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SFY 2006-07 Benchmark Rate Study

Oregon Health Plan

Technical Report

MERCER
Government Human Services Consulting

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Executive Summary

House Bill 3624, enacted during the 2003 Regular Session of the Oregon Legislature, provided for the establishment of benchmark rates for Oregon Health Plan (OHP) members. Benchmark rates were to be developed for both fee-for-service (FFS) providers and prepaid managed care health services organizations based on the actual cost of providing services. The benchmark period is July 1, 2005, through June 30, 2007 (referred to as 2006 in this report). The legislation also identified minimum requirements for eligibility groups within the OHP, and provider categories (e.g., hospital, physician).

The Health Services Commission (HSC) was tasked with overseeing the development of these benchmark rates. The HSC engaged Mercer Government Human Services Consulting (Mercer) to develop the benchmark rates. This report summarizes the benchmark rates developed pursuant to House Bill 3624.

There were several significant challenges with respect to developing benchmark rates that reflect cost. First, cost needed to be defined. Discussions with both the HSC and an Advisory Committee, consisting of provider and managed care organization representatives, provided guidance as to the elements of providing services to Medicaid participants that should be considered in the definition of cost. The consensus of both groups was that direct costs of providing services, as well as operating expenses, should be considered as cost, whereas costs to provide non-Medicaid services should not. Costs should reflect only the costs of direct providers of services and not administration or management costs of managed care entities, third-party payments, or OHP enrollee cost sharing.

The second challenge was to determine what information or data would be used to develop cost. If reliable cost data were available, such as hospital cost reports, this cost data was used to develop the benchmark rates. If reliable cost data were not available, alternative approaches were used to develop an estimate or proxy of cost. These approaches are described in Section 4 of this report. There was no data available for drug acquisition costs,

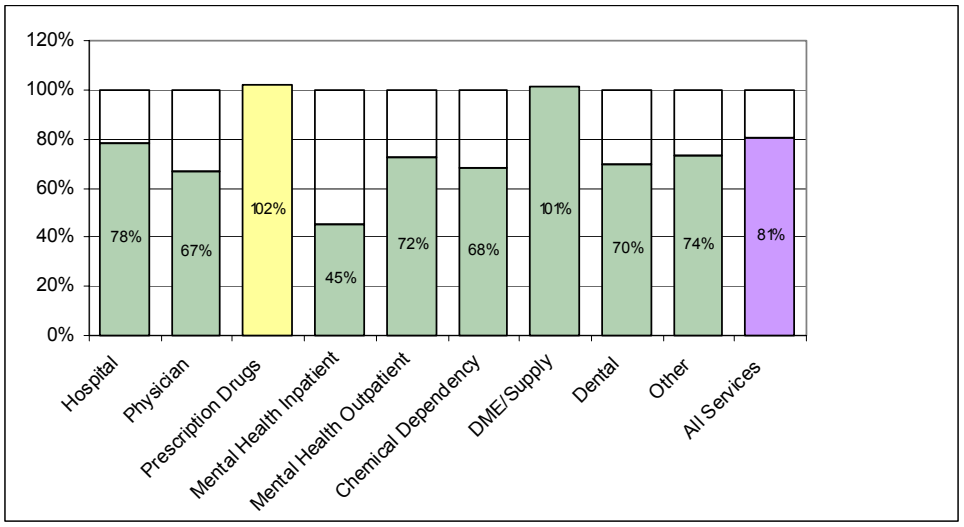
therefore, we were unable to develop a true benchmark rate for prescription drugs. OHP's prescription drug costs were instead benchmarked against other states.

The last challenge was to develop benchmark rates that provided equity among all provider groups. Although it is intended that the results of this benchmark study provide sufficient information to *improve* equity among providers, it will not eliminate the inequity that currently exists among provider groups. There was not sufficient cost data available, particularly for prescription drug services, to enable Mercer to use the same methodology or data sources to develop uniform estimates of provider costs. The current inequity can be noted in Section 3 of our report, Disproportionate Profit Margins.

The final benchmark rates are summarized in Appendix E and F of this report and are for the 2006 time period (the midpoint of the 2005–07 biennium), as required by this study. We did not have 2006 Medicaid reimbursement rates available from the Office of Medical Assistance Programs (OMAP) to reference for comparison, but have provided State Fiscal Year (SFY) 2002 and SFY 2003 (referred to as 2002 in this report) Medicaid FFS reimbursements (for the 2001–03 biennium) compared to 2002 FFS Unit Cost Benchmarks. These are shown in Figure 1.1 below. We have highlighted the Prescription Drugs bar to emphasize that a true unit cost benchmark was not developed for that category. Hospital values have been adjusted to reflect supplemental OMAP payments as discussed in the Hospital COS sub-section.

These are provided only for illustrative purposes. This report does not provide a direct comparison to the rates anticipated to be paid by OMAP for July 1, 2005, through June 30, 2007. No conclusions are discussed, nor are, we believe, relevant, related to the appropriateness of the rates to be paid by OMAP. We understand that OMAP will be responsible for evaluating the benchmark rates developed pursuant to House Bill 3624, as they relate to the rates anticipated to be paid.

Figure 1.1
Comparison of 2002 Medicaid FFS Reimbursements per Unit to 2002 FFS Unit Cost Benchmarks



The benchmark study uses the same definitions of units that OMAP uses in the development of the 2005 – 2007 per capita cost report. Because the study aggregates the 101 OMAP "service buckets" into nine provider categories of service (COS), there are multiple unit types used within individual COS. The unit types, shown in Figure 1.2 below, provide the necessary context to give meaning to the unit cost benchmark values shown in the study.

Figure 1.2
Units of Service

COS	Type of Unit
Hospital	Admits/Claims
Physician	Visits/Claims/CPT Code Units/Services
Prescription Drugs	Claims/Prescriptions Filled
Mental Health — Inpatient	Days/Services
Mental Health — Outpatient	Claims/Services
Chemical Dependency	Services
DME/Supply	Services
Dental	Services
Other Services	Admits/Claims/CPT Code Units/Services

It is important for policymakers and others to proceed cautiously with using the results of this benchmarking study. Because of significant limitations in available cost data, many assumptions needed to be made to develop estimates of provider costs. The rates developed as a result of this study were not developed in accordance with Centers for Medicare and Medicaid Services (CMS) requirements for Medicaid capitation rate development. Although all data used were reviewed for reasonableness, we did not validate the data used in this study. Section 5 of this report describes further limitations with respect to using these benchmark rates.

Both the HSC and Advisory Committee have agreed that this report may be used as a high level approximation for inequities in Medicaid provider reimbursements versus provider costs for each COS, as well as providing high level approximations as to gaps within each provider group between reimbursement and the costs of providing services. The results can also be used to provide guidance to both OMAP and the Oregon Legislature on where to focus more in-depth analysis to provide greater equity among provider groups.

This report is intended to provide significant detail around the development of the benchmark rates and is, therefore, lengthy and technical in nature. The reader who is only interested in a general discussion of the methodology and results is encouraged to first read the Summary Report on the Benchmark Rate Study released by the Health Services Commission and then return to this report if further detail is needed. Section 2 of this report highlights the guidance provided for the development of the report. Section 3 discusses the healthcare marketplace. Sections 4, 5, and 6 review the overall benchmark strategy, discuss study limitations, and discuss methodologies used for developing benchmarks for each of the COS, respectively. Representatives of various provider groups interested in only reviewing the benchmark rate

for a particular COS may choose to limit their review to Sections 4 and 5, and the applicable sub-section of Section 6.The corresponding benchmark rates for each provider group and eligibility group are included in Appendices E and F.

2

Introduction

House Bill 3624, enacted during the 2003 Regular Session of the Oregon Legislature, provided for the establishment of benchmark rates for Oregon Health Plan (OHP) members. Benchmark rates were to be developed for both fee-for-service (FFS) providers and prepaid managed care health services organizations based on the actual cost of providing services. The benchmark period is July 1, 2005, through June 30, 2007. The legislation also identified minimum requirements for eligibility groups and provider categories.

The Health Services Commission (HSC) was tasked with overseeing the development of these benchmark rates. The HSC engaged Mercer Government Human Services Consulting (Mercer) to develop the benchmark rates. This report summarizes the benchmark rates developed pursuant to House Bill 3624.

Guidelines for determining the benchmark rates, or unit cost benchmarks, were established early in the process. The objective of the study is to develop benchmark rates that represent the actual cost of providing services. Members of the HSC and Advisory Committee communicated that regardless of the outcome of the benchmark rates, the benchmarks themselves should be equitable across the various provider groups. The current feeling was that some provider categories were getting paid above cost, while other categories are not getting near the cost of providing services.

First defining, and then determining, the actual cost of providing services is clearly a challenge. The authorizing legislation requires this study to estimate the unit cost and capitation rate per member per month (PMPM) which, if paid directly to providers, should be sufficient to cover the provider cost for these services. However, the legislation was not clear on the definitions of cost, leaving several possible interpretations of the legislation. During the course of this assignment, discussions with both the HSC and the Advisory Committee provided guidance as to the elements of providing services to Medicaid participants that should be considered in the definition of cost. The consensus of both groups was that direct

costs of providing services, as well as operating expenses, should be considered as cost, whereas, costs to provide non-Medicaid services should not. Finally, costs should reflect only the costs of direct providers of services and not administration or management costs of managed care entities. The benchmarks were developed to be consistent with the 2002 historical experience, in that the benchmarks are net of third-party payments and recipient contributions. Complicating the development of benchmark rates is the fact that for many categories of service (COS), very little cost information was available. As a result, assumptions were made to help develop an approximation of cost. These assumptions are discussed in more detail in Sections 3 and 6.

In accordance with the mandate by the legislature, and in consultation with Office of Medical Assistance Programs (OMAP), benchmark rates were developed for the OHP eligibility groups outlined in House Bill 3624. These categories, also referred to as categories of aid (COA), are presented below (see Appendix G for a glossary of terms and acronyms used):

- OHP Plus populations:
  - AB/AD with Medicare,
  - AB/AD without Medicare,
  - OAA with Medicare,
  - OAA without Medicare,
  - PLM Adults,
  - PLM/CHIP/TANF < 1 year,
  - PLM/CHIP/TANF 1 through 5 years,
  - PLM/CHIP/TANF 6 through 18 years,
  - SCF Children, and
  - TANF Adults;
- OHP Standard populations
  - OHP Adults and Couples, and
  - OHP Families; and
- FFS-Only Populations
  - CAWEM.

Qualified Medicare Beneficiaries (QMB) do not receive the full range of Medicaid services. In addition to participation being limited to the FFS program, the historical payment source data for this population indicated significant irregularities and inconsistencies. After discussions with OMAP regarding these issues, it was determined that the QMB population was to be excluded from further consideration in this study.

For each OHP eligibility group, benchmark rates were developed for the following COS, as required in the authorizing legislation:

- **Hospital**
  Hospital Services cover both inpatient and outpatient services provided at hospital-based facilities.
- **Physician**
  Physician Services cover those services provided by a licensed healthcare provider or in the provider's office setting.
- **Prescription Drugs**
  Prescription Drug Services include both retail prescription drug and institutional prescription drug benefits, but do not cover mail-order prescription drug benefits (excluded from our study).
- **Mental Health**
  Mental Health Inpatient Services and Mental Health Outpatient Services include both acute inpatient and outpatient services provided by licensed facilities or practitioners for mental health services.
- **Chemical Dependency**
  Chemical Dependency Services include services for both methadone and non-methadone clinic services.
- **Durable Medical Equipment (DME)/Supply**
  DME/Supply include both rental and sale services for DME and medical supplies to OHP participants.
- **Dental**
  Dental Services include those services provided by a licensed dentist or in the dentist's office setting.
- **Other Services**
  Other Services include those services covered by OHP, which are not included in the above services. For a complete listing, please see Appendix C of this report.

Mercer has used the definitions used by OMAP to classify various providers into the above categories and eligibility groups.

Throughout our report, we have endeavored to be as accurate and precise as possible. However, data concerns and time constraints, as well as the complexity of the Medicaid program, have forced both simplifying assumptions, as well as estimating assumptions. As a result, this report does not propose changes to the current Medicaid reimbursement process, fee schedules, or capitation rates currently in place or proposed for future periods. Moreover, the benchmark rates, although reasonable, were not developed in accordance with CMS requirements for Medicaid capitation rate development. We have made the following observations:

- Base data may include utilization at higher or lower rates than would be the case for an efficient and effectively managed delivery system. We have made no adjustment to

modify utilization rates to such a level, other than the adjustments made to reflect the impact of program changes.
- There was not sufficient cost data for some COS, nor was the cost information that was available audited by Mercer.
- Statewide benchmark rates were developed; however, regional variations should be expected.

However, both the HSC and Advisory Committee have agreed that this report may be used as a high level approximation for inequities in Medicaid provider reimbursements versus provider costs for the COS, as well as providing high level approximations as to gaps within each provider group between reimbursement and the costs of providing services. The results can also be used to provide guidance to both OMAP and the Oregon Legislature as to where to focus more in-depth analysis. For example, the results of this study could be used to determine where to make adjustments to the Medicaid fee schedule currently in place.

Although the benchmark rates are intended to be complete and approximate the cost of services at the time of this study, policymakers and others should exercise caution in how and when these benchmark rates are utilized. The healthcare marketplace remains both volatile and dynamic. Costs for providing services can vary greatly, from month to month and across geographic regions. Certain healthcare expenditures, such as prescription drug costs, remain elusive, resulting in perhaps a continued inequitable distribution of healthcare dollars. Although a difference between current reimbursements and benchmark rates exists, no opinion as to the appropriateness of the current reimbursement level or practices has been made.

Several outcomes should be reviewed prior to considering changes to the FFS rates or managed care rates. For instance, any changes made to the FFS rates or managed care rates may have significant budgetary implications. Utilization of services also often increase when FFS rates are increased. Finally, a significant portion of the OHP rates are funded by CMS; therefore, any changes to provider payments should consider implications of federal funding provided by CMS.

3

The Dynamic Healthcare Marketplace

The 1990s and 2000s have been a period of significant advancement in the development and provision of healthcare services and products. These advancements often require additional time for providers to master the enhanced information, as well as capital outlays to purchase new equipment. In addition to these technological advancements, increased regulatory reporting requirements — specifically in the form of the Health Insurance Portability and Accountability Act (HIPAA) — have increased the amount of time and costs associated with providing healthcare services. Economic conditions have also placed increased pressure on limited financial resources, including the attraction and retention of qualified staff.

There is increased competition by various provider categories for the healthcare dollar. Direct consumer advertising related to provider practices, facilities, or services have reached unprecedented levels. Although the most noticeable example may be in promotional spending by pharmaceutical manufacturers ($15.7 billion in 2000),[1] advertisements for hospital-based facilities and practices are also common in the marketplace.

The combined effect of the changing marketplace, as well as many other factors, has translated into healthcare dollars being spent on an ever increasing and constantly changing mix-of-services provided by the healthcare community. This changing marketplace is a result of the ever changing demands for healthcare services placed on the system by the end users, both in terms of quality and quantity of services.

[1] Kaiser Family Foundation and the Sonderegger Research Center, Prescription Drug Trends, A Chartbook Update, November 2001

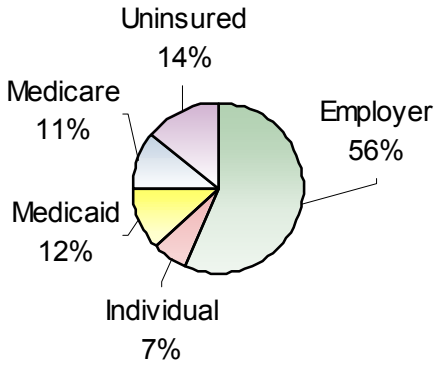
Overview of Payer Sources in Oregon

Providers are reimbursed for services from multiple payer categories. A brief outline of the distribution of the population by payer category is provided in Figure 3.1:[2]

Figure 3.1
Payer Sources — Comparison

Payer Category	Oregon	Washington	United States
Employer	56%	59%	56%
Individual	7%	6%	5%
Medicaid	12%	11%	12%
Medicare	11%	10%	12%
Uninsured	14%	14%	15%
Total	100%	100%	100%

Figure 3.2
Payer Sources — Oregon 2001–02



[2] Kaiser Family Foundation — State Health Facts Online, 2001-02

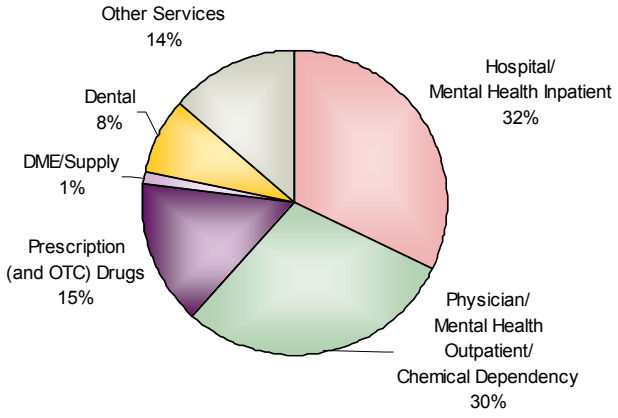
Distribution of Healthcare Spending

In addition to the distribution of participants in the healthcare market, it is also important to understand how the market is allocating the current economic resources. Figure 3.3 gives a summary of healthcare spending for Oregon as compared to that of Washington, as well as National levels[3] for all payer categories. Changes in where dollars are spent will impact the market equilibrium (cost shifting), as well as equity among the various groups. Based upon the data in Figures 3.3 and 3.4, Oregon's expenditures by provider group are relatively consistent with other states. Figure 3.5 shows PMPM expenditures for the OHP Program.

Figure 3.3
Healthcare Spending — Comparison
*Numbers adjusted so whole numbers add to 100.

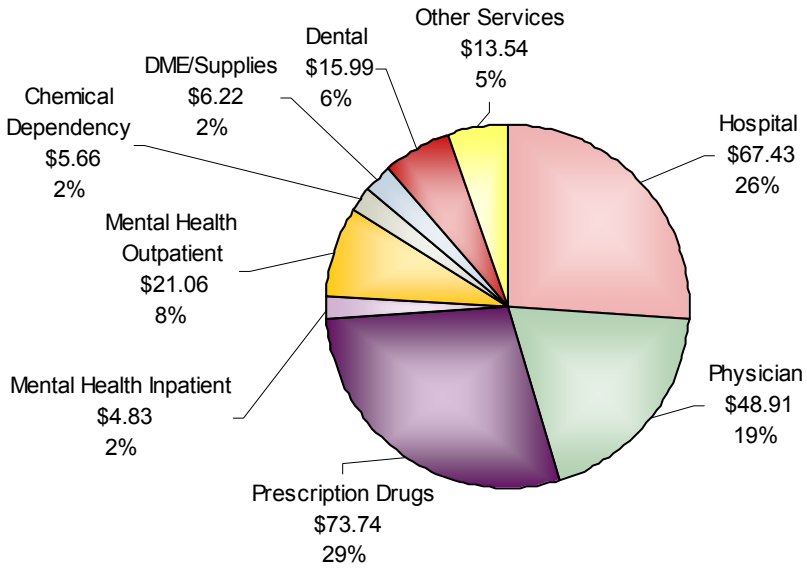
Category of Service	Oregon	Washington	United States
Hospital/Mental Health Inpatient	32%	36%	32%
Physician/Mental Health Outpatient/ Chemical Dependency	30%	29%	30%
Prescription (and OTC) Drugs	15%	15%*	15%
DME/Supply	1%	1%	2%*
Dental	8%	5%	9%
Other Services (Includes some non-OHP services)	14%	14%	12%
All Categories of Service	**100%**	**100%**	**100%**

Figure 3.4
Distribution of All Oregon Healthcare Spending by Category of Service 2002



[3] CMS, Health Accounts, Historical National Health Expenditures by Type of Service and Source of Funds: Calendar Years 1960-02 Health Accounts, State Health Accounts by State of Provider (note – analysis required)

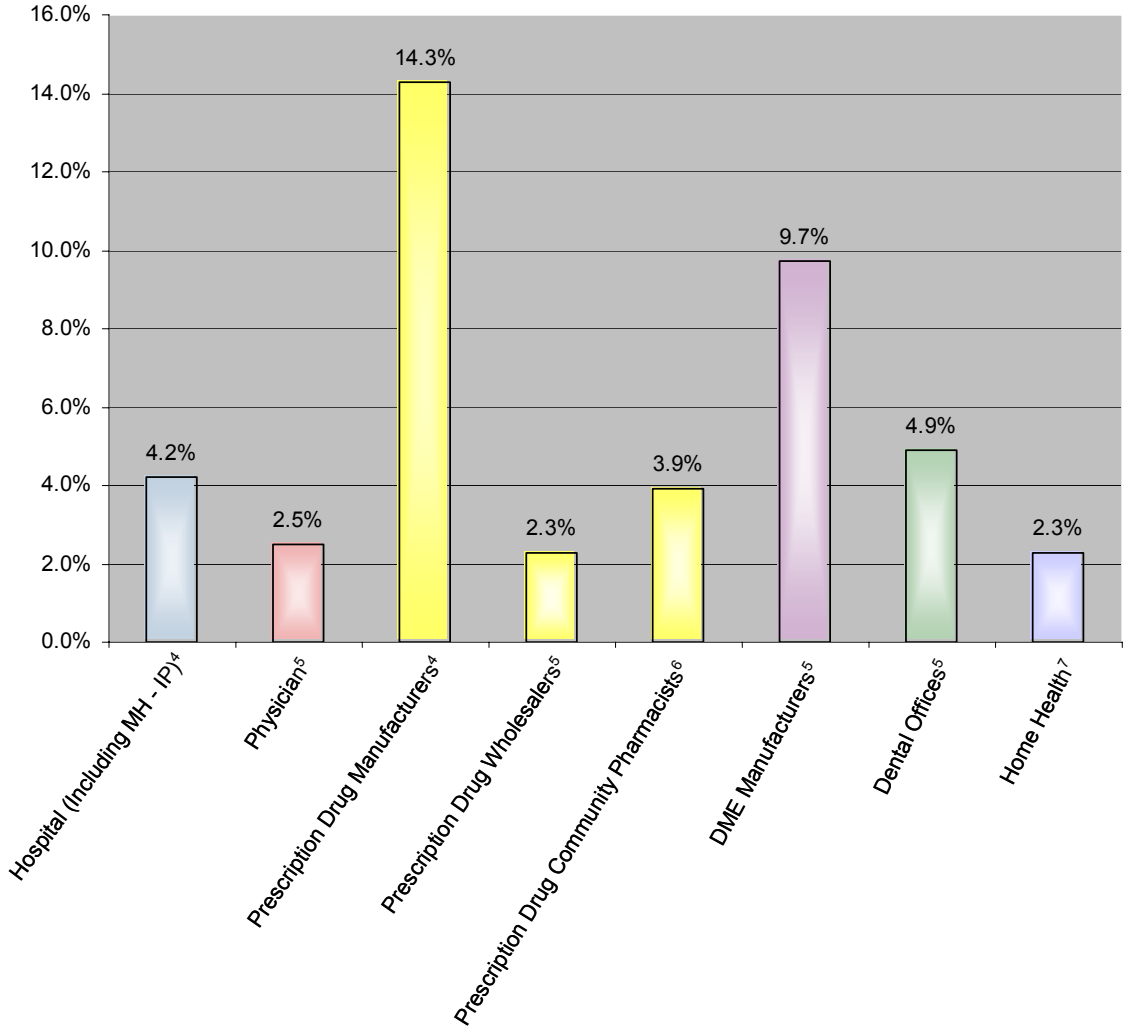
Figure 3.5
Distribution of OHP FFS and Managed Care Spending by Category of Service 2002



Disproportionate Profit Margins

Healthcare expenditures can be further separated into costs and profit. Profit information, collected across several provider categories, is shown in Figure 3.6 on the following page. This information was collected on a national basis, as there is limited publicly available information regarding provider profitability in Oregon. To some extent, we would expect profit levels in Oregon to be similar with those across the nation. However, the healthcare marketplace is in continual disequilibrium, in our opinion. This disequilibrium is caused by marketplace dynamics, including regulatory requirements and cost drivers that impact some providers more than others. Disequilibrium in the healthcare marketplace results in disproportionate profit margins across provider categories. The disequilibrium, combined with changes to the cost shifting occurring across payer sources, makes net profits truly a "snapshot" of profits at one point in time.

Figure 3.6
Profit Margins by Category of Service



[4] Kaiser Family Foundation, Trends in Indicators in the Changing Health Care Marketplace, 2004 Update
[5] Corporate Profitability by Industry, www.bizstats.com
[6] National Community Pharmacists Association, 2003 NCPS-Pfizer Digest
[7] CMS Health Care Industry Market Update — Home Health, September 22, 2003

In the Medicaid managed care environment, profit can be further separated into provider profit and MCO profit. OMAP and the Office of Mental Health and Addiction Services (OMHAS) collected financial information for the OHP-contracting MCOs, for Calendar Year (CY) 2002 and CY 2003 which has been compiled into Figures 3.7, 3.8, and 3.9.

