a consultation by a member of the psychiatric team, and thus may not have specific psychiatric diagnoses listed in their medical record. For example, the medical attending may document "schizophrenia" rather than the more specific "schizophrenia, paranoid type, chronic"; "depression" rather than "major depression, recurrent, mild" or "dysthymia"; or "anxiety" rather than "panic disorder without agoraphobia" or "generalized anxiety disorder." These conditions do reflect an increased risk of psychiatric morbidity, including readmission, even if the full formal diagnosis is not documented in the record. This expanded list of mental health diagnoses is needed to adequately capture the intent of having such a list in the first place.

Response : There is a whole variety of codes in the list provided by the MHA of which many are quite minor in nature; thus it is important that institutions code the truly severe mental health conditions for institutions to obtain the maximum adjustment

With respect to major mental health and substance abuse disorders: We would like to emphasize the following several points:

1. Readmissions for mental health conditions are treated no differently, from a preventability point of view than any other chronic condition such as diabetes.

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2. That is, all patients who have diabetes and are readmitted for virtually any medical condition (e.g. CHF) is considered to have had a preventable readmission
3. See iv below. The actual to expected calculation is different for Mental Health/ Substance Abuse Services
 - i. The Actual to expected calculation is adjusted for the presence/absence of principal and/or secondary diagnoses of MH/SA.
 - ii. The reason is that at the historically higher rates for readmissions for patient with mental health conditions in either the initial admission and/or readmission
 - ii. Those institutions that take on additional MH/SA will have greater protection as the separate A/E computation takes into account the higher rates of readmission for patients with significant MH/SA diseases
 - iii. The concept of “chains” of patients is important as it protects the institution who disproportionately have patients who are frequently readmitted.
4. There is significant research data to indicate that improvement in readmission rates are possible. In addition to an evidence based summary that we are preparing with a nationally known group of psychiatrists / substance abuse specialists that will be submitted for publication in the peer reviewed literature we would make the following points:
 - i. With respect to substance abuse services, Mark et al in 2006 in the Journal of Substance Abuse Treatment documented that Engaging patients in treatment following detoxification may reduce readmission rates and time to readmission
 - ii. A variety of different therapeutic approaches including those pioneered by Lehman (Assertive community treatment), Drake (Shared decision making), and, among others, case management services has documented decreased initial and readmission hospitalizations
 - iii. Recently, Garnick et al in the Journal of Substance Abuse Treatment in their summary of recently implemented/ recommended process and outcomes measures for substance abuse services: ”Finally, examining costs in relation to the Washington Circle measures will reveal the business case for using these measures. If reporting initiation and engagement results leads to targeted quality improvement efforts and to subsequent improvements in client outcomes, then there is the potential for savings not only in the cost of reduced readmission to substance abuse treatment but also reduced criminal justice, unemployment or other related costs.”
 - iv. In a recent paper published in the Journal of Rural Health from the Mayo Clinic, a multifaceted inpatient psychiatry approach compared to usual care resulted in a lower readmission rate.

References:

Hospital Industry Comments and HSCRC Responses to Clinical Assignment and Exclusion Logic of the Maryland Hospital Preventable Readmissions / 3M Potentially Preventable Readmissions (PPRs)

Drake RE, Deegan PE, Rapp C The promise of shared decision making in mental health. Psychiatr Rehabil J. 2010 Summer;34(1):7-13.

Lang TP, Rohrer JE, Rioux PA. Multifaceted inpatient psychiatry approach to reducing readmissions: a pilot study. J Rural Health. 2009 Summer;25(3):309-13.

Lehman AF, Postrado LT, Roth D, McNary SW, Goldman, HH: An evaluation of continuity of care, case management, and client outcomes in the Robert Wood Johnson Program on Chronic Mental Illness, *The Milbank Quarterly*, 1994, 72:105-122.

Mark TL, Vandivort-Warren R, Montejano LB. Factors affecting detoxification readmission: analysis of public sector data from three states. J Subst Abuse Treat. 2006 Dec;31(4):439-45.

APPENDIX D

Response presented at the PPR Clinical Vetting Session May 3rd 2010

Comments on PPR Clinical Issues

From the MHA PPR Clinical Workgroup

4/19/10

Hospital Industry Comments and HSCRC Responses to Clinical Assignment and Exclusion Logic of the Maryland Hospital Preventable Readmissions / 3M Potentially Preventable Readmissions (PPRs)

Item 1: Planned versus Unplanned Readmissions

The workgroup recognizes that certain APR DRGs are not considered clinically related due to the potential that they are planned readmissions, such as a knee replacement followed by another knee replacement, but this does not take into account all scenarios of planned readmissions. It is recommended that 3M and HSCRC use the “Nature of Admission” field value of “Scheduled” as an exclusion for a readmission.

Item 1: 3M Response

The PPR methodology uses data elements contained on standard administrative data uniformly collected and consistently applied in order to reduce the potential for introducing a lot of variability into the method. Since there are standard data elements consistently applied to identify planned readmissions, 3M HIS has worked with panels of clinicians for identifying planned readmission and have incorporated logic into PPR v27. For example, the knee replacement followed by knee replacement as well as the following combinations of initial admissions followed by a readmission will be designated as a planned readmission and NOT considered a potentially preventable readmission (PPR).

