

**Comparative Assessment Report:
Access to Care by Enrollees in
Oregon Health Plan Managed Care Plans, 2001–2003**

**Presented to the Oregon Department of Human Services,
Health Services, Office of Medical Assistance Programs**

March 18, 2005

Presented by

OMPRO

A Healthcare Quality Resource

2020 SW Fourth Avenue, Suite 520

Portland, Oregon 97201-4960

Phone 503-279-0100

Fax 503-279-0190

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Executive Summary

The Oregon Department of Human Services, Health Services, Office of Medical Assistance Programs (OMAP) has contracted with OMPRO to evaluate the performance of 14 fully capitated health plans (FCHPs) participating in the Oregon Health Plan (OHP). OMPRO will evaluate FCHP performance through a series of comparative assessments on five clinical and nonclinical topics. The focus of this comparative assessment is enrollees' access to health care.

Access to care is often used as a basic measure of healthcare quality. Regular access to health care is linked to increases in utilization of preventive services and the management of chronic conditions. Research has shown that managed-care enrollees experience an improved quality of life when they have preventive care and continuity of care.

OMAP offers Medicaid managed care coverage to enrollees through OHP. OMAP expects that enrollees will receive preventive and screening health services. Measuring access to care

- is consistent with the Oregon Department of Human Services' (DHS) goal to increase the percentage of Oregonians with access to physical health care
- provides important information regarding the ability of the OHP to meet the DHS goal through FCHPs

Access to care is a complex concept that is not always clearly defined. Many factors have been linked to access, including the availability of transportation, patients' ability to see specialists, time to next appointment, adequacy of the healthcare network, and availability of translation services. One of the fundamental aspects of access to care is whether enrollees utilize the healthcare services available to them. Although utilization is not a summary of all measures of access, it offers a starting point for measuring access.

This study measures the utilization of health care by OHP enrollees by examining first encounters of new enrollees within six months of enrollment. All individuals with a new enrollment date between October 1, 2001, and October 1, 2003, were included.

OMPRO performed analyses on FCHP performance using descriptive and inferential statistical tests across demographic groups and by OHP program level. Results were reported for all segments by

- the percentage of enrollees with a first encounter
- time elapsed between enrollment and enrollee's first encounter
- percentage of first encounter types (ambulatory, ED, inpatient, "other")

An FCHP was considered an outlier for ambulatory or ED visits if its percentage of ambulatory encounters was lower than the aggregate or its percentage of ED encounters was higher than the aggregate. Only FCHPs that were outliers in both ambulatory *and* ED encounters were defined as outliers regarding access to care.

The highlights of the results are grouped by analysis and listed below.

Enrollee first encounters

- The majority of new enrollees (84.1 percent) had a first encounter during the study time frame.

Time to first encounter

- Of enrollees with a first encounter
 - more than one-quarter saw a provider within one week (28.6 percent)
 - almost two-thirds saw a provider within one month (62.6 percent)
 - most had a claim within six months of enrollment (93.6 percent)

Type of first encounter

- The most common types of encounters were ambulatory (52.2 percent) and “other” encounters (40.6 percent).
- All FCHPs except Oregon Health Management Services differed significantly from the aggregate percentage in at least one category of visit types.
- Three FCHPs had lower percentages of ED first encounters and higher percentages of ambulatory first encounters compared with the aggregate. These FCHPs—Cascade Comprehensive Care, Central Oregon Independent Health Services, and InterCommunity Health Network—may have implemented processes or practices that resulted in more desirable first-visit proportions.
- Of the 14 FCHPs assessed, only Douglas County IPA had a percentage of ambulatory encounters lower than the aggregate and a percentage of ED encounters higher than the aggregate, making it an outlier regarding access to care in this study.

Recommendations derived from the results are listed below.

FCHP-specific recommendations

- FCHPs and OMAP may want to assess how FCHPs and providers can be more proactive in encouraging enrollees to seek and receive preventive treatment.
- FCHPs may want to consider enrollee education emphasizing that the PCP provides continuity of care and follow-up care that an individual cannot receive in the ED.
- Douglas County IPA staff and administrators may want to
 - develop ED screening guidelines
 - consider offering information to enrollees about ED use
 - send a list of enrollees with unnecessary ED visits to PCPs in its region
 - consider providing a community-wide telephone triage system for its OHP enrollees
 - follow the recommendations outlined in the 2004 CAHPS[®] report

Recommendations for future evaluations

- Follow-up assessments should
 - identify and isolate more of the factors that contribute to enrollees’ access to care
 - begin to define relationships among the factors that affect access to care
- With regard to evaluation of the FCHPs participating in OHP, OMAP may want to
 - examine the process by which FCHPs identify new enrollees
 - identify the way in which enrollees choose PCPs
 - continue to periodically assess FCHP performance
 - investigate the use of the Achievable Benchmarks of Care[™] methodology for evaluation
- Regarding FCHP variation, OMAP may want to
 - recommend that FCHPs with higher-than-aggregate percentages of inpatient and ED first encounters review utilization trends periodically
 - collect and disseminate FCHP best practices regarding encouraging ambulatory encounters

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Introduction

Background

Federal regulations require state Medicaid agencies to contract with an external quality review organization (EQRO) to provide an independent annual review of the quality outcomes, timeliness of service, and access to care provided by Medicaid managed care organizations (MCOs). In May 2003, the Oregon Department of Human Services, Health Services, Office of Medical Assistance Programs (OMAP) contracted with Oregon Medical Professional Review Organization (OMPRO) to be its EQRO and to provide an annual review of care and services provided by the fully capitated health plans (FCHPs) that participate in the Oregon Health Plan (OHP).

As part of its review activity, OMPRO will complete five comparative assessments over the two years of the contract. The assessments will examine five clinical and nonclinical topics selected by OMAP and FCHP medical directors at the beginning of the contract period. The comparative assessments are part of a rapid cycle process in which

- OMPRO analyzes the data for evidence of variation
- OMAP validates the results
- OMAP and OMPRO share the findings with the FCHPs
- OMPRO follows up with FCHPs to discuss opportunities for improvement and produces a comparative assessment report

OMPRO evaluates FCHP performance through a series of rapid cycle studies that analyze measures derived from administrative data and encounter data, and to a lesser extent, through analyses of health record data. The purpose of rapid cycle studies is to provide high-level results that can be applied more quickly than results obtained through a formal research analysis. The findings of the five comparative assessments will be used in conjunction with data and information gathered in other external quality review (EQR) activities, such as evaluation of statewide quality improvement program activities and CAHPS® to provide a comprehensive evaluation of each FCHP's performance.

The focus of this comparative assessment is enrollees' access to health care. Access to care is often used as a basic measure of healthcare quality. Regular access to health care is linked to increases in utilization of preventive services and the management of chronic conditions. The benefits of managed care are outlined in a report published by the Institute of Medicine:

Many of managed care's principal features—its potential to strengthen preventive services and care coordination, better case management, and a clearly identifiable health care provider with overall patient management responsibilities—are generally viewed as holding promise for improving access to care for a historically underserved population.¹

Research has shown that enrollees experience an improved quality of life when they have a “medical home,” preventive care, and continuity of care.² The cost of health care is lower for the enrollee and the health plan when diseases are prevented or identified early. When a disease progresses

¹The impact of change on vulnerable populations. In: Lewin ME, Altman S, eds. *America's Health Care Safety Net: Intact but Endangered*. Washington, DC: Institute of Medicine, National Academy Press. 2000:159–79.

²Coughlin TA, Long SK. Effects of Medicaid managed care on adults. *Med Care*. 2000;38(4):433–46.

undetected, treatment often requires extensive healthcare resources, such as emergency services and hospitalization.

Reduced access to health care may result in increases in hospitalization and Emergency Department (ED) utilization, neither of which is ideal from a patient or cost perspective.³ Many studies compare access to health care for Medicaid managed care enrollees, Medicaid fee-for-service enrollees, and commercial health plan enrollees. The literature shows that the strengths of a managed care program include providing a medical home and offering preventive health services for enrollees.^{4,5,6,7,8,9,10}

OMAP offers Medicaid managed care coverage through OHP and expects that enrollees will receive preventive and screening health services. Measuring access to care

- is consistent with the Oregon Department of Human Services' (DHS) goal to increase the percentage of Oregonians with access to physical health care
- provides important information regarding the ability of the OHP to meet the DHS goal through FCHPs

In addition, research has shown that Oregonians receiving Temporary Assistance to Needy Families (TANF) say that the Oregon Health Plan is the most important benefit they receive from the state, placing it ahead of food stamps, cash, and housing assistance.¹¹ It follows, therefore, that OMAP should assess whether these people are actually utilizing the system they claim to value.