Figure 3.7
Profits in the Marketplace — Managed Care Organizations:
Fully Capitated Health Plans (FCHPs) CY 2002 and CY 2003

Net Percent Profit/Loss

FCHP	CY 2002	CY 2003
CareOregon	-5.78%	7.82%
Cascade	0.45%	3.63%
COIHS	0.43%	12.57%
DOCS	0.33%	0.66%
DCIPA	3.60%	3.18%
Family Care	4.23%	2.15%
InterComm	-0.18%	3.22%
Kaiser *	-43.64%	-25.73%
LIPA	-2.29%	4.20%
MPCHP	3.07%	2.10%
Mid Rogue	2.43%	7.51%
OHMS	-4.08%	-2.47%
Providence*	-0.59%	-2.19%
Tuality	1.20%	-0.06%
Weighted Average	-1.75%	5.67%

*no withhold / incentive arrangements

Figure 3.8
Profits in the Marketplace — Managed Care Organizations:
Dental Care Organizations (DCOs) CY 2002 and CY 2003

Net Percent Profit/Loss

DCO	CY 2002	CY 2003
Capital	3.16%	1.06%
Hayden	8.36%	5.84%
Managed	2.06%	1.83%
MultiCare	0.41%	0.02%
Northwest*	5.65%	4.95%
ODS	-17.27%	-4.72%
Willamette	2.90%	-7.98%
Weighted Average	-1.28%	-0.66%

*withhold / incentive arrangements

Figure 3.9
Profits in the Marketplace — Managed Care Organizations: Mental Health Organizations (MHOs) CY 2002 and CY 2003

Net Percent Profit/Loss

MHO	CY 2002	CY 2003
ABHA	5.05%	1.20%
Clackamas	-13.06%	3.99%
FamilyCare	0.0%	0.0%
GOBHI	0.27%	-1.10%
Jefferson	1.86%	0.86%
Lane	-10.19%	-17.74%
MVBCN	-1.08%	2.96%
Multnomah	-0.28%	9.96%
Tuality	0.0%	0.0%
Weighted Average	-1.36%	1.08%

4

Methodology Overview

As directed by the authorizing legislation, benchmark rates have been developed for each COS and eligibility group independent of current payment and reimbursement rates. In addition, this report includes separate benchmark rates for the FFS and managed care programs. These benchmark rates represent estimates for State Fiscal Year (SFY) 2006 and SFY 2007 (the bi-annual period of July 1, 2005, through June 30, 2007).

Current program expenditures were provided for the period of July 1, 2001, through June 30, 2003, for OHP Plus populations and for the period of July 1, 2001, through February 28, 2003, for OHP Standard populations. These data sets form a basis for our analysis. Initial benchmark rates were developed for these time periods, as this process would require the least number of assumptions. The combination of these data sets are centered on the date of July 1, 2002; this date represents the basis for our 2002 benchmark rates. These are then projected, using estimates of both unit cost and utilization trend to the date of July 1, 2006. The choice of using a single date point for the projection period simplifies both the analysis and the interpretation of the results, as a single benchmark rate for the projection period may be used for discussion purposes. Note, however, that while the benchmark rates are determined for SFY 2006–07 with a midpoint of July 1, 2006, OHP contracts will be established from October 1, 2005, through October 1, 2007, with a midpoint of October 1, 2006.

The exact methodology, source data, assumptions, and adjustments are presented in the following sections of this report for each COS. The remainder of this section addresses the overall approach and issues common to all COS.

Experience Base Data

The base data for developing the current program reimbursements are the claims and eligibility data provided by OMAP. This data contained both utilization and total cost data for the FFS program, and encounter (utilization) data and total billed charges for the managed

care program. Encounter data are collected by MCOs from their provider payment records, and reflect utilization and billed charges from the individual providers; it does not reflect capitation payments made to MCOs by OMAP for providing services to Medicaid participants.

Mercer did not validate the data received from OMAP other than to review the data for reasonableness. The current program data were summarized by OMAP for each COS and eligibility group. In instances wherein OMAP found data which did not appear reasonable across reporting organizations or time periods, the data were excluded by OMAP. Many of the COS have additional breakouts, or sub-categories, which were aggregated as appeared reasonable. The summarized data from OMAP were for the entire experience period combined, with no distinction between SFY 2002 and SFY 2003.

Estimation of 2002 Benchmark Rates

The general approach in developing benchmark rates starts with first identifying a source of utilization and unit cost data which may be appropriate for this population and mix-of-services. This becomes the "source data" for our benchmark rate study. The source data are adjusted based upon a series of analyses and assumptions to develop our final benchmark rates.

Historical and current cost data are the most applicable data sources for developing unit cost benchmarks. However, gathering cost data for all providers within each COS is an enormous undertaking, especially for the number of providers in most non-facility-based groups. When available, this cost information was utilized for our study. However, when actual cost information was not available, Mercer employed a variety of techniques and methods to estimate the cost of services. These data limitations — as well as other development limitations — require the consideration of alternate methodologies to develop appropriate costs for several of the provider categories.

The Oregon Legislature recognized the impact of limited data sources and the need to vary both sources and possibly methodologies by provider category. House Bill 3624 provided guidance on which data might be applicable for use in the development of the unit cost benchmarks. Each of the data sources listed in the legislation was considered, along with other information that Mercer and the HSC determined to be appropriate. The legislation also provided specific guidance for some services, i.e., DME to be based on 80% of the Medicare allowable charge.

Five benchmark methodologies were used in this study, each targeting different data sources to develop a unit cost benchmark. If cost data were available, the cost data were the preferred approach. When cost data were not available, other approaches, as described on the following pages, were needed.

In some cases, multiple approaches were used for a particular COS. Each approach will be described in greater detail in Section 6 where each COS is discussed.

- **Provider Cost Data Approach**
  The Provider Cost Data Approach recognizes that current and historical cost data may be available, in some form, and would provide a sound foundation for building unit cost benchmarks. When actual cost data are available, such as hospital cost reports, this is the preferred data source for developing a unit cost benchmark.

- **Alternative Fee Schedule Approach**
  For some provider categories, the estimated cost of providing services is a function of an already established fee schedule. Typically, this cost-to-fee-schedule approach is based on specific empirical research regarding the cost of providing services relative to a benchmark fee schedule. This relationship between cost and a set fee schedule could then be utilized, along with Medicaid-specific utilization, to set the unit cost benchmark for the COS.

- **Average Market Reimbursement Approach**
  For the Physician COS, reliable Medicaid cost data were not available, nor did we identify an alternative fee schedule approach, so the Average Market Reimbursement Approach was developed. This Average Market Reimbursement Approach considers the reimbursement that provider groups receive from each of the major payer sources: Medicaid, Medicare, and Commercial. Recognizing that cost shifting occurs between each of the payer sources, this methodology uses the average market reimbursement from all major payer sources as a proxy of cost. Under the Average Market Reimbursement Approach, it is assumed that there is a modest profit attained across all payer sources. Exact profits are not quantified, and, therefore, remain in this approach. However, in our opinion, profits have minimal impact on unit cost benchmark results.

  For the purposes of this approach, we have defined the recipients of healthcare services and the payers for those services as:

  - **Medicaid Population** — individuals covered by the OHP;
  - **Medicare Population** — individuals covered by the Federal Medicare Program;
  - **Commercial Population** — individuals covered by employer-sponsored benefit arrangements, or members who receive coverage from individual health policies; and
  - **Uninsured Population** — individuals not covered under Medicaid, Medicare, or Commercial insurance arrangements.

  At times, an individual member may cross over one or more groups (i.e., be covered by both Medicare and Commercial insurance). However, for the purposes of this study, we will consider these groups independent and distinct populations, and the impact of the cross-over populations is assumed to be negligible. Moreover, we have assumed that the uncompensated costs associated with the uninsured population has a negligible impact on the financial outcome of a payer category, as these are assumed to be incorporated into the unit reimbursement costs for the other payer categories.

Regarding the concept of cost shifting, although considered to be both common knowledge and common practice, this phenomenon is rapidly achieving national exposure and attention. Cost shifting occurs when services are provided at below market value for some populations resulting in above market charges for other proportions of the population. This phenomenon was commented on by the Society of Actuaries:

> **"**The federal programs — Medicare and Medicaid — cover a large proportion of the population. Their reimbursement schedules through Resource-Based Relative Value Schedule (RBRVS) are generating payments that are not in line with the amounts the providers deem necessary to meet their income needs. The providers must then recoup the lost income from the Medicare/Medicaid reimbursements by charging higher amounts to their other clients. This phenomenon is called "cost shifting." As the babyboomer generation will reach the Medicare age in the next 15 years, the cost shifting problem will only intensify." [4]

- **Modified Medicaid Data Approach**
  For some provider categories, such as non-emergent transportation, OHP benefits are somewhat unique in the marketplace, thus, limiting the use of non-Medicaid data to develop unit cost benchmarks. When this approach is required, Mercer has relied on our experience with Medicaid programs throughout the country to provide an estimate of reasonable unit cost benchmarks for these services.

- **Benchmarking Against Better Purchasing Approaches**
  Whereas limited cost data was available for prescription drug services, cost-based approaches could not be utilized. The Average Market Reimbursement Approach is not suitable, as this methodology requires a balance between both supply and demand. Prescription drug services therefore provide a unique challenge for determining a unit cost benchmark. Limited acquisition cost data was available, and unfortunately, the acquisition cost represents a significant piece of the overall prescription drug spend. Because of the limited cost data and lack of balance between supply and demand, we were unable to develop a true unit cost benchmark for prescription drugs.

  Through discussions with the HSC, we determined that in lieu of developing a true unit cost benchmark, we would benchmark Oregon's drug purchasing against best practices in other state Medicaid programs. This was considered to be a reasonable approach as OHP does not contract directly with manufacturers and distributors, so profits, administration, and acquisition costs from drug manufacturers cannot be reasonably controlled or negotiated, at least at the present time. Therefore, the benchmarking would at least provide the HSC with some observations as to how effective the OHP has been in drug purchasing, relative to other states.

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[4] Society of Actuaries, An Actuarial Response to the Health-Care Crisis, April 2004 newsletter

It should be noted, however, that since the Prescription Drug COS was the only area where one of the above approaches was not feasible, it is unlikely that true equity among all provider groups will be achieved without further studies, as well as State and national initiatives targeted towards prescription drug spending.

Throughout this benchmarking report the following terms will be used and are significant in terms of their relevance in interpreting the results of the benchmark rates:

- **Utilization**
  Utilization is a statistic that is presented as a count of services utilized per individual during a 12-month period, referred to as "Utilization per Member" (UPM). For payers, this statistic provides half of the total cost equation (see PMPM below).
- **Expected Payment per Service**
  The payment per service may be presented in one of the following forms:
  - Average Reimbursement — This statistic provides the average net payment to a provider per service provided. This statistic represents the reimbursement per unit, as well as the dollar per Relative Value Unit (RVU).
  - Unit Cost — This statistic provides the average payment required to cover the cost to a provider per service provided.
- **PMPM**
  This statistic represents the total payment for an individual for a month. The value is developed by multiplying the UPM times the payment per service provided, and dividing by 12.

Projection of 2002 Benchmark Rates to 2006

The previous section discussed briefly the approach for developing 2002 benchmark rates and why 2002 was selected. Although the 2002 benchmark rate may be of interest, the scope of this study is to determine a benchmark rate for the period of July 1, 2005, through June 30, 2007. To accomplish this, the 2002 benchmark rate and historical utilization were trended to the projection period using our best estimates of cost and utilization trend.

Unit cost trend rates were developed to reflect the increase in expected cost due to inflation, new regulatory requirements, and other general costs. It is important to recognize that our unit cost trend rates attempt to estimate cost, not reimbursements or required premiums.

Our analysis does not reflect expected costs related to the expansion of business, construction, or other related expenses due to the expansion of services offered by providers. The benchmarks presented within this report do not explicitly include profit margins, contingency margins, or recoupments of prior losses.

In addition to the increases in unit costs, the base data utilization for the FFS and managed care programs was increased to better reflect the expected increase in utilization of services by each eligibility group as a result of increased awareness, changing health needs, changes in the benefit program, and service delivery efficiency. Specific adjustments for each COS and eligibility group combination are demonstrated in the Summary Exhibits as provided in Appendices E and F.

The result of the adjustments for unit cost and utilization trend are benchmark rates for the projection period, centered on July 1, 2006.

Benchmarks Rates for Eligibility Groups

The 2006 unit cost benchmarks are based on information for all eligibility groups combined, representing the concept of a universal procedure cost applicable to all eligibility groups. For any given procedure, the cost of providing the procedure is constant regardless of the recipient. For example, the cost of providing an x-ray is constant across the populations, although reimbursement for that service varies across payer group (Medicaid, Medicare, and Commercial). However, within the Medicaid payer group, it is assumed that providers are reimbursed at a constant rate across eligibility groups, although at different levels for FFS and managed care.

Although, in our opinion the procedure-level unit cost is to be constant across eligibility groups, the mix-of-services (mix-of-procedures) does vary by group for OHP members. As a result, the unit cost benchmarks need to be adjusted to account for the mix-of-services represented by each of the eligibility groups rather than all groups as a whole.

To accomplish this adjustment, a ratio of the historical reimbursement rate per unit for any given eligibility group was compared to the average historical reimbursement rate per unit for all groups combined. For example, if the historical reimbursement rate for the Dental COS was $75 for the TANF Adults eligibility group and $100 for all eligibility groups combined, the TANF Adults unit cost benchmark would be 75% of the unit cost benchmark for all eligibility groups combined. Assuming that all payments are made using the same fee schedule, this ratio would provide a reasonable proxy for the variance in the mix-of-services for each of the eligibility groups. A similar calculation was made for the managed care program using historical billed rates per unit rather than historical reimbursement rates per unit.

Program Benefit and Eligibility Changes

Program Changes

Several program changes or budget issues have been implemented by Oregon that impact the benchmark rate development. These are changes that occurred between July 1, 2001, and June 30, 2007, the begin date of our base data and end date of the benchmark report period, respectively. A full list of the program changes can be found in Appendix D. Each of these

program changes has been reviewed. An evaluation of incident rates, unit cost, and the likelihood of the program changing enrollee and provider utilization behavior were all considered when determining whether the program changes would have a material impact on the UPM and/or unit cost benchmarks. Adjustments were developed and applied to service category 2006 benchmark rates for the following program changes:

- **FFS AWP Discounts, Oregon Maximum Allowable Charge, and Dispensing Fees —** Adjustments were applied to the Prescription Drugs COS.
- **FFS Disease State Management** — Adjustments were applied to the Hospital COS, Inpatient and Emergency Room sub-COS, Physician COS, and Prescription Drugs COS.
- **Gabapentin Carve-out from Managed Care** — An adjustment was applied to the Prescription Drugs COS.
- **Pharmacy Lock-in, Polypharmacy Profiling, and Drug Prior Authorization** — Adjustments were applied to the Prescription Drugs COS.
- **Prioritized List Changes: Restrictions on Coverage of Bone Marrow Rescue and Transplant Procedures and Solid Organ Transplants —** Adjustments were applied to the Hospital COS.
- **FFS OHP Plus Copayments —** Adjustments were applied to the Hospital COS, Physician COS, Prescription Drugs COS, Dental COS, Mental Health COS, Chemical Dependency COS, and Other Services COS.

Additional information regarding the above adjustments can be found in the benchmark rate methodology review for each of the respective COS, found in Section 6 of the report.

Oregon has precluded any new enrollment into the OHP Standard program as of July 1, 2004, and has reduced coverage for these populations since the base data period. Due to time constraints, neither the base data nor the benchmarks reflect these reductions in coverage for the OHP Standard population, nor any potential impact from declining enrollment in the OHP Standard program. Additionally, there have been no adjustments to account for the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, which will impact Oregon's portion of prescription drug costs for the populations dually eligible for both Medicaid and Medicare. The benchmarks do not reflect the potential implementation of the hospital provider tax.

Consideration of Other Payer Sources

The benchmark rate methodology for this study reflects the estimate of the actual cost of providing services, net of payments that will be made by other payers. So, to the extent that OHP individuals have Medicare, Commercial, or other health insurance coverage for these anticipated third-party payments, the unit cost benchmarks have been reduced to reflect costs net of these payments. The unit cost benchmarks have also been reduced to reflect costs net of recipient contributions. Thus, the benchmark reflects costs as they would be viewed by OMAP — the amount to pay to a provider after considering payments from other third-party payers and recipient contributions.

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Limitations

This section is meant to outline some of the limitations of our analysis, as well as outline areas for additional review or consideration.

Purpose of Report

Although the authorizing legislation directed a study to determine the cost to providers for rendering services, there was sufficient ambiguity in the legislation for multiple interpretations of cost and providers. Guidance from the HSC and the Advisory Committee was instrumental in developing working definitions which formed the basis of our study.

While the intent of this report and the authorizing legislation was to develop benchmark rates that reflect provider cost, in some instances cost data simply were not available. In these cases, alternative methods were employed to develop proxies for cost. We have discussed the approach used for each COS, indicating where actual cost data were available versus where assumptions were needed to determine provider costs.

This report was not intended to meet the requirements by CMS for State demonstration and waiver purposes. The techniques and assumptions outlined in this report should not be considered as meeting the CMS requirements for Medicaid capitation rate development, As a result, the benchmark rates represented in this report are meant to provide guidance as to the cost of providing services regardless of payer source and may not be comparable to cost or capitation rates developed for other purposes. Analyses done using similar data for other purposes may differ significantly from the results shown in this report.

General Constraints

Guidance from the HSC and the Advisory Committee provided a timeline for our analysis. As a result, certain methods of collecting or analyzing data were not available for this report.

For example, Medicare utilization and reimbursements are available for the State of Oregon; however, the application and approval process would not permit this information to be available prior to the completion of the project. Similarly, exhaustive research concerning cost studies, financial audits of providers, or surveys of provider cost might provide additional guidance and accuracy for determining cost, but were not employed for this analysis. These data sources could be used in future iterations of benchmark rate setting if resources and timelines permit.

In addition to temporal issues, the HSC and Advisory Committee requested that all calculations and methodologies be openly defined. Although there were times when proprietary or confidential information was utilized in our assumptions, we have demonstrated how that information was used to a level of detail that can quickly become overwhelming.

Data Considerations

Benchmark rates are only as good as the data used to develop those rates. Although we reviewed all data for reasonableness, we did not validate the data for completeness and accuracy. Current program expenditure data was provided by OMAP for the base data period. We noted some inconsistencies in how units of service were reported.

Methodology Issues

The methodologies and techniques outlined in this report were developed to meet the needs of the authorizing legislation with guidance from the HSC and Advisory Committee. Although alternative approaches would be expected to produce results which differ from those presented here, in our opinion our methodology and techniques produce results which are reasonable in aggregate.

This report was intended to estimate the cost for provider services based on actual experience. Although our benchmark rates recognize the current program and cost structure, it is important to recognize that the benchmark rates are not a measure of clinical or administrative efficiencies. Productivity, overhead, and clinical best practices were not incorporated into our analysis, nor were measures or program changes that might increase efficiency of the healthcare delivery system in Oregon.

Our approach at estimating cost was to combine all eligibility groups together and blend experience for the entire population. An underlying assumption to our study is that the cost of any particular service is uniform across payer groups and eligibility groups, blending the experience and cost estimates together to formulate a consolidated unit cost benchmark. This

simplifies both the modeling and assumptions necessary for the analysis. To demonstrate an expected cost for any particular eligibility group, ratios of historical unit reimbursements/ charges were used to reflect differences in the mix-of-services within a group.

Methodology and data limitations specific to each COS are discussed in depth in Section 6.

In the course of conducting our analysis, certain assumptions relating to unknown elements were estimated. One example of these estimates would be past and future changes in utilization and unit cost due to the passage of time (trend). Mercer developed a range of reasonable assumptions for estimates throughout our analyses. For the purposes of this study, our "best guess" point estimate was determined. As a result, each benchmark represents a point estimate with a range of reasonable results, allowing for the variation in our benchmarks relating to unknown or estimated factors.

Manufacturers of prescription drugs and DME appear to be reporting profits that are considerably higher than all other provider groups. It is unlikely that the benchmark rates developed pursuant to this study will completely eliminate the discrepancy among providers, particularly as it relates to pharmaceutical expenditures. It is intended that the benchmark results do, however, get closer to equity among provider groups.

Profitability of Healthcare Providers

Providing affordable, yet profitable, healthcare services continues to be a challenge for some providers. The increasing costs of education — both initial and continuing — as well as increasing practice costs and the general economic state, continue to erode initially low profit margins. Although a strong concern of both the HSC and the Advisory Committee is equity in profitability, provider practice profit, individual profit (in terms of salary or other compensation), as well as practice profit in terms of employee benefits were not estimated. As a result, the true margins of profit, which may exist in each of the benchmark rates, is not measurable.

Alternative approaches relating to accounting audits and financial analyses may result in more detailed information regarding the relationship between cost and profitability.

Role of The Oregon Health Plan Medicaid Program

The OHP Medicaid program is one of many sources of income for providers in the State of Oregon. This concept is illustrated in our Average Market Reimbursement Approach. This approach assumes that cost shifting is occurring to a degree that enables providers to maintain an overall reasonable profit margin when considering all lines of business. The healthcare marketplace is not truly at equilibrium, thus, the term current market value. This approach considers what Medicare and Commercial payers are paying for similar services. The Average Market Reimbursement Approach does not include adjustments for Medicare payment schedules that have been noted by physician associations as being too low or not regionally adjusted.

This approach may also not adequately address more recent trends, such as possible declining participation by certain providers in Medicare and Medicaid programs, since actual cost data were not available. Mercer's trend assumptions do attempt to broadly reflect increasing costs of providing healthcare for all provider groups.

Medicaid reimbursement has an enormous impact on healthcare spending in Oregon. Changing Medicaid reimbursements will impact the current market value and equilibrium for all healthcare spending in Oregon, likely initiating "correction" on the part of employers and other payers. Care should be exercised in estimating the financial impact on the healthcare marketplace, in total, when reviewing the results and implications of this study.

Recognizing and Rewarding Efficiencies

As with any cost-based reimbursement approach, cost does not necessarily represent efficiency. Those provider groups that have more aggressively managed their costs will likely not benefit as much from a rate based upon costs. Typically, market forces and supply and demand dictate reimbursement and not cost. Unfortunately, market forces and supply and demand are more challenging in government-sponsored programs.

Some provider groups, particularly physicians, have indicated that the benchmark rate approach used does not acknowledge the financial constraints and efficiencies that have been forced upon some physicians to be able to work within limited reimbursement arrangements.

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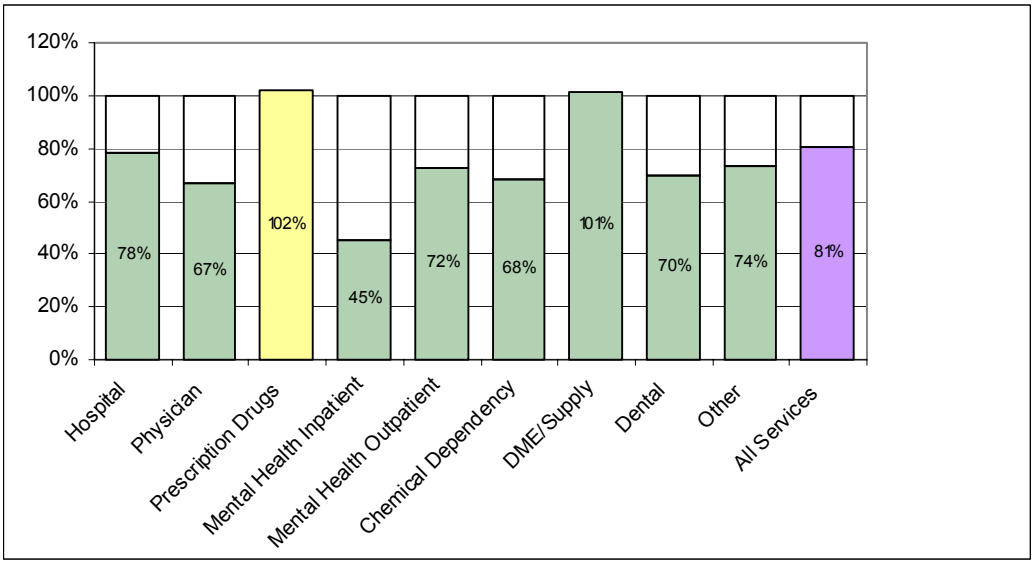
Benchmark Rates

Using the methodology described in Section 4, benchmark rates were developed specific to nine COS. Methodologies for each COS were applied according to available data to more accurately capture true provider costs. Summaries of historical rates and benchmark rates are included in Appendices E and F.