IA	IA Description	RA	RA Description
190	Acute myocardial infarct	165	Coronary bypass w cath/percut
191	Card cathet exc ischemia	165	Coronary bypass w cath/percut
198	Angina pect & coronary ath	166	Coronary bypass wo cath/percut
191	Card cathet exc ischemia	175	Percut cardiovasc wo AMI
190	Acute myocardial infarct	191	Card cathet exc ischemia
241	Peptic ulcer & gastritis	220	Maj stom, esoph, duod proc
247	Intestinal obstruction	220	Maj stom, esoph, duod proc
251	Abdominal pain	262	Cholecystectomy exc lap
284	Dis gallbladder & biliary trct	262	Cholecystectomy exc lap
340	Fracture of femur	301	Hip joint replacement
347	Back & neck dis, fract & inj	310	Intervertebral disc excision

Additional specific recognition for planned readmissions will be introduced in version 28 (Oct 2010) as an exclusion reason code output variable.

Item 2: Chronic Conditions as Readmissions

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‘Ambulatory care sensitive conditions as designated by the AHRQ’ and ‘All other readmissions for a chronic problem that may be related to care either during or after the initial admission’ are considered to be clinically-related categories. As an example, if a patient is admitted for a hip replacement and is readmitted for asthma, heart failure or diabetes, that is considered a clinically-related readmission. Even if a hospital prescribes an appropriate outpatient regimen at discharge, the hospital cannot control the patient’s behavior related to these chronic conditions. In a policy program that is geared towards hospitals targeting specific improvement processes, it will be very difficult for a hospital to develop process improvements around preventing readmissions for chronic conditions. The workgroup is also requesting clinical evidence to support that these types of readmissions are in fact preventable. It is recommended that the clinically-related categories of 2A and 2B are removed.

Item 2: 3M Response

While it is true that patient behavior is very often beyond the discharging hospital’s control, there are a number of other factors that influence readmissions for deterioration of a chronic condition that should be considered the obligations of the hospital, including communication with the patient about medications and treatments at the time of discharge, ensuring that the patient’s medications are updated and appropriate, arranging prompt and appropriate follow-up by the primary care team, communication with the primary care team, and communication with the patient’s family and caregivers.

It is also important to remember that a hospital is not penalized simply because a patient was readmitted for a chronic condition that was unrelated to the reason for the initial admission (readmissions for chronic conditions are inevitable); the hospital is scrutinized or penalized only if its risk-adjusted rates of readmissions for chronic conditions are statistically significantly higher than those of comparable hospitals.

Item 3: Mental Health and Substance Abuse Conditions as Initial Admissions or Readmissions

The clinically-related categories of 6A, 6B and 6C all relate to mental health and substance abuse conditions as the initial admission, readmission or both the initial admission and readmission. These types of patients are unique in both their access to inpatient and outpatient care and their treatment course. The mental health and substance abuse APR DRGs are considered clinically-related readmissions to all but 6 APR DRG initial admissions. It does not seem clinically logical that an admission for a knee replacement is clinically related to a readmission for cocaine abuse, eating disorders, or alcoholic liver disease. This logic would require screening of nearly every patient admitted for mental health or substance abuse potential. The workgroup would also like to request the clinical evidence to support that these types of readmissions are in fact preventable.

Since access to care in both the inpatient and outpatient settings for these types of patients appears to be an ongoing issue, an unintended consequence of this policy may be for hospitals to

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want to transfer patients with these conditions to another hospital to avoid a potentially preventable readmission in this category. It is recommended that the clinically-related categories of 6A, 6B and 6C be removed.

Item 3: 3M Response

We created a separate category for mental health and substance abuse readmissions precisely because there is uncertainty and disagreement about the preventability of these types of readmissions. In circumstances where there is inadequate funding for MH and SA care, there could be considerable variability in readmission rates across hospitals. This variability may be beyond the control of poorly performing hospitals, and more dependent on the socio-economic status of their patients. On the other hand, if the systems of care for MH and SA are adequately funded and resources are equitably distributed, it would be more appropriate to use readmission rates for a rewards-based performance measure.

Analyses have demonstrated that the probability of a readmission is related to the reason for admission, severity of illness, the presence of comorbid mental health or substance abuse problems, and the patient's age at the time of the initial admission. Risk adjustment for each of these factors is therefore necessary in order to create fair evaluations of readmission rates. The HSCRC proposed MHPR policy currently includes PPR rates to be risk adjusted by the reason for admission and patient severity of illness at the time of the initial admission. The proposed MHPR policy further recommends risk adjusting for the presence of comorbid mental health or substance abuse problems and the patient age.

Ultimately, the decision about whether to have these types of readmissions affect payment is a policy decision for the state of Maryland.

Item 4: Interval for Readmission

While the clinical workgroup realizes that the time interval used for analysis is a policy decision, it is an issue for clinical vetting as well. From a clinical and quality standpoint, many hospitals focus on 15-day readmissions for process improvement. Readmissions greater than 15 days often represent non-preventable scenarios, patient compliance and access to ambulatory care issues that are not within the hospital's immediate control at the time of discharge. The clinical workgroup requests the clinical evidence to support the choice of 30 days as the readmission interval. It is recommended that the readmission interval be set at 15 days.

Item 4: 3M Response

The PPR method allows the user to determine the readmission time interval; this is a state-level policy decision. (We at 3M have advocated a 15-day interval as a first step, with expansion to 30 days when one starts to get into bundled payment retrospectively applied to the primary care setting/outpatient setting as a later possibility).