However, access to care is a complex concept that is not always clearly defined. To date, healthcare analysts have not articulated one concise measure of access to care; rather, the concept comprises many factors, including the availability of transportation, patients' ability to see specialists, time to next appointment, adequacy of the healthcare network, and availability of translation services.^{12,13,14}

At its essence, access to care is simply the ability of the enrollee to get needed health care at the time it is needed. One of the fundamental aspects of access to care is whether enrollees in a healthcare system utilize the services available to them. For example, the Health Plan Employer Data and Information Set (HEDIS[®]) measure of access to care for adults includes the question "Have you

³Institute of Medicine, *Coverage Matters: Insurance and Health Care*. Washington, DC: National Academy Press, 2001.

⁴Berk M, Schur C. Access to care: how much difference does Medicaid make? *Health Aff.* 1998;17(3):169–80.

⁵Bovbjerg V, Smith W, Cotter J, et al. Assessing Medicaid recipient access and satisfaction. *Evaluation & the Health Professions*. 2000;23(4):422–40.

⁶Coughlin TA, Long SK. Effects of Medicaid. 434.

⁷Hargraves J, Cunningham P, Hughes R. Racial and ethnic differences in access to medical care in managed care plans. *Health Serv Res*. 2001;36(5):853–68.

⁸Long S, Coughlin T. Public policy impact—Medicaid issues: impacts of Medicaid managed care on children. *Health Serv Res*. 2001;36(1):7–23.

⁹Thompson J, Ryan K, Pinidiya S, Bost J. Quality of care for children in commercial and Medicaid managed care. *JAMA*. 2003;290(11):1486–93.

¹⁰Zuckerman S, Brennan N, Yemane A. Has Medicaid managed care affected beneficiary access and use? *Inquiry*. 2002;39:221–42.

¹¹Seccombe K, Hoffman K. "Access to Health Care and Welfare Reform." Presentation at the Oregon Health Research & Evaluation Collaborative meeting, Salem, OR. October 19, 2004.

¹²Institute of Medicine, *Coverage Matters*. 2001.

¹³Berk ML, Schur CL. Measuring access to care: improving information for policymakers. *Health Aff.* 1998;17(1):180–6.

¹⁴Sinay T. Access to quality health services: determinants of access. *J Health Care Finance*. 2002;28(4):58–68.

been to the doctor in the past year?”¹⁵ Although utilization is not a summary of all measures of access, it offers a starting point for measuring access.

This study measures the utilization of health care by OHP enrollees by examining the nature of the initial encounter. The initial encounter with the healthcare system allows a provider to assess the health status of an individual so that proper care can be administered. Enrollees in OHP should receive preventive services including

- immunizations
- health education and counseling in diet, exercise, nicotine use cessation, seat-belt use, and avoiding high-risk behaviors to prevent injury and disease
- screening services necessary for early detection and treatment of diseases

Understanding who is accessing the managed care system, and which FCHPs have higher or lower rates of utilization, is critical to exploring possible explanations and working toward eliminating barriers that prevent certain populations from utilizing the healthcare system.

Access to care can be measured by assessing not only whether or not a person utilizes healthcare services, but also the time elapsed between enrollment in managed care and the first appointment. Presumably, the sooner an enrollee accesses the system, the sooner he or she can begin receiving healthcare services.

Because of the many benefits of preventive care, the quality of access to care should also be measured by the type of services the person receives in an initial encounter. Initial encounters with ambulatory care providers are preferable to initial encounters at the ED or a hospital. Enrollees who have access to ambulatory care providers benefit from the provision of preventive services that may reduce the likelihood that the enrollee would have to undergo potentially invasive or risky treatments in an emergent or inpatient setting. Managed care health plans benefit from less-frequent use of more costly healthcare resources. Another potentially beneficial result of having a higher percentage of ambulatory visits as first encounters is that MCOs with a defined enrollee population can initiate new-enrollee screening activities to determine whether a preventive visit is necessary or a health condition needs attention. For example, well individuals may not require a subsequent visit within a one-year period.

¹⁵Health Plan Employer Data and Information Set (HEDIS®). Volume 2: Technical Specifications. 2004:149–54. HEDIS is a registered trademark of the National Committee for Quality Assurance.

Objectives and scope

OMAP and the FCHPs need to know whether new enrollees to OHP are accessing healthcare services available to them through the managed care plans. OMPRO analyzed administrative and encounter data submitted by FCHPs to answer the following questions:

- Do FCHPs vary from the aggregate regarding overall healthcare system access?
- Do FCHPs vary from the aggregate regarding the time to first encounter after enrollment?
- What is the type and frequency of first encounters with healthcare services after new enrollment with OMAP managed care—ambulatory care, ED, inpatient hospitalization, or “other” encounter type?¹⁶ Does this first encounter type vary by FCHP?
- What are the characteristics of enrollees who do not access the healthcare system, and how do those characteristics differ from the characteristics of enrollees who do access the system? Do enrollees with different demographic characteristics vary by or how they access the system (e.g., ambulatory, ED, inpatient, “other” encounter types)?
- Are there first encounter patterns that could alert FCHPs to disparities in access?

OMAP and OMPRO targeted “new” enrollees and analyzed the first encounter with the healthcare system within six months following the date of new enrollment. For the purposes of this study, new enrollment was defined as the date of enrollment with no enrollment for the preceding 60 days, except for less than 30 days’ eligibility contiguous to the new enrollment date. Eligible new enrollees were those enrolled in an FCHP for six months with no gaps. All individuals with a new enrollment date between October 1, 2001, and October 1, 2003, were included.

The 14 FCHPs participating in the OHP were as follows:

- CareOregon, Inc.
- Cascade Comprehensive Care, Inc.
- Central Oregon Independent Health Services
- Doctors of the Oregon Coast South
- Douglas County Independent Physicians Association
- FamilyCare, Inc.
- InterCommunity Health Network
- Kaiser Permanente Northwest
- Lane Individual Practice Association
- Marion Polk Community Health Plan
- Mid-Rogue Independent Physician Association
- Oregon Health Management Services
- Providence Health Plan
- Tuality Health Alliance

¹⁶“Other” visits include visits for ancillary services (radiology, lab work, physical or occupational therapy), eye visits, and visits for dental and mental health services.

Methodology

Study design

Comparative assessments are evaluations of FCHP performance that

- compare the populations of each FCHP's encounter data to a baseline of FCHP aggregated data
- examine the distribution of data for all FCHPs

For this comparative assessment, OMPRO used descriptive and inferential statistical methods to examine the amount of variation in the types of first encounters and to identify adversely out-of-range performance. Out-of-range performance data may be subject to review by OMAP and the FCHP. If, in OMAP's judgment, the data review does not result in an adequate explanation of the variation (i.e., the variation between the FCHP-submitted data and the aggregate data cannot be explained, identified, or shown to be the result of data entry, coding, transmission, or reporting error), OMPRO will review a representative sample of health records (charts) from the appropriate FCHP.

Data extraction

Claims and encounter data were submitted to OMAP by medical facilities, FCHPs, and individual providers using UB-92 or HCFA-1500 insurance claim forms. These forms include information on the type of visit, services provided, diagnoses, and demographic characteristics of the enrollee. In March 2004, OMAP extracted data from its encounter and claims database for all eligible new enrollees in the study time frame.

Data definitions

The definitions for eligibility, exclusions, numerator, and denominator follow.

Eligible population

New enrollees were defined as having a date of enrollment with no enrollment for the preceding 60 days, except for less than 30 days' eligibility contiguous to the new enrollment date. During the 30 days prior to enrollment, the individual was accepted for coverage under the fee-for-service benefit structure until he or she was enrolled in a managed care FCHP.

Exclusions

Enrollees with live births during the study time frame were excluded from the sample of new enrollees. Live births were defined as those covered by the following diagnosis related groups (DRGs): 385–391, 801–805, 810.¹⁷

Numerator

The numerator for percentages was based on new enrollees who had a first encounter with a provider after the enrollment date, or new enrollees who had no first encounter with a provider after the enrollment date. The three ways in which access to care was measured defined the three possible numerators:

- enrollees with, and without, a first encounter
- enrollees with ambulatory, ED, inpatient, or "other" first encounter types

¹⁷Diagnosis related group (DRG) is a classification system that relates common patient characteristics such as diagnosis, treatment, and age to an expected consumption of hospital resources and length of stay.

- enrollees with first encounters within
 - one week
 - one month
 - three months
 - six months
 - one year

Tables 1 through 4 show the codes or code combinations used to define diagnoses and procedures for each of the four types of encounters under examination.

Table 1. Ambulatory encounters defined.

Description	CPT codes ^a	ICD-9-CM revenue codes ^b
Office or other outpatient services	99201–99205, 99211–99215, 99241–99245, 99499	
Preventive medicine	99381–99387, 99391–99397, 99401–99404, 99411, 99412, 99420, 99429	
Immunizations		V03X–06X
Prenatal care		V22X, V23X
Other evaluation and management services	99499	
Clinic		51X
Free-standing clinic		52X
Professional fees, outpatient services		982
Professional fees, clinic		983

^aCurrent Procedural Terminology (CPT[®]) codes for reporting medical services and procedures were developed by the American Medical Association.