Figure 6.1 below provides a comparison of the CY 2002 Medicaid FFS reimbursement to CY 2002 FFS unit cost benchmarks. This comparison suggests that Mental Health Inpatient Services has the lowest reimbursement rate in comparison to unit cost benchmarks for CY 2002. Prescription Drugs COS and DME/Supply COS have the highest reimbursement rates in comparison to their respective unit cost benchmark for CY 2002. It should be noted, however, that Prescription Drug COS and DME/Supply COS FFS fee schedules have decreased since the 2002 data period. Additionally, Hospital values have been adjusted to reflect supplemental OMAP payments as discussed in the Hospital COS sub-section.

Figure 6.1
Comparison of 2002 Medicaid FFS Reimbursements per Unit to 2002 FFS Unit Cost Benchmarks



Projecting these comparisons between FFS reimbursements and unit cost benchmarks to the SFY 2006 and SFY 2007 benchmark study period would require an estimate of Medicaid FFS reimbursement for the SFY 2006 and SFY 2007 period. The following cost development by section will provide additional information regarding the current environmental factors that may have led to the disparity between cost and reimbursement among COS.

Methodology and Data Limitations

Although the developed benchmark rates are intended to be an approximation of the cost of services, several methodology and data limitations are noted below:

- **Validation of Data**
  Benchmark rates are only as good as the data used to develop those rates. Although we reviewed all data for reasonableness, we did not validate the data for completeness and accuracy. Current program expenditure data was provided by OMAP for the base data

period described within the Data section, and was used in our analysis. We noted some inconsistencies in how units of service were reported.

- **Point estimates within ranges**
  It is important to remember that our point estimates represent one possible outcome in a range of likely outcomes, as each assumption is itself a point estimate in a range of reasonable assumptions.

- **Equity among services**
  A significant priority for this benchmark study was to provide equity among all provider groups. Given the profits reported by the drug industry, the difficulty in obtaining cost information, and the need to use different methodologies for different provider groups in this study, it is unlikely that true equity as compared to prescription drugs is represented by the benchmark rates for the other service categories.

- **Statewide benchmark rates**
  Although the benchmark rates may be appropriate for the average provider, it should be noted that costs may vary significantly from one provider to another. Medical technologies, geographic differences, and other factors contribute to cost variances between providers. The benchmark rates have been provided on a statewide-basis and are not provider-specific.

- **FFS and Managed Care Program Differences**
  Variances between the FFS and managed care unit cost benchmarks and benchmark PMPMs by COS reflect differences in the mix of services and utilization under the two delivery systems. These variances may be partially attributable to differences in the mix of services, population mix, access to care, and service utilization between FFS and managed care and do not necessarily suggest differences in cost and/or efficiency between the two delivery systems.

The following discusses the benchmark rate methodology used for each COS.

Hospital

Overview of Methodology

The benchmark rate for the Hospital Services COS has been developed using the Provider Cost Data Approach described in Section 4 of this report. This approach uses Medicaid-specific cost data from the Medicaid hospital cost reports, which provide historical self-reported cost data. These reports were used to establish a baseline for the 2002 unit cost benchmarks for inpatient and outpatient hospital services. The 2002 unit cost benchmarks were then trended forward to the period of July 1, 2005, through June 30, 2007 (the time period for this study). This process was performed for each of the 12 sub-COS listed in Appendix C.

Due to constraints inherent within this project, Mercer utilized several assumptions to best approximate the 2002 and 2006 unit cost benchmarks; however, it is important to remember that each assumption utilized is a point within a range of reasonable estimates. The mixture of any of these assumptions has been tested as part of this study and has produced reasonable end results. A summary of the unit cost benchmarks developed using our best point estimate assumptions for each sub-COS within hospital services is illustrated in Appendix E.

Assumptions specific to each sub-COS were not independently developed. Instead, assumptions regarding hospital services in aggregate were developed and then applied uniformly for each sub-COS. Although these assumptions may not hold for each individual service, sub-COS, or eligibility group, in our opinion the assumptions are reasonable in aggregate for all hospital services. Accordingly, the results for the Hospital COS in aggregate are reasonable, but caution should be exercised when reviewing unit cost benchmarks for any specific eligibility group or sub-COS.

Data

To develop the hospital services benchmark rates, Mercer utilized the following data sources:

- summarized OHP FFS and encounter hospital service data; and
- Medicaid hospital reports for 2000 and 2001 hospital business operating plan years.

The summarized and procedural-level information was provided for the base data period, where the base data period varies depending upon the population served. Below is a listing of the population and the appropriate study period:

- **OHP Plus** — the base data period is July 1, 2001, through June 30, 2003; and
- **OHP Standard** — the base data period is July 1, 2001, through February 28, 2003.

Methodology

Historical Medicaid Reimbursement and Billed Rates

The development of the hospital benchmark rates begins with historical Medicaid data from OMAP. Historical Medicaid payment rates per unit, utilization rates, and PMPM rates were developed for each of the twelve sub-COS within the Hospital Services COS. Separate rates were developed for both FFS and managed care. The development of the FFS rates utilized the Oregon Medicaid FFS reimbursed claims, units, and member months data from the base data period. The development of the managed care rates utilized the Oregon Medicaid encounter billed charges, encounter units, and member months data from this period.

For each sub-COS, Mercer summed all FFS reimbursed claims for the above period and divided by the sum of all FFS units to derive a reimbursement rate per unit, or what would represent payments per inpatient admit or per outpatient service. This is referred to as the 2002 Medicaid FFS Reimbursement Rate per Unit. Likewise, from the Medicaid managed care data, encounter billed amounts were divided by encounter units to derive a billed rate per unit, representing the billed charges per inpatient admit or per outpatient service. This is referred to as the 2002 Medicaid Managed Care Billed Rate per Unit.

FFS utilization rates were developed from Medicaid FFS utilization and member months data. Similarly, Medicaid encounter data was used to develop the managed care utilization rates. These estimates are referred to as a utilization per member (UPM) in Appendix E. These Medicaid utilization rates were then applied to the payment rates to determine the PMPM rates attributable to Medicaid hospital services. These were calculated separately for FFS and managed care.

Rates per unit, utilization rates, and PMPM rates were developed separately for each of the hospital sub-COS. The rates were then summarized to represent total rates for all hospital services, resulting in a 2002 Medicaid FFS reimbursement rate per unit of $2,771.14 for inpatient services and $99.04 for outpatient services. The 2002 Medicaid Managed Care Billed Rate per Unit was $9,122.99 for inpatient services and $325.10 for outpatient services, as illustrated in Appendix E.

Benchmark Rate for 2002

The historical Medicaid reimbursement and billed rates provide utilization data and the payments (for FFS) or billed amounts (for managed care) from a historical perspective. However, these amounts may not represent cost. The following discusses the data sources and process Mercer used to develop the 2002 benchmark rates.

Fee For Service Medicaid Hospital Cost Reports

A/B hospitals[5], which serve rural areas, must be reimbursed at cost per Oregon statute. These A/B hospitals are initially reimbursed on a per diem basis. Actual costs are then determined annually through a subsequent settlement process, where additional payments are made. As part of this cost settlement process, the A/B hospitals submit Medicaid hospital cost reports that contain both billed and paid charges, as well as calculated cost amounts. Similar cost reports are provided for DRG hospitals, which are compensated using a DRG based fee schedule. There is no requirement for DRG hospitals to be compensated at 100% of the cost of providing services.

This information was provided for the 2000 and 2001 business operating plan years, which varied by hospital with dates ranging from April 1, 1999, through December 31, 2001. Prior to data summarization, paid amounts, billed charges, and cost amounts were trended forward to July 1, 2002 (the midpoint of the historical period) for each hospital, to represent a true picture of billed charges and cost amounts at a single point in time. The trend rate used for these adjustments was an annual effective rate of 6.3% for inpatient services, and 7.0% for outpatient services.

From the Medicaid hospital cost reports, Mercer used the paid amounts, billed charges, cost amounts, number of billed days, and the number of admits/discharges for aggregate inpatient hospital services. For aggregate outpatient hospital services, the information used within the analysis were paid amounts, billed charges, cost amounts, and the number of outpatient services. In conducting our analysis, Mercer aggregated both A/B and DRG hospitals together to better estimate the differential between current payments and actual costs for the hospital sector.

Although Mercer did not audit the Medicaid hospital cost reports, in our opinion, the underlying information appears reasonable and should provide a reasonable basis for establishing aggregate unit cost benchmark information without adjustment.

Inpatient Cost per Admit

The FFS inpatient cost per admit may be obtained directly from the aggregate hospital cost reports. These reports provide information regarding aggregate paid amounts, aggregate cost amounts, as well as the number of admissions covered. However, the payment amounts provided in the hospital cost reports reflect only payments made according to the current fee schedules and do not represent supplemental payments made for DSH, GME, or the settlement amounts for A/B hospitals.

Unless these supplemental payments are accounted for, there would be a large discrepancy between current payments and costs, as these supplemental payments are not in the current payment estimates. As a result, supplemental payments, for each hospital, were also provided

[5] Please see the glossary for a description of A/B and DRG hospitals

by OMAP. These were also adjusted with trend for timing differences. Together with payments from other sources (as provided by the hospital cost reports), these amounts were subtracted from the cost information provided by the cost reports in the current payment estimates. It is worth noting that supplemental payments were made for both inpatient and outpatient services. However, details for these payments were not available, and as a result the total payment amounts were allocated to the inpatient cost estimates.

2002 Unit Cost Benchmarks

Unit cost benchmarks for 2002 were established by reviewing the relationship between paid amounts and estimated costs for the FFS program, and billed charges and costs for the managed care program. Using the unadjusted information in the hospital cost reports, estimated FFS hospital costs were approximately 66.1% higher than current payments under the FFS program, or 57.2% of the billed charges. However, after the adjustments are made to account for supplemental payments, the revised estimates for hospital costs are expected to be approximately 50.7% higher than the current payment amount for the FFS program.

Outpatient Cost per Service

Similar to the process for inpatient services, the paid amounts, billed charges, and cost amounts were estimated for each reporting hospital. These were again trended to a common period (July 1, 2002) and aggregated across all reporting hospitals. The resulting ratios for outpatient services are that FFS payments may be reduced by 7.0% for FFS, and that costs represent approximately 35% of billed charges. As supplemental payments were not available for outpatient services only, there were no adjustments made to outpatient cost estimates.

It is worth noting that supplemental payments provided earlier did not distinguish between inpatient and outpatient services.

Cost by Sub-COS

As the Medicaid cost reports only provide data for inpatient and outpatient services overall, Mercer relied on internal relationships within the historical Medicaid data to develop the 2002 unit cost benchmarks by sub-COS. To estimate the unit cost benchmarks for each of the twelve sub-COS within hospital services, the ratios of the paid amounts to cost estimates were applied to the historical reimbursement rate per unit of each sub-COS within hospital services. Similarly, the ratios of cost to billed amounts were applied to the Managed Care historical billed charges to estimate the cost of providing services under a Managed Care program. The historical Medicaid utilization rates were applied to 2002 unit cost benchmarks to determine PMPM rates attributable to hospital inpatient and outpatient services. These were calculated separately for FFS and managed care. Thus, if historical reimbursement showed that the Impatient – Basic sub-COS comprised 65% of the aggregate hospital inpatient PMPM, the Inpatient – Basic benchmark rate PMPM would be 65% of the aggregate hospital inpatient PMPM.

Unit cost benchmarks for 2002, utilization rates, and PMPM rates were developed separately for each of the sub-COS services within the Hospital Services COS. These rates were then

aggregated to represent total rates for hospital inpatient and outpatient services. The resulting 2002 FFS Unit Cost Benchmarks are $4,175.92 for inpatient services and $91.93 for outpatient services. The resulting 2002 Managed Care Unit Cost Benchmarks are $5,222.36 for inpatient and $114.93 for outpatient. The full complement of 2002 benchmark rates is provided in Appendix E.

Benchmark Rate for 2006

Unit cost benchmarks for 2002 were trended from the midpoint of the base period to the midpoint of the benchmark period to determine the 2006 unit cost benchmarks.

Trend factors recognize changes in cost per service and utilization for hospital services from the base period to the projection period. Mercer reviewed several economic indicators, including both seasonally adjusted and non-seasonally adjusted CPI indicators for Hospital, as well as the DRI-CPI for Hospital, which is a projection of the CPI. Both cost and utilization trend were adjusted for the Oregon marketplace. Annual trend estimates are illustrated in Appendix F. These estimates represent the expected increase in cost per service, as well as utilization, for the applicable time period.

These historical cost and utilization indexes were estimated for all combinations of FFS, managed care, inpatient, and outpatient, and projected forward to adjust the data from the experience period to the projection period. Cost per service and utilization trends were developed on an SFY basis. Annual point estimate trend rates are summarized in Figure 6.2 below:

Figure 6.2

	Inpatient		Outpatient	
	FFS	Managed Care	FFS	Managed Care
Cost	6.3%	6.4%	7.0%	7.5%
Utilization	2.1%	2.0%	2.3%	2.2%

Trend factors were applied to 2002 unit cost benchmarks and 2002 utilization rates. Each point estimate represents one possible trend within a range of reasonable trends. The range of estimates was tested in our analysis to help determine the variability of the final results to the individual estimates.

The 2006 unit cost benchmarks, 2006 utilization rates, and 2006 PMPM rates were calculated separately for each of the hospital services within all Hospital Services COS. The rates were then summarized to represent unit cost benchmarks for all hospital inpatient and outpatient services, resulting in 2006 FFS Unit Cost Benchmarks of $5,285.46 for inpatient services and $120.52 for outpatient services. The 2006 Managed Care Unit Cost Benchmarks are $6,674.36 services for inpatient and $153.44 for outpatient services, as illustrated in Appendix E.

Program Changes

Several program changes or budget issues have been implemented by Oregon that impact the benchmark rate development. These are changes that occurred between July 1, 2001, and June 30, 2007, the begin date of our base data and end date of the benchmark report period, respectively. Each of these program changes has been reviewed. A full list of the program changes can be found in Appendix D. Highlighted on the next page are the program changes that were accounted for in the development of the 2006 Hospital Services COS benchmark.

- **FFS Disease Management (Implemented October 2002)**
  Oregon began to implement FFS disease management programs for asthmatics, diabetics, and individuals with congestive heart failure. As a result of this disease management program implementation, decreases in inpatient hospital and emergency room utilization are expected. To account for these expected utilization decreases, the 2006 FFS benchmark UPMs were decreased by 1.4% for inpatient hospital services and 1.0% for outpatient hospital services.

- **Prioritized List Changes (Implemented October 2004)**
  Coverage of bone marrow rescue and transplant is no longer covered for a list of ten ICD-9 diagnosis codes. Coverage for second bone marrow transplants and second solid organ transplants have also been restricted. Because substitute treatments are not expected to be provided, the elimination of these expensive treatments will decrease aggregate unit cost for inpatient hospital services. To account for the expected unit cost decreases, the 2006 unit cost benchmarks were decreased by 0.7 %for FFS inpatient hospital services and 0.4% for managed care inpatient hospital services. As these services are not provided in an outpatient setting, outpatient hospital adjustments are not anticipated.

- **FFS OHP Plus Copayments (Implemented January 2003)**
  Copayments were instituted for many eligibles within the FFS OHP Plus population, which will reduce OHP's payment responsibility. To account for the implementation of copays for some outpatient services, the 2006 Outpatient Hospital unit cost benchmarks were decreased by 0.1% for FFS OHP Plus populations. As the provision of services cannot be denied due to the recipient's inability to make the copayment and the nominal size associated with the copayment, there is no anticipated reduction in service utilization as a result of the institution of copayments for the FFS OHP Plus population. As copayments were not instituted for inpatient services, no adjustments are made to the Inpatient Hospital unit cost benchmarks.

Oregon has precluded any new enrollment into the OHP Standard program and has reduced coverage for these populations since the base data period. Due to time constraints, neither the base data nor the benchmarks reflect these reductions in coverage for the OHP Standard population, nor any potential impact from declining enrollment in the OHP Standard program. The benchmarks do not reflect the potential implementation of the hospital provider tax.

2006 Benchmark Rates by Eligibility Group

To determine the estimate for benchmark rates for any individual eligibility group, costs per admit/visit, utilization rates, and PMPM rates were developed for each of the thirteen eligibility groups and for each Hospital Service COS within these categories. Based on our discussions with OMAP, we have assumed that each eligibility group has a similar reimbursement schedule.

As a result, within each sub-COS, the ratio of the historical rate per unit for any given eligibility group to the historical rate per unit for all eligibility groups is assumed to represent the differences in the mix-of-services provided for each eligibility group.

To determine the appropriate sub-COS unit cost benchmark for each eligibility group, the 2002 unit cost benchmark for all eligibility groups is multiplied by the historical rate per unit ratio, resulting in a mix-of-services adjusted unit cost benchmark. Cost and utilization trends were then applied to our mix-of-services adjusted 2002 benchmark rates to determine 2006 benchmark rates for each eligibility group and Hospital Service COS combination.

Summary of Results

A summary of historical rates for each hospital service and their corresponding 2002 and 2006 unit cost benchmarks is summarized in Figure 6.3 and 6.4 below.

Figure 6.3

	FFS		
Hospital Services	**Historical 2002 Reimbursement Rate per Unit**	**2002 Unit Cost Benchmarks**	**2006 Unit Cost Benchmarks**
Inpatient- Basic	$ 3,540.66	$ 5,335.52	$6,766.50
Inpatient - Family Planning	$ 0.00	$ 0.00	$0.00
Inpatient - Hysterectomy	$3,762.03	$ 5,669.11	$7,226.96
Inpatient - Maternity	$1,832.26	$ 2,761.09	$3,519.83
Inpatient - Newborn	$1,978.51	$ 2,981.47	$3,800.77
Inpatient - Sterilization	$2,942.45	$ 4,434.07	$5,652.54
All Inpatient Hospital	$2,771.14	$ 4,175.92	$5,285.46
Outpatient - Basic	$103.01	$ 95.62	$125.09
Outpatient - Family Planning	$78.43	$ 72.81	$95.24
Outpatient - Hysterectomy	$61.94	$ 57.49	$75.22
Outpatient - Maternity	$0.00	$ 0.00	$0.00
Outpatient - Sterilization	$124.29	$ 115.38	$150.94
Outpatient - Emergency Room	$477.42	$ 443.20	$579.76
All Outpatient Hospital	$99.04	$ 91.93	$120.52
All Hospital	$ 264.93	$ 345.49	$ 437.60

Figure 6.4

Hospital Services	Managed Care 2002 Unit Cost Benchmarks	Managed Care 2006 Unit Cost Benchmarks
Inpatient- Basic	$ 7,399.80	$9,444.05
Inpatient - Family Planning	$ 51.78	$66.43
Inpatient - Hysterectomy	$ 5,799.91	$7,440.70
Inpatient - Maternity	$ 2,776.93	$3,562.52
Inpatient - Newborn	$ 2,608.45	$3,346.38
Inpatient - Sterilization	$ 4,476.03	$5,742.30
All Inpatient Hospital	$ 5,222.36	$6,674.36
Outpatient - Basic	$ 124.14	$165.73
Outpatient - Family Planning	$ 86.60	$115.89
Outpatient - Hysterectomy	$ 44.48	$59.38
Outpatient - Maternity	$ 1,602.62	$2,139.65
Outpatient - Sterilization	$ 100.94	$134.77
Outpatient - Emergency Room	$ 917.19	$1,224.53
All Outpatient Hospital	$ 114.93	$153.44
All Hospital	$ 419.39	$ 538.60

Historical 2002 rates, 2002 benchmark rates, and 2006 benchmark rates for all hospital services combined are summarized by the thirteen eligibility groups included in this study. Results, which are summarized separately for FFS/managed care and inpatient/outpatient, can be found in Appendix F.

Alternate Cost Methodology

DSH, GME, and capital reimbursements to hospitals is unique to the hospital category of service. Although these payments are typically made to hospitals to supplement the FFS payment schedules, they are not captured as payments in the claims system. In an effort to maintain consistency with the interpretation of historical payments for other categories of service, we chose to reduce the estimate of cost by these amounts to obtain the remaining liability to OMAP which would be paid from the existing payment schedules.

An alternative method to account for these payments would be to incorporate them into the existing payment information and not net these payments from the cost estimate. This interpretation may provide an alternative view of the total program payments made with respect to cost. Our analysis followed a similar process as outlined earlier, with the exception that supplemental payments were not subtracted from cost. Our analysis shows that supplemental payments are approximately 12.48% of the paid amounts flowing through the claim system. As a result, we have added this percentage to the historical FFS payments and our cost estimate to reflect this alternative approach. This produces a unit cost benchmark, which is approximately 45.1% higher than current FFS program payments (including supplemental payments). For illustrative purposes, these results for inpatient hospital are outlined in Figure 6.5 on the following page:

Figure 6.5

	2002 Historical Payments	2002 Unit Cost Benchmark	2006 Unit Cost Benchmark
As Prepared for Report	$ 2,771.14	$ 4,175.92	$ 5,285.46
Adjusted to Include Supplemental OMAP Payments	$ 3,117.35	$ 4,521.81	$ 5,720.40

Limitations

Although the developed benchmark rates are intended to be an approximation of the cost of services, more extensive analyses would be required to develop provider fee schedules or capitation rates.

Other limitations are provided below:

- **Inpatient versus Outpatient**
  One of the key requirements of this report was to provide an unbiased estimate of cost using currently available information. For Hospital Services COS the currently available Medicaid Cost Reports were used. The available Medicaid Cost Report information was adjusted to represent a consistent time period across each of the individual hospitals. As a result, the hospital inpatient and outpatient services reflect the paid, cost, and billed information as reported in the Medicaid Cost Reports and adjusted to represent a uniform time period. Although we believe this information produces reasonable results for Hospital Services COS in aggregate, the inpatient and outpatient service-specific results may need additional analysis. Note that costs developed for outpatient versus inpatient may look unreasonable do to cost shifting / reporting between outpatient and inpatient; therefore, results should be reviewed in aggregate.

- **Hospital efficiency and cost reporting**
  The Medicaid Cost Reports formed the basis of the Hospital services unit cost benchmark development, where cost is defined as the cost to acquire the services rendered. While the State has audited this information, Mercer did not independently audit the results or assess the hospitals for medical efficiency. Therefore, no savings adjustments were made to the Medicaid Cost Reports to reduce the costs associated with inefficient hospitals.

- **Charity care distribution**
  Charity work by hospitals is not consistent among hospitals. Benchmark rates have been reduced to account for disproportionate share hospital (DSH, or charity care) payments.

- **Graduate medical education (GME) payment distribution**
  GME costs incurred by teaching facilities tend to vary by hospital. Benchmark rates have been reduced to reflect GME payments, including direct medical education and indirect medical education payments.

- **Service-specific costs**
  The Medicaid Cost Reports used to calculate the unit cost benchmarks are based on all of the inpatient admits and all of the outpatient visits. Sub-COS level costs were not available. To the extent that OHP pays certain hospital services closer to cost was not taken into account. This situation would have resulted in a distortion across services categories, where the overall inpatient and outpatient results were accurate in total.

Current Environmental Factors

Oregon is one of 14 states with a low number of hospital beds per person.[6] Not having an excess of hospitals helps to limit overhead expenses stemming from vacant beds/rooms and ultimately lower costs per admit.

Other current environmental factors include:

- **Inpatient trends**
  In recent years, the Medicaid Cost Reports have indicated that the average length of stay has increased significantly. This in combination with an increasing cost per day is yielding unexpected results on a cost per admit basis.

- **Staffing shortages**
  The national nursing shortage may also impact Oregon and the hospitals that employ them. This in combination with the current capacity levels may have stretched available hospital resources and reduced hospital efficiency levels.

- **Oregon hospital utilization is unique**
  While national statistics show the average length of stay (ALOS) has decreased from 7.2 days to 5.7 days during a recent 10 year period;[7] Oregon cost reports show the ALOS as increasing over a recent 4 year period, although remaining at a lower ALOS than the national average. Stakeholders have indicated that Oregon's hospital utilization is different than the national experience. As Medicaid experience specific to Oregon was available to calculate the historical experience and the benchmark rates, all data presented in the Hospital services section was derived using all Oregon experience.

[6] Kaiser Family Foundation, 2000 American Hospital Association Annual Survey, State Health Facts Online

[7] American Hospital Association, The Changing Physician Environment, Trend Watch, June 2003, Vol. 5, No. 1

Physician

Overview of Methodology

The physician services component of the benchmark rate has been developed using the Average Market Reimbursement Approach described in Section 4 of this report. That is, to determine a benchmark rate, an assumption was made that when all payer sources (Medicaid, Medicare, and Commercial) are considered, the overall reimbursement for covered physician services is assumed to be sufficient to cover costs for providers. The Physician Services COS is primarily represented by physician provider services. A complete listing of the sub-COS classified under physician services is provided in Appendix C.

