Seasoning Your Compliance Plan with PEPPER: How to Read PEPPER Data on Payment Errors

by Lou Ann Wiedemann, MS, RHIA

PEPPER data help facilities compare their Medicare payments with state and national averages. Here's how to read yours.

Hospitals can take advantage of a report that helps them compare their Medicare reimbursement to state and national averages. What they learn can help them prioritize their compliance programs as well as ensure they are receiving proper reimbursement for the services they provide. The report goes by the name PEPPER, and it is provided to hospitals through their state quality improvement organizations (QIOs).

The CMS Effort to Monitor Payment Errors

Payment errors have long been a focus of the Centers for Medicare and Medicaid Services (CMS) because they represent possible incorrect or improper payments made from the Medicare Trust Fund. A key CMS initiative is the Hospital Payment Monitoring Program (HPMP), a strategic part of a nationwide endeavor to protect the CMS Trust Fund and the overall reliability of the Medicare program. HPMP seeks to ensure that Medicare pays for only reasonable and medically necessary services that are appropriately and adequately documented within the medical record.

Beginning in 1999 with the 6th Scope of Work and continuing through the 2005 8th Scope of Work, CMS charged the HPMP Quality Improvement Organization Support Center (TMF Health Quality Institute) with developing a program to assist facilities in prioritizing their auditing and monitoring compliance plans. TMF developed a tool called PEPPER-the Program for Evaluating Payment Patterns Electronic Report. Reports are produced for the range of fee-for-service contractors, including carriers, durable medical equipment regional carriers, fiscal intermediaries, and short- and long-term acute care hospitals.

CMS monitors payment errors through this quarterly report, which is composed of a random sample of billed Medicare claims each month in specific target areas (shown in the table "PEPPER Targets").

CMS targets these areas because national analysis of payment errors identifies them as either high in error dollars or high in proportion of payment errors. According to CMS data from fiscal year 2003, approximately 39 percent of all admission denials were for admissions with a one-day length of stay; 78 percent were for admissions of three days or fewer. DRGs 079, 416, and 089 were selected due to high dollars in error for DRG changes.

PEPPER Targets

PEPPER helps CMS monitor payment errors through a random sample of Medicare claims in the following areas, targeted because of their potential for high-error dollars or payment errors. The numerator is the total count of discharges for the particular DRGs defined in the target area. The denominator is the total count of discharges for the particular DRGs listed. The numerator and denominator do not always comprise the same DRGs.

Target Area	Measure
DRGs 014 and 559	Numerator: count of discharges for DRGs 014 and 559 Denominator: count of discharges for DRGs 014, 015, 524, or 559
DRG 079	Numerator: count of discharges for DRG 079 Denominator: count of discharges for DRGs 079, 080, 089, or 090

DRG 089	Numerator: count of discharges for DRG 089 Denominator: count of discharges for DRGs 089, 090, or 088
DRG 127 one-day stays	Numerator: count of discharges for DRG 127 with length of stay less than or equal to one day excluding patient status of 20 (expired), 07 (left AMA), or 02 (discharged/transferred to a short-term general hospital for inpatient care) Denominator: count of all DRG 127 discharges
DRG 143 one-day stays	Numerator: count of discharges for DRG 143 with length of stay less than or equal to one day excluding patient status of 20, 07, or 02 Denominator: count of all DRG 143 discharges
DRGs 182 and 183 one-day stays	Numerator: count of all discharges for DRGs 182 or 183 with length of stay less than or equal to one day excluding patient status of 20, 07, or 02 Denominator: count of all discharges for DRGs 182 or 183
DRG 243	Numerator: count of all discharges for DRG 243 Denominator: count of all discharges
DRGs 296 and 297 one-day stays	Numerator: count of discharges for DRGs 296 or 297 with length of stay less than or equal to one day excluding patient status of 20, 07, or 02 Denominator: count of discharges for DRGs 296 or 297
DRG 416	Numerator: count of discharges for DRG 416 Denominator: count of discharges for DRGs 416, 320, or 321
Seven-day readmit to same facility or elsewhere	Numerator: count of index (first) admissions for which readmission occurred within seven days to the same hospital or to another short-term acute care PPS hospital for the same beneficiary; patient status of the admission is not equal to 02 (discharged/transferred to a short-term general hospital for inpatient care) Denominator: count of all discharges
One-day stays excluding transfers	Numerator: count of discharges with length of stay less than or equal to one day excluding patient status of 20, 07, or 02 Denominator: count of all discharges excluding patient status 02
Three-day skilled nursing facility (SNF) qualifying admissions	Numerator: count of discharges to a SNF with a three-day length of stay Denominator: count of all discharges to a SNF (identified by patient status code of 03 (discharged or transferred to a SNF) or 61 (discharged or transferred to a swing bed))
Complication/Comorbidity (CC) pairs	Numerator: count of discharges for medical DRGs with a CC, excluding DRGs 079 or 089 Denominator: count of discharges for all medical DRG pairs, excluding DRGs 079, 080, 089, or 090
Source: Iowa Foundation for Medical Quality. "Short-Term Care Program for Evaluating Payment Patterns Electronic Report (ST PEPPER) User's Guide."	