^bInternational Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) is the official system of assigning codes to diagnoses and procedures associated with hospital utilization in the United States.

Table 2. ED encounters defined.

UB-92 type of bill codes^a	<i>and</i>	UB-92 revenue codes	<i>OR</i>	Place of service codes CMS 1500	<i>and</i>	CPT codes
13X, 43X		450–452, 459		23		10040–69979 99281–99288

^aThe UB-92 Uniform Health Insurance Claim Form is used by providers to submit Medicaid and Medicare claims.

Table 3. Inpatient discharges and procedures defined.

Description	DRG codes	ICD-9-CM codes	UB-92 codes
Total inpatient	1–423, 439–455, 461, 463–471, 473, 475–520	All principal diagnosis codes	Type of bill codes: 11X, 12X, 41X, 42X, 84X
Maternity	370–384		Revenue codes: 112, 122, 132, 142, 152, 724
Surgery	1–8, 36–42, 49–63, 75–77, 103–109, 110–120, 146–171, 191–201, 209–234, 257–270, 285–293, 302–315, 334–345, 353–365, 392–394, 400–402, 406–408, 415, 439–443, 461, 468, 471, 476–486, 488, 491, 493–504, 506–507, 512–520		
Medicine	9–35, 43–48, 64–74, 78–102, 121–145, 172–190, 202–208, 235–256, 271–284, 294–301, 316–333, 346–352, 366–369, 395–399, 403–405, 409–414, 416–423, 444–455, 463–467, 473, 475, 487, 489–490, 492, 505, 508–511		

“Other” visits represent first encounters not defined as ambulatory, ED, or inpatient. Given the complexity of this category, only the major procedure or diagnoses were identified: ancillary, eye, dental, and mental health encounters (see Table 4). Additional encounters not identified through these categories were labeled “indeterminate.”

Table 4. “Other” encounters defined.

Description	CPT codes	ICD-9-CM codes
Ancillary— radiology, lab, physical therapy (PT), occupational therapy (OT)	70010–79999 (Radiology) 80048–89356 (Lab) 97001–97006, 97010–97546 (PT/OT)	
Eye	65091–68899, 92002–92499	08.00–16.99, 360.00–379.99
Dental (teeth only)		23.00–24.99, 520.00–525.9X
Mental health	90804–90899	290.00–319.00

Denominator

The denominator represented one of two possible populations:

- all new enrollees who had a first encounter with a provider after the enrollment date
- all new enrollees who did not have an encounter with a provider after the enrollment date

Limitations

The data available for analysis for this comparative assessment were administrative and encounter records, which have some limitations. For example, the definition of a new enrollee established for this study may not have reflected every possible individual circumstance. The data did not give the necessary detail to distinguish, for example, the following possibilities:

- Individuals with established relationships with an FCHP or provider prior to enrollment in OHP may not have had an encounter within six months of enrollment, *or* may not have had an ambulatory encounter as their first claim as an OHP enrollee.
- Enrollees older than 65, dually enrolled in Medicaid and Medicare, may have received services through Medicare instead of through OHP.

In addition, whether an enrollee had a first encounter with a provider is one of several measures of access, and is limited in scope. The factors that contribute to access to care merit further definition and study.

Data analysis

For each FCHP and for the aggregate of all FCHPs in the state, OMPRO performed three analyses:

- the percentage of enrollees with a first encounter
- time elapsed between enrollment and enrollee's first encounter
- percentage of first encounter types (ambulatory, ED, inpatient, "other")

The percentages were calculated for each measure in the following categories:

- type of OHP program
- ethnicity
- gender
- geography (rural vs. urban as defined by enrollee ZIP code)¹⁸
- race
- age group

OMPRO analyzed differences in the percentages of first encounters, time to first encounter, and type of first encounter by OHP program (OHP Plus and OHP Standard) to determine whether populations in either program experience difficulties seeking and receiving health care.^{19,20}

The data from all calculations are arrayed in tables in the Results section beginning on page 17.

OMPRO analysts used a z-test to analyze the difference between each FCHP's percentage and the aggregate percentage in each analysis. The z-test compared the FCHP proportion to the aggregate proportion and determined whether a difference was due to random chance or suggested an actual difference in the two proportions. Statistically significant variation is defined with p-values less than 0.05 ($p < 0.05$). When $p < 0.05$, there is less than 5 percent chance that the difference between the FCHP's percentage and the aggregate percentage is due to random chance.

Although overall first encounters and time to first encounter were also assessed, these measures did not contribute to the determination of an outlier. An FCHP was considered an outlier for ambulatory or ED visits if its percentage of ambulatory encounters was lower than the aggregate or if its percentage of ED encounters was higher than the aggregate. Only an FCHP that was an outlier in both ambulatory *and* ED encounters was defined as an outlier for enrollee access to care.

Analyzing first encounters by type of encounter not only provides a description of service use but also validates the data submitted by the FCHPs, as specified in the protocol established by the federal Department of Health and Human Services, Centers for Medicare & Medicaid Services.²¹ See Appendix B, Data Accuracy and Completeness Evaluation.

¹⁸This analysis uses the definition of urban and rural areas created by the Office of Rural Health at Oregon Health & Science University. Rural areas are "all geographic areas 10 or more miles from the centroid of a population center of 30,000 or more." For a list of urban and rural towns in Oregon based on this definition, see <http://www.ohsu.edu/oregonruralhealth/urbanruralcheck.pdf>. Accessed February 3, 2005.

¹⁹McConnell J, Wallace N. Impact of premium changes in the Oregon Health Plan. Office for Oregon Health Policy and Research 2003:6.

²⁰Comparative assessment report: Emergency Department utilization, Oregon Health Plan Managed Care Plans, 2002–2003. Presented by OMPRO to the Oregon Department of Human Services, Health Services, Office of Medical Assistance Programs. February 18, 2005.

²¹Department of Health and Human Services, Centers for Medicare & Medicaid Services, *Conducting Medicaid External Quality Review Activities, a Protocol for Use in Conducting Medicaid External Quality Review Activities, Final Protocol, Version 1.0*. May 2002.

Results

Enrollee first encounters

The majority of FCHP enrollees had a first encounter after enrolling in OHP. Table 5 shows that 84.1 percent of enrollees had a first encounter during the study time frame. The percentage of new enrollees with a first encounter differed by FCHP. Three FCHPs reported percentages of first encounters significantly higher than the aggregate; six FCHPs reported percentages of first encounters significantly lower than the aggregate. Although the FCHP differences from the aggregate were statistically significant, when interpreting the results, care should be taken to distinguish between statistical significance and the practical importance of the difference.

Table 5. First encounter percentage by FCHP and aggregate.

FCHP	Number of first encounters	Number of eligible enrollees	Percentage in FCHP with a first encounter ^a	
CareOregon, Inc.	9,957	11,509	86.5	↑
Cascade Comprehensive Care, Inc.	716	856	83.6	
Central Oregon Independent Health Services	2,162	2,535	85.3	
Doctors of the Oregon Coast South	729	925	78.8	↓
Douglas County IPA	1,348	1,573	85.7	
FamilyCare, Inc.	1,192	1,414	84.3	
InterCommunity Health Network	1,683	2,116	79.5	↓
Kaiser Permanente Northwest	1,057	1,144	92.4	↑
Lane Individual Practice Association	2,933	3,608	81.3	↓
Marion Polk Community Health Plan	3,279	4,006	81.9	↓
Mid-Rogue IPA	514	628	81.8	
Oregon Health Management Services	546	682	80.1	↓
Providence Health Plan	1,617	1,991	81.2	↓
Tuality Health Alliance	688	792	86.9	↑
Aggregate	28,421	33,779	84.1	

^aArrows ↑ ↓ indicate the FCHP percentage is statistically significantly higher or lower, respectively, than the aggregate at p<0.05.

Males, non-whites, Hispanics, and those living in urban areas had significantly higher percentages of first encounters than their counterparts (females, whites, non-Hispanics, those living in rural areas, respectively). Table 6 shows that children younger than 1 year and those ages 1–5 had higher percentages of first encounters than all other age groups. Between 6 and 55 years, the percentage of enrollees with a first encounter declines; for those 55 years and older, the percentage of first encounters shows an increase.

Table 6. Percentage of enrollees with first encounter in each demographic group.

Description	Number	Percentage ^a	
Aggregate	28,421	84.1	
Gender			
Male	12,643	84.8	*
Female	15,689	83.6	
Race			
White	20,857	83.1	*
Non-white	7564	87.0	
Ethnicity			
Hispanic	4191	87.2	*
Non-Hispanic	24,230	84.6	
Geographic region			
Urban	16,332	84.7	*
Rural	11,844	83.4	
Age			
Younger than 1 year	7612	99.4	↑
1–5 years	4388	88.1	↑
6–12 years	4136	83.7	↓
13–18 years	2588	81.3	↓
19–35 years	4326	76.5	↓
36–55 years	3130	70.9	↓
56–65 years	850	75.4	↓
Older than 65 years	1391	76.9	↓

^aAsterisk * indicates statistically significant differences based on chi-square tests with $p < 0.05$. Arrows ↑ ↓ indicate the FCHP percentage is statistically significantly higher or lower, respectively, than the aggregate at $p < 0.05$.

