Ohio medicaid QUALITY MONITOR

OHIO Job & Family SERVICES

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Study steps: RNs reviewing medical records

Permedion's highly-qualified, Ohio-licensed RNs use a laptop computer or scannable data collection tools to compile information for health care quality and utilization studies.

Training sessions for RN reviewers provide in-depth information on the study topic and background. However, a complete review of the data collection tool and data dictionary dominates the training agenda. Reviewers practice collecting data from sample records and compare their results with the "gold standard," a teacher's key of sorts. This part of the process allows the reviewers to gain feedback on their work before they begin collecting actual study data. While in the field, nurse reviewers also can contact the project manager at Permedion with questions.

In addition to quality control before and during data collection, data reliability is measured when data collection is complete. From the original sample of medical records, 5% are randomly selected and re-reviewed. The results are compared again to the "gold standard." Re-review results also are compared to the original review results. Agreement rates and kappa statistics are calculated to determine reliability of the original data collection process. Agreement rates must be at least 70% or higher; otherwise, all records will be re-reviewed to determine the disagreement issues. The results are shared with each reviewer for continuous quality improvement and are included in the study report.

We will review specific aspects of data analysis in the next issue.

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PERMEDION

How Medicaid patients utilize outpatient services

In recent years, much of the care traditionally rendered in hospitals has been shifted to ambulatory settings. Due to technological advancements and evolving preferences of patients, third-party payers, and regulators, ambulatory care has become the prevailing mode of health care delivery in the United States. Although ambulatory care is provided in a wide range of settings, visits to hospital outpatient centers and emergency departments represent the highest percentage of ambulatory care visits. This continuing increase in the demand for hospital outpatient services has changed overall patterns of health care utilization and reimbursement.

As part of the Ambulatory Care Project, Permedion has produced six studies (referred to as phases) for ODJFS since 1997. These studies provide ODJFS with a better understanding of outpatient usage by the Ohio Medicaid population and assist in future planning.

PHASE 1
Fee-for-Service Outpatient Ambulatory Services Study/Market Profile, SFY 1998

PHASE 2
Description of Ambulatory Care Systems in Selected Ohio Counties and Facilities, SFY 1998

PHASE 3
Additional Description of Ambulatory Care Systems in Selected Ohio Counties and Facilities, SFY 1999

PHASE 4
Evaluation of the Quality of Emergency Department Care, SFY 2000

PHASE 5
Institutional Ambulatory Services Study, SFY 2001

PHASE 6
Profile of Institutional Health Care in Ohio, SFY 2001

The Phase 5 study details how Medicaid fee-for-service (FFS) and managed care (MC) patients use outpatient services such as the emergency department, pathology/laboratory, preventive services, radiology, and surgical procedures. Visits to non-institutional clinics and physicians were excluded.

The Phase 5 study population (1,339,651) included all Ohio Medicaid eligibles with continuous enrollment for at least three months in 2000. Females made up 59% of the population. A total of 606,555 (45%) enrollees in the study received care in 2000; of these recipients, 28% were in a managed care plan.

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RESULTS

There were 2,303,373 FFS and MC visits combined. The average number of visits per person was 3.8; FFS recipients averaged 4.3 visits and MC recipients averaged 2.5 visits. FFS enrollees accounted for 80.6% of all patient visits.

As expected, the counties with the largest populations—Cuyahoga, Franklin and Hamilton—also had the highest number of eligibles and recipients.

Five of the top ten primary diagnoses in Medicaid patients visiting the ED were variations of acute upper respiratory infections (URI)—pharyngitis, URI, otitis media, acute bronchitis, and viral infection. These diagnoses collectively represented 16.9% of all ED visits. See *Table 1* for the top 10 ED diagnoses.

Tests related to pregnancy accounted for 7.5% of the pathology/laboratory services. See *Table 2* for the top 10 pathology laboratory diagnoses.

The routine child health exam was by far the most frequent preventive service, as it accounted for 53.8% of the visits in this category (see *Table 3*). Radiology visits encompassed a widely dispersed group of

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Table 1: ***Top 10 ED diagnoses***

	# of visits	% of visits
Acute URI (NOS)	38,361	5.5%
Otitis Media (NOS)	36,888	5.3%
Acute Pharyngitis	21,604	3.1%
Asthma, Unspecified	13,138	1.9%
Noninfectious Gastroenteritis (NEC)	12,550	1.8%
Acute Bronchitis	12,144	1.7%
Fever	12,020	1.7%
Urinary Tract Infection (NOS)	11,675	1.7%
Headache	10,309	1.5%
Viral Infection NOS	10,039	1.4%