In accordance with the Average Market Reimbursement Approach, market reimbursement per service (MRPS) rates, representing the cost per physician service, are determined separately for Medicaid, Medicare, and Commercial sources. These are then blended together to derive a single average market reimbursement. The historical Medicaid data for the base period (July 1, 2001, through June 30, 2003, for OHP Plus and July 1, 2001, through February 28, 2003, for OHP Standard) forms the basis for this study. This unit cost benchmark was then trended forward to the period of July 1, 2005, through June 30, 2007 (the time period for this study) to determine the 2006 unit cost benchmark. The relationship between historical 2002 reimbursements and 2006 unit cost benchmarks could then be determined. This process was applied to a more detailed level of data resulting in the 2006 unit cost benchmarks for all physician provider services within each eligibility group.

Data

To develop the physician services benchmark rates, Mercer utilized the summarized OHP FFS and encounter physician services data.

The summarized and procedural-level information was provided for the base data period, where the base data period varies depending upon the population served. Below is a listing of the population and the appropriate study period:

- **OHP Plus** — the base data period is July 1, 2001, through June 30, 2003; and
- **OHP Standard** — the base data period is July 1, 2001, through February 28, 2003.

Methodology

To develop the Physician Services COS component of the unit cost benchmark, several data sources were used to measure Medicaid, Medicare, and Commercial utilization and reimbursements. Summarized experience was provided from Oregon's FFS and managed care programs, and was used as a basis for the Medicaid component of the average market reimbursement. Medicare-specific FFS and managed care data for Oregon were not available

due to the constraints of this assignment. Commercial fee schedules and utilization for all physician providers in Oregon are considered proprietary by the contracting insurance companies and MCOs, and were also not available. We, therefore, relied on our actuarial experience to draw comparisons between data sources and to replicate reasonable base data for Medicare and Commercial reimbursement.

Reimbursements, utilization rates, and market reimbursement PMPM rates were developed for each payer source — Medicaid, Medicare, and Commercial — for each of the nine sub-COS within Physician Services. Rates were developed from Oregon Medicaid data and data constructed from adjustments as described below. Separate rates for each payer type were developed for both FFS and managed care. Average market reimbursements were developed by blending Medicaid, Medicare, and Commercial reimbursements for FFS and for managed care.

As part of our reimbursement and cost development for Physician Services COS, Mercer has applied several assumptions to best approximate 2002 and 2006 unit cost benchmarks; however, each assumption is a point within a range of reasonable estimates. The mixture of any of these assumptions has been tested as part of this study and has produced reasonable end results. A summary of our unit cost benchmarks developed by using our best estimate point assumptions for each physician provider service is illustrated in Appendix E.

Due to constraints inherent within this project, assumptions specific to each sub-COS were not developed. Instead, assumptions regarding physician services in aggregate were developed and then applied uniformly for each sub-COS. Although these assumptions may not hold for each sub-COS, or the individual procedures represented by that sub-COS, in our opinion the assumptions are reasonable in aggregate for all physician services covered by this COS.

Medicaid Market Reimbursement

Determining the Medicaid component of the average market reimbursement was based on Medicaid data readily available as provided by OMAP. The development of the FFS rates utilizes the Oregon Medicaid FFS paid claims, units, and member months data from the base data period. The development of the managed care utilization rates utilizes the Oregon Medicaid encounter service units and member months from the same period.

For each sub-COS, Mercer summed all FFS paid claims for the above period and divided by the sum of all FFS units to derive an estimate of the 2002 Medicaid FFS Market Reimbursement, or what was paid per service. For the Medicaid managed care data, encounter data do not contain reliable paid information. Based upon Mercer's Medicaid rate-setting experience in other states, the Medicaid FFS average reimbursement was increased by 4%[8] to reflect a cost of service per unit for managed care. This adjustment is assumed to reflect both the differences in contracted reimbursement rates, as well as the

[8] Mercer Intellectual Capital

variance in the mix-of-services from FFS to managed care. This result is referred to as the 2002 Medicaid Managed Care Market Reimbursement.

FFS utilization rates were developed from Medicaid FFS utilization and member months. Similarly, Medicaid encounter data were used to develop managed care utilization rates.

Medicaid utilization rates were applied to market reimbursements to determine the estimated PMPM rates attributable to Medicaid physician provider services. These were calculated separately for FFS and managed care.

Reimbursements, utilization rates, and PMPM rates were developed separately for each of the Physician sub-COS. The PMPM rates were then summarized to represent total rates for Physician Services COS, resulting in a 2002 Medicaid FFS Market Physician Reimbursement of $51.44 and a 2002 Medicaid Managed Care Market Physician Reimbursement of $53.48, as illustrated in Appendix E.

Medicare Market Reimbursement

To estimate the reimbursement for Medicaid services under a Medicare environment, an assumption was needed to establish a relationship between the payer sources. As Medicare utilization data were not available for this project, Mercer reviewed available information regarding differences in reimbursements between Medicare and Medicaid. After adjusting for differences in time periods, we estimated that Oregon Medicare reimbursements were approximately 43%[9,10] higher than Medicaid for the same covered services.

As a result, we applied a factor of 1.43 to the Medicaid FFS Market Reimbursement to develop the Medicare FFS Market Reimbursement. In addition, we expect that reimbursement for Medicare managed care will be 4.55%[11] higher than Medicare FFS reimbursement.

To estimate utilization of Medicaid services in a Medicare environment, Mercer mapped Oregon's CPT codes for physician services to our datasets based on Mercer's experience with Medicare provider groups. Based on our analysis, we estimate that Medicare FFS utilization is 31%[14,12] higher than Medicaid FFS utilization, and Medicare managed care utilization to be 10% higher than Medicare FFS utilization.

Similar to Medicaid, Medicare utilization rates were applied to Medicare market reimbursements to determine the market reimbursement PMPM rates attributable to Medicare

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[9] Assessing the New Federalism, Recent Trends in Medicaid Physician Fees, 1993-1998, September 1999

[10] The Lewin Group, Analysis of Medicaid Reimbursement in Oregon, February 2003

[11] Mercer Intellectual Capital

[12] Medicare split between FFS and MC from CMS, Health Care Financing Review Medicare and Medicaid Statistical Supplement, 2001, http://www.cms.hhs.gov/review/supp/2001/table81.pdf

physician provider services. Again, these were calculated separately for FFS and managed care.

Reimbursements, utilization rates, and PMPM rates were developed separately for each of the physician provider services within Physician Services COS. The rates were then summarized to represent total rates for Physician Services COS, resulting in a 2002 Medicare FFS Market Reimbursement of $77.05 and a 2002 Medicare Managed Care Market Reimbursement of $74.41, as illustrated in Appendix E.

Commercial Market Reimbursement

Similar to the relationship between Medicaid and Medicare, an estimate was needed to determine the relationship between reimbursements made under a Commercial arrangement compared to services under a Medicare environment. Again, relying on available information regarding this relationship, Mercer adjusted for both geographic and time differences to estimate that Commercial reimbursements for similar FFS services are approximately 19%[13,14,15] higher than Medicare reimbursements. Our experience with Commercial vendors regarding reimbursements for PPO, Indemnity, HMO, and POS deliveries of physician provider services indicate that within a Commercial environment, the average reimbursement for managed care is approximately 2.5%[17,18,16] lower than FFS reimbursement. Applying this reduction to the Commercial FFS Market Reimbursement determined our estimated Commercial Managed Care Market Reimbursement.

Similar to Medicare, Mercer estimated the utilization for the Commercial environment using our experience with employers and providers, adjusted for geographic differences. Based on our analyses, we estimate that Commercial FFS utilization is 53%[17] lower than Medicaid FFS utilization. Applying this decrease to the Medicaid FFS Utilization Rate determined our estimated Commercial FFS Utilization Rate. Again, based on our experience, we estimate that the average utilization under managed care is approximately 4.97%[17,18,20] higher than FFS utilization. Applying this increase to the Commercial FFS Utilization Rate determined our estimated Commercial Managed Care Utilization Rate.

Commercial utilization rates were applied to the Commercial market reimbursements to determine the market reimbursement PMPM rates attributable to Commercial physician provider services. This was calculated separately for FFS and managed care.

Reimbursements, utilization rates, and PMPM rates were developed separately for each of the physician provider services within Physician Services COS. The rates were then summarized to represent total rates for physician services, resulting in a 2002 Commercial FFS Market

[13] Mercer Intellectual Capital

[14] Orange book financial information for fiscal years 2001 and 2002

[15] Dyckman & Associates, Survey for Health Plans Concerning Physicians Fees and Payment Methodology, August 2003

[16] Confidential self-reported Oregon carrier information provided for this project.

Reimbursement of $87.21 and a 2002 Commercial Managed Care Market Reimbursement of $85.17, as illustrated in Appendix E.

Average Market Reimbursement Rate for 2002

The above sections describe how market reimbursements and utilization rates were determined for Medicaid, Medicare, and Commercial populations. Information regarding the percentage of populations receiving medical services within Medicaid, Medicare, Commercial, and uninsured environments[17] was used to provide weights to our previous results. The uninsured population was excluded from our study, and it is assumed that the cost of providing unreimbursed services to this population is incorporated into the compensated reimbursements.

The development of a unit cost benchmark for FFS and managed care required an estimate of the percentage of each population receiving care by each of the three payer sources. These percentages are presented in Figure 6.6 below:

Figure 6.6

Payer	FFS	Managed Care	Total
Medicaid	42%[18]	58%[19]	100%
Medicare	67%[20]	33%	100%
Commercial	54%[21]	46%	100%

[17] 2001–2002 Kaiser Family Foundation Statistics

[18] Medicaid split between FFS and MC based on member months from Paid and Encounter data. Split is set for all COA combined to develop benchmarks rates

[19] The 58% represents enrollment in managed care as a percentage of the entire OHP population. The percentage would increase to approximately 70% if we consider only those eligible for managed care

[20] Medicare split between FFS and MC from CMS, Health Care Financing Review Medicare and Medicaid Statistical Supplement, 2001, http://www.cms.hhs.gov/review/supp/2001/table81.pdf

[21] Mercer Human Resource Consulting, 2003 Mercer National Survey of Employer-sponsored Health Plans, http://www.mercerhr.com/knowledgecenter/reportsummary.jhtml/dynamic/idContent/1051300, adjusted to remove consumer directed health plans

The distribution of members among the three payer sources was then calculated to arrive at the percentage of the Oregon population in each of the payer source program buckets. This distribution has been re-weighted to exclude the uninsured populations. These percentages are presented in Figure 6.7 below:

Figure 6.7

Payer	FFS	Managed Care	Total
Medicaid	5.91%[22]	8.04%	13.95%[23]
Medicare	8.57%	4.22%	12.79%
Commercial	39.62%	33.64%	73.26%
Uninsured	0.00%	0.00%	0.00%
Total	54.10%[24]	45.90%	100.00%

To further illustrate this process, the following example is provided for the Medicaid population:

> As shown in the tables above, 13.95%[27] of the Oregon population is funded through Medicaid and 42%[25] of this Medicaid population receives services under the FFS program. The product of these two percentages show that 5.91%[26] of the Oregon population is enrolled in the Medicaid FFS program. The same logic is used for the calculations of the Medicare and Commercial populations.

The final distributions of payer sources within FFS and managed care were then calculated for reference in the weighting to calculate one FFS reimbursement rate and one managed care reimbursement rate. These distributions, detailed in the table below, were calculated as follows:

> Again, using the Medicaid payer source and the FFS population as an example 5.91%[26] of the Oregon population is enrolled in the Medicaid FFS program and 54.10%[28] of the entire Oregon population is enrolled in the total FFS program for all three payer sources. To arrive at the Medicaid FFS percentage of the entire FFS program, the Medicaid FFS portion is divided by the entire FFS percentage (5.91%[26]/54.10%[28]). The resulting quotient, 10.93%[26], is provided in Figure 6.8 on the following page.

[22] Calculated that 5.91% of Oregon population is enrolled in Medicaid FFS

[23] 2001-2002 Kaiser Family Foundation Statistics

[24] Calculated that 54.10% of the entire Oregon population is enrolled in FFS when considering Medicaid, Medicare, and Commercial payers.

[25] Medicaid split between FFS and MC based on member months from Paid and Encounter data. Split is set for all COA combined to develop benchmarks rates.

[26] Calculated that 5.91% of Oregon population is enrolled in Medicaid FFS.

Figure 6.8

Payer	FFS	Managed Care
Medicaid	10.93%[27]	17.52%
Medicare	15.84%	9.20%
Commercial	73.23%	73.28%
Total	100.00%	100.00%

The average market reimbursement for 2002 represents the individual Medicaid, Medicare, and Commercial Market Reimbursements weighted together by their respective population percentages for FFS and then for managed care. This was done for utilization and PMPM rates. Reimbursements were solved for, resulting in a 2002 Average FFS Market Reimbursement of $77.05 and a 2002 Average Managed Care Market Reimbursement of $74.42, as illustrated in Appendix E.

Benchmark Rate for 2002

The average market reimbursement, representing three major payer types, was adjusted for TPL to determine the 2002 unit cost benchmarks for physician services.

Utilization rates were applied to 2002 unit cost benchmarks to determine PMPM rates attributable to physician provider services. This was calculated separately for FFS and managed care. Unit cost benchmarks, utilization rates, and PMPM rates were developed separately for each of the physician provider services within Physician Services COS. The rates were then summarized to represent total rates for Physician Services COS, resulting in a 2002 FFS Unit Cost Benchmark of $76.87 and a 2002 Managed Care Unit Cost Benchmark of $74.20, as illustrated in Appendix E.

Benchmark Rate for 2006

Unit cost benchmarks for 2002 were trended from the midpoint of the base period to the midpoint of the benchmark period to determine the 2006 unit cost benchmarks.

Trend factors recognize changes in cost per service and utilization of physician services from the base period. It is important to distinguish that the trend we are considering is an increase in unit costs, not unit reimbursements. Mercer reviewed several economic indicators, including both seasonally adjusted and non-seasonally adjusted CPI indicators for Physician Services, as well as the DRI-CPI for Physician Services, which is a projection of the CPI. Mercer has developed a proprietary database (MARS©) that includes utilization data on Medicaid services from several states. We utilized MARS© to estimate the annual increase in physician provider utilization for Medicaid services. Both unit cost and utilization trend were adjusted for the Oregon marketplace.

[27] Calculated that 10.93% of FFS overage is attributed to Medicaid

Annual cost trend factors from 2001 through 2007 were developed for reimbursement and utilization. The annual reimbursement and utilization trend factors were developed based on considerations for inflation, increases in utilization, and outside influences, including increases in practice cost and increases in malpractice premiums.

These historical cost and utilization indexes were estimated for both FFS and managed care, and projected forward to adjust the data from the experience period to the projection period. Unit cost and utilization trends were developed on an SFY basis. Annual FFS trend was 2.9% and 2.8% for reimbursement and utilization, respectively. Annual managed care trend was 3.1% and 2.7% for reimbursement and utilization, respectively. Trend factors were applied to 2002 unit cost benchmarks and 2002 utilization rates.

The 2006 unit cost benchmarks, 2006 utilization rates, and 2006 PMPM rates were developed separately for each of the physician provider services within Physician Services COS. The rates were then summarized to represent total rates for Physician Services COS, resulting in a 2006 FFS Unit Cost Benchmark of $85.85 and a 2006 Managed Care Unit Cost Benchmark of $83.98, as illustrated in Appendix E.

Program Changes

Several program changes or budget issues have been implemented by Oregon that impact the benchmark rate development. These are changes that occurred between July 1, 2001, and June 30, 2007, the begin date of our base data and end date of the benchmark report period, respectively. Each of these program changes has been reviewed. A full list of the program changes can be found in Appendix D. Highlighted below are the program changes that were accounted for in the development of the 2006 Physician Services COS benchmark.

- **FFS Disease State Management (Implemented October 2002)**
  Oregon began to implement FFS disease management programs for asthmatics, diabetics, and individuals with congestive heart failure. A 0.03% downward adjustment was applied to the 2006 benchmark UPM for the FFS Physician Services COS. This adjustment was applied to recognize the decreased physician services utilization that was expected to result from the implementation of the asthma portion of the disease management program.[28]

[28] National Pharmaceutical Council, Inc., Disease Management: Balancing Cost and Quality, April 2002

- **FFS OHP Plus Copayments (Implemented January 2003)**
  Oregon instituted copayments for many eligibles within the FFS OHP Plus population. A 0.8% downward adjustment was applied to the 2006 FFS Physician Services COS unit cost benchmark to reflect the institution of copayments for some physician services. There is no anticipated reduction in service utilization as a result of the institution of copayments for the FFS populations.

Oregon has precluded any new enrollment into the OHP Standard program and has reduced coverage for these populations since the base data period. Due to time constraints, neither the base data nor the benchmarks reflect these reductions in coverage for the OHP Standard population, nor any potential impact from declining enrollment in the OHP Standard program.

2006 Benchmark Rates by Eligibility Group

To determine the estimate for benchmark rates for any individual eligibility group, costs per visit, utilization rates, and PMPM rates were developed for each physician sub-COS within each of the thirteen eligibility groups and then summed. Based on our discussions with OMAP, we have assumed that each eligibility group has a similar reimbursement schedule.

As a result, within each sub-COS, the ratio of the historical rate per unit for any given eligibility group to the historical rate per unit for all groups is assumed to represent the differences in the mix-of-services provided for each one.

To determine the appropriate sub-COS unit cost benchmark for each eligibility group, the 2002 unit cost benchmark for all groups is multiplied by the historical rate per unit ratio, resulting in a mix-of-services adjusted unit cost benchmark. Cost and utilization trends were then applied to our mix-of-services adjusted 2002 unit cost benchmarks to determine 2006 benchmark rates for each eligibility group and physician sub-COS combination.

Summary of Results

A summary of historical rates for each physician sub-COS and their corresponding 2002 and 2006 benchmarks with ranges is summarized in Figure 6.9 and 6.10 below:

Figure 6.9

	FFS		
Services	Historical 2002 MRPS	2002 Unit Cost Benchmarks	2006 Unit Cost Benchmarks
Physician - Basic Office Visits	$ 53.20	$ 79.50	$ 88.62
Physician - Basic Other	$ 42.41	$ 63.37	$ 70.63
Physician - Basic Surgery	$ 113.52	$ 169.63	$189.08
Physician - Basic X-ray	$ 23.91	$ 35.74	$ 39.83
Physician - Family Planning	$ 63.12	$ 94.32	$105.14
Physician - Hysterectomy	$ 333.00	$ 497.60	$554.66
Physician - Maternity	$ 337.08	$ 503.71	$561.46
Physician - Newborn	$ 63.08	$ 94.27	$105.07
Physician Sterilization	$ 194.70	$ 290.94	$324.30
All Physician Services	$ 51.44	$ 76.87	$ 85.67

Figure 6.10

	Managed Care	
Services	2002 Unit Cost Benchmarks	2006 Unit Cost Benchmarks
Physician - Basic Office Visits	$ 76.40	$ 86.27
Physician - Basic Other	$ 61.15	$ 69.05
Physician - Basic Surgery	$ 162.63	$183.63
Physician - Basic X-ray	$ 35.08	$ 39.61
Physician - Family Planning	$ 100.10	$113.03
Physician - Hysterectomy	$ 477.24	$538.86
Physician - Maternity	$ 493.93	$557.71
Physician - Newborn	$ 94.70	$106.93
Physician Sterilization	$ 274.86	$310.35
All Physician Services	$ 74.20	$ 83.78

The 2006 FFS unit cost benchmark is estimated to have a Dollar per Resource Value Unit (RVU) value, or Medicare Conversion Factor, of $43.22. This amount is estimated using the assumption that the current FFS reimbursement per unit reflects a $25.95 Conversion Factor in the FFS fee schedule, and the Conversion Factor value will increase in direct proportion to the increase from current reimbursement to the 2006 unit cost benchmark, i.e., increase by approximately 67 %. Several data variables, including the aggregation of non-Physician services within the Physician unit cost benchmark, distort this Conversion Factor rough estimation.

Summary Exhibit

Historical 2002 reimbursements, 2002 benchmark rates, and 2006 benchmark rates for the Physician Services COS are summarized by the thirteen eligibility groups included in this study. Results, which are summarized separately for FFS and managed care, can be found in Appendix F.

Limitations

Although the developed benchmark rates are intended to be an approximation of the cost of services, more extensive analyses would be required to develop provider fee schedules or capitation rates. In addition, developed benchmark rates are estimates of cost, as actual cost data were not available for physician services.

Other limitations are provided below:

- **Practice environment**
  Administrative expenses are typically absorbed more effectively by group practices, allowing the average cost per service to be lower than the average cost per service for solo practices. The expense estimates provided in the benchmark rates apply to all physician practices and do not distinguish between the costs associated with solo or group practices.

- **Generalist versus specialist**
  With the exception of a few specialties (i.e., dermatologists), the costs incurred by specialists tend to exceed generalist costs. Unfortunately, the historical Medicaid data provided for this project did not separate generalists from specialists. Therefore, no distinction was made between costs for generalists and specialists.

- **Stakeholder feedback on the Average Market Reimbursement Approach**
  Stakeholders indicated a concern that this would produce an average market reimbursement that was insufficient overall. Stakeholders did, however, acknowledge that a better methodology probably was not available given the constraints of this study.

- **Consistent population mix**
  The benchmark rates assume that the Medicaid, Medicare, and Commercial markets do not significantly alter from the 2002 study period to the projected 2006 time period. Therefore, any changes in uninsured levels and population mixes between Medicaid, Medicare, and Commercial will not be reflected in the benchmark rates.

Current Environmental Factors

One important economic indicator with respect to provider reimbursement for Medicaid services is provider participation in the program. If participation is declining, it could indicate that reimbursement is too low, while if it is stable or increasing, it could indicate that it is satisfactory. The Oregon Medical Association reports that over 50% of Oregon physicians do not currently accept OHP members or limit their acceptance of OHP patients.[29] Thirty-nine percent of Oregon physicians do not currently accept Medicare patients or limit their acceptance of Medicare patients. Nationwide, approximately 35% of physicians do not accept Medicaid members or limit their acceptance, and 20% of physicians do not accept Medicare members or limit their acceptance.[30] Stakeholders have indicated that this is compelling evidence to suggest that not only are Medicaid payment rates insufficient, but Medicare payment rates are as well.

Other current environmental factors include:

- **Medicare reimbursement practices**
  Supporting claims that Medicare reimbursement may also be inadequate, the American Medical Association's statement regarding The Medicare Payment System indicates that flaws in the Medicare payment update formula produce payment updates that have failed to keep pace with the cost of practicing medicine.[31] In addition to this concern, some stakeholders believe that the Medicare fee schedule needs to be adjusted to reflect Oregon-specific costs, allowing the Oregon Medicare fee schedule to be more consistent with other states' levels.

- **Projected physician pay cuts**
  According to the Medicare Board of Trustees, the projected pay cuts of 5% per year from 2006 through 2012 will result in a cumulative reduction in physician payment rates of more than 31%, while medical practice costs are expected to rise by 19% during this time frame.[32] These reductions are in addition to Medicare's rate cuts and Medicaid's rate freeze in prior years. Stakeholders have indicated that physicians continue to be impacted negatively financially and physicians have been forced to continue cutting costs. Stakeholders question whether other industries, such as pharmaceuticals, have had to endure similar cost increases that have exceeded their revenue increases.

[29] The Oregon Medical Association, Preliminary Report of the 2003 Physician Workforce Assessment

[30] American Academy of Family Physicians, 2004 FACTS About Family Practice

[31] American Medical Association to the Subcommittee on Health, Committee on Energy and Commerce, U.S. House of Representatives, May 2004-07-26

[32] 2004 Annual Report of the Medicare Board of Trustees

- **Drug expenditures trends**
  Drug expenditures are continuing to grow at a very rapid pace. Between 1996 and 2002, per enrollee spending on drugs grew 244% compared to 38% for physician provider services.[33] As a result, including prescription drugs in the sustainable growth rate (SRG) greatly increases the odds that Medicare spending on physician provider services will exceed the SRG target, triggering pay cuts that penalize physicians for prescribing important new drugs.

- **Malpractice insurance increases**
  The premiums for malpractice insurance continue to rise, but overall represents a small component of the overall trend figures.

- **Potential modification to medical practice patterns**
  Stakeholders have indicated that physicians are changing their medical practices to adapt to current budgetary concerns. This may have longer term implications on quality of care provided.

[33] American Medical Association, Statement to the Subcommittee on Health Committee on Energy and Commerce US House of Representatives, RE: The Medicare Payment System, May 5, 2004

Prescription Drugs

Overview of Methodology

Whereas cost data are not available for prescription drug services, and the Average Market Reimbursement Approach requires a balance between both supply and demand, prescription drug services provides a unique challenge for determining a benchmark rate. Acquisition cost data is simply not available at this time because it is not a reported requirement; unfortunately, the acquisition cost represents a significant piece of the overall prescription drug spend. Because of the lack of cost data and lack of balance between supply and demand, we were unable to develop a true benchmark rate for prescription drugs.