Time to first encounter

Table 7 shows the aggregate percentage of first encounters made within several time frames. Of enrollees with a first encounter, more than one-quarter saw a provider within one week (28.6 percent). Almost two-thirds saw a provider within one month (62.6 percent) and most people (93.6 percent) had a claim within six months of enrollment.

Table 7. Time to first encounter after enrollment.

Time elapsed since enrollment	Cumulative number of first encounters	Cumulative percentage of total first encounters
Within one week	8,141	28.6
Within one month	17,798	62.6
Within three months	23,854	83.9
Within six months	26,600	93.6
Within one year	28,051	98.7
More than one year	28,421	100.0

The average elapsed time from enrollment to first encounter was 50 days, although this duration varied by type of encounter. Those with an ED first encounter waited the longest before accessing the system (78 days); those with ambulatory or “other” needs waited the shortest time (50 and 45 days, respectively). Those with inpatient first encounters had an average time to first encounter of 60 days.

OMPRO analyzed the percentage of new enrollees in each FCHP and OHP program who had a first encounter within six months of enrollment (see Table 8 on the following page). Oregon Health Management Services and Providence Health Plan fell significantly below the state aggregate percentage; InterCommunity Health Network was the only FCHP with a percentage of first encounters that was above the state aggregate. OHP Standard enrollees had a higher percentage of first encounters within six months than OHP Plus enrollees.

Table 8. Percentage of first encounters within six months of enrollment, by aggregate, FCHP, and program.

Category	%	#	
Aggregate	26,600	93.6	
FCHP^a			
CareOregon, Inc.	9,325	93.7	
Cascade Comprehensive Care, Inc.	683	95.4	
Central Oregon Independent Health Services	2,047	94.7	
Doctors of the Oregon Coast South	686	94.1	
Douglas County IPA	1,278	94.8	
FamilyCare, Inc.	1,106	92.8	
InterCommunity Health Network	1,599	95.0	↑
Kaiser Permanente Northwest	979	92.6	
Lane Individual Practice Association	2,758	94.0	
Marion Polk Community Health Plan	3,040	92.7	
Mid-Rogue IPA	486	94.6	
Oregon Health Management Services	488	89.4	↓
Providence Health Plan	1,489	92.1	↓
Tuality Health Alliance	636	92.4	
Program^{b,c}			
OHP Plus	23,642	93.4	*
OHP Standard	2,762	95.1	

^aArrows ↑ ↓ indicate the FCHP percentage is statistically significantly higher or lower, respectively, than the aggregate at p<0.05.

^bAsterisk * indicates statistically significant difference based on chi-square tests with p<0.05.

^cOHP Plus population includes only new enrollees 18–64 years to ensure comparability with the OHP Standard population.

Females, whites, and non-Hispanics had higher percentages of encounters within the first six months (see Table 9 on the following page). Nearly all children younger than one year had a first encounter within six months of enrollment (99.3 percent). Middle-aged adults (36–65 years) and older patients (those over 65 years) also had higher percentages of first encounters within the first six months than the aggregate.

Table 9. Demographics of enrollees with a first encounter within six months of enrollment.

Demographic category	#	%
Aggregate	26,600	93.6
Gender ^a		
Female	14,789	94.3 *
Male	11,724	92.7
Location		
Urban	15,256	93.4
Rural	11,104	93.8
Race/ethnicity ^b		
White	19,685	94.4 ↑
African American	1293	91.0 ↓
Hispanic	3822	91.2 ↓
Asian	712	91.3 ↓
Age		
Younger than 1 year	7560	99.3 ↑
1–5 years	3932	89.6 ↓
6–12 years	3556	86.0 ↓
13–18 years	2281	88.1 ↓
19–35 years	4121	95.3
36–55 years	2992	95.6 ↑
56–65 years	810	95.3 ↑ ^c
Older than 65 years	1348	96.9 ↑

^aAsterisk * indicates statistically significant differences based on chi-square tests at $p < 0.05$.

^bArrows ↑ ↓ indicate the FCHP percentage is statistically significantly higher or lower, respectively, than the aggregate at $p < 0.05$.

^cAlthough the percentage of first encounters in the 56–65-year age group is the same as the percentage in the 19–35 age group, only the 56–65 age group was found to have a statistically significant difference from the aggregate, due to sample size.

Type of first encounter

Table 10 shows the types of first encounters for all enrollees. The most common types of encounters were ambulatory and “other” encounters; very few inpatient visits were reported as first encounters after enrollment.

Table 10. First encounter types, all FCHPs aggregated.

Type of encounter	Number of enrollees with a first encounter	Percentage of enrollees with a first encounter
Ambulatory	14,824	52.2
ED	1919	6.8
Inpatient	125	0.4
“Other”	11,553	40.6

The breakdown of first encounters in the “other” category is given in Figure 1 below. The “indeterminate” subcategory is made up of more than 100 disparate visit types.

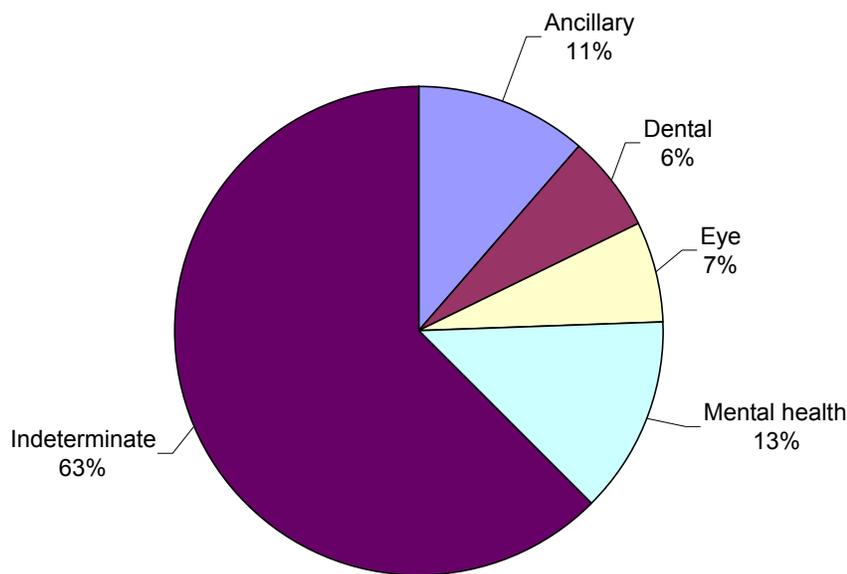


Figure 1. Composition of “other” first encounters.

There were no significant differences in the percentage of first encounter types by OHP program (see Table 11).

Table 11. Type of first encounter by OHP program.^a

	Ambulatory		ED		Inpatient		“Other”	
	#	%	#	%	#	%	#	%
Aggregate	14,824	52.2	1919	6.8	125	0.4	11,553	40.6
OHP program								
OHP Plus	13,299	52.5	1709	6.8	97	0.4	10,207	40.3
OHP Standard	1512	52.1	208	7.2	27	0.9	1156	39.8

^aOHP Plus population includes only new enrollees 18–64 years to ensure comparability with the OHP Standard population.

The percentages of types of encounters differed by FCHP. Table 12 on page 24 shows that all FCHPs except Oregon Health Management Services differed significantly from the aggregate percentage in at least one category. Ambulatory encounters represent encounters that are more likely to be preventive and can therefore be considered more desirable. In contrast, some ED visits (i.e., those that would be considered not urgent) may be the result of insufficient access to a primary care provider (PCP) due to the providers’ limited office hours, enrollees’ difficulties finding transportation to appointments, or language barriers. Therefore, a higher percentage of ED encounters may signal lower access to care.^{22,23,24,25}

²²Fredrickson DD, Molgaard CA, Dismuke DE, et al. Understanding frequent emergency room use by Medicaid-insured children with asthma: a combined quantitative and qualitative study. *J Am Board Fam Pract.* 2004; 17(2):96–100.

²³Cabana MD, Jee SH. Does continuity of care improve patient outcomes? *J Fam Pract.* 2004; 53(12):974–80.

²⁴Zuckerman S, Brennan N, Yemane A. Has Medicaid managed care affected beneficiary access and use? 221–42.

²⁵Billings J. Using administrative data to monitor access, identify disparities, and assess performance of the safety net. In: Tools for Monitoring the Health Care Safety Net. September 2003. AHRQ Publication No. 03-0027. Agency for Healthcare Research and Quality, Web site. Available at: www.ahrq.gov/data.safetynet/billings.htm. Accessed August 19, 2004.

