Ohio medicaid QUALITY MONITOR

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Ohio Medicaid Quality of Care Findings

Permedion, as the utilization review entity for Ohio Medicaid, performs a semi-annual analysis of quality concerns that have been identified through retrospective medical record review. Every medical record is reviewed for quality according to generally accepted standards of care. The most recent analysis encompassed State Fiscal Year (SFY) 2005 (July 2004 - June 2005). The reporting period takes into account the lag time involved in the investigation and final determination of the quality issue. The report includes quality concerns for each hospital, as well as hospital peer groups. The peer groups are designated by ODJFS for reporting purposes.

When a potential quality issue is identified by a nurse reviewer, an Ohio-based physician determines the severity level. Quality concerns are categorized into three severity levels:

Level 1 - Defined as medical mismanagement without the potential for significant adverse effects to the patient. These concerns are simply trended or monitored. The provider is not notified of these concerns and no further action is taken.

Level 2 - Defined as medical mismanagement with the potential for significant adverse effects to the patient. These concerns are confirmed quality issues as identified by a physician reviewer.

Level 3 - Defined as medical mismanagement with significant adverse effects to the patient. These concerns are also confirmed by physician review.

The overall percentage of *Level 1* quality concerns was down significantly from SFY 2004. Four peer groups had a slight increase in their trended quality concern rate from SFY 2004 to SFY 2005, and five had a slight decrease.

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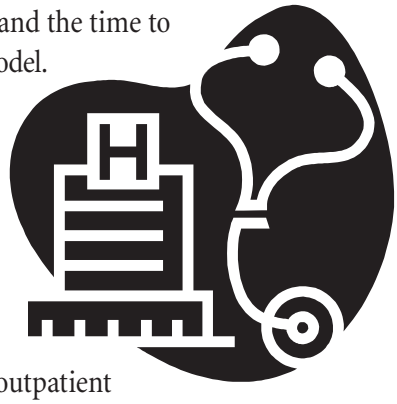
PERMEDION

Study Examines Hospital Admissions and Readmissions

The frequency, expense, and possible quality of care aspects of hospital readmissions make it important to identify patients who are at risk of unplanned returns to hospitals. In collaboration with the Ohio Department of Job and Family Services (ODJFS), Permedion developed and coordinated the *Admissions/Readmissions Study* to recognize factors that may influence the readmission of Ohio Medicaid patients.

As part of the study, a survival analysis model was constructed. Survival analysis is a statistical method used to identify variables that have a significant impact on the amount of time that passes before an event occurs. The relationship between these variables and the time to the event is expressed in a mathematical model. In our study, the variables of interest were patient and hospital characteristics, and the event of interest was readmission to the hospital within 30 days.



The data was collected and analyzed to determine demographic patient profiles, facility characteristics, admission source, discharge status, hospital lengths of stay, outpatient visits between discharge and readmission, and costs. Documented patient compliance with discharge instructions and CMS discharge quality screens (Institute of Medicine, 1999) were used to evaluate the appropriateness of discharge planning and medical stability of the patient at the time of discharge.

The population and sample were divided into two separate groups, children (0-16 years) and adults (17-64 years). There were 63,696 inpatient admissions eligible for inclusion in the study. Each group's data was analyzed and reported separately. The randomized sampling permitted the results of each group to be generalized to all Medicaid patients in the respective age groups with an admission during SFY 2003. A random sample of 1,404 hospital stays was selected and 1,318 records were produced for the study.

The average age of the pediatric group was 5 years old for both non-readmitted and readmitted patients. The average age of the adult group was 41 years old for non-readmitted patients and 45 for readmitted patients. In the pediatric group, males represented 55% of the non-readmits and 53% of the readmits. In the adult group, females represented 67% of the non-readmits

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and 60% of the readmits. The largest race group was Caucasian for both the pediatric group (73% non-readmits; 70% readmits) and adult group (72% non-readmits; 69% readmits). The next largest group was African-American for both the pediatric group (22% non-readmits; 25% readmits) and adult group (25% non-readmits; 29% readmits).

The model identified factors that were significantly related to readmission status. For pediatric patients, the number of secondary diagnoses coded during the index admission had the most significant relationship with readmission within 30 days. Patients with 4 or more coded secondary diagnoses were 235% more likely to be readmitted than those who had 3 or fewer. Similarly, for each 1 point increase in a pediatric patient's DRG relative weight, the estimated probability of readmission within 30 days increased by 3.6%. Infants were also found to have an increased risk of readmission, with patients younger than 2 years of age being 43.3% more likely to be readmitted within 30 days than those 1 to 16 years of age.

Two key actions occurring after the index admission of children—physician office visit and prescription filled—were found to be related to a reduction in risk of readmission within 30 days. Young patients with a physician office visit were 35.1% less likely to be readmitted than those who did not have such a visit. Similarly, having a prescription filled was associated with a 28.1% reduction in readmission risk. Children discharged to home also had a reduced readmission risk, being 33.2% less likely to be readmitted than patients with any other discharge status.