Table 2: ***Top 10 path/lab diagnoses***

	# of visits	% of visits
Supervision of Other Normal Pregnancy	48,474	5.3%
UTI (site not specified)	25,418	2.8%
Acute Pharyngitis	23,224	2.5%
Routine Child Hlth. Exam	23,026	2.5%
Pregnancy State, Incidental	20,194	2.2%
Diabetes Mellitus, Uncomplicated (NOS)	18,512	2.0%
Laboratory Exam	14,492	1.6%
Screening for Malignant Neoplasm - Cervix	13,089	1.4%
Other Convulsions	12,814	1.4%
Gynecologic Exam	12,028	1.3%

Table 3: ***Top 10 preventive diagnoses***

	# of visits	% of visits
Routine Child Hlth. Exam	55,403	53.8%
Routine Medical Exam	1,237	1.2%
Migraine, Unspecified	1,228	1.2%
Headache	1,198	1.2%
Otitis Media (NOS)	1,088	1.1%
Vaccine for Viral Hepatitis	1,077	1.0%
Acute URI (NOS)	918	0.9%
Contraceptual Surveillance (NEC)	847	0.8%
Asthma, Unspecified	782	0.8%
Vaccine for Unspecified Single Disease	764	0.7%

CODING CORNER

Preventative services related to patient history

As a counterpart to the story on our Phase 5 Ambulatory Care Project, this issue's *Coding Corner* reviews the identification and coding of specific preventative services for outpatients. For personal and family history of health conditions, *ICD-9-CM Diagnosis Coding Advisor* provides coding clarification.

Family History of Neoplasm

Some seemingly well individuals undergo screening examination or procedures due to a strong family history of malignant neoplasm. These patients are coded using the V76 series, describing the family history of malignant neoplasm of various sites. Also, codes from the V16 series are used to describe the reason for the examination or procedure.

An Example:

A 45-year-old female with a strong history of malignant neoplasm of the colon presents for a baseline colonoscopy. In this case, first code V76.49, special screening for malignant neoplasm, and then V16.0, family history of malignant neoplasm of gastrointestinal tract, as an additional diagnosis.

Personal History

Personal history codes (V10 series) are used to identify a patient's past medical condition that no longer exists and no longer requires treatment. These codes identify conditions that have potential for recurrence, making it necessary to continue monitoring. They also may be used in conjunction with screening and follow-up codes to clarify the need for the test. Secondary malignancies are excluded from category V10, as these are reserved for primary malignancies only.

An Example:

A 36-year-old female is seen for removal of a Hickman catheter following chemotherapy for breast cancer. There is no evidence of residual disease. In this case, first code V67.0, follow-up examination following surgery, and then V10.3, personal history of malignant neoplasm of breast, as an additional diagnosis.

As always if documentation is unclear, query the physician and request additional clarifying documentation to ensure correct coding.

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diagnoses, including chest pain (2.1%), pregnancy (2.0%), and ankle sprain (1.9%). Normal pregnancies accounted for the highest percentage (5.7%) of outpatient surgical procedures.

Analysis of service utilization by age group revealed that outpatient visits by adults 19 years old or older were most likely to involve pathology/laboratory services. In contrast, nearly 4 out of every 10 visits by infants involved ED services. *Table 4* shows the proportion of recipients in each age group that received services in one or more outpatient categories during the study period.

Table 4: ***Outpatient service usage by age group***

age group	ED	path/lab	preventive	radiology	surgical	total *(denominator)*
Infant *birth to <2 yrs.*	37.3%	24.6%	12.6%	15.4%	13.0%	227,602
Preschool *age 2 through 6*	35.4%	26.4%	6.5%	13.5%	14.7%	323,033
School Age *age 7 through 18*	34.0%	34.0%	5.3%	20.7%	18.9%	455,634
Young Adult *age 19 through 39*	29.4%	48.0%	3.8%	21.0%	29.3%	783,426
Adult *age 40 through 64*	22.4%	47.9%	3.4%	27.5%	31.0%	477,946
Older Adult *age 65 and over*	12.3%	51.7%	2.5%	24.9%	33.7%	33,171
Overall	***30.2%***	***39.9%***	***5.2%***	***20.7%***	***24.0%***	***2,300,812***

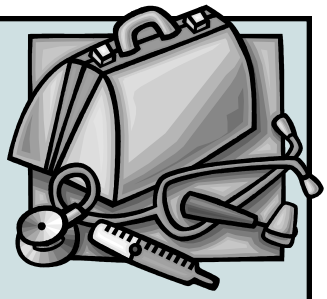
DISCUSSION

There were limitations to this study of ambulatory services. Only institutional services were analyzed; visits to non-institutional clinics and physicians were excluded. To more fully understand why select procedures or diagnostic tests were performed, the source of the service must be tracked to an institutionally-based, non-institutional, or ED provider through chart review. Another notable limitation was the dependence on the data. It was impossible to ensure that the coding for the procedures and/or the diagnoses was always correct. Despite these limitations, several important findings were revealed.