Table 12. First encounter type by FCHP and aggregate.

FCHP ^a	Ambulatory		ED		Inpatient		"Other"	
	#	%	#	%	#	%	#	%
CareOregon, Inc.	5,076	51.0 ↑	835	8.4 ↑	42	0.4	4,004	40.2
Cascade Comprehensive Care, Inc.	434	60.6 ↑	20	2.8 ↓	4	0.6	258	36.0 ↓
Central Oregon Independent Health Services	1,221	56.5 ↑	110	5.1 ↓	9	0.4	822	38.0 ↓
Doctors of the Oregon Coast South	356	48.8	72	9.9 ↑	2	0.3	299	41.0
Douglas County IPA	615	45.6 ↓	154	11.4 ↑	10	0.7	569	42.2
FamilyCare, Inc.	601	50.4	79	6.6	7	0.3	565	42.7
InterCommunity Health Network	928	55.1 ↑	61	3.6 ↓	9	0.5	685	40.7
Kaiser Permanente Northwest	474	44.8 ↓	18	1.7 ↓	4	0.4	561	53.1 ↑
Lane Individual Practice Association	1,585	54.0	131	4.5 ↓	8	0.3	1,209	41.2
Marion Polk Community Health Plan	1,808	55.1 ↑	232	7.1	12	0.4	1,227	37.4 ↓
Mid-Rogue IPA	250	48.6	32	6.2	5	1.0	227	44.2
Oregon Health Management Services	288	52.7	36	6.6	4	0.7	218	39.9
Providence Health Plan	769	47.6 ↓	86	5.3 ↓	10	0.6	752	46.5 ↑
Tuality Health Alliance	419	60.9 ↑	54	7.7	3	0.4	213	31.0 ↓
Aggregate	14,824	52.2	1,919	6.8	125	0.4	11,553	40.6

^aArrows ↑ ↓ indicate the FCHP percentage is statistically significantly higher or lower, respectively, than the aggregate at p<0.05.

Outliers

Ambulatory first encounters

Six FCHPs had percentages of first encounters as ambulatory visits significantly higher than the mean; three FCHPs had percentages of ambulatory encounters significantly below the mean. However, the range of percentages of ambulatory first encounters was relatively narrow. None of the percentages of ambulatory encounters was lower than two sigma from the mean, although Kaiser Permanente Northwest’s percentage was almost two sigma below the mean. In contrast, Cascade Comprehensive Care and Tuality Health Alliance each had a percentage of ambulatory first encounters that was two sigma above the mean. Figure 3 shows all FCHP percentages plotted in comparison with the mean.

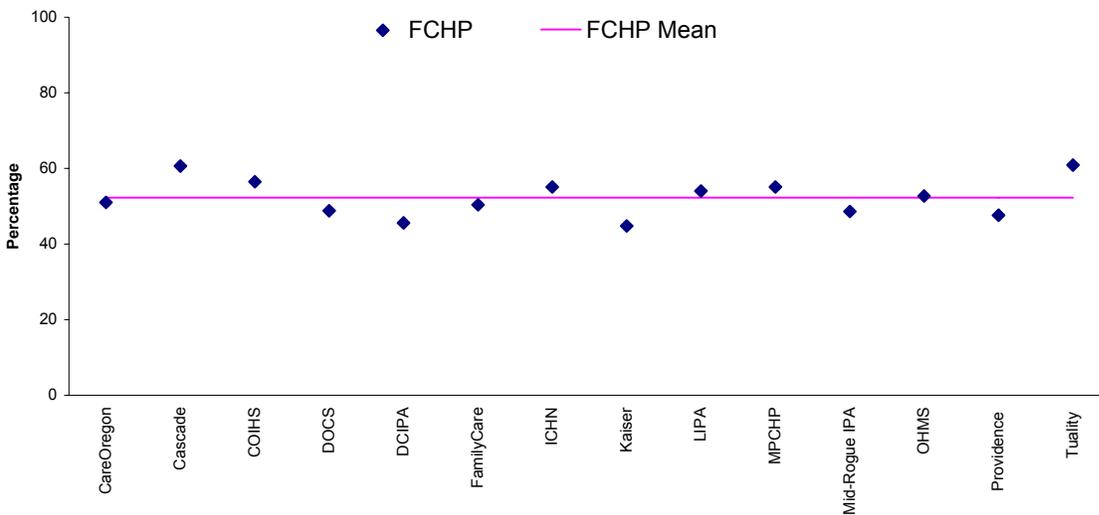


Figure 3. Percentage of ambulatory encounters as first encounters, all FCHPs and mean.

ED first encounters

Table 12 shows that three FCHPs had percentages of ED first encounters significantly above the aggregate; six FCHPs had percentages of ED first encounters significantly below the aggregate.

The range of percentages of ED first encounters is relatively narrow. Only Douglas County IPA had a percentage greater than two sigma above the mean. In contrast, Cascade Comprehensive Care and Kaiser Permanente Northwest reported percentages of ED encounters that were two sigma below the mean. Figure 2 shows all FCHP percentages plotted in comparison with the mean.

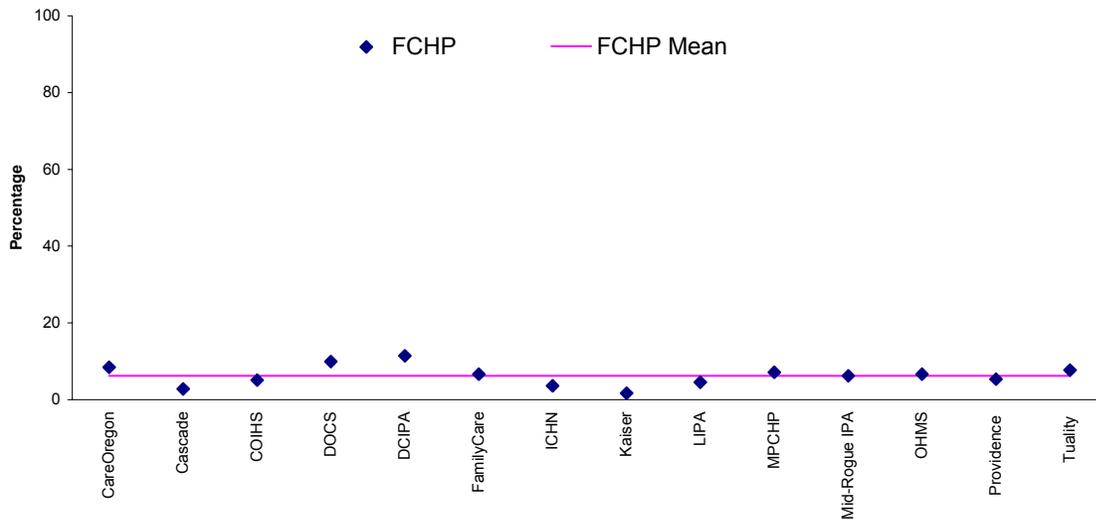


Figure 2. Percentage of ED encounters as first encounters, all FCHPs and mean.

First encounter differences among demographic groups

Differences in the types of first encounters were analyzed by demographic groups. Table 13 shows that females had a lower percentage of ED visits as first encounters than males. Urban residents had higher percentages of “other” encounters and lower percentages of ambulatory and ED encounters than rural residents. The number of inpatient first encounters was very low; interpretation of results for this encounter category is not recommended.

Table 13. Type of first encounter by gender and location.

Demographic category ^{a,b}	Ambulatory		ED		Inpatient		“Other”		
	#	%	#	%	#	%	#	%	
Gender									
Female	8223	52.4	958	6.1 *	70	0.4	6438	41.0	
Male	6,555	51.8	951	7.5	54	0.4	5083	40.2	
Location									
Urban	8284	50.7 *	1034	6.3 *	66	0.4	6948	44.6 *	
Rural	6428	54.3	870	7.3	57	0.5	4489	37.9	
Aggregate	14,824	52.2	1,919	6.8	125	0.4	11,553	40.6	

^aAsterisk * indicates statistically significant differences based on chi-square tests with $p < 0.05$.

^bSome rows do not add to 100 percent due to rounding

Whites and African Americans had lower percentages of ambulatory visits as first encounters and higher percentages of “other” visits than the aggregate. Hispanics, on the other hand, had higher percentages of ambulatory and ED visits and lower percentages of “other” visits as first encounters (see Table 14 on the following page). Asians and whites had a lower percentage of ED first encounters than the aggregate.

Infants and children under 5 years had higher percentages of ambulatory first encounters and lower percentages of “other” first encounters than the aggregate. The percentage of “other” encounters increases with age as the percentage of ambulatory encounters decreases. Young children (1–5 years), adolescents (13–18 years), and young adults (19–35 years) had higher percentages of ED first encounters than the aggregate, while infants younger than 1, older adults (56–65 years), and seniors (65 years and older) had lower percentages of ED visits as a first encounter than the aggregate.