The model for adults identified patients with 4 or more coded secondary diagnoses were 45.2% more likely to be readmitted than those who had 3 or fewer. Similarly, for each 1 point increase in an adult patient's DRG relative weight, the estimated probability of readmission within 30 days increased by 3%. Older patients were also found to have an increased risk of readmission with patients 40-64 years of age being 42.8% more likely to be readmitted within 30 days than patients 17-39 years old.

Adult patients who left against medical advice were 71.2% more likely to be readmitted than those who were discharged to home. Similarly, patients discharged to another facility or with home health care were 20.3% more likely to be readmitted.

The source of admission was related to the risk of readmission. Adult patients admitted through the ER were 8.5% more likely to be readmitted than non-ER, non-transfer referrals. Transfer patients were 23.7% more likely to be readmitted. Patients

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CODING CORNER

Sudden Cardiac Death / Arrest

In this article of the Coding Corner, we provide information on the identification, who is at risk, and the appropriate coding and sequencing of Sudden Cardiac Death/Arrest.

A cardiac arrest, or circulatory arrest, is the abrupt cessation of normal circulation of the blood due to failure of the heart to contract effectively during systole.

The resulting lack of blood supply results in cell death from oxygen starvation. Cerebral hypoxia, or lack of oxygen supply to the brain, causes victims to lose consciousness and to stop breathing, which in turn causes the heart to stop. Brain damage is likely to occur after 3-4 minutes, except in cases of hypothermia. To improve survival and neurological recovery, immediate response is paramount.

Cardiac arrest is a medical emergency that is potentially reversible if treated early enough. Sudden Cardiac Death (SCD) occurs when cardiac arrest leads to death. The primary first-aid treatment for cardiac arrest is cardiopulmonary resuscitation.

WHO IS AT RISK?

Two of the most important contributors to cardiac arrest are a previous heart attack and coronary artery disease.

There are also a number of signs and symptoms that may indicate that a person is at risk for SCD. These include: an abnormal heart rate or rhythm, an unusually rapid heart rate, episodes of fainting, and a low ejection fraction.

CODING GUIDELINES

ICD-9-CM code 427.5 (cardiac arrest) may be assigned as a principal diagnosis only when a patient arrives at the hospital in a state of cardiac arrest and cannot be resuscitated, or is resuscitated briefly but pronounced dead before the underlying cause of the arrest is identified. It may be assigned as a secondary diagnosis when cardiac arrest occurs during the hospital episode and the patient is resuscitated (or resuscitation is attempted). In this case, the code for the underlying cause is designated as the principal diagnosis, with the code 427.5 assigned as an additional code.

Always query the attending physician to ensure appropriate coding and sequencing.

Precertification List Changes Effective October 1, 2006

ODJFS notified hospital providers with HHTL 3352-06-02 dated August 11, 2006 that the precertification requirements have been revised for dates of services on or after October 1, 2006. Permedion is the utilization review entity for Ohio Medicaid and performs this precertification function.

Please refer to the following list which identifies all of the CPT codes that will require precertification:

Inpatient and Outpatient

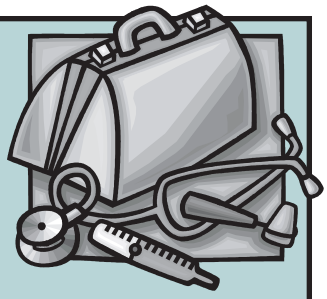
Hysterectomy	ICD9 codes 68.31, 68.39, 68.4, 68.51, and 68.59
	CPT codes 51925, 58150, 58152, 58180, 58200, 58260, 58262, 58263, 58267, 58270, 58275, 58280, 58550, 58552, and 58951

Inpatient Only

Cervical Laminectomy	ICD9 code 81.02-81.03
	CPT codes 22554, 22556, 22558, 22585, 22808, 22810, 22812, 22590, 22600, 22610, 22612, 22614, 22800, 22802, 22804, 22840, 22851, 63075, and 63076
Esophagogastroduodenoscopy (EGD) with Closed Biopsy	ICD9 code 45.16
	CPT codes 43235, 43238, 43239, 43242, 44360, 44361, 44376, and 44377
Injection or Infusion of Cancer Chemotherapeutic Substance	ICD9 code 99.25
	CPT codes 36823, 51720, 96401, 96402, 96405, 96406, 96409, 96411, 96413, 96415, 96416, 96417, 96420, 96422, 96423, 96425, 96521, and 96522
Laparoscopic Cholecystectomy	ICD9 codes 51.23, 51.24
	CPT codes 47562 - 47564
Laparoscopy Diagnostic	ICD9 code 54.21
	CPT codes 49320 - 49323, 49329
Lumbar Laminectomy - Posterior	ICD9 codes 80.51 and 81.08
	CPT codes 22600, 22610, 22612, 22614, 22630, 22632, 22800, 22802, 22804, 22842, 22843, 22844, 22851, 63030, 63035, 63042, 63044, and 63047
Percutaneous Angioplasty Non-coronary Vessel	ICD9 code 39.50
	CPT codes 35470 - 35476
PTCA - Coronary Angioplasty	ICD9 code 00.66
	CPT codes 92982, 92984, 92995, and 92996

Procedures performed on an emergency basis do not require precertification. When precertification is required but not obtained, there will be no financial reimbursement to the hospital. Additional information regarding precertification can be found at *www.permedion.com* (click on Ohio Medicaid) or by calling Permedion's Precertification Call Center at 1-800-772-2179.