Through discussions with the HSC, we determined that in lieu of developing a true benchmark rate, we would benchmark Oregon's drug purchasing against best practices in other state Medicaid programs. This was considered to be a reasonable approach as OHP does not contract directly with manufacturers or distributors, so profits, administration, and/or acquisition costs from drug manufacturers or distributors cannot be reasonably controlled or negotiated, at least at the present time. So, therefore, the benchmarking would at least provide the HSC with some observations as to how effective the OHP has been in drug purchasing, relative to other state Medicaid pharmacy programs.

It is important to note that benchmarking against better purchasing approaches often implies that the "better purchasing approaches" are state-of-the-art, or considered to be very effective. Unfortunately, virtually no state has effectively controlled its drug spending. Drug expenditure trends over the past several years have far exceeded general inflation and have continued to account for a greater share of all personal healthcare expenditures.

In addition to the benchmarking, we did develop a historical reimbursement amount that was trended forward to 2006. Again, the 2006 anticipated reimbursement amount does not represent cost. However, for purposes of comparison to other provider categories of service, this is the most appropriate benchmark available for comparison purposes.

Data

To develop prescription drug historical reimbursement amounts and to evaluate OHP's purchasing against other approaches, Mercer utilized the following data sources:

- OHP FFS and encounter summarized prescription drug services data;
- OHP FFS prescription drug claims-level data for the period July 1, 2003, through December 31, 2003;
- a national Medicaid MAC list to compare with Oregon's MAC list; and
- Mercer's database of States' Reimbursement Components and Medicaid Managed Care/Pharmacy Benefit Manager (PBM) pharmacy contract components.

The summarized and procedural-level information was provided for the base data period, where the base data period varies depending upon the population served. Below is a listing of the populations and the appropriate study period:

- **OHP Plus** — the base data period is July 1, 2001, through June 30, 2003; and
- **OHP Standard** — the base data period is July 1, 2001, through February 28, 2003.

Detailed and complete prescription drug managed care encounter data were not available for the same time period as the FFS data. Mercer attempted to obtain specific reimbursement information for the managed care program via direct inquiry from each OHP contracted health plan. However, only two contracted health plans supplied the requested plan-specific information regarding pricing and reimbursement contract terms. Since this was not a significant representative sample of all health plans' experience, Mercer did not use this data. As a result, Mercer relied on the FFS data, our experience of the Medicaid industry, and our background in managed care consulting to benchmark OHP's prescription drug spending.

Methodology

Historical Payments for Prescription Drugs

To develop the historical payments for prescription drugs, Mercer used OHP FFS and encounter summarized prescription drug services data for the base data period. The data were adjusted to reflect historical program changes. It is important to note that the 2002 data represents what was paid by OHP. It does not represent actual cost, although it does represent the "cost" to OHP, i.e., reimbursement to pharmacies, net of third-party payments and enrollee cost sharing.

Benchmarking Methodology and Results

Mercer relied on its experience working across various Medicaid programs in the country, as well as our experience with large employers, to review prescription drug purchasing in Oregon relative to what other states are doing. There are two key areas within prescription drug spending that facilitate comparison or benchmarking across the country — the AWP discount and the dispensing fees paid. A summary of Oregon and several other states is shown in Figure 6.11 on the following page:

Figure 6.11
Prescription Drug State Reimbursement Components — Current Comparison

	Brand AWP Discount	Reimbursement Non-MAC Generics/Multi-Source Brand Drugs*	Dispensing Fee	PDL with Supplemental Rebates
California	AWP-5%	AWP-5%	$5.40	Yes
Colorado	AWP-13.5%	AWP-35%	$4.00 – retail $1.89 – institutional	No
Idaho	AWP-12%	AWP-12%	$4.94 ($5.54 for unit dose)	Yes
Kansas	AWP-13% (single source brand–SSB)	AWP-27%	$3.40	No
Missouri	Lower of AWP-10.43% or WAC+10%	Lower of AWP-10.43% or WAC+10%	$4.09	Yes
Montana	AWP-15%	AWP-15%	$4.70	No
North Carolina	AWP-10%	AWP-10%	$5.60 – generic $4.00 – brand	No
New Mexico	AWP-12.5%	AWP-12.5%	$3.65	No
Oklahoma	AWP-12%	AWP-12%	$4.15	No
Oregon	**AWP-11% (institutional) AWP-15% (non-institutional)**	**AWP-11% (institutional) AWP-15% (non-institutional)**	**$3.91 (institutional) $3.50 (non-institutional)**	**No**
Texas	Lower of AWP-15% or WAC+12%	Lower of AWP-15% or WAC+12%	$5.14	No
Washington	AWP-14% (SSB & multi-source —MSB—with 2–4 manufacturers AWP-19% (brand mail order)	AWP-50% (MSB with 5+ manufacture AWP-15% (generic mail order)	$4.20 – $5.20 (based on tiered pharmacy volume) $3.25 (mail order)	Yes (for certain therapy classes)
Wyoming	AWP-11%	AWP-11%	$5.00	No

* In Oregon, drugs subjected to MAC pricing constitute approximately 65-75% of all generics/multi-source brands dispensed by retail and institutional pharmacies

Our conclusion with respect to benchmarking against other state purchasing approaches is that Oregon should consider additional best practice initiatives, particularly around controlling inappropriate utilization, to further control drug spending. For example, OHP's preferred drug list (PDL) is optional. We believe additional unit cost savings of about 2–4% (based upon other state experience) could be achieved in the FFS program if the PDL were mandated. Accordingly, with a mandatory PDL program, an additional savings of 4-6% can be obtained from supplemental rebates. Other initiatives such as dose optimization, quantity limits, and step therapy clinical edits could provide further savings.

Oregon does appear to be achieving better discounts than the average state. However, as indicated previously, virtually no state has been able to effectively control drug expenditures. Additional observations noted during our benchmarking review , as summarized in Figure 6.12 on the following page, includes the following summary of "best practice" approaches being used across the country that Oregon should consider to more effectively control its drug expenditures and that would begin to improve the equity among the various provider groups. It should be noted that the range of potential savings shown are for the FFS program only.

Figure 6.12
Prescription Drug Best Practices Table

Best Practice Initiative	Description	Estimated Savings and/or Quality of Care Impact to the FFS Program	States with Best Practice Implemented	Oregon Considerations
Mandatory PDL	Clinically driven; use of evidence-based evaluations Strict prescribing requirements Medical exception approval criteria Experienced call center representatives to enforce criteria Negotiate supplemental rebates	Unit cost savings: 2–4% of total drug spend Savings estimate may be impacted if other best practice initiatives are also implemented Supplemental rebate savings: 4–6% of total drug spend	Kentucky, Louisiana, Missouri, Florida, Michigan, Maryland, Mississippi, West Virginia, Washington, California, Idaho, Kansas, Montana, Oklahoma, Texas, and Wyoming	Must offer prior authorization override process if request deemed clinically appropriate / medically necessary Current Oregon legislation precludes the use of prior authorization program
340b Program Maximization	Maximizes the significant drug discounts available to 340b qualified entities. Oregon has 188 qualified 340b entities. Phased approach ▪ Increase participation by eligible 340b entities ▪ Consider "Injection Centers"	Variable savings — 11–15% of total drug spend depending on the current environment and level of implementation Savings estimate is a "stand-alone" estimate, and should not be impacted if other best practice initiatives are also implemented	Seven states passed laws regarding the 340b drug pricing program in 2001–2003 ▪ Utah, West Virginia ▪ New Mexico (must identify 340b entities eligible to participate) ▪ Texas (implemented program in the Department of Criminal Justice) ▪ Feasibility studies in Maine and Maryland ▪ California (authorized 340b clinics to contract with community pharmacies to dispense 340b drugs)	Requires effort and coordination to increase participation amongst eligible entities; however, resources are now available to assist states via a collaboration between the federal government and the American Pharmacists Association A "champion" will likely be necessary

Best Practice Initiative	Description	Estimated Savings and/or Quality of Care Impact to the FFS Program	States with Best Practice Implemented	Oregon Considerations
Dose Optimization	Dose consolidation from multiple smaller doses to an equivalent daily dose Review for clinical appropriateness Recommend a hard edit at POS with corresponding override policies and procedures Improved medication compliance	Variable savings — depending on target medications (0.5–1.0% of drug spend) Savings estimate may be impacted if other best practice initiatives are also implemented	▪ Missouri ▪ Michigan ▪ Oregon: initiating a dose consolidation/optimization program for mental health medications through Oregon State University	Must offer prior authorization override process if request deemed clinically appropriate/medically necessary Current Oregon legislation precludes the use of prior authorization program

Best Practice Initiative	Description	Estimated Savings and/or Quality of Care Impact to the FFS Program	States with Best Practice Implemented	Oregon Considerations
Step Therapy Clinical Edits	Initiate therapy on first or second-line medications when clinically appropriate Use of automated system results in transparency to beneficiary and provider Edits based on evidence-based clinical criteria Incorporate medical claims data Requires prescriber education and buy-in to ensure acceptance of proposed edits Recommend a hard edit at POS with corresponding override policies and procedures	Variable savings—depending on target medications (1.0–1.5% of drug spend) Quality of care impact Savings estimate may be impacted if other best practice initiatives are also implemented	▪ Missouri: automated system edits ▪ Idaho: manual review — automated edits not operational ▪ California: Department of Human Services authorized development of step protocols in 2003 ▪ Washington: use of step edits since 2001 ▪ Texas: use of Texas Medical Assistance Program protocols for select mental health medications	Potential increases in workload for providers (physicians and pharmacists) when edits dictate second-line therapy not appropriate Must offer prior authorization override process if request deemed clinically appropriate/medically necessary Current Oregon legislation precludes the use of prior authorization program
Mandated Acquisition Cost Data Reporting	Require drug manufacturers, drug wholesalers and/or retail pharmacies to report actual prices for drugs	Variable and significant savings Savings estimate is a "stand-alone" estimate, and should not be impacted if other best practice initiatives are also implemented	▪ Texas ▪ Maine: legislation in 2004	Will require legislation

	Description	Estimated Savings and/or Quality of Care Impact to the FFS Program	States with Best Practice Implemented	Oregon Considerations
Quantity Limits	Prevent inappropriate prescribing and use Minimize over-utilization and potential adverse effects Consistent with FDA-approved dosing guidelines Hard edit at POS recommended with corresponding override policies and procedures	Variable — depending on target medications (0.5–1.5% of drug spend) Quality of care impact Savings estimate may be impacted if other best practice initiatives are also implemented	▪ Kentucky: limit on the amount dispensed or refilled ▪ Missouri: drug management for all recipients with greater than 9 prescriptions per month ▪ Michigan: limit on the amount dispensed or refilled ▪ Colorado: 8 prescriptions per month and 100-day limit on the number of pills per prescription ▪ North Carolina: 6 prescriptions per person per month without prior approval and 34-day supply ▪ Washington: 4 brand name prescriptions per month ▪ Oklahoma: 3 prescriptions per month, 100 units or 34-day supply	Must offer prior authorization override process if request deemed clinically appropriate/medically necessary Current Oregon legislation precludes the use of prior authorization program

Best Practice Initiative	Description	Estimated Savings and/or Quality of Care Impact to the FFS Program	States with Best Practice Implemented	Oregon Considerations
Disease Management Programs	Improve quality of care and control costs Focus on high-cost prevalent disease states in the population Incorporate with case management programs Integrate efforts with pharmacy providers	Variable savings Quality of care impact Savings estimate may be impacted if other best practice initiatives are also implemented	▪ Iowa – based on pharmaceutical case management model (asthma, CHF, diabetes, CV, GERD, PUD, depression, osteoarthritis, atrial fibrillation, COPD) ▪ Mississippi (asthma, diabetes, hypertension) ▪ North Carolina (asthma, diabetes, CHF, gastroenteritis) ▪ Florida ▪ Washington (asthma, CHF, diabetes, kidney disease) ▪ Colorado (asthma and chronic diseases) ▪ Missouri (asthma, depression, diabetes, heart failure) ▪ Montana (asthma, diabetes, heart failure, cancer, and chronic pain) ▪ Oklahoma (asthma) ▪ Wyoming (considering programs)	Oregon currently has programs targeted at asthma, diabetes, CHF, and high cost cases but not a high degree of integration with pharmacy providers

Best Practice Initiative	Description	Estimated Savings and/or Quality of Care Impact to the FFS Program	States with Best Practice Implemented	Oregon Considerations
Bulk Purchasing	Volume purchasing to negotiate deeper discounts Increase customer purchasing pool 1) Medicaid, State Employees, and Department of Corrections 2) States joining together — multi-state purchasing pool ▪ Approved by CMS ▪ Use same PBM — FirstHealth ▪ Each state may maintain its own PDL CMS may cap number of members	Variable savings Savings estimate is a "stand-alone" estimate, and should not be impacted if other best practice initiatives are also implemented	▪ Alaska ▪ Hawaii ▪ Maryland ▪ Michigan ▪ Minnesota ▪ Nevada ▪ New Hampshire ▪ Vermont ▪ Rhode Island (considering)	Requires buy-in from all stakeholders Most efficient if one state agency coordinates efforts, including procurement and oversight of bulk purchasing SB 875 in 2003 created the Oregon Prescription Drug Purchasing Program – voluntary program to leverage combined purchasing power and use of a PDL, but does not include Medicaid
Capture of Prescriber Identifier on Claims	The success of numerous pharmacy management initiatives (e.g., point-of-sale and retrospective DUR) are dependent on the ability to accurately identify the prescriber Program the claims adjudication system to edit the prescriber identifier field for both accuracy and validity	Minimal savings Quality of care impact Savings estimate is a "stand-alone" estimate, and should not be impacted if other best practice initiatives are also implemented	▪ Missouri	Editing prescriber field should improve the capture of prescriber information; but lock-out of invalid/inaccurate prescriber identifier fields would be problematic Accordingly, this initiative requires education and buy-in from all prescribers

Best Practice Initiative	Description	Estimated Savings and/or Quality of Care Impact to the FFS Program	States with Best Practice Implemented	Oregon Considerations
Electronic Prescribing	Physician access at the point of care to information such as beneficiary history/demographics, formulary status, clinical edits, and drug information via handheld electronic prescribing tools/technology Once the prescriber has identified the appropriate therapy, electronic technology transmits the prescription directly to the pharmacy for filing/dispensing Included in the Medicare Modernization Act (MAA)	Variable savings Quality of care – reduce potential for medication errors Savings estimate is a "stand-alone" estimate, and should not be impacted if other best practice initiatives are also implemented	▪ None	Requires effort, coordination, education and resources to ensure appropriate rollout

Reimbursement Benchmark for 2002

Because the results of our benchmarking indicate that Oregon is purchasing in a manner that is consistent with other Medicaid programs, we did not believe we had sufficient data or information to propose a benchmark rate that is different than what is currently being paid. The FFS historical reimbursement data for the Prescription Drugs COS is composed primarily of prescriptions dispensed by retail and institutional pharmacies (excluding outpatient hospital pharmacies), reported in aggregate to Mercer. The FFS historical reimbursement data for the Prescription Drugs COS also contains drugs dispensed by outpatient hospital pharmacies, reported separately from prescriptions from other retail and institutional pharmacies. A complete listing of the sub-COS classified under the Prescription Drugs COS is provided in Appendix C. Several program changes were implemented by Oregon during the FFS historical data period related to drug reimbursement rates and pharmacy dispensing fees. Highlighted below are the program changes that were applied to the FFS historical reimbursement data to develop the 2002 reimbursement benchmark.

- **FFS AWP Discounts (Implemented July 2001)**
  All pharmacies received an AWP discount of minus 11%. On October 1, 2001, the state modified the discount for all pharmacies to AWP minus 13%. The state then lowered the discount again on November 1, 2002, to AWP minus 14%. The state later decided to offer distinct discounts to retail pharmacies and institutional pharmacies. Beginning on February 1, 2003, the state left the retail discount at AWP minus 14% and offered institutional pharmacies AWP minus 11%. On June 1, 2003, the state lowered the retail discount to AWP minus 15% and left the institutional discount at AWP minus 11%. A 1.3% downward adjustment was applied to the 2002 benchmark unit cost for the FFS Prescription Drugs COS. This adjustment was applied to reflect the overall impact of the various AWP discount modifications made between July 1, 2001, and June 30, 2003.

- **FFS Dispensing Fees (Implemented July 2001)**
  All pharmacies received dispensing fees ranging from $3.50 to $4.10. The state decided to offer distinct dispensing fees to retail pharmacies and institutional pharmacies. On October 1, 2001, the state modified the dispensing fees for retail pharmacies to $3.50 and the dispensing fees for institutional pharmacies to $3.80. The state then raised the dispensing fee for institutional pharmacies on February 1, 2003, to $3.91. A 0.13% downward adjustment was applied to the 2002 benchmark unit cost for the FFS Prescription Drugs COS. This adjustment was applied to reflect the reduction in the prescription drug unit cost as a result of the various dispensing fee modifications.

- **FFS Oregon Maximum Allowable Charge (OMAC) (Implemented March 2002)**
  This reduced the state's allowable reimbursement for multi-source brand and generic drugs included on the OMAC. A 0.24% downward adjustment was applied to the 2002 benchmark unit cost for the FFS Prescription Drugs COS to reflect this program change.

Reimbursement Benchmark for 2006

The 2002 Reimbursement Benchmark was trended forward to 2006 and is included in Appendix E and F. To develop the trend factors, Mercer reviewed several national industry indicators and trend factors from other Medicaid programs to develop the prescription drug unit cost trend factors used in this analysis. Annual FFS prescription drug unit cost trend was 4.7.

Program Changes

Several program changes or budget issues have been implemented by Oregon that impact the reimbursement benchmark development. These are changes that occurred between July 1, 2001, and June 30, 2007, the begin date of our base data and end date of the benchmark report period, respectively. Each of these program changes has been reviewed. A full list of the program changes can be found in Appendix D. Highlighted below are the program changes that were accounted for in the development of the 2006 Prescription Drugs COS reimbursement benchmark.

- **FFS Disease State Management (Implemented October 2002)**
  Oregon began implementing FFS disease management programs for asthmatics, diabetics, and individuals with congestive heart failure. A 0.2% upward adjustment was applied to the 2006 benchmark UPM for the FFS Prescription Drugs COS. This adjustment was applied to reflect the expected increase in prescription drug utilization as a result of the disease management program.

- **Pharmacy Lock-in (Implemented July 2002)**
  Medicaid recipients are required to designate a primary pharmacy, with the intent of reducing costs resulting from drug-seeking behavior and improving clinical coordination of care through the use of a single pharmacy. Mercer believes that such a program change could cause a small reduction in utilization for targeted recipients. A 0.05% downward adjustment was applied to the 2006 UPM for the FFS Prescription Drugs COS to reflect the expected decrease in utilization attributed to this program change.

- **Prior authorization (PA) (Implementation Dates Vary)**
  PA requirements were implemented or eliminated on the indicated dates for the following medications and therapy classes:
  - **Non-sedating antihistamines and nasal inhalers** — new PA effective 8/1/2002;
  - **H2 Antagonists** — PA eliminated on 10/1/2002;
  - **Sedatives (Ambien, Sonata, Restoril, Halcion, Doral, Dalmane, ProSom and generic equivalents)** — new PA effective 12/6/2002 for prescriptions exceeding 15 doses in 30 days;
  - **Soma (Carisoprodol)** — new PA effective 12/6/2002 for prescriptions exceeding 56 tablets in 90 days;
  - **Marinol** — new PA effective 4/1/2003;
  - **Multiple-source brand name drugs** — new PA effective 6/15/2003;
  - **Neurontin (Gabapentin)** — new PA effective 7/1/2003;

- **Triptan** — new PA effective 12/1/2003; and
- **Flumist** — new PA effective 3/1/2004.

Taking into consideration the effective dates of each program change, an adjustment was applied to recognize the expected decrease in prescription drug utilization and unit cost attributed to the combination of these PA program changes. A 0.3% downward adjustment was applied to the 2006 UPM and a 1.4% downward adjustment was applied to the 2006 Unit Cost for the FFS Prescription Drugs COS.

- **OHP Plus Co-payments (Implemented January 2003)**
  A $3 copayment for brand name prescription drugs and a $2 copayment for generic prescription drugs were instituted for many eligibles with the FFS OHP Plus population. The introduction of copayments will reduce OHP's payment responsibility when collected. Downward adjustments of -1.7% for outpatient and -1.9% for retail and institutional were applied to the 2006 FFS Prescription Drugs COS unit cost benchmark to reflect the expected decrease in FFS prescription drug cost as a result of this program change.

  However, services cannot be denied to eligibles who are unable to make the copayment. Preliminary analysis on the impact on utilization as a result of copayment implementation was completed by OSU College of Pharmacy. Results indicated a variable reduction in utilization by therapeutic category. Based on this initial analysis it could not be concluded that copayments will significantly alter overall utilization patterns, therefore, no adjustment was applied to 2006 UPM benchmark.

- **Polypharmacy Profiling (Implemented March 2004)**
  Oregon began imposing payment limits for clients using 15 or more different drugs in a six-month period, targeting duplicate therapy within drug classes, overuse of selected classes, and under use of generics. A 0.5% downward adjustment was applied to the 2006 UPM benchmark for the FFS Prescription Drugs COS. This adjustment was applied to reflect the expected decrease in prescription drug utilization as a result of polypharmacy profiling.

- **Gabapentin Carve Out (Implemented October 2003)**
  The state ended the policy of carving gabapentin out of managed care. At this time, the managed care organizations became responsible for the cost of gabapentin for their respective members. A 1.43% downward adjustment was applied to the 2006 unit cost benchmark for the FFS Prescription Drugs COS. This adjustment was applied to reflect the expected decrease in FFS prescription drug cost as a result of this program change.

- **7/11 Drug List Unfrozen (Implemented 10/1/2003)**
  The state unfroze the 7/11 drug list resulting in coverage for additional behavioral therapies. A 0.137% upward adjustment was applied to the 2006 benchmark unit cost for the FFS Prescription Drugs COS. This adjustment was applied to recognize the increased prescription drug cost that was expected to result from unfreezing the 7/11 drug list.

Oregon has precluded any new enrollment into the OHP Standard program and has reduced coverage for these populations since the base data period. Due to time constraints, neither the base data nor the benchmarks reflect these reductions in coverage for the OHP Standard population, nor any potential impact from declining enrollment in the OHP Standard program. Additionally, there have been no adjustments to account for the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, which will impact Oregon's portion of prescription drug costs for the populations dually eligible for Medicaid and Medicare.

The Summary Exhibits in Appendix E and F, therefore, show a reimbursement benchmark that represents historical payments trended forward, adjusted for program changes. We were also unable to provide a managed care benchmark as no credible data were provided from the managed care plans in Oregon, and historical claims data did not include paid amounts — only billed.

Summary of Results

Based upon profits reported by drug manufacturers, even if we did have specific data available, it is unlikely that we would conclude that more money is needed for prescription drug spending relative to other provider categories. However, as illustrated in Figure 3.5 of our report, profits within prescription drug spending (manufacturers vs. wholesalers vs. community pharmacists) are not equitable. Any efforts to better align prescription drug spending with other healthcare spending should consider current inequities within prescription drug spending. Moreover, the escalation in prescription drugs is not only resulting from acquisition costs, but utilization increases as well. Programs to address inappropriate utilization will be equally important in better controlling prescription drug spending.

Serious consideration should be given to reviewing some of the "best practice" approaches described above, as a means to begin to provide for a more equitable distribution of future Medicaid healthcare dollars. In addition, it is possible, as Texas has demonstrated, to require drug manufacturers to report acquisition cost data. This would require state legislation, but would provide the necessary data to evaluate "cost" relative to the intent of this study.

Limitations

Benchmark rates for prescription drugs were not developed. Cost data for drug acquisition costs was not available.

Other limitations are provided below:

- **Information not available within the dataset**
  Manufacturers' and distributors' profits, administration fees, and acquisition costs, including rebates, can not be determined through the use of prescription drug claims data.

- **Development of managed care results**
  Managed care utilization statistics for average prescription per member were not available for this study (see page 54 for details), so only differences between managed care and FFS reimbursements per prescription could be evaluated — AWP discounts, dispensing fees, and MAC drug list.

Current Environmental Factors

- **Manufacturer versus pharmacy cost trends**
  The Prescription Drug Category of service has been a significant cost driver for many states. According to CMS, drug costs have accounted for only 10% to 11% of the national healthcare expenditures, but have experienced far greater trend increases than other healthcare services, including physician and hospital services. Although national drug trend has declined since 1999, CMS projects that it will remain in the double digits in the near future.[34] The growing costs of providing a prescription drug benefit can be attributed to two primary drivers — increased utilization and rising unit costs.