Table 14. Type of first encounter by race/ethnicity, age, and aggregate.

Demographic category ^a	Ambulatory		ED		Inpatient		“Other”		
	#	% ^b	#	%	#	%	#	%	
Race/ethnicity									
White	10,649	48.5 ↓	1,310	6.3 ↓	99	0.5	8,799	42.2 ↑	
African American	633	44.4 ↓	112	7.8	10	0.7	672	47.1 ↑	
Hispanic	2,641	63.0 ↑	368	8.8 ↑	13	0.3	1,169	27.9 ↓	
Asian	400	51.3	37	4.7 ↓	0	0.0	343	44.0	
Age									
Younger than 1 year	5,290	69.5 ↑	317	4.2 ↓	18	0.2 ↓	1,987	26.1 ↓	
1–5 years	2,754	62.8 ↑	459	10.5 ↑	16	0.4	1,159	26.4 ↓	
6–12 years	1,762	42.6 ↓	287	6.9	2	0.0 ↓	2,085	50.4 ↑	
13–18 years	1,093	42.2 ↓	222	8.6 ↑	4	0.2 ↓	1,269	49.0 ↑	
19–35 years	1,936	44.8 ↓	371	8.6 ↑	31	0.7 ↑	1,988	46.0 ↑	
36–55 years	1,324	42.3 ↓	202	6.5	32	1.0 ↑	1,572	50.2 ↑	
56–65 years	360	42.4 ↓	39	4.6 ↓	10	1.2 ↑	441	51.9 ↑	
Older than 65 years	305	21.9 ↓	22	1.6 ↓	12	0.9 ↑	1,052	75.6 ↑	
Aggregate	14,824	52.2	1,919	6.8	125	0.4	11,553	40.6	

^aSome rows do not add to 100 percent due to rounding.

^bArrows ↑ ↓ indicate the FCHP percentage is statistically significantly higher or lower, respectively, than the aggregate at p<0.05.

Discussion

This report assessed three basic measures of access to care—overall percentages of first encounters, types of first encounters, and time from enrollment to first encounter. These measures were created through a process of collaborative thinking between OMAP and OMPRO. The “new enrollee” definition—created for this comparative assessment—is unprecedented. Because this is the first time such a measure has been used, it has not been assessed for reliability and validity by an external entity. Definitive conclusions must be drawn cautiously regarding aggregate or FCHP-specific results in the absence of national or state-level goals for

- percentages of first encounters
- time elapsed until first encounter
- proportions of types of first encounters

If measurement of these factors proves useful for evaluation, continued assessment is recommended so that comparisons across time can be made, especially as there are no other benchmarks to measure increasing or declining utilization of the healthcare system.

Although the primary goal of this assessment is to examine differences among FCHPs, it is also important to analyze who accessed the system less frequently or not at all. Enrollees in demographic segments with lower-than-aggregate percentages of ambulatory first encounters may be experiencing lower access to care. Without timely ambulatory visits, enrollees are less likely to receive gender-, age-, or culture-appropriate screenings, immunizations, and other preventive care services. Maintaining acceptable levels of access to care means more than making providers and services available; it also can mean ensuring that enrollees are actually getting the care they need to live healthy lives. The established guidelines for well-patient visits, enrollee screening, and immunizations can be used as proxies for benchmarks to access to care, thus providing better standards by which to assess whether people are getting the care they need.

Enrollee first encounters

Overall, the vast majority of new OHP enrollees had a first encounter with the system during the study time frame (84.1 percent). This percentage of new enrollees with a first encounter may represent the proportion of all enrollees who access the system. This percentage shows satisfactory access to care for enrollees in OHP FCHPs.

Nearly all new enrollees encountered the healthcare system within one year of enrollment (98.7 percent), most saw a provider within six months (93.6 percent), and more than one-quarter saw a healthcare professional within one week (28.6 percent). These results show that access to care for OHP enrollees is satisfactory, although there are opportunities for improvement. Six FCHPs had percentages of overall first encounters lower than the aggregate, potentially indicating lower access, although care should be taken to distinguish between statistical significance and the practical importance of the difference when interpreting the results.

Overall, females had lower percentages of visits of any type than males (83.6 percent compared with 84.8 percent). Although this statistically significant difference is not large, its relative importance grows when considering that women in their reproductive years are recommended to have more exams than men (especially true for low-income women who are at greater risk for undetected

cervical cancer because of reduced access for regular screenings).²⁶ Thus, it would seem that females would be more likely to have a first encounter than males if the proper preventive care were being sought.

There are also notable age-related patterns in enrollee utilization. This discussion focuses on children younger than 18, because annual visits are not recommended for all adults.^{27,28} Preventive service guidelines recommend that infants and children younger than 3 years have several visits each year and children ages 3–17 visit less often.^{29,30} Nearly all children younger than 1 year (99.4 percent) had an encounter within one year of enrollment. Older children had higher percentages of nonparticipation during the first-year time frame: approximately 12 to 19 percent of youth between the ages of 1 and 18 did not have a first encounter.

Children who did not have a first encounter in the past year may be missing important prevention messages as a result of not accessing the healthcare system in a timely manner. Given that 13-to-18-year-olds are vulnerable to risk-taking behaviors, such as using tobacco and alcohol, more analysis is warranted to assess whether adolescents are receiving the proper counseling from their PCPs regarding their health-related behaviors. Similarly, children and adolescents alike are facing an epidemic of obesity.³¹ Without a healthcare visit, young people who need help monitoring their diet and exercise habits may not receive the intervention and assistance they need.

Time to first encounter

Time to first encounter may also serve as an indicator of access to care; a long wait between enrollment and a first provider appointment may mean that an enrollee is not receiving needed medical services in the interim. The lack of a first encounter may mean that preventive care is not being administered. FCHPs with percentages lower than the aggregate for first encounters within six months may benefit from further study to identify possible explanations for the gap.

The timing of first encounters was examined by enrollee age. Almost all infants (99.3 percent) had an encounter within six months of enrollment. Only 2.2 percent of children ages 1–5 years, 3.1 percent of children ages 6–12, and 2.7 percent of adolescents ages 13–18 did not have a first

²⁶Centers for Disease Control and Prevention. CDC recommendations regarding selected conditions affecting women's health. *MMWR Recomm Rep* 2000;49(RR-2):1–76.

²⁷Camino Medical Group, a division of the Palo Alto Medical Foundation. Preventive Care Guidelines Web site. Available at: www.caminomedical.org/news/spring_2004/preventive.html. Accessed March 10, 2004.

²⁸The U.S. Preventive Services Task Force (USPSTF), sponsored by the Agency for Healthcare Research and Quality (AHRQ). USPSTF conducts rigorous, impartial assessments of the scientific evidence for the effectiveness of clinical preventive services, including screening, counseling, and preventive medications. Its recommendations are considered the “gold standard” for clinical preventive services. USPSTF Web site. Available at: www.ahrq.gov/clinic/uspstfix.htm. Accessed March 10, 2004.

²⁹Institute for Clinical Systems Improvement. Preventive services for children and adolescents. Bloomington, MN: Institute for Clinical Systems Improvement, 2004. AHRQ National Guideline Clearinghouse Web site. Available at www.guideline.gov/summary/summary.aspx?doc_id=5831. Accessed March 10, 2005.

³⁰Committee on Practice and Ambulatory Medicine. Recommendations for preventive pediatric health care (RE9535). American Academy of Pediatrics Web site. Available at <http://aappolicy.aappublications.org/sub-journals/pediatrics/html/content/vol1105/issue3/images/large/pe0304207001.jpeg>. Accessed February 24, 2005.

³¹Centers for Disease Control and Prevention. Prevalence of Overweight Among Children and Adolescents: United States, 1999–2002. Available at <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm>. Accessed March 10, 2005.

encounter within six months of enrollment. These numbers may be an accurate reflection of recommended utilization of the medical system for children and young people.

Type of first encounter

The type of first encounter with the healthcare delivery system serves as a proxy for access to care. Lower percentages of ambulatory first encounters and higher percentages of ED or inpatient first encounters might signal lower access to care. Three FCHPs had percentages of ambulatory visits as first encounters below the aggregate; three FCHPs had percentages of ED visits as first encounters above the aggregate. Given the lack of significant differences in inpatient encounter percentages and the relatively low incidence of inpatient encounters overall, this visit type was not discussed in detail in this report.

The aggregate percentage of ED visits as first encounters was 6.8 percent. To date, there have been no published studies setting benchmarks for an ideal rate of ED visits as first encounters. Clearly, some ED visits are inevitable as people experience trauma and unexpected events. However, examining the results of this study in light of results from OMPRO's report on ED utilization may provide clues as to how to limit the number of preventable ED visits.³² If this assessment is conducted over time, a decrease in ED first encounters accompanied by an increase in ambulatory first encounters may validate the assumption that increases in preventive visits or ambulatory encounters help reduce preventable ED visits.