How to Use the Report

Hospitals can use PEPPER to compare their data to that of other acute care prospective payment system (PPS) hospitals in their state or nationwide. They can evaluate their own data over time to identify changes in billing practices, undercoding issues, overcoding issues, and auditing and monitoring tools.

PEPPER is available only through QIOs. It is important to note that QIOs are not required to provide reports to hospitals, but they are encouraged to do so. Some of the reports they may provide include:

- Data tables, which include a variety of statistics for a target area summarized over fiscal year or quarter time period.
- Graphs, which provide a visual representation of the proportion for each target area over time. The graphs can assist in the identification of significant changes from one time period to the next, which could be a result of changes in the medical staff, coding staff, utilization review processes, or hospital services.
- Compare worksheets, which assist in prioritizing areas for auditing and monitoring by using two factors: the number of discharges for an area and the hospital's "outlier value" for that area, which is a measure of how unusual the finding for

your hospital is relative to all PPS hospitals in your state.

The report comes in an Excel spreadsheet format that is easily reproducible for administration and educational needs within the facility. It can be shared with coders, coding supervisors or managers, compliance officers, CFOs, medical staff, and quality and utilization staff. An interdisciplinary performance improvement team can quickly identify problem-prone areas for the facility and focus compliance efforts.

CMS sets the reporting periods (shown in the table "Reporting Time Frames") and calculates error rates by reviewing provider claims submitted during these periods.

Reporting Time Frames

CMS sets reporting periods for PEPPER. Reporting periods for acute care hospitals are shown here.

Report Date	Acute Care Hospital Discharges
November 2003	April 1, 2001–March 31, 2002
November 2004	July 1, 2002–June 30, 2003
November 2005	Short-term acute care: July 1, 2003–June 30, 2004 Long-term acute care and denied claims: claims submitted January 1, 2004–December 31, 2004
May 2006	July 1, 2004–June 30, 2005
November 2006	January 1, 2005–December 31, 2005

Source: CMS. "Improper Medicare FFS Payments Long Report."

PEPPER identifies a facility's outliers, noting where the hospital's payments vary significantly from average. Outliers are findings that are at or above the 75th percentile at the national level (indicated in red). If the facility has an outlier marked in red, it has billed CMS for treating the particular DRG significantly more often than most other hospitals in the state. This indicates potential overcoding.

An outlier below the 10th percentile at the national level is indicated in green. A facility with green outliers has billed CMS for treating the particular DRG significantly less often than most other hospitals in the state. This indicates possible undercoding. Interpreting PEPPER is straightforward once the red and green target areas for the facility are identified. The table "Potential PEPPER Findings" assists in interpreting the report.

Before a facility develops an action plan based on the findings, it should review the total number of its cases reviewed in the report. If the volume is below 10 cases for the entire year, it may not be appropriate to focus compliance program efforts on that area. Instead, the facility may want to focus its efforts on high-volume DRGs in the 75th or 10th percentiles.