- **Trends vary by therapeutic class**
  Different therapeutic classes have experienced distinct fluctuations in utilization trends over the years, and this is not expected to change. Per Medco Health Solution's (Medco's) 2004 Drug Trend Report, it is anticipated that cholesterol-lowering medications, antihypertensive drugs, antidepressants, nonsteroidal anti-inflammatory drugs (NSAIDs), respiratory drugs, and diabetes drugs will all continue to experience moderate utilization growth through 2006.[38] Express Scripts, Inc. (Express Scripts) also noted that specialty drugs will experience a marked increase in utilization — accounting for 40% of the increase in spending for specialty drugs.[35]

- **Unit cost versus utilization trends**
  Medco projects unit cost growth will continue to exceed utilization growth over the next few years.[38] The primary driver of the inflationary increase will be due to increases in manufacturers' prices, but changes in market share among drugs in the same therapeutic class will also impact unit cost trends. Most of the drugs in the pipeline "are for new indications, new dosage forms, and new combination products."[38] This means that though many new drugs will be coming to market they will likely not be serving a new need, and thereby, increasing utilization trend, but rather shift spending from a drug that is currently on the market to the newly FDA approved drug. This change in therapeutic mix will result in the slowing of utilization for lower cost generic products. The expected combined national utilization trend and unit cost trend is estimated at 9% to 13% per Medco. Utilization trend will comprise 3% to 6 %, and unit cost trend will vary between 5% to 8 % in 2004, 2005, and 2006.[38]

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[34] Medco Health Solutions, Inc., 2004 Drug Trend Report, May 2004, Volume 6, Issue 1

35 Express Scripts, Inc., 2003 Drug Trend Report

- **Value of pharmaceuticals**
  Although the Prescription Drug category of service is a significant cost driver, when appropriately prescribed, pharmaceuticals bring value by improving health outcomes and quality of life for beneficiaries. For example, pharmaceuticals are now used to treat disease states that previously required hospitalization or surgery (e.g., gastroinstestinal products); treat disease states for which effective therapy did not previously exist (e.g., various cancers); and prevent the development of complications from chronic disease states (e.g., cholesterol lowering and high blood pressure medications).

- **Changes requiring legislation**
  Unfortunately, many of the best practice approaches recommended above require changes in legislation at the state level. It is likely that changes at a national level will also need to occur before drug spending can truly be addressed. In addition, new programs, such as the Medicare Part D program, may well continue to provide increased cost burden to states.

Mental Health Inpatient

Overview of Methodology

The Mental Health Inpatient benchmark rate was developed using the Provider Cost Data Approach described in Section 4 of this report. This approach uses historical self-reported, Medicaid-specific cost data. These reports were used to establish a baseline for the 2002 unit cost benchmarks for mental health inpatient services. The 2002 unit cost benchmarks were then trended forward to the period of July 1, 2005, through June 30, 2007. This process was performed for each of the thirteen eligibility groups listed in Appendix F.

Due to constraints inherent within this project, Mercer utilized several assumptions to best approximate the 2002 and 2006 unit cost benchmarks; however, it is important to remember that each assumption utilized is a point within a range of reasonable estimates. The mixture of these assumptions has been tested as part of this study and has produced reasonable end results.

Assumptions specific to eligibility groups were not independently developed. Instead, assumptions regarding mental health inpatient services in aggregate were developed and then applied uniformly for each eligibility group. Accordingly, the results for the mental health inpatient unit cost benchmarks in aggregate are reasonable; however, caution should be exercised when reviewing unit cost benchmarks for any specific eligibility group.

Data

To develop the mental health inpatient services benchmark rates, Mercer utilized the following data sources:

- summarized OHP FFS and encounter mental health inpatient data; and
- Medicaid hospital reports for 2000 and 2001 hospital business operating plan years.

The summarized and procedural-level information was provided for the base data period, where the base data period varies depending upon the population served. Below is a listing of the population and the appropriate study period:

- **OHP Plus** — the base data period is July 1, 2001, through June 30, 2003; and
- **OHP Standard** — the base data period is July 1, 2001, through February 28, 2003.

Methodology

Historical Medicaid Reimbursement and Billed Rates

Historical Medicaid rates per unit, utilization rates, and PMPM rates were developed for each of the thirteen eligibility groups within mental health inpatient services. Historical rates were developed from Oregon Medicaid data. Separate rates were developed for both FFS and managed care. The development of the FFS rates utilized the Oregon Medicaid FFS reimbursed claims, units, and member months data from the base data period. The development of the managed care rates utilized the Oregon Medicaid encounter billed amounts, encounter units, and member months data from the base data period.

For each eligibility group, Mercer summed all FFS reimbursed claims for the above period and divided by the sum of all FFS units to derive a reimbursement rate per unit, or what would represent inpatient cost per day. Total inpatient dollars were combined to capture total cost and divided by total units (days) to calculate a cost per day rate, representing the reimbursement per inpatient day per eligibility group. This is referred to as the 2002 Medicaid FFS Reimbursement Rate per Unit. Likewise, from the Medicaid managed care data, encounter billed amounts were divided by encounter units to derive a billed rate per unit, representing the billed charges per inpatient day per eligibility group. This is referred to as the 2002 Medicaid Managed Care Billed Rate per Unit.

It is important to distinguish between billed charges, paid amounts, and cost amounts. MCOs typically negotiate payment rates with providers independently of OHP rates. As a result, the encounter data capture the billed charges submitted by these providers, not the amount of reimbursement for those services, resulting in billed charges that tend to be significantly higher than actual paid amounts.

Utilization rates were developed from utilization and member months using Medicaid FFS data to determine FFS utilization rates, and using Medicaid encounter data for managed care utilization rates. These Medicaid utilization rates per eligibility group were then applied to rates per unit to determine the PMPM rates for mental health inpatient services. These were calculated separately for FFS and managed care for each eligibility group, resulting in a 2002 Medicaid FFS Reimbursement Rate per Unit of $244.98 and a Managed Care Billed Rate per Unit of $1,184.71, as illustrated in Appendix E.

Benchmark Rate for 2002

Unit cost benchmarks for mental health managed care inpatient services were developed using a cost-to-billed ratio developed for hospital inpatient services. The cost-to-billed ratio was then applied to the billed charges as identified in the hospital reports to estimate expected costs for providing these services.

Historical Medicaid hospital reports were used to develop the cost-to-billed ratio. The reports identify billed charges and cost amounts. The cost-to-billed ratio was calculated by taking the

total cost divided by the total billed charges. The hospital "basic"[36] cost-to-billed ratio (one element of the hospital's aggregate blended rate) was applied to the mental health inpatient billed PMPM and then divided by historical utilization and adjusted for expected third-party payments, resulting in a 2002 Managed Care Unit Cost Benchmark of $634.94, as illustrated in Appendix E.

The 2002 FFS unit cost benchmark was calculated by applying the FFS-to-managed care relative value adjustment developed for hospital inpatient basic services. The FFS-to-managed care relative value was applied to the 2002 managed care encounter cost resulting in a 2002 FFS Unit Cost Benchmark of $540.47, as illustrated in Appendix E.

Benchmark Rate for 2006

Unit Cost Benchmarks for 2002 were trended from the midpoint of the base period to the midpoint of the benchmark period to determine the 2006 unit cost benchmarks.

Trend factors recognize changes in cost per service and utilization for mental health inpatient services from the base period to the projection period. Mercer reviewed several economic indicators, including seasonally adjusted and non-seasonally adjusted CPI indicators for hospital, as well as the DRI-CPI for hospital, which is a projection of the CPI. Annual trend estimates are illustrated in Appendix F. These estimates represent the expected increase in unit cost, as well as utilization, for the applicable time period.

These historical cost and utilization indexes were estimated for FFS and managed care, and trended forward to adjust the data from the experience period to the projection period. Unit cost and utilization trends were developed on an SFY basis. Annual FFS trend was 5.6% and 2.2% for reimbursement and utilization, respectively. Annual managed care trend was 5.8% and 2.1% for reimbursement and utilization, respectively. Trend factors were applied to 2002 unit cost benchmarks and 2002 utilization rates.

The 2006 unit cost benchmarks, 2006 utilization rates, and 2006 PMPM rates were developed for mental health inpatient services in total. This results in a 2006 FFS Unit Cost Benchmark of $672.15 and a 2006 Managed Care Unit Cost Benchmark of $795.99, as illustrated in Appendix E.

[36] The hospital cost-to billed ratio includes inpatient basic, family planning, hysterectomy, maternity, newborn, and sterilization; however, mental health is not identified separately.

Program Changes

Several program changes or budget issues have been implemented by Oregon that impact the benchmark rate development. These are changes that occurred between July 1, 2001, and June 30, 2007, the begin date of our base data and end date of the benchmark report period, respectively. Each of these program changes has been reviewed. A full list of the program changes can be found in Appendix D. Highlighted below is the program change that was accounted for in the development of the 2006 Mental Health Inpatient COS benchmark.

- **FFS OHP Plus Copayments (Implemented January 2003)**
  Copayments were instituted for many eligibles within the FFS OHP Plus population. A 0.12% downward adjustment was applied to the 2006 FFS Mental Health COS unit cost benchmark to reflect the institution of $3 copayments for some mental health services. There is no anticipated reduction in service utilization as a result of the institution of copayments for the FFS populations.

Oregon has precluded any new enrollment into the OHP Standard program and has reduced coverage for these populations since the base data period. Due to time constraints, neither the base data nor the benchmarks reflect these reductions in coverage for the OHP Standard population, nor any potential impact from declining enrollment in the OHP Standard program.

2006 Benchmark Rate by Eligibility Group

To determine 2006 benchmark rates by eligibility group, a mix-of-service ratio was calculated and applied to the 2002 historical payments (reimbursement per unit) and then trended forward. The 2002 unit cost benchmark was divided by the 2002 historical reimbursement per unit to calculate the mix-of-service ratio. The ratio was then applied to the 2002 historical payment for each eligibility group and then trended forward to determine the 2006 unit cost benchmarks.

Summary of Results

A summary of historical rates for all eligibility groups in total and their corresponding 2002 and 2006 unit cost benchmarks are summarized in Figure 6.13 and 6.14 below:

Figure 6.13

Services	FFS		
	Historical 2002 Reimbursement Rate per Unit	2002 Unit Cost Benchmarks	2006 Unit Cost Benchmark
Mental Health Inpatient	$ 244.98	$ 540.47	$ 672.15

Figure 6.14

Services	Managed Care	
	2002 Unit Cost Benchmarks	2006 Unit Cost Benchmark
Mental Health Inpatient	$ 634.94	$ 795.99

Limitations

Although the developed benchmark rates are intended to be an approximation of the cost of services, more extensive analyses would be required to develop fee schedules or capitation rates.

Other limitations are provided below:

- **Hospital efficiency and cost reporting**
  The cost reports from 32 mental health agencies did not include the inpatient costs. However, the Medicaid Cost Reports used for the hospital services benchmark rate development contained the aggregate hospital costs, including the costs associated with psychiatric units. As the cost-to-billed ratios derived from the Medicaid Cost Reports did not breakout mental health inpatient separately, the overall hospital cost-to-charge ratio was applied to mental health inpatient charges. While Oregon has audited this information, Mercer did not independently audit the results or assess the hospitals for medical efficiency. Therefore, no savings adjustments were made to the Medicaid Cost Reports to reduce the costs associated with inefficient hospitals.

- **Charity care distribution**
  Charity work by hospitals is not consistent among hospitals. Benchmark rates have been reduced to account for disproportionate share hospital (DSH, or charity care) payments.

- **Graduate medical education (GME) payment distribution**
  GME costs incurred by teaching facilities tend to vary by hospital. Benchmark rates have been reduced to reflect GME payments, including direct medical education and indirect medical education payments.

- **Service-specific costs**
  The Medicaid Cost Reports used to calculate the benchmark rates are based on all of the inpatient admits. Sub-COS level costs were not available. To the extent that OHP pays certain hospital services closer to cost, this was not taken into account. This situation would have resulted in a distortion across services categories, where the overall inpatient costs are correct overall.

Current Environmental Factors

Oregon mandates that at least 75% of services follow evidence-based practices by 2009. In general, implementation of evidenced-based practice should improve treatment outcomes by following the "right" protocols and have services rendered at the appropriate staff level. Depending upon the specific mental health condition in question, the use of evidence-based practices can either increase or decrease utilization. An example of possible increased utilization could be earlier identification of a mental health condition, such as anxiety, where the recipient then seeks treatment. However, decreased utilization can also occur as services are provided more effectively. Due to the possible changes in service utilization and staff levels rendering the service, it is likely that the mix-of-services will change the cost per service.

Other current environmental factors include:

- **Reimbursement trends**
  Mental health rates have been going down over recent years and mental health funding is low due to budget shortfalls. Mental health rates, budget issues, and coverage are a national issue. This was outlined in the article, "The Government Performance Project: A Case of Neglect," that featured some of the Oregon initiatives and challenges.

- **Spending allocation to children**
  Oregon requires a certain percentage of mental health dollars be spent on children — children make up 60% of Medicaid member months but only 35% of the dollars. It is likely that the historical data used to develop the benchmark rates are consistent with the required spending levels and do not produce results that would be based on actual need rather than the rationing of services.

- **Staffing shortages**
  The national nursing shortage is impacting Oregon. The nursing shortage in combination with new federal requirements regarding seclusion and restraint have driven costs upward.

Mental Health Outpatient

Overview of Methodology

The mental health outpatient benchmark rate was developed using the Provider Cost Data Approach described in Section 4. This approach uses self-reported unit cost data collected from four MHOs and their thirty-two agencies. The cost data covered the period from July 1, 2001, through June 30, 2003. These reports were used to establish a baseline for the 2002 unit cost benchmarks for mental health outpatient services. The 2002 unit cost benchmarks were then trended forward to the period of July 1, 2005, through June 30, 2007. This process was performed for each of the thirteen eligibility groups listed in Appendix F.

Due to constraints inherent within this project, Mercer utilized several assumptions to best approximate the 2002 and 2006 unit cost benchmarks; however, it is important to remember that each assumption utilized is a point within a range of reasonable estimates. The assumptions have been tested as part of this study and have produced reasonable end results.

Mental health outpatient unit cost benchmarks were developed using BA procedure codes, which are state-specific procedure codes for mental health services. Assumptions specific to each BA service code were not independently developed. Instead, assumptions regarding mental health outpatient in aggregate were developed. Although these assumptions may not hold for each individual service code, in our opinion the assumptions are reasonable in aggregate for mental health outpatient services. Accordingly, the results for the mental health outpatient in aggregate are reasonable, but caution should be exercised when reviewing unit cost benchmarks for any specific eligibility group.

Data

To develop the mental health outpatient services benchmark rates, Mercer utilized the following data sources:

- summarized OHP FFS and encounter mental health outpatient data;
- BA code level OHP FFS and encounter mental health outpatient data;
- MCPP Healthcare Consulting, Inc. (MCPP) cost data representing twenty-seven agencies; and
- Verity Behavioral Integrated Healthcare System (Verity) cost data representing five agencies.

The summarized and procedural-level information was provided for the base data period, where the base data period varies depending upon the population served. Below is a listing of the population and the appropriate study period:

- **OHP Plus** — the base data period is July 1, 2001, through June 30, 2003; and
- **OHP Standard** — the base data period is July 1, 2001, through February 28, 2003.

Methodology

Historical Medicaid Reimbursement and Billed Rates

Historical Medicaid rates per unit, utilization rates, and PMPM rates were developed for each of the thirteen eligibility groups within mental health outpatient services. Historical rates were developed from Oregon Medicaid data. Separate rates were developed for both FFS and managed care. The development of the FFS rates utilized the Oregon Medicaid FFS reimbursed claims, units, and member months data from the base data period. The development of the managed care rates utilized the Oregon Medicaid encounter billed, encounter units, and member months data from the base data period.

For each eligibility group, Mercer summed all FFS reimbursed claims for the above period and divided by the sum of all FFS units to derive a reimbursement rate per unit. Mental Health outpatient dollars were combined to capture total cost and divided by total units to calculate a cost per unit rate. Likewise, from the Medicaid managed care data, encounter billed charges were divided by encounter units to derive a billed rate per unit. These were calculated separately for FFS and managed care for each eligibility group, resulting in a 2002 Medicaid FFS Reimbursement Rate per Unit of $65.37 and a Managed Care Billed Rate per Unit of $75.75, as illustrated in Appendix E.

It is important to distinguish between billed charges, paid amounts, and cost amounts. MCOs typically negotiate payment rates with providers independently of OHP rates. As a result, the encounter data capture the billed charges submitted by these providers, not the amount of reimbursement for those services, resulting in billed charges that tend to be significantly higher than actual payment amounts.

Medicaid FFS utilization rates were developed from utilization and member months using Medicaid FFS data and Medicaid encounter data was used to develop managed care utilization rates. These Medicaid utilization rates per eligibility group were then applied to rates per unit to determine the PMPM rates for mental health outpatient services.

Benchmark Rate for 2002

In addition to the data described above, two additional data sources were used to develop the 2002 unit cost benchmarks. The first data source, prepared by MCPP, included cost data from 27 agencies. These agencies represented Washington County, Mid-Valley Behavioral Care Network, and Accountable Behavioral Health Alliance, servicing approximately 32% of the OHP membership.

The second data source was prepared by Verity for their 5 agencies. These agencies provide care to Multnomah County, the largest county in Oregon, and cover approximately 20% of the OHP members.

Combined reports for the 4 MCOs (32 agencies) cover approximately 52% of OHP membership.[37].Population demographics included 12 of the 36 Oregon counties.[38]

The objective of the unit cost reports prepared by the agencies was to gain an understanding of their "true" cost for providing services. The self-reported data identified actual unit cost data for each agency by individual BA service code. Across the 32 agency reports, there were 30 common BA service codes, listed in Appendix C. The 30 common BA codes represented 92% of the total dollars and 90% of total units.

Agencies used a similar methodology to self-report the cost data. The methodology was developed by MCPP. Cost was defined as the per-unit operating cost, fully-loaded for overhead expenses, to deliver specific OMAP covered services.

Estimated actual unit costs for mental health services were developed by summing the data from the 32 agencies and dividing total cost by total units. Key drivers of cost include provider's productivity, provider mix, administrative overhead structure, and methodologies to allocate cost to services. Average productivity[39], used in the MCPP reports for 27 agencies was 50%. Direct cost of providing services, as well as operating expenses, should be considered as cost, whereas, profit and cost to provide non-Medicaid services should be excluded.[40] Exact profits were not determined. In our opinion, profits will have a minimal impact on benchmark rate results and, therefore, remain in mental health outpatient costs.

Based on the relationship of the BA code historical unit reimbursement as reported by OMAP to the BA code benchmark unit cost as derived from agency reports, we expect the unit cost and PMPM to be 37.9% greater in the FFS program. In addition, we expect that the 2002 MC PMPM benchmark to be approximately 39.5% higher than the comparable FFS PMPM. This percent change was applied to the 2002 historical unit cost and then multiplied by historical utilization to develop the 2002 benchmark PMPM for both FFS and managed care, which was then adjusted for expected third-party payments. This resulted in a 2002 FFS Unit Cost Benchmark of $90.17 and a 2002 Managed Care Unit Cost Benchmark of $49.62.

Benchmark Rate for 2006

Unit Cost Benchmarks for 2002 were trended from the midpoint of the base period to the midpoint of the benchmark period to determine the 2006 unit cost benchmarks.

Trend factors recognize changes in cost per service and utilization for mental health outpatient services from the base period to the projection period. Mercer reviewed several

[37] Membership percents based on December 2003 Enrollment by Rate Category

[38] Twelve counties represented include: Benton, Crook, Deschutes, Jefferson, Lincoln, Linn, Marion, Multnomah, Polk, Tilamook, Washington, and Yamhill

[39] Productivity was defined for the agencies, by MCPP Consulting, Inc., as "the hours that a clinician spends doing "charitable" work that would result in the entry of service code" divided by the total hours worked per year

[40] State agency guidelines

economic indicators, including seasonally adjusted and non-seasonally adjusted CPI indicators for Outpatient Hospital, as well as the DRI-CPI for Outpatient Hospital, which is a projection of the CPI. Annual trend estimates are illustrated in Appendix F. These estimates represent the expected increase in unit cost, as well as utilization, for the applicable time period.

These historical cost and utilization indexes were developed for FFS and managed care, and were trended forward to adjust the data from the experience period to the projection period. Unit cost and utilization trends were developed on an SFY basis. Annual FFS trend was 3.1% and 2.8% for reimbursement and utilization, respectively. Annual managed care trend was 3.4% and 2.7% for reimbursement and utilization, respectively. Trend factors were applied to 2002 unit cost benchmarks and 2002 utilization rates.

The 2006 unit cost benchmarks, 2006 utilization rates, and 2006 PMPM rates were developed for Mental Health Outpatient services in total, resulting in a 2006 FFS Unit Cost Benchmark of $101.11 and a 2006 Managed Care Unit Cost Benchmark of $56.64, as illustrated in Appendix E.

Summary of Results

A summary of historical rates for all eligibility groups in total and their corresponding 2002 and 2006 unit cost benchmarks are summarized in Figure 6.15 and 6.16 below:

Figure 6.15

Services	FFS		
	Historical 2002 Reimbursement Rate per Unit	2002 Unit Cost Benchmarks	2006 Unit Cost Benchmark
Mental Health Outpatient	$ 65.37	$ 90.17	$ 101.11

Figure 6.16

Services	Managed Care	
	2002 Unit Cost Benchmarks	2006 Unit Cost Benchmark
Mental Health Outpatient	$ 49.62	$ 56.64

Program Changes

Several program changes or budget issues have been implemented by Oregon that impact the benchmark rate development. These are changes that occurred between July 1, 2001, and June 30, 2007, the begin date of our base data and end date of the benchmark report period, respectively. Each of these program changes has been reviewed. A full list of the program changes can be found in Appendix D. Highlighted below is the program change that was accounted for in the development of the 2006 Mental Health Outpatient COS benchmark.

- **FFS OHP Plus Copayments (Implemented January 2003)**
  Copayments were instituted for many eligibles within the FFS OHP Plus population. A 1.01% downward adjustment was applied to the 2006 FFS Mental Health COS unit cost benchmark to reflect the institution of $3 copayments for some mental health services. There is no anticipated reduction in service utilization as a result of the institution of copayments for the FFS populations.

Oregon has precluded any new enrollment into the OHP Standard program and has reduced coverage for these populations since the base data period. Due to time constraints, neither the base data nor the benchmarks reflect these reductions in coverage for the OHP Standard population, nor any potential impact from declining enrollment in the OHP Standard program.

2006 Benchmark Rate for Eligibility Groups

To determine 2006 benchmark rates by eligibility group, a mix-of-service ratio was calculated by dividing the 2002 unit cost benchmark by the 2002 historical reimbursement per unit. The ratio was then applied to the 2002 historical payment (reimbursement per unit) for each eligibility group and then trended forward to the benchmark period.

Limitations

Although the benchmark rates are intended to be an approximation of the cost of services, more extensive analyses would be required to develop fee schedules or capitation rates.

Other limitations are provided below:

- **Available cost reporting**
  Actual unit cost data were collected from the thirty-two agencies. Actual cost data were not available for all agencies; therefore, unit cost benchmarks were based on the 30 common BA procedure codes reported by the agencies. The methodology for collecting actual cost data was not developed, administered, or audited by Mercer. Mercer cannot offer an opinion or endorsement of the agency reports.

- **Service-specific costs**
  The Medicaid Cost Reports used to calculate the unit cost benchmarks are based on all of the mental health outpatient visits. Sub-COS level costs were not available. To the extent that OHP pays certain mental health outpatient services closer to cost, this was not taken into account. This situation would have resulted in a distortion across services categories, where the overall mental health outpatient services are correct overall.

- **Practice environment**
  Administrative expenses are typically absorbed more effectively by group practices, allowing the average cost per service to be lower than the average cost per service for solo practices. The expense estimates provided in the unit cost benchmarks apply to all mental health providers and do not distinguish between the costs associated with solo or group practices.
- **Psychiatrist versus psychologist**
  The costs incurred by psychiatrists tend to exceed psychologist costs. Unfortunately, the historical Medicaid data provided for this project did not separate the outpatient mental health services by provider classification. Therefore, no distinction was made between costs for psychiatrists and psychologists.

Current Environmental Factors

Oregon mandates that at least 75% of services follow evidence-based practices by 2009. In general, implementation of evidenced-based practice should improve treatment outcomes by following the "right" protocols and have services rendered at the appropriate staff level. Depending upon the specific mental health condition in question, the use of evidence-based practices can either increase or decrease utilization. An example of possible increased utilization could be earlier identification of a mental health condition, such as anxiety, where the recipient then seeks treatment. However, decreased utilization can also occur as services are provided more effectively. Due to the possible changes in service utilization and staff levels rendering the service, it is likely that the mix-of-services will change the cost per service.