The types of first encounters were analyzed by demographics. Males, those living in rural areas, and Hispanics had higher percentages of ED first encounters than other groups. Those living in rural areas and Hispanics had higher percentages of ambulatory visits as first encounters than those in other demographic groups. There were also differences in type of encounter by age group: children under 5 years had higher percentages of ambulatory first encounters than the aggregate; children 1–18 years, and young adults 19–35 years had higher percentages of ED first encounters than the aggregate. Significant differences in inpatient demographic characteristics were found but not interpreted, given the relatively low number of encounters of this type. “Other” encounter differences were not interpreted because of the diversity of visit types in this category.

Outliers regarding access to care were defined by encounter type only. An FCHP was considered an outlier if it met both of the following two criteria:

- a percentage of ambulatory first encounters significantly below the aggregate
- a percentage of ED first encounters significantly above the aggregate

Of the 14 FCHPs assessed, only Douglas County IPA met both criteria for the definition of an outlier regarding access to care in this study.

Three FCHPs had a lower percentage of ED first encounters and a higher percentage of ambulatory first encounters. These FCHPs—Cascade Comprehensive Care, Central Oregon Independent Health Services, and InterCommunity Health Network—may have implemented processes or practices that have resulted in more desirable first-visit proportions for access to care.

³²Comparative assessment report: Emergency Department utilization, Oregon Health Plan Managed Care Plans, 2002–2003. Presented by OMPRO to the Oregon Department of Human Services, Health Services, Office of Medical Assistance Programs. February 18, 2005.

Conclusions and Recommendations

OMPRO found that overall first-encounter rates, time to first encounter, and type of first encounter varied by FCHP and by demographic segments. However, most of the significant FCHP differences among these measures were relatively small, indicating that most FCHPs were performing within a reasonable range of the aggregate.

Outliers in access to care were defined as FCHPs that had a percentage of ambulatory first encounters below the aggregate percentage, accompanied by a percentage of ED first encounters above the aggregate percentage. With this definition, only Douglas County IPA was considered an outlier for access to care as defined in this study.

FCHP-specific recommendations

Some FCHPs have percentages of ED first encounters above the aggregate. Higher-than-aggregate ED encounters are relatively undesirable, especially when enrollees use the ED for nonemergent reasons.³³ FCHPs and OMAP may want to assess how an FCHP and its providers can be more proactive in encouraging enrollees to seek and receive the right treatment at the right time. FCHPs may want to consider enrollee education that emphasizes that the PCP provides continuity of care and follow-up care that an individual cannot receive in the ED.

Douglas County IPA

Only Douglas County IPA was considered an outlier in access to care. An examination of other quality reports on Douglas County IPA's performance and information from the FCHP provided more information about this result.

Emergency Department utilization report

As shown in OMPRO's Emergency Department utilization report, Douglas County IPA had a higher percentage of overall ED visits as well as a higher percentage of nonemergent visits.³⁴ Douglas County IPA may be able to lower the number of first-encounter ED visits by addressing the number of preventable ED visits. In response to the findings from the Emergency Department utilization report, the FCHP has taken the following actions:

- Staff and administrators met with hospital officials to develop ED screening guidelines, addressing issues such as patient triage efficiency, medical screening redirection, and referral back to the PCP for nonemergency situations.
- Administrators are considering offering information to enrollees about ED use. An idea under consideration is to send a letter to enrollees who had visited the ED unnecessarily. The letter would state that the visit was not medically appropriate and could have been handled by the enrollee's PCP.

³³Comparative assessment report: Emergency Department utilization, Oregon Health Plan Managed Care Plans, 2002–2003. Presented by OMPRO to the Oregon Department of Human Services, Health Services, Office of Medical Assistance Programs. February 18, 2005.13–14.

³⁴Ibid. 29.

- PCPs will receive a list of their enrollees who went to the ED unnecessarily. Douglas County IPA will encourage PCPs to talk with these enrollees about the availability of an urgent care clinic and the Douglas County Medical Clinic as alternatives.
- Administrators are also considering providing a community-wide telephone triage system for the FCHP's OHP enrollees.

Taking these recommended steps to lower unnecessary ED utilization may also lower the first-encounter ED percentage for Douglas County IPA and improve this aspect of the access to care for its enrollees.

CAHPS report

Douglas County IPA also scored below average on some measures of CAHPS.³⁵ Overall, Douglas County IPA received a below-average score for enrollee ratings of the FCHP and of PCPs for both adults and children. Douglas County IPA scored below average on some individual measures relating to access, including

- problem getting a satisfactory doctor or nurse (both child and adult)
- experiencing delays in getting help (adult only)
- experiencing delays in customer service (adult only)
- not getting help during office hours (adult only)
- problem getting treatment (child only)

If Douglas County IPA follows the recommendations in the CAHPS report, its proportion of ambulatory encounters may increase as it resolves issues such as enrollee satisfaction with healthcare providers and delays in receiving care. To date, Douglas County IPA has not reported taking any actions in response to the CAHPS ratings and results.

Information from Douglas County IPA

In 2000, Douglas County IPA faced a shortage of PCPs and met the criteria for a medically underserved area.³⁶ Nevertheless, in 2003, the FCHP included OHP Standard enrollees in its plan, increasing its OHP enrollment by 1,300 enrollees. This combination of a shortage of PCPs and a higher enrollment in recent years could also account for a lower percentage of ambulatory visits as first encounters.

The new enrollee handbook supplied by the FCHP does not recommend an initial screening visit.³⁷ Similarly, none of the educational materials disseminated by Douglas County IPA address the benefits of well visits for either children or adults. Douglas County IPA may increase its percentage of enrollees with ambulatory visits as first encounter if the FCHP promotes the importance of having a first encounter with a PCP. As a consequence, enrollees may be more likely to receive the needed preventive services and screenings and to avoid medical situations that would warrant a visit to the ED or hospital.

³⁵2003 CAHPS® 3.0 Adult Medicaid member satisfaction survey: plan-specific report: Douglas County Independent Physicians Association. Oregon Health Plan, Oregon Department of Human Services. 2004.

³⁶U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Primary Health Care Web site. Guidelines for medically underserved area/population (MUA/P) designation: <http://bhpr.hrsa.gov/shortage/nuaguide.htm>. To find the list of medically underserved areas by state, visit: <http://bphc.hrsa.gov/databases/newmua/>.

³⁷Douglas County Individual Practice Association (DCIPA). Member *Handbook, Standard Plan. Revised 7/28/04*. Available through the Oregon Department of Human Services, Health Services, Office of Medical Assistance Programs.

Recommendations for future evaluation

The factors that contribute to access to care merit additional study. Future studies should move the evaluation of access to care toward a more streamlined and comprehensive measure for future benchmarking. Follow-up assessments should

- identify and isolate more of the factors that contribute to enrollees' access to care
- begin to define relationships among the factors that affect access to care

With regard to evaluation of the FCHPs participating in OHP, OMAP may want to

- examine the process by which FCHPs identify new enrollees
- identify the way in which enrollees choose PCPs
- continue to assess individual and aggregate FCHP performance periodically so that comparisons across time can be made
- investigate the use of the Achievable Benchmarks of Care™ methodology for evaluating FCHPs within Oregon³⁸

Several sub-populations of OHP enrollees warrant further examination as well. Questions for additional study that arose from this analysis of access to care are

- Are pre-adolescents and adolescents receiving the proper counseling from their physicians regarding potentially risky health behaviors?
- Are children ages 3–18 receiving needed help monitoring diet and exercise habits?
- Which children ages 3–18 are receiving healthcare services and which are not?
- What factors affect utilization patterns by race and ethnicity?
- What factors contribute to underutilization of the healthcare system by females?
- Would outreach by FCHPs or PCPs improve enrollee access to care over time?

Regarding FCHP variation, OMAP may want to

- recommend that FCHPs with higher-than-aggregate percentages of inpatient and ED first encounters use the parameters defined in this report to review data periodically and document utilization trends
- collect and disseminate best practices from FCHPs with higher percentages of ambulatory encounters

³⁸Achievable Benchmarks of Care (ABC™) is a tool to facilitate the measurement, comparison, and dissemination of benchmarks derived from the process-of-care practices already achieved by the best-performing organizations. For more information on the ABC methodology, visit the University of Alabama Center for Outcomes and Effectiveness Research & Education Web site, available at: <http://main.uab.edu/show.asp?durki=14527>. Accessed March 8, 2005.

Appendix A

List of Data Elements

Table A-1 displays the data elements and related fields used to extract the encounter records from the OMAP data set for this comparative assessment.

Table A-1. Data elements and fields used in this comparative assessment.