Medical Director *dialogue*



Introducing The Ohio Health Plans' New Medical Director: Mary Applegate, M.D.

In July, the Ohio Health Plans (OHP) welcomed a new Medical Director: Mary Applegate, BSN, MD, FAAP, FACP. Dr. Applegate graduated from the Ohio State University (OSU) College of Medicine and completed her residency programs at OSU and Columbus Children's Hospital. She is certified by the American Board of Internal Medicine and the American Board of Pediatrics.

"I remain dedicated to providing competent and compassionate medical care to one patient at a time," Dr. Applegate said, "but recognize the importance and potential of system and policy improvements."

As Medical Director, Dr. Applegate will provide clinical leadership in the development of OHP's health care quality improvement agenda as well as representing ODJFS regarding clinical matters before the Medical Care Advisory Committee. Additionally, Dr. Applegate will actively participate on OHP's Quality Committee.

Dr. Applegate joins OHP with a diverse background in many medical roles. She has served as the Medical Director for a home nursing company, worked as a registered nurse, and was a deputy coroner for Union County. Currently, she has a private practice with her husband in Marysville, Ohio. Dr. Applegate also teaches medicine as a clinical assistant professor of Internal Medicine and Pediatrics at the OSU College of Medicine and Public Health.

Dr. Applegate's diverse roles in the field of medicine will provide a unique perspective to OHP and its work.

Look for articles by Dr. Applegate in future issues of the *Quality Monitor*.

Readmission Study *continued from p. 2*

discharged from adult teaching hospitals were 28.1% more likely to be readmitted than those from adult non-teaching hospitals. The major diagnostic category was also related. Patients with cardiopulmonary diagnoses were 15.3% more likely to be readmitted than those with other diagnoses.

Two key actions occurring after the index admission of adults—physician office visit and outpatient hospital visit for follow-up testing—were related to a reduction in readmissions within 30 days. Patients with a physician office visit were 51.8% less likely to be readmitted than those who did not have such a visit. Similarly, having an outpatient visit was associated with a 33.8% reduction in readmission risk.

The findings of this study of hospital admissions and readmissions in the Ohio Medicaid population supported several recommendations for improvement in decreasing readmissions. Recommendations specific to the survival analysis model follow:

- Present education to the hospital staff on the importance of providing patients who leave the hospital against medical advice with planning, prescriptions, and follow-up instructions as needed.
- Develop a disease and/or case management program focused on the number of comorbidities–not just the presence of a chronic disease–to reduce readmissions.
- Study the use of this model as an alert and monitoring system to assist in identifying patients who are at risk for readmissions. The use of the clearly identifiable and easily trackable factors may prospectively target high-risk patients to reduce readmissions.

For more information about this study or to request a copy of the report, please contact Sue Hackett, Permedion's Quality Assessment Service Line Manager, at 1-800-473-0802, Ext. 3374.

Quality Findings *continued from p. 1*

The overall percentage of confirmed quality concerns (*Level 2* and *3*) was significantly higher than the previous year. Seven peer groups had a slight increase in their confirmed quality concern rate from SFY 2004 to SFY 2005, while only three peer groups had a slight decrease. There were five *Level 3* concerns during this reporting period, compared to only one last period.

Permedion provides hospitals with a monthly **Preliminary Summary of Quality of Care Findings** report in addition to individual quality letters per Medicaid recipient. Permedion also reports the information on the *Level 2* and *3* quality concerns to ODJFS. For additional information regarding Permedion's quality of care review program, please contact Maureen Riley, Utilization Review Service Line Manager at 1-800-473-0802.

HOSPITAL TESTIMONIAL

New Online Precertification Feature

Permedion began online precertification in January 2006. Many hospitals use this feature and are pleased with how quick, easy, and efficient the process is. Bobbie Wilson, Utilization Management Specialist at MetroHealth Systems, states: "Permedion going online has saved me so much time from running back and forth to that fax machine. I just copy and paste my clinicals and tab over to the next patient without having to write out every line. The system is designed for no fuss. The best thing is that I get to deal with the great staff at Permedion."

Why not become the next satisfied user? Go to *www.permedion.com* and click on Ohio Medicaid. Use the "Precertification Registration" button at the top of the page to obtain a secure user name and password. For questions, call the Precertification Call Center at 1-800-772-2179.

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