Potential PEPPER Findings

Significant variation between a facility's claims and state averages could indicate unnecessary admissions or possible coding and billing errors.

Target Area	Indications for Results at or above the 75th Percentile	Indications for Results at or below the 10th Percentile
One-day stay areas	Unnecessary admissions related to inappropriate use of admission screening criteria or outpatient observation	No problem indicated, no additional review required
DRG 079	Potential coding or billing errors related to overcoding	This could indicate that no coding or billing errors have been identified.
DRGs 014 and 559	Potential overcoding	No problem indicated, no additional review required
DRG 243	Possible inappropriate admissions or use of outpatient observation	No problem indicated, no additional review required

DRG 416	Potential coding or billing errors related to overcoding	This could indicate that there are coding or billing errors related to undercoding of DRG 416.
Seven-day readmissions to the same facility or elsewhere	Possible inappropriate admissions or discharges, quality of care issues, or billing issues	No problem indicated, no additional review required
DRG 089	Potential coding or billing errors	This could indicate that there are coding or billing errors related to undercoding for DRG 089.
CC pairs	Potential coding or billing errors related to overcoding due to unsubstantiated CCs	This could indicate that there are coding or billing errors related to undercoding for CCs.
Three-day SNF admissions	Possible medical necessity issues related to unnecessary admissions to qualify patients for admission to a SNF	No problem indicated, no additional review required
Adapted in part from: Iowa Foundation for Medical Quality. "Short-Term Care Program for Evaluating Payment Patterns Electronic Report (ST PEPPER) User's Guide."		

Comparing to National Averages

Facilities also can compare their results with national averages. These can be found on the CMS Web site. In the May 2006 "Improper Medicare FFS Payments Long Report," for instance, CMS reports that "5.1% of the dollars paid nationally did not comply with one or more Medicare coverage, coding, billing and payment rules." The table "National Error Rates" contains the national error rates and improper payment amounts for the Medicare Fee-for-Service program for this period.

National Error Rates

CMS also reports error rate and improper payments at the national level. This table shows data for acute care hospitals for the May 2006 reporting period.

Type of Contractor	Total Dollars Paid	Overpayments	Underpayments	Total Improper Payments	Error Rate
Acute care hospitals	$99.8B	$4.4B	$0.9B	$5.3B	5.3%
Total, all fee-for-service programs	$257.4B	$11.9B	$1.2B	$13.1B	5.1%
Source: CMS. "Improper Medicare FFS Payments Long Report."					

Using CMS data illustrated in the table "Top 10 DRGs for One-Day Stay Discharges," facilities may compare their top one-day stays to the national average. A facility whose top DRGs mirror those in the table "Top 10 Service Types with Highest Improper Payments" may want to focus compliance efforts on these particular problem-prone areas.

Top 10 DRGs for One-Day Stay Discharges

Facilities also may compare their top one-day stays to the national average. This table shows the leading DRGs for one-day stay discharges for short-term acute care hospitals (excluding deaths, transfers, and leaves against medical advice).

DRG	Description	One-Day Stay Count	Proportion of One-Day Stays to Total Discharges for DRG
558	Percutaneous Cardiovascular Proc w/Drug Eluting Stent w/o Maj Cv Dx	59,171	66.7%
143	Chest Pain	45,928	42.8%
127	Heart Failure and Shock	20,555	6.2%

182	Esophagitis, Gastroent & Misc Digest Disorders Age >17 w/CC	18,248	11.8%
515	Cardiac Defibrillator Implant w/o Cardiac Cath	15,414	53.1%
138	Cardiac Arrhythmia & Conduction Disorders w/CC	14,982	14.6%
557	Percutaneous Cardiovascular Proc w/Drug-Eluting Stent w/Maj Cv Dx	13,408	21.0%
125	Circulatory Disorders Except AMI, w/Card Cath w/o Complex Dx	13,361	32.5%
088	Chronic Obstructive Pulmonary Disease	13,181	6.3%
552	Other Permanent Cardiac Pacemaker Implant w/o Major Cv Dx	12,634	34.3%
Sources: Medicare PPS inpatient hospital discharge data; TMF Health Quality Institute, "HPMP Resource."			