Element	Data field	Comments
Enrollee identifier	<ul style="list-style-type: none"> • Prime ID (NmbrPerPrimID) • First name (NameRecip1st) • Last name (NameRecipLast) • Middle initial (NameRecipMidInit) 	
Enrollee age at time of visit for each visit	<ul style="list-style-type: none"> • Date of ED visit (DateCImServBeg) • Date of birth (DOB) (DateBrth) 	<p>Calculated field. Data element (QuanYrAge) is the difference between the date of the ambulatory care visit and date of birth.</p> <p>Age categories:</p> <ul style="list-style-type: none"> • 0 up to 1 year • 1 up to 6 years • 6 up to 11 years • 11 up to 19 years • 19 up to 40 years • 40 up to 64 years • 65 years and older
Enrollee demographics	<ul style="list-style-type: none"> • Gender (CodeSex) • Race/Ethnicity (CodeRace) • Language spoken (CodeLangSpk) • ZIP Code (AddrResZip) • County (CodeCntyFipsRes) 	
Program code for each enrollee	<ul style="list-style-type: none"> • Program Eligibility Recording Code (PERC): 2 digits, 36 codes (CodeRptEligProg) 	
Enrollee length of enrollment in health plan immediately prior to visit	<ul style="list-style-type: none"> • Date of visit (DateCImServBeg) • Date of enrollment (DateCovPhpBeg) 	Calculated field. Calculation is the difference between the date of enrollment and the date of visit.
Individual encounter or claim identifier for each visit	<ul style="list-style-type: none"> • Encounter or claims ID number (NmbrCImIntCtEnt) 	
Diagnostic code for each visit	<ul style="list-style-type: none"> • ICD-9 code—Primary and secondary diagnoses (CodeDiagCondMedI1 and CodeDiagCondMedI2) 	To identify ambulatory care sensitive (ACS) conditions for inpatient hospitalizations.
Procedural code for each visit	<ul style="list-style-type: none"> • ICD-9 code—include all procedures 	For exclusions in ACS conditions for inpatient hospitalizations.

Table A-1. Data elements (continued).

Element	Data field	Comments
Procedural code for each visit	<ul style="list-style-type: none"> Current Procedural Terminology (CPT[®]) code—primary and secondary procedure (CodeProcServProf) 	To identify an ED visit or the type of outpatient visit.
Plan identifier for each visit	<ul style="list-style-type: none"> Plan ID number (NmbrldPlan) Billing provider—an individual or plan (NmbrldProvBill) 	
Provider identifier for each visit	<ul style="list-style-type: none"> Place of service—provider code (NmbrldProv) Provider type (CodeTypeProvText) 	
Lag time for submitting data	<ul style="list-style-type: none"> Date of service (DateCImServBeg) Date of submission (embedded in NmbrCImIntCtEnt) 	Calculated field. Calculation is the difference between the date of service and date of submission.
UB 92 Type of Bill code UB 92 Revenue code	<ul style="list-style-type: none"> Type of Bill code Revenue code (CodeInstRevCent) 	To identify ED visits and types of inpatient visits.
CMS 1500 Place of service code	<ul style="list-style-type: none"> Place of service code (CodeModProcServ) 	To identify ED visits.
Diagnostic Related Groups (DRG)	<ul style="list-style-type: none"> Diagnostic Related Groups (DRGs) (CodeDRG) 	To identify type of inpatient hospitalization.
Major diagnostic category (MDC) code	<ul style="list-style-type: none"> Roll-up of DRGs 	Calculated field. To identify exclusions in ACS conditions. MDC 14 is all DRGs from 370 to 384 (Obstetrics). MDC 15 is all DRGs from 385 to 391 (Newborn).

Appendix B

Data Accuracy and Completeness Evaluation

OMPRO analysts analyzed the accuracy and completeness of the managed care encounter data for fully capitated health plans (FCHPs) submitted to the Oregon Department of Human Services, Health Services, Office of Medical Assistance Programs (OMAP). Data records were evaluated using the standards developed by the Centers for Medicare & Medicaid Services (CMS) for use by external quality review organizations (EQROs). The standards are listed in the protocol Validating Encounter Data, Final Protocol, Version 1.0..³⁸

OMPRO found that the completeness rate for the managed care encounter data submitted to OMAP was 97 percent or better for the following fields:

- enrollee ID
- enrollee name
- enrollee date of birth
- provider ID
- date of service

The field for MCO/PIHP ID is 100 percent valid; the FCHP listed in the encounter data was matched to the FCHP listed in the enrollment data detailing. The standard recommended by CMS for this field is 100 percent.

Table B-1 is from the CMS EQRO protocol Validating Encounter Data, Final Protocol, Version 1.0. Results of checks for accuracy and completeness of OMAP Access to Care data are listed with suggested standards from CMS.

³⁸Protocols for External Quality Review of Medicaid Managed Care Organizations and Prepaid Inpatient Health Plans are available at www.cms.hhs.gov/medicaid/managedcare/mceqrhmp.asp. Select the Validating Encounter Data link to download Validating Encounter Data: A Protocol for Use in Conducting Medicaid External Quality Review Activities. Final Protocol, Version 1.0. May 1, 2002. Accessed March 3, 2005.

Table B-1. Expectations, CMS recommendations, and results for data elements.

Data Element	Expectation	CMS Recommended Standard	OMAP results
Enrollee ID	Should be valid ID as found in the State eligibility file. Can use State's ID unless State also accepts SSN.	100% valid	100% of claims have an enrollee ID in the claim.
Enrollee Name	Should be captured in such a way that makes separating pieces of the name easy. Confidentiality issues make this difficult to obtain. If collectible, data expected to be present and of good quality.	85% present	97.7% present; 1,914 claims out of 82,036 are missing name field. Name appeared as "{last name}, {first name}" in the same field.
Enrollee Date of Birth	Should not be missing and should be a valid date.	<2% missing or invalid	100% present.
MCO/PIHP ID	Critical data element.	100% valid	100% present and valid after matching health plan in enrollment data.
Provider ID	Should be an enrolled provider listed in provider enrollment file.	95% valid	>99.99% present; 7 claims missing billing provider.
Principal Diagnosis	Well coded except by ancillary type providers.	>90% present and valid codes (using ICD-9-CM lookup tables) for practitioner providers (not including transportation, lab, and other ancillary providers)	13.5% missing and 0.01% invalid; 13 claims contained a primary diagnosis code of "00000" or "0000." However, in cases in which a primary diagnosis was missing, the claim contained a CPT code.
Other Diagnoses	This is not expected to be coded on all claims even with applicable provider types, but should be coded with a fairly high frequency.	90% valid when present	100% valid when present. 33.3% of claims contain secondary diagnosis with ICD-9-CM code.
Date of Service	Dates should be evenly distributed across time.	If looking at a full year of data, 5–7% of the records should be distributed across each month.	100% claims have a valid service begin date. 18 claims (<0.1%) have invalid service end date (all are 12/31/2999).
Procedure Code	This is a critical data element and should always be coded when appropriate.	99% present (not zero, blank, 8- or 9- filled); 100% should be valid, State-approved codes.	Populated in 5.2% of submitted claims.

Table B-2 shows the accuracy and completeness of the OMAP managed care data for Access to Care by FCHP. None of the FCHPs shows a clear pattern of missing data.

Table B-2. Accuracy, completeness, and timeliness of data by FCHP.

FCHP	Accuracy—number of fields missing in category							Completeness of data submitted March 2004
	Enrollee ID	Name	DOB	FCHP name	Provider ID	Dx1 ^a	Date of Service	
CareOregon, Inc.	—	731	—	—	—	—	—	October 2001–March 2004
Cascade Comprehensive Care, Inc.	—	49	—	—	—	—	—	October 2001–March 2004
Central Oregon Independent Health Services	—	181	—	—	—	—	18	October 2001–March 2004
Doctors of Oregon Coast South	—	29	—	—	—	—	—	October 2001–March 2004
Douglas County Independent Physicians Association	—	154	—	—	—	—	—	October 2001–March 2004
FamilyCare, Inc.	—	71	—	—	—	—	—	October 2001–March 2004
InterCommunity Health Network	—	81	—	—	—	—	—	October 2001–March 2004
Kaiser Permanente Northwest	—	124	—	—	—	—	—	October 2001–March 2004
Lane Individual Practice Association	—	129	—	—	—	—	—	October 2001–March 2004
Marion Polk Community Health Plan	—	140	—	—	—	11	—	October 2001–March 2004

^aPrimary diagnosis code

Table B-2. Accuracy, completeness, and timeliness of data by FCHP (continued).

FCHP	Accuracy—number of fields missing in category ^a							Completeness of data submitted February 2004
	Enrollee ID	Name	DOB	FCHP name	Provider ID	Dx1	Date of Service	
Mid-Rogue Independent Physician Association	—	15	—	—	—	—	—	October 2001–March 2004
Oregon Health Management Services	—	41	—	—	7	—	—	October 2001–March 2004
Providence Health Plan	—	118	—	—	—	2	—	October 2001–March 2004
Tuality Health Alliance	—	51	—	—	—	—	—	October 2001–March 2004