While Cuyahoga, Franklin, and Hamilton counties had the most Medicaid enrollees, the three counties with the highest percentage of enrollees receiving care were Scioto, Muskingum, and Hocking. Utilization of institutional outpatient services in these counties ranged from 54.7% to 57.0%, while the average across all 88 Ohio counties was 45%. Clinton, Jefferson, and Scioto counties demonstrated visits per recipient ranging from 4.4 to 4.7, higher than the overall Ohio county average of 3.8 visits. There are several possible explanations for the higher visit rates, one being that there may be a lack of non-institutional providers in these areas. This would then shift the care to the institutional providers, giving the appearance of a higher rate of utilization. The only way to completely understand this is to examine the care provided in both settings, which was beyond the scope of this study.

Outpatient *continued on back*

Medical Director *dialogue*



by T.J. Redington, MD
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The Office of Ohio Health Plans (OHP) is fortunate to be served by the Health Care Quality Coordinating Committee, a group of highly skilled professionals who are responsible for monitoring system performance and the quality of services that are delivered to our eligible population. The committee meets once a week to discuss our current clinical quality of care studies as well as our future direction, especially as it relates to the pursuit of value purchasing and outcomes-based decision making.

We have pointed our spotlight on long-term care, managed care, the fee-for-service delivery system, pharmacy services, and the eligible waiver population to uncover ways we can enhance value, both for our eligible population and Ohio taxpayers. We have studied processes of care in many diseases, including asthma, diabetes, depression, and hypertension.

However, more important than quality of care studies is the engagement of clinicians with the data. All of us—purchasers and providers—must continue to work together to improve value through high-quality, cost-effective care for the eligible population. OHP spends about 160 million dollars each week on health-related services. We expect high quality and strive to be aggressive value purchasers.

Permedion, as an OHP partner in quality, is completing a series of studies that describe and measure our ambulatory care infrastructure. We first undertook the studies to better understand what drove high rates of ED visits. We thought that the high visit rate was driven largely by a lack of physician offices accepting new Medicaid patients, but that was generally not the case. There is a great deal of ED usage that would be better directed towards a primary care provider, both for cost and quality reasons. This is a story that continues to develop, and we will report updates in future issues of the *Quality Monitor.*

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Opportunities for improved effectiveness and resource savings may exist in three areas of care. The study shows that patients with asthma utilize considerable ED and radiology resources. Better management of asthma could reduce the utilization of both types of service. Also, the high rate of ankle radiographs suggests that implementation of the Ottawa ankle rules, which have been found to reduce the use of radiographs by 36%, could reduce radiology costs for this diagnostic category. Overall, preventive services appeared to be underutilized, although the administration of preventive services to children, such as immunization, likely occurred within the scope of a well child visit.

Focusing on the claims review and appeals processes

As part of ODJFS' Office of Ohio Health Plans' (OHP) quality agenda and hospital utilization review program, Permedion performs retrospective reviews every month on a sample of claims. OHP and Permedion follow systematic and rigorous procedures for reviewing claims and for assessing appeals of denied claims. The claims review and appeal processes are conducted by specially-trained registered nurse and physician reviewers who rely on established medical practice standards. The review and appeal processes are consistent with OHP's strategic objective of using value purchasing to enhance accountability and to emphasize quality and improved outcomes.

OHP also strives to be effective and responsive in our program administration. In order to help providers understand the claims review and appeals processes, the next issue of the *Quality Monitor* will include an article that describes these processes in more detail. Watch for it!

Hospitals to benefit from Medicaid pattern analysis

Permedion soon will be sending each hospital a Pattern Analysis Monitor Report to help them identify trends and patterns in their Medicaid admissions. The report examines seven indicators (listed below) calculated from Medicaid claims data submitted to ODJFS and includes comparison data for state fiscal years 1999, 2000, and 2001.

- **0-1 day readmissions** (within one day readmission to the same provider for any DRG)
- **2-7 days readmissions** (other readmissions within seven days to the same provider for any DRG)
- **admissions due to complications** (complication admissions rates based on primary diagnosis)
- **transfer out** (percentage of cases coded as transfers to other hospitals)
- **transfer billing** (percentage of cases that are potential transfer billing errors)
- **outliers** (percentage of cases that are day and/or cost outliers)
- **significantly short lengths of stay** (percentage of cases which have significantly short lengths of stay with respect to DRG lower trim point and/or to primary diagnosis)

The report also will include comparative statistics for the hospital peer group and for all hospitals treating Ohio Medicaid patients.

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