Top 10 Service Types with Highest Improper Payments

Lack of medical necessity is the most common error among the DRGs with the highest improper payments for acute care hospitals. This table shows data from the May 2006 reporting period.

DRG	Decription	Projected Improper Payment	Error Rate	No Documentation	Insufficient Documentation	Medically Unnecessary	Incorrect Coding
182	Esoph, Gastroent & Misc Dig Disor Age >17 w/CC	$207.2M	18.0%	0.6%	0.0%	88.6%	8.5%
210	Hip and Femur Proc Exc Maj Joint Age >17 w/CC	$201.8M	17.3%	0.0%	0.0%	0.0%	100.0%
552	Oth Permanent Cardiac Pacer Implant w/o Major CV DX	$136.8M	9.5%	0.6%	0.0%	78.8%	5.8%
143	Chest Pain	$133.2M	23.1%	2.5%	0.0%	84.0%	3.6%
553	Oth-Vasc Proc w/CC	$132.1M	8.7%	10.5%	0.0%	61.8%	26.9%
243	Medical Back Problems	$109.0M	30.9%	0.0%	0.0%	93.0%	6.5%
515	Cardiac Defibrillator Implant w/o Car Cath	$104.1M	8.2%	0.0%	0.0%	33.9%	11.9%
544	Maj Joint & Limb Reattach Proc Lower Extremity	$100.4M	21.%	21.8%	0.0%	57.3%	12.8%
296	Nut & Misc Metab Disor Age >17 w/CC	$95.5M	9.7%	0.0%	0.0%	67.8%	19.3%
127	Heart Failure and Shock	$87.7M	2.6%	6.4%	0.0%	64.6%	25.3%
Source: CMS. "Improper Medicare FFS Payments Long Report."							

PEPPER will not identify specific billing errors for a facility nor will it provide a case-by-case breakdown of a single facility's data. However, it does provide comparison data that so many facilities need in order to take a measure of their data, and added to an organization's compliance program, it can help in the effort for accurate and complete payment.

Many Reports, Many Standards for Reporting

PEPPER is just one of many reports that aggregate provider data for quality and compliance reporting.

The CMS Web site links to numerous CMS quality improvement efforts that include hospitals, physicians, durable medical equipment, carriers, and nursing homes (www.cms.hhs.gov). The Agency for Healthcare Research and Quality is the health services research arm of the Department of Health and Human Services; it provides detailed information in major areas of healthcare research (www.ahrq.gov).

There are also private-sector initiatives surrounding quality reporting. For example, the Institute for Healthcare Improvement heads up the 100k Lives Campaign, which is focused on ensuring hospitals achieve the best possible outcomes for their patients (www.ihi.org/ihi). More than 100 public and private organizations that provide healthcare benefits to approximately 32 million consumers constitute the Leapfrog Group, which compiles outcome measures to help guide organizations and consumers in their choice of provider (www.leapfroggroup.org).

A Need for Standards

For providers, meeting the submission requirements is complicated by differing reporting standards, timelines, and formats. When organizations use varying standards for the data content itself, the quality of the resulting reports is compromised.

The medical record provides the all-important data and documentation used to develop and implement most quality and patient safety initiatives. For this reason, HIM professionals should take an active role in efforts for data content standardization.

Resources

Centers for Medicare and Medicaid Services (CMS). "Improper Medicare FFS Payments Long Report." May 2006. Available online at www.cms.hhs.gov/apps/er_report/index.asp.

CMS. "Site Tools and Resources." Available online at www.cms.hhs.gov/home/tools.asp.

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Lou Ann Wiedemann *(lou-ann.wiedemann@ahima.org) is a manager of professional practice resources at AHIMA.*

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