Other current environmental factors include:

- **Reimbursement rate trends**
  Mental health rates have been going down over recent years and mental health funding is low due to budget shortfalls. Mental health rates, budget issues, and coverage are a national issue. This was outlined in the article, "The Government Performance Project: A Case of Neglect," that featured some of the Oregon initiatives and challenges.

- **Spending allocation to children**
  Oregon requires a certain percentage of mental health dollars be spent on children — children make up 60% of Medicaid member months, but only 35% of the dollars. It is likely that the historical data used to develop the unit cost benchmarks are consistent with the required spending levels and do not produce results that would be based on actual need rather than the rationing of services.

Chemical Dependency

Overview of Methodology

The chemical dependency benchmark rate was developed using the Provider Cost Data Approach described in Section 4. This approach uses available Medicaid-specific data from the Oregon Medicaid Encounters. This data were used to establish a baseline for the 2002 unit cost benchmarks for chemical dependency services. The 2002 unit cost benchmarks were then trended forward to the period of July 1, 2005, through June 30, 2007. This process was performed for each of the thirteen eligibility groups listed in Appendix F.

Due to constraints inherent within this project, as described in the Limitations section, Mercer utilized several assumptions to best approximate the 2002 and 2006 benchmarks; however, it is important to remember that each assumption utilized is a point within a range of reasonable estimates. The mixture of these assumptions has been tested as part of this study and has produced reasonable end results.

Chemical dependency benchmark rates were developed for each of the eligibility groups; however, assumptions specific to each group were not independently developed. Instead, assumptions regarding chemical dependency services in aggregate were developed and then applied uniformly for each group. In our opinion, the assumptions are reasonable in aggregate for chemical dependency given the limited data available. Accordingly, the results for the chemical dependency in aggregate are reasonable, but caution should be exercised when reviewing benchmark rates for any specific eligibility group.

Data

To develop the chemical dependency services benchmark rates, Mercer utilized the following data sources:

- summarized OHP FFS and encounter chemical dependency data; and
- Mental health outpatient 2002 unit cost benchmark.

The summarized and procedural-level information was provided for the base data period, where the base data period varies depending upon the population served. Below is a listing of the population and the appropriate study period:

- **OHP Plus** — the base data period is July 1, 2001, through June 30, 2003; and
- **OHP Standard** — the base data period is July 1, 2001, through February 28, 2003.

Methodology

Historical Medicaid Reimbursement and Billed Rates

Historical Medicaid rates per unit, utilization rates, and PMPM rates were developed for each eligibility group. Historical rates were developed from Oregon Medicaid data. Separate rates were developed for both FFS and managed care. The FFS rates were developed using the Oregon Medicaid FFS reimbursed claims, units, and member months data from the base data period. Managed care rates were developed using the Oregon Medicaid encounter billed amounts, encounter units, and member months data from the base data period.

For each eligibility group, Mercer summed all FFS reimbursed claims for the above period and divided by the sum of all FFS units to derive a reimbursement rate per unit. Chemical dependency outpatient dollars were combined to capture total cost and divided by total units to calculate a cost per unit rate. Likewise, from the Medicaid managed care data, encounter billed charges were divided by encounter units to derive a billed rate per unit. These were calculated separately for FFS and managed care for each eligibility group, resulting in a 2002 Medicaid FFS Reimbursement Rate per Unit of $39.69 and a Managed Care Billed Rate per Unit of $41.39, as illustrated in Appendix E.

It is important to distinguish between billed charges, paid amounts, and cost amounts. MCOs typically negotiate payment rates with providers independently of OHP rates. As a result, the encounter data capture the billed charges submitted by these providers, not the amount of reimbursement for those services, resulting in billed charges that tend to be significantly higher than actual payment amounts.

Medicaid FFS utilization rates were developed from utilization and member months using Medicaid FFS data. Medicaid encounter data was used to develop managed care utilization rates. These Medicaid utilization rates per eligibility group were then applied to rates per unit to determine the PMPM rates for chemical dependency services.

Benchmark Rate for 2002

The chemical dependency estimated unit cost benchmark was developed based on an assumption that mental health outpatient and chemical dependency rates per unit would have a consistent relationship to mental health outpatient and chemical dependency costs. The mental health outpatient to chemical dependency relationship methodology was used given that actual cost data for chemical dependency was not available. The mental health outpatient unit cost benchmark was developed using actual cost data self-reported by 32 behavioral health agencies. We believe this relationship to be reasonable given the information available at this time.

Data sources identified above for Medicaid were used to develop the existing ratios of the chemical dependency historical paid and billed PMPMs to the mental health outpatient historical paid and billed PMPMs. The chemical dependency historical PMPM was factored into the mental health historical PMPM resulting in a ratio of .31 for managed care and .81 for FFS. These ratios were then applied to the mental health outpatient PMPM benchmark to

estimate the chemical dependency 2002 PMPM benchmark. Historical utilization data were then used to develop the benchmark rate for FFS and managed care. The chemical dependency PMPM for managed care was then divided by the encounter utilization to arrive at a managed care unit cost benchmark. The FFS chemical dependency PMPM was then divided by the FFS utilization to arrive at a FFS chemical dependency unit cost benchmark. This resulted in a 2002 FFS Unit Cost Benchmark of $58.14 and a 2002 Managed Care Unit Cost Benchmark of $28.84 as illustrated in Appendix E.

Benchmark Rate for 2006

Unit cost benchmarks for 2002 were trended from the midpoint of the base period to the midpoint of the benchmark period to determine the 2006 unit cost benchmarks.

Trend factors recognize changes in cost per service and utilization for chemical dependency services from the base period to the projection period. Mercer reviewed several economic indicators, including seasonally adjusted and non-seasonally adjusted CPI indicators for medical services, as well as the DRI-CPI for medical services, which is a projection of the CPI. These estimates represent the expected increase in unit cost, as well as utilization, for the applicable time period.

These 2002 cost and utilization indexes were developed for FFS and managed care, and were trended forward to adjust the data from the experience period to the projection period. Unit cost and utilization trends were developed on a SFY basis. Annual FFS trend was 3.1% and 2.8% for cost and utilization, respectively. Annual managed care trend was 3.4% and 2.7% for cost and utilization, respectively. Trend factors were applied to 2002 unit cost benchmarks and utilization rates resulting in a 2006 FFS Unit Cost Benchmark of $64.92 and a 2006 Managed Care Unit Cost Benchmark of $32.92, as illustrated in Appendix E.

Program Changes

Several program changes or budget issues have been implemented by Oregon that impact the benchmark rate development. These are changes that occurred between July 1, 2001, and June 30, 2007, the begin date of our base data and end date of the benchmark report period, respectively. Each of these program changes has been reviewed. A full list of the program changes can be found in Appendix D. Highlighted below is the program change that was accounted for in the development of the 2006 Chemical Dependency COS benchmark.

- **FFS OHP Plus Copayments (Implemented January 2003)**
  Copayments were instituted for many eligibles within the FFS OHP Plus population. A 1.58% downward adjustment was applied to the 2006 FFS Chemical Dependency COS unit cost benchmark to reflect the institution of copayments for some chemical dependency services. There is no anticipated reduction in service utilization as a result of the institution of copayments for the FFS populations.

Oregon has precluded any new enrollment into the OHP Standard program and has reduced coverage for these populations since the base data period. Due to time constraints, neither the base data nor the benchmarks reflect these reductions in coverage for the OHP Standard population, nor any potential impact from declining enrollment in the OHP Standard program.

Summary of Results

A summary of historical rates per unit for the chemical dependency services and their corresponding 2002 and 2006 unit cost benchmarks are summarized in Figure 6.17 and 6.18 below:

Figure 6.17

	FFS		
Services	Historical 2002 Reimbursement Rate per Unit	2002 Unit Cost Benchmarks	2006 Unit Cost Benchmarks
Chemical Dependency Services	$39.69	$ 58.14	$64.92

Figure 6.18

	Managed Care	
Services	2002 Unit Cost Benchmarks	2006 Unit Cost Benchmarks
Chemical Dependency Services	$ 28.84	$32.92

Historical 2002 rates per units, 2002 benchmark rates, and 2006 benchmark rates for all chemical dependency services are summarized by the thirteen eligibility groups included in this study. Results, which are summarized separately for FFS and managed care, can be found in Appendix F.

Limitations

Although the developed benchmark rates are intended to be an approximation of the cost of services, more extensive analyses would be required to develop fee schedules or capitation rates.

Other limitations include:

- **Available cost reporting**
  Costs were not reported for the chemical dependency services, but were available for a portion of the agencies providing outpatient mental health services. An assumption was made that the mental health outpatient costs per unit are similar to the chemical dependency costs per unit. Therefore, the outpatient unit cost benchmarks were adjusted by the PMPM ratio of chemical dependency services to outpatient mental health services to develop the chemical dependency unit cost benchmarks.

- **Service-specific costs**
  The Medicaid Cost Reports used to calculate the unit cost benchmarks are based on all of the chemical dependency services. Sub-COS level costs were not available. To the extent that OHP pays certain chemical dependency services closer to cost was not taken into account. This situation would have resulted in a distortion across services categories, where the overall chemical dependency services are accurate in total.

Current Environmental Factors

Stakeholders have noted that the lack of methadone services in some communities in Oregon forces enrollees to utilize more costly alternative treatment facilities.

DME/Supply

Overview of Methodology

The DME/Supply services component of the benchmark rate has been developed using the Alternative Fee Schedule Approach described in Section 4 of this report. That is, to determine a unit cost benchmark, the relationship between cost (as measured by empirical research) and a fee schedule was used. The bulk of the DME/Supply services are provided by Medicare, representing 59% of the DME/Supply payments of the non-private payments.[41] Recognizing these levels, the Medicare fee schedule was used as the basis for the calculation. The Medicare fees were then adjusted by 80% to reflect cost based on provider input received from the HSC and supported by independent case studies. The DME/Supply services are comprised of two sub-COS: DME/Supplies. The same methodology has been applied for both of these sub-COS.

The historical Medicaid data were provided for the base data period (July 1, 2001, through June 30, 2003, for OHP Plus and July 1, 2001, through February 28, 2003, for OHP Standard), and forms the basis for this study. In order to estimate the cost of the covered services, the Medicaid rates per service were replaced on a procedural basis with 80% of the Medicare fee schedule to determine the 2002 unit cost benchmark. This unit cost benchmark was then trended forward to the period of July 1, 2005, through June 30, 2007 (the time period for this study), to determine the 2006 unit cost benchmark. The relationship between historical 2002 reimbursements and 2006 unit cost benchmarks could then be determined. This process was applied to a more detailed level of data resulting in the 2006 unit cost benchmarks for all DME/Supply services within all eligibility groups.

As part of our reimbursement and cost development for DME/Supply services, Mercer has applied several assumptions to best approximate 2002 and 2006 unit cost benchmarks; however, each assumption is a point within a range of reasonable estimates. The mixture of any of these assumptions has been tested as part of this study and has produced reasonable end results. A summary of the unit cost benchmark developed by using our best point estimate assumptions for DME/Supply services is illustrated in Appendix E.

Due to constraints inherent within this project, assumptions specific to each sub-COS were not developed. Instead, assumptions regarding DME/Supply services in aggregate were developed and then applied uniformly for each sub-COS. Although these assumptions may not hold for each sub-COS, or the individual procedures represented by that sub-COS, in our opinion, the assumptions are reasonable in aggregate for all DME/Supply services covered by this COS.

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[41] CMS, Health Accounts, Historical National Health Expenditures by Type of Service and Source of Funds: Calendar Years 1960-2002, Health Accounts, State Health Accounts by State of Provider
(note – analysis required)

Data

To develop the DME/Supply services benchmark rates, Mercer utilized the following data sources:

- summarized OHP FFS and encounter DME/Supply services data;
- procedural level OHP FFS and encounter DME/Supply services data; and
- 2003 Medicare fee schedule.

The summarized and procedural-level information was provided for the base data period, where the base data period varies depending upon the population served. Below is a listing of the population and the appropriate study period:

- **OHP Plus** — the base data period is July 1, 2001, through June 30, 2003; and
- **OHP Standard** — the base data period is July 1, 2001, through February 28, 2003.

Methodology

Historical 2002 Medicaid Experience

OMAP provided both summary and detail (procedural) level data for use in this study. The development of the FFS rates utilizes the Oregon Medicaid FFS paid claims, units, and member months data from the base data period. The development of the managed care utilization rates utilizes the OHP billed charges, encounter service units, and member months from the base data period.

For each sub-COS and eligibility group, Mercer summed all FFS paid claims for the above period and divided by the sum of all FFS units to derive a reimbursement rate per unit. For each sub-COS and eligibility group, Mercer summed all encounter billed charges for the above period and divided by the sum of all encounter units to derive a billed rate per unit. For the Medicaid managed care data, encounter data do not contain reliable paid information, but rather billed charges.

Utilization rates were developed from utilization and member months, using Medicaid FFS data to determine FFS utilization rates and using Medicaid encounter data for managed care utilization rates.

Medicaid utilization rates were applied to the rates per unit to determine the PMPM rates attributable to Medicaid DME/Supply services. These were calculated separately for FFS and managed care.

Rates per unit, utilization rates, and PMPM rates were developed separately for DME and supplies and for each eligibility group. The rates were then summarized to represent total rates for DME/Supply services for all eligibility groups, resulting in a 2002 Medicaid FFS Reimbursement Rate per Unit of $1.43 and a 2002 Medicaid Managed Care Billed Rate per Unit of $3.97, as illustrated in Appendix E.

Medicare Fee Schedule Cost Basis

Using feedback the HSC received from the DME/Supply provider community, the historical Medicaid experience was re-priced using 80% of the Medicare fee schedule to reflect the cost of providing care. This recommended approach was validated using a study that was provided by Janet Rehnquist, Inspector General of the Department of Health and Human Services, in her June 12, 2002, testimony before the Senate Committee on Appropriations Subcommittee on Labor, HHS, and Education. This study compared the Medicare rates to the rates offered on a retail basis and to the Federal Employee Health Plan (FEHP) using 16 DME/Supply services, which represent 26% of the Medicare DME/Supply payments and 15% of the Oregon Medicaid DME/Supply billed charges (encounter data). This study, in conjunction with Medicaid units, produced results where retail prices and FEHP were 76% and 87% of the Medicare allowable costs, respectively. This study was not designed to meet the inherent reasonableness standards for rate setting that CMS will need to use to comply with Section 4316 of the Balanced Budget Act of 1997. However, the results of this more limited study indicate that, when the DME/Supply community negotiated the rates for the retail and federal employees market, they were willing to accept significant discounts from the Medicare allowable costs. The Oregon FFS program currently reimburses at 80% of Medicare allowable costs.

The historical Medicaid experience was translated into cost using 80% of the CY 2003 Medicare Fee Schedule that was released on August 28, 2003, for the Oregon market. This particular fee schedule was used because it would include all procedures that exist within the historical Medicaid data and would allow for the development of the 2002 unit cost benchmarks. The 2003 Medicare Fee Schedule was modified to reflect the same midpoint of the base historical experience by applying a negative 1.1% trend factor. This trend factor represents the percent change that Medicare implemented between its 2002 and 2003 fee schedules.[42]

Once the Medicare fee schedule was adjusted to reflect the same time period as the historical data, and was adjusted to represent costs by applying an 80% factor, an adjustment was applied to remove expected third-party payments, and then the historical Medicaid costs were replaced with the modified Medicare fee schedule. This replacement occurred at the eligibility group and procedural level, resulting in different adjustments specific to each service and population. For certain DME services, the Medicare fee schedule provides costs separately for rentals and sales. Where sufficient data existed, the appropriate Medicare allowable cost was used. In cases where the Medicaid data did not indicate whether the DME was provided on a rental or sales basis, a blended allowable cost was assumed based on the procedure's historical distribution between rental and purchase.

[42] Durable Medical Equipment, Prosthetics/Orthotics, and Supplies (DMEPOS) Fee Schedules narrative, August 2003, http://www.cms.hhs.gov/providers/pufdownload

Benchmark Rate for 2002

The 2002 unit cost benchmarks represent the historical Medicaid experience based on 80% of the Medicare fee schedule.

Medicaid utilization rates were applied to 2002 unit cost benchmarks to determine PMPM rates attributable to DME/supply services. This was calculated separately for FFS and managed care.

Unit cost benchmarks for 2002, utilization rates, and PMPM rates were developed separately for DME and supplies. The rates were then summarized to represent total rates for DME/Supply services, resulting in a 2002 FFS Unit Cost Benchmark of $1.41 and a 2002 Managed Care Unit Cost Benchmark of $2.52, as illustrated in Appendix E.

Benchmark Rate for 2006

Unit cost benchmarks for 2002 were trended from the midpoint of the period to the midpoint of the benchmark period to determine the 2006 unit cost benchmarks.

Trend factors recognize changes in cost per service and utilization of DME/supply services from the base period. It is important to distinguish that the trend we are considering is an increase in unit costs, not unit reimbursements. Mercer reviewed several economic indicators, including both seasonally adjusted and non-seasonally adjusted CPI indicators for DME/Supply Services, as well as the DRI-CPI for DME/Supply Services, which is a projection of the CPI. Mercer has developed a proprietary database (MARS©) that includes utilization data on Medicaid services from several states. We utilized MARS© to estimate the annual increase in DME/supply utilization for Medicaid services. Both unit cost and utilization trend were adjusted for the Oregon marketplace.

Annual cost trend factors from 2001 through 2007 were developed for reimbursement and utilization. The annual reimbursement and utilization trend factors were developed based on considerations for inflation, increases in utilization, and outside influences (e.g., technology improvements).

These historical cost and utilization indexes were estimated for both FFS and managed care, and projected forward to adjust the data from the experience period to the projection period. Unit cost and utilization trends were developed on an SFY basis. Annual FFS trend was 1.5% and 1.0% for reimbursement and utilization, respectively. Annual managed care trend was 1.6% and 0.9% for reimbursement and utilization, respectively. Trend factors were applied to 2002 unit cost benchmarks and 2002 utilization rates.

The 2006 unit cost benchmarks, 2006 utilization rates, and 2006 PMPM rates were developed separately for DME and supplies. The rates were then summarized to represent total rates for DME/Supply services, resulting in a 2006 FFS Unit Cost Benchmark of $1.50 and a 2006 Managed Care Unit Cost Benchmark of $2.68, as illustrated in Appendix E.

Program Changes

Several program changes or budget issues have been implemented by Oregon that impact the benchmark rate development. These are changes that occurred between July 1, 2001 and June 30, 2007, the begin date of our base data and end date of the benchmark report period, respectively. Each of these program changes has been reviewed. A full list of the program changes can be found in Appendix D. The development of the 2006 DME/Supply COS benchmark did not incorporate any program changes, because the program change implemented either did not apply to DME/Supply services or had a minimal impact on the results.

Oregon has precluded any new enrollment into the OHP Standard program and has reduced coverage for these populations since the base data period. Due to time constraints, neither the base data nor the benchmarks reflect these reductions in coverage for the OHP Standard population, nor any potential impact from declining enrollment in the OHP Standard program.

Summary of Results

A summary of historical rates per unit for each DME/supply service and their corresponding 2002 and 2006 unit cost benchmarks are summarized in Figure 6.19 and 6.20 below:

Figure 6.19

	FFS		
Services	Historical 2002 Reimbursement Rate per Unit	2002 Unit Cost Benchmarks	2006 Unit Cost Benchmarks
DME	$ 85.64	$ 72.92	$ 77.51
Supplies	$ 0.69	$ 0.79	$ 0.84
DME/Supply Services	$ 1.43	$ 1.41	$ 1.50

Figure 6.20

	Managed Care	
Services	2002 Unit Cost Benchmarks	2006 Unit Cost Benchmarks
DME	$ 88.77	$ 94.60
Supplies	$ 1.15	$ 1.23
DME/Supply Services	$ 2.52	$2.68

Historical 2002 rates per units, 2002 benchmark rates, and 2006 benchmark rates for all DME/Supply services are summarized by the thirteen eligibility groups included in this study. Results, which are summarized separately for FFS and managed care, can be found in Appendix F.

Limitations

Although the benchmark rates developed are intended to be an approximation of the cost of services, more extensive analyses would be required to develop provider fee schedules or capitation rates. In addition, developed benchmark rates are estimates of cost, as actual cost data were not available for DME/supply services.

Other limitations include:

- **Other sources of income**
  Unlike the Average Market Reimbursement Approach, the DME/supply methodology relied on a single payer source (Medicare) to develop the benchmark rates. The single payer source elected was Medicare because 59% of DME/supply non-private payments are from Medicare. Sources other than Medicare were not incorporated within the benchmark rate development.[43]

- **Service-specific costs**
  Independent studies have indicated that the recommended use of 80% of the Medicare fee schedule is appropriate for an overall DME/supply unit cost benchmark. However, this percentage could logically vary for each DME/supply service. Greater discounts are generally achievable for DME (non-commodity) compared to supplies, but sufficient supporting information did not exist to make separate assumptions for DME and supplies.

- **DME rental versus sales**
  Some evidence exists (via a DME provider's financial statements) that net income is higher for DME rental services compared to DME sales. However, the procedure-level data provided for analysis did not contain reliable modifiers to support the development of unit cost benchmarks on a purchase/rental level of detail.

- **Unit definitions**
  The historical Medicaid data that were the basis for the unit cost benchmark development likely contains a mix of unit definitions within the DME/supply data. Depending on how the provider submits the claim, the units could represent either a single item, box of items (varying quantity), or rental months. The lack of a uniform unit definition complicates the comparisons of unit cost benchmarks across eligibility groups.

[43] CMS, Health Accounts, Historical National Health Expenditures by Type of Service and Source of Funds: Calendar Years 1960-2002, Health Accounts, State Health Accounts by State of Provider
(note – analysis required)

- **Publicly-traded provider financial experience**
  A recommendation was made that DME/supply provider financial experience for publicly traded vendors could be used to define cost. Unfortunately, DME/supply vendors often provide a variety of services outside of DME/supply services. As the lines of business are not separated, the true cost associated with DME/supply services is not available. Even when the lines of business are separated, the administrative costs are merely an allocation across all lines of business.

- **Third-party payments**
  Benchmark rates do not reflect actual third-party payment experience, but estimates.

Current Environmental Factors

Medicare will be implementing changes to their DME/supply reimbursement policy, holding 2004–2008 reimbursement at the 2003 levels by applying a 0% trend. In addition to limiting any reimbursement increases, Medicare will also be releasing certain DME/supplies for competitive bid contracts to potentially lower reimbursement going forward. The implementation of these initiatives will likely limit the ability to use the Medicare fee schedule at 80% for future benchmark rates. The 2006 benchmark rate was unaffected by these Medicare changes, as 80% of the Medicare fee schedule was applied to the historical 2002 Medicaid experience (prior to these changes).

Dental

Overview of Methodology

The Dental services component of the benchmark rate has been developed using the Modified Fee Schedule Approach described in Section 4 of this report. That is, unit cost benchmarks were based on Commercial data regarding submitted charges in Oregon, along with evidence-based assumptions regarding cost. Experts estimate that approximately 47% of the cost of dental care is paid by private insurance; another 47% by patient out-of-pocket payments; and 4% by government-financed care. Given the high level of insurance-based payment (47%) relative to government-financed payments (4%), the Commercial data were selected as the appropriate benchmark for this analysis. This large set of Commercial data was used to create a schedule of average submitted charges on a procedural basis. The average Commercial charges were then adjusted by 59.7% to approximate cost, based on ADA survey results.[44] Also note that dental services are comprised of thirteen sub-COS, which are listed in Appendix C.

The historical Medicaid data were provided for the base data period (July 1, 2001, through June 30, 2003, for OHP Plus and July 1, 2001, through February 28, 2003, for OHP Standard), and forms the basis for this study. In order to estimate the cost of the covered services, the Medicaid rates per service were replaced on a procedural basis to represent average Commercial charges. To convert the average commercial charges to cost amounts, the charges were adjusted by 59.7%. This unit cost benchmark was then trended forward to the period of July 1, 2005, through June 30, 2007, to determine the 2006 unit cost benchmark. The relationship between historical 2002 reimbursements and 2006 unit cost benchmarks could then be determined. This process was applied to a more detailed level of data resulting in the 2006 unit cost benchmarks for all dental services within all eligibility groups.

As part of our reimbursement and cost development for dental services, Mercer has applied several assumptions to best approximate 2002 and 2006 unit cost benchmarks; however, each assumption is a point within a range of reasonable estimates. The blend of these assumptions has been tested as part of this study, and has produced reasonable end results, with variances of up to 3% from the midpoint results. A summary of the unit cost benchmarks developed by using our best estimate point assumptions for each of the dental sub-COS is illustrated in Appendix E.

Due to constraints inherent within this project, assumptions specific to each sub-COS were not developed. Instead, assumptions regarding dental services in aggregate were developed and then applied uniformly for each sub-COS. Although these assumptions may not hold for each sub-COS, or the individual procedures represented by that sub-COS, we believe the assumptions are reasonable in aggregate for all dental services.

[44] American Dental Association: 2002 Survey of Dental Practice Income: Income from the Private Practice of Dentistry as reprinted on the Web as the "Dental Buying Guide."

Data

To develop the dental services benchmark rates, Mercer utilized the following data sources:

- summarized OHP FFS and encounter dental services data;
- procedural level OHP FFS and encounter dental services data; and
- Commercial data regarding submitted dental charges in Oregon during 2001 and 2002.

The summarized and procedural-level information was provided for the base data period, where the base data period varies depending upon the population served. Below is a listing of the population and the appropriate study period:

- **OHP Plus** — the base data period is July 1, 2001, through June 30, 2003; and
- **OHP Standard** — the base data period is July 1, 2001, through February 28, 2003.

Methodology

Historical 2002 Medicaid Experience

OMAP provided both summary and detail (procedural) level data for use in this study. The development of the FFS rates utilizes the Oregon Medicaid FFS paid claims, units, and member months data from the base data period. The development of the managed care utilization rates utilizes the OHP billed charges, encounter service units, and member months from the base data period.

For each sub-COS and eligibility group, Mercer summed all FFS paid claims for the above period and divided by the sum of all FFS units to derive a reimbursement rate per unit. For each sub-COS and eligibility group, Mercer summed all encounter billed charges for the above period and divided by the sum of all encounter units to derive a billed rate per unit. The Medicaid managed care data only include the billed charges field, which may or may not represent actual paid amounts, depending on the DCO submitting the information. For purposes of the historical dental data, the financial information present in the encounter data will be referred to as "billed charges," reflecting the field used within the analysis.

Utilization rates were developed from utilization and member months, using Medicaid FFS data to determine FFS utilization rates, and using Medicaid encounter data for managed care utilization rates. Medicaid utilization rates were applied to the rates per unit to determine the PMPM rates attributable to Medicaid dental services. These were calculated separately for FFS and managed care.

Rates per unit, utilization rates, and PMPM rates were developed separately for each of sub-COS and eligibility group combination. The rates were then summarized to represent total rates for dental services for all eligibility groups, resulting in a 2002 Medicaid FFS Reimbursement Rate per Unit of $31.69 and a 2002 Medicaid Managed Care Billed Rate Per Unit of $68.27, as illustrated in Appendix E.

Commercial Fee Schedule Cost Basis

The historical Medicaid experience was adjusted on a procedural level, based on claims submitted by Oregon dentists to Commercial insurance companies on a FFS basis during the latter half of 2001 and early 2002. The Commercial fee data were available on a geographic basis and was blended, assuming the population distribution from CY 2000 census, to develop a statewide schedule of average Commercial charges. Using the statewide Commercial experience, a schedule of average Commercial charges for 108 dental procedures that occurred within the encounter data were reviewed. These top 108 procedures represent 98% of the encounter units and 97% of the billed charges, where 80% of the Medicaid population receives their dental services through a DCO. By comparing the average Commercial charges to the historical rates per unit for the available 108 procedures, a conversion factor was developed to adjust all of the dental procedures; this conversion factor was developed and applied at the sub-COS and eligibility group level, where the historical rates per unit are converted into average Commercial charges. The resulting average Commercial charges were then translated into cost by applying a factor of 59.7% to the Commercial data, where the prices were based on average submitted charges. This factor represents the "costs of providing dental care as a percent of total submitted charges" as per the ADA survey center results. These results are based on aggregate nationwide survey data, since the rates specific to Oregon were not available.

Benchmark Rate for 2002

The 2002 unit cost benchmarks represent the historical Medicaid experience based on 59.7% of average Commercial charges, minus an adjustment for expected third-party payments.

Medicaid utilization rates were applied to 2002 unit cost benchmarks to determine PMPM benchmarks attributable to dental services. This was calculated separately for FFS and managed care.

Unit cost benchmarks for 2002, utilization rates, and PMPM rates were developed separately for each sub-COS. The rates were then summarized to represent total rates for Dental Services COS, resulting in a 2002 FFS Unit Cost Benchmark of $45.31 and a 2002 Managed Care Unit Cost Benchmark of $49.49, as illustrated in Appendix E.

Benchmark Rate for 2006

Unit cost benchmarks for 2002 were trended from the midpoint of the base period to the midpoint of the benchmark period to determine the 2006 unit cost benchmarks.

Trend factors recognize changes in cost per service, and utilization of dental services from the base period. It is important to remember that the trend we are considering is an increase in unit costs, not unit reimbursements. Mercer reviewed several economic indicators, including both seasonally adjusted and non-seasonally adjusted CPI indicators for Dental services, as well as the DRI-CPI for Dental services, which is a projection of the CPI. Mercer also used its internally-developed proprietary database, known as MARS©. This database includes

Medicaid utilization data from several states. We utilized MARS© to estimate the annual increase in Dental utilization for Medicaid services, and both unit cost and utilization trend were adjusted for the Oregon marketplace.

Annual cost trend factors from 2001 through 2007 were developed for reimbursement and utilization. The annual reimbursement and utilization trend factors were developed based on considerations for inflation, increases in utilization, and outside influences, including increases in research and development cost.

These historical cost and utilization indexes were estimated for both FFS and managed care, and projected forward to adjust the data from the experience period to the projection period. Unit cost and utilization trends were developed on an SFY basis. Annual FFS trend was 3.8% and 2.1% for reimbursement and utilization, respectively. Annual managed care trend was 4.0% and 2.0% for reimbursement and utilization, respectively. Trend factors were applied to 2002 unit cost benchmarks and 2002 utilization rates.

The 2006 unit cost benchmarks, 2006 utilization rates, and 2006 PMPM rates were developed separately for each sub-COS. The rates were then summarized to represent total rates for Dental Services COS, resulting in a 2006 FFS Unit Cost Benchmark of $52.51 and a 2006 Managed Care Unit Cost Benchmark of $57.83, as illustrated in Appendix E.

Program Changes

Several program changes or budget issues have been implemented by Oregon that impact the benchmark rate development. These are changes that occurred between July 1, 2001, and June 30, 2007, the begin date of our base data and end date of the benchmark report period, respectively. Each of these program changes has been reviewed. A full list of the program changes can be found in Appendix D. Highlighted below is the program change that was accounted for in the development of the 2006 Dental COS benchmark.

- **FFS OHP Plus Copayments (Implemented January 2003)**
  Copayments were instituted for many eligibles within the FFS OHP Plus population. A 0.22% downward adjustment was applied to the 2006 FFS Dental COS unit cost benchmark to reflect the institution of copayments for some dental services. There is no anticipated reduction in service utilization as a result of the institution of copayments for the FFS populations.

Oregon has precluded any new enrollment into the OHP Standard program and has reduced coverage for these populations since the base data period. Due to time constraints, neither the base data nor the benchmarks reflect these reductions in coverage for the OHP Standard population, nor any potential impact from declining enrollment in the OHP Standard program.

Summary of Results

A summary of historical rates for each dental service and their corresponding 2002 and 2006 unit cost benchmarks is summarized in Figure 6.21 and 6.22 below:

Figure 6.21

	FFS		
Services	Historical 2002 Reimbursement Rate per Unit	2002 Unit Cost Benchmarks	2006 Unit Cost Benchmarks
Periodontics	$ 45.09	$ 85.92	$ 99.57
Adjunctive General	$ 38.81	$ 65.50	$ 75.90
Tobacco Cessation	$ 0.00	$ 0.00	$ 0.00
Restorative	$ 41.16	$ 61.42	$ 71.17
Preventative	$ 25.16	$ 29.92	$ 34.68
Orthodontics	$ 900.00	$ 0.00	$ 0.00
Oral Surgery	$ 53.34	$ 64.51	$ 74.75
Maxillofacial Prosthetics	$ 0.00	$ 0.00	$ 0.00
Implants and Fixed Prosthodontics	$ 22.50	$ 24.31	$ 28.17
Endodontics	$ 82.74	$ 155.59	$ 180.30
Diagnostic	$ 17.41	$ 22.59	$ 26.18
Anesthesia Surgical	$ 19.50	$ 44.31	$ 51.35
Removable Prosthodontics	$ 125.88	$ 243.64	$ 282.34
All Dental Services	$ 31.69	$ 45.31	$ 52.51

Figure 6.22

	Managed Care	
Services	2002 Unit Cost Benchmarks	2006 Unit Cost Benchmarks
Periodontics	$ 81.46	$ 95.18
Adjunctive General	$ 55.62	$ 64.99
Tobacco Cessation	$ 18.26	$ 21.34
Restorative	$ 67.10	$ 78.40
Preventative	$ 31.46	$ 36.76
Orthodontics	$ 506.96	$ 592.38
Oral Surgery	$ 66.46	$ 77.66
Maxillofacial Prosthetics	$ 0.23	$ 0.27
Implants and Fixed Prosthodontics	$ 154.38	$ 180.39
Endodontics	$ 171.50	$ 200.39
Diagnostic	$ 23.04	$ 26.93
Anesthesia Surgical	$ 34.90	$ 40.78
Removable Prosthodontics	$ 279.21	$ 326.26
All Dental Services	$ 49.49	$ 57.83

Historical 2002 rates, 2002 benchmark rates, and 2006 benchmark rates for all dental services are summarized by the thirteen eligibility groups included in this study. The results, which are summarized separately for FFS and managed care, can be found in Appendix F.

Limitations

Although the developed benchmark rates are intended to be an approximation of the cost of services, more extensive analyses would be required to develop provider fee schedules or capitation rates. In addition, developed benchmark rates are estimates only, as actual cost data were not available for dental services.

Other limitations include:

- **Small cell sizes**
  The benchmark rates that are presented on a sub-COS basis, include some services that contain fewer than 200 visits. Due to the small incidence rate for these services, the results may not be reasonable. Those sub-COS that have fewer than 200 visits have been indicated by an asterisk in Appendix E.

- **DCO reported billed charges**
  DCOs utilize a "billed charges" field, which may or may not represent actual paid amounts, depending on the DCO submitting the information. As a result, the relationship between the 2002 historical billed per unit value and the 2002 unit cost benchmark may fluctuate.

- **Inclusion of FQHC data**
  OMAP has indicated that the summarized dental data includes services provided by Federally Qualified Health Centers (FQHCs). Because FQHCs are reimbursed at cost, this limits the variance between the FFS reimbursement and FFS benchmark rate for the Dental COS as compared to solely evaluating non-FQHC dental providers.

- **Other sources of income**
  According to ADA survey data,[45] 91.2% of all practicing dentists are private practitioners. Therefore, other sources of income, such as working in public health or academia, were not considered within the development of the 59.7% factor used to translate submitted charges to costs of providing dental care.

- **Practice environment**
  According to survey data, 88% of private practice dentists work in solo practice or with one other dentist, while the other 12% work with two or more dentists. Administrative expenses are typically absorbed more effectively by group practices, resulting in the average cost per service to be lower than the average cost per service for solo practices. The expense estimates provided apply to all private practice dentists and do not distinguish between the costs associated with solo or group practices.

[45] American Dental Association: The 1997 Survey of Dental Practice: Annual Expenses of Operating a Private Practice

- **General dentists versus specialists**
  About 83.8% of dentists are general practitioners and 16.2% are specialists. However, general dentists are trained and licensed to perform specialty services, and current dental coding does not separately identify generalists versus specialists. Therefore, for the purpose of this analysis, we have not distinguished between generalists and specialists.

- **National cost assumption**
  According to the ADA Survey Center, expenses accounted for 59.7% of gross billings for independent dentists in 2001.[46] This is down from the 1997 survey results, which found that in 1996, total practice expenses were 74.9% of gross billings. Also note that the results are based on nationwide aggregate data and not broken out by geography. However, the data are weighted to account for the geographic distribution of dentists, as well as the distribution between general dentists and specialists. Our factors have not been adjusted to account for regional differences that might exist in this particular ratio. However, we have no reason to believe that it is dramatically different in Oregon than in other parts of the US, given the high penetration of third-party payer dollars to dentists in all regions.

- **Cost allocation by type of service**
  It is widely recognized that some services are more profitable than others. For example, cleanings, exams, and x-rays tend to be low margin services, while complex services like crowns or osseous surgery provide a higher profit margin. However, data about the relative differences in profit margin by individual type of procedure is not available; therefore, for simplicity, we assumed an equal rate of return across all services.

- **Third-party contributions**
  Benchmark rates do not reflect actual third-party payment experience.

Current Environmental Factors

One important economic indicator with respect to provider reimbursement for Medicaid services is provider participation in the program. If participation is declining, it could indicate that reimbursement is too low, while if it is stable or increasing, it could indicate that it is satisfactory. According to CDC estimates, in 2003 with 47 of 50 states reporting, about 47% of dentists in the US are enrolled in Medicaid.[47] However, in Oregon they estimate that 80% of dentists are enrolled in Medicaid. All else held constant, this would imply that dentists in Oregon are reimbursed at a higher level than the national average. We are unable to comment on the likely explanation for the reported high level of participation in Oregon, but we do believe that this warrants further study and verification.

[46] American Dental Association, 2002 Survey of Dental Practice: Income from the Private Practice of Dentistry as reprinted on the Web as the "Dental Buying Guide"

[47] CDC, Oral Health Trends For details, see http://www2.cdc.gov/nccdphp/doh/synopses/NatTrendTableV.asp

Other current environmental factors include:

- **Alleged practice patterns variations between DCO and FFS dentists**
  Some stakeholders have expressed concern that a great divergence of cost and reimbursement levels could exist between the DCOs and fees charged by traditional FFS dentists when treating non-Medicaid patients. It was theorized that this possible divergence could impact provider work habits. Where a DCO dentist may work shorter appointments and spread out restorative treatment, the individual practitioner aims to deliver all needed treatment within a short period. However, there are many considerations that go into appointment scheduling by individuals or groups of dentists, and this decision will vary widely across dentists, regardless of the delivery model used. For example, scheduling will be impacted by where they went to school, the capital/labor ratio and use of auxiliaries, the overall condition of the equipment, and level of capacity. Scheduling differences do not, in and of themselves, represent a qualitative problem. The only way to determine whether or not any real qualitative differences exist would be to conduct a clinical quality audit; however, that is beyond the scope of this project.

- **Proposed Washington-based benchmark**
  One stakeholder suggested that the dental Medicaid fee schedule for Washington State could be used for developing the unit cost benchmarks for Oregon. However, Medicaid fee schedules are widely considered to be below market levels, which help to explain the lower provider participation in these programs. Also noteworthy is the fact that the CDC estimates that only 31% of the dentists in Washington State participate in Medicaid,[48] giving further support for a below-market fee schedule. Finally, public assistance programs by definition include an array of economic distortions, due to the lack of market prices as a rationing device and a perception by end users that services are free, or nearly free. Therefore, we were not comfortable using Medicaid fee schedules as a proxy for actual provider cost, choosing instead to use an array of average Commercial charges in Oregon.

[48] CDC: Synopses of State and Territorial Dental Public Health Programs (http://www2.cdc.gov/nccdphp/doh/synopses/index.asp)

Other Services

Overview of Methodology

Fifteen sub-COS have been grouped into the other services component of the benchmark rate, as listed in Appendix C. As noted in the Appendix E, nine of these sub-COS are only provided to OHP eligibles on a FFS basis, (i.e., the managed care organizations are not contractually required to provide these nine sub-COS).

The methodologies, as described in the Methodology Section 4, used to develop benchmark rates vary by sub-COS within other services eligibility group. Home healthcare/private duty nursing cost and ambulatory transportation benchmarks were developed using the Medicare Cost Data/Fee Schedule Approaches. Other transportation, vision exams and therapy, and vision materials and fittings benchmark rates were developed using the Modified Medicaid Data Approach. Benchmark rates for the remaining 10 sub-COS, which represented less than 27% of the total SFY 2002 and SFY 2003 FFS reimbursements and managed care billed charges for the Other Services COS, used the cost variance factor for the most similar COS. The cost variance factor is the difference between the base data reimbursement per unit or billed per unit and the 2002 unit cost benchmark. The Hospital Services COS, Physician Services COS, and Home Healthcare/Private Duty Nursing sub-COS cost variance factors were utilized. All 3 of these approaches, which were used to establish a baseline for the 2002 unit cost benchmarks, are discussed further in this section. The 2002 unit cost benchmarks were then trended forward to the period of July 1, 2005, through June 30, 2007 (the time period for this study), to determine the 2006 unit cost benchmark. The relationships between the 2002 unit cost benchmarks and the 2006 unit cost benchmarks were then applied to each eligibility group to establish unit cost benchmarks for that particular eligibility group.

Due to constraints inherent within this project, Mercer utilized several assumptions to best approximate the 2002 and 2006 unit cost benchmarks; however, it is important to remember that each assumption utilized is a point within a range of reasonable estimates. The mixture of any of these assumptions has been tested as part of this study and has produced reasonable end results, with variances of up to 9% from the midpoint results. A summary of the unit cost benchmarks developed by using our best estimate point assumptions for each sub-COS within Other Services COS is provided in Appendix E.

Assumptions specific to each sub-COS were not always independently developed. Some assumptions, including medical inflation, were developed in aggregate and then applied uniformly across multiple sub-COS. Although these assumptions may not hold for each individual service, sub-COS, or eligibility group, in our opinion, the assumptions are reasonable in aggregate for all Other Services COS. Accordingly, the results for the Other Services COS in aggregate are reasonable, but caution should be exercised when reviewing benchmark rates for any specific eligibility group or sub-COS.

The sub-groupings for the Other Services COS were based on the service buckets used by OMAP to develop the 2005–2007 per capita cost report. A list of the service groupings included within other services can be found in Appendix C.

Data

To develop the other services benchmark rates, Mercer utilized the following data sources:

- summarized OHP FFS and encounter data;
- 2002 Medicare home healthcare cost report; and
- unit cost benchmarks from physician and hospital services.

The summarized and procedural-level information was provided for the base data period, where the base data period varies depending upon the population served. Below is a listing of the population and the appropriate study period:

- **OHP Plus** — the base data period is July 1, 2001, through June 30, 2003; and
- **OHP Standard** — the base data period is July 1, 2001 through February 28, 2003.

Methodology

Historical Medicaid Reimbursement and Billed Rates

Historical Medicaid rates per unit, utilization rates, and PMPM rates were developed for each of the 15 sub-COS within Other Services. Historical rates were developed from Oregon Medicaid data provided by OMAP and data constructed from adjustments described below. Separate rates were developed for both FFS and managed care. The development of the rates for the 15 FFS sub-COS utilized the Oregon Medicaid FFS reimbursed claims, units, and member months data from the base data period. The development of rates for the 6 managed care sub-COS utilized the Oregon Medicaid encounter billed, encounter units, and member months data from the base data period, where the managed care rates per unit represent billed per unit.

For each sub-COS, Mercer summed all FFS reimbursed claims for the above period and divided by the sum of all FFS units to derive a reimbursement rate per unit. This is referred to as the 2002 Medicaid FFS Reimbursement Rate per Unit. Likewise, from the Medicaid managed care data, encounter billed charges were divided by encounter units to derive a billed rate per unit. This is referred to as the 2002 Medicaid Managed Care Billed Rate per Unit.

It is important to distinguish between billed charges, paid amounts, and cost amounts. MCOs typically negotiate payment rates with providers independently of OHP rates. As a result, the encounter data capture the billed charges submitted by these providers, not the amount of reimbursement for those services, resulting in billed charges that tend to be significantly higher than actual payment amounts.

Utilization rates were developed from utilization and member months using Medicaid FFS data to determine FFS utilization rates, and using Medicaid encounter data for managed care utilization rates. These Medicaid utilization rates were then applied to rates per unit to determine the PMPM rates attributable to Medicaid other services. These were calculated separately for FFS and managed care.

Rates per unit, utilization rates, and PMPM rates were developed separately for each of the Other Services COS. The rates were then summarized to represent total rates for all Other Services COS, resulting in a 2002 Medicaid FFS Reimbursement Rate per Unit of $31.99 and a 2002 Medicaid Managed Care Billed Rate per Unit of $92.67, as illustrated in Appendix E. It should be noted that the FFS Reimbursement Rate per Unit represents all 15 sub-COS and the Managed Care Billed Rate per Unit only represents the 6 sub-COS covered under the managed care program.

Medicare Cost Data and Fee Schedules

The home healthcare/private duty nursing and ambulatory transportation sub-COS unit cost benchmarks were developed using Medicare cost data. CMS provided a summary-level home healthcare claims report for CY 2002 for Oregon, containing both facility-based and non-facility agency costs combined.

Private duty nursing costs were not available from CMS. Because OMAP reported home healthcare and private duty nursing services together as one sub-COS, Mercer was unable to determine reimbursement per unit, billed per unit, and UPM for home healthcare and private duty nursing services separately. Based on our experience working with other states, private duty nursing Medicaid expenditures represent less than 20% of total expenditures for home healthcare and private duty nursing services combined. Additionally, Mercer has noted that reimbursement per unit is not significantly lower for home health care services than for private duty nursing services. Thus, the combined home healthcare/private duty nursing unit cost benchmark was based on home healthcare cost data.

OMAP and PricewaterhouseCoopers performed a study of home health agency costs in 2002 and estimated that the Medicaid FFS fee schedule was on average at 38.7% of cost. Mercer did not receive sufficient data to replicate or validate these results.

CY 2002 Medicare ambulatory transportation fee schedules for the two regions in Oregon were also obtained, and assumed to represent cost. The ambulatory fee schedules were applied to fee-code level OHP utilization data. The 2002 unit cost benchmarks for each of these sub-COS were assumed to be 100% of the Medicare unit cost, less expected third-party payments.

Although Mercer did not audit the Medicare cost data, in our opinion, the underlying information is valid and should provide a reasonable basis for establishing unit cost benchmark information for home healthcare/private duty nursing and ambulatory transportation without any adjustment.

Modified Historical Medicaid Data for Unit Cost Benchmarking

The hospice unit cost benchmarks were developed using the Modified Medicaid Data Approach. The unit cost benchmarks were developed from Oregon Medicaid encounter data for the base data period. They were adjusted to reflect that hospice costs exceed revenue by 10% – 20%.[49]

The other transportation, vision exams and therapy, and vision materials and fittings sub-COS unit cost benchmarks were developed using the Modified Medicaid Data Approach. Unit cost benchmarks for each of the above sub-COS, excluding other transportation, were developed from Oregon Medicaid encounter data for the base data period, using the managed care billed rate per unit for both the 2002 managed care unit cost benchmark and the 2002 FFS unit cost benchmark. As noted earlier, the billed rate per unit represents billed charges submitted by the providers, not necessarily the amount of reimbursement for the services. While this generally results in billed charges that tend to be significantly higher than actual payment amounts, we are of the opinion that for these sub-COS, billed charges submitted by the providers closely approximate the cost of providing the services. Our opinion that billing schedules approximate actual cost comes from the fact that, in general, these services are provided within a market environment in which a larger portion of the population pays for services out-of-pocket, rather than through health organizations or other large purchasers that can push providers to offer bulk purchasing discounts that are lower than billed charges.

Unit cost benchmarks for the other transportation sub-COS are developed from Oregon Medicaid FFS data for the base data period, using the FFS reimbursement rate per unit. This sub-COS is only provided to OHP eligibles on a FFS basis; thus, there is no Medicaid encounter data available to establish a baseline for developing unit cost benchmarks as was done for the three previously mentioned sub-COS. We are of the opinion that given the competitive contracting arrangement in place with other transportation providers, FFS payments closely approximate the cost of providing the services.

Benchmark Rate Development of Various COS as a Proxy

For the remaining nine sub-COS within Other Services COS, benchmark rates are developed based on variance factors derived from benchmark rate development for other COS. The nine sub-COS represent a very small proportion of the total claims, as noted above. Fully investigating the data for variability, outlier, and other credibility concerns, was outside of the limits of this study. As a result, it was appropriate to develop benchmark rates for these

[49] National Hospice and Palliative Care Organization (NHPCO) and Milliman USA, The Cost of Hospice Care: An Actuarial Evaluation of the Medicare Hospice Benefit, August 2001

sub-COS using similar services as a proxy. The sub-COS and the proxy COS are noted in Figure 6.23 below:

Figure 6.23

Other Services Sub-COS	Proxy Service Category (or sub-COS)
Administrative Exams	Physician Services
Other Medical – Maternity Management	Physician Services
School-Based Health Services	Physician Services
Targeted Case Mgmt – Babies First	Physician Services
Targeted Case Mgmt – HIV	Physician Services
Targeted Case Mgmt – Substance Abuse Moms	Physician Services
Therapeutic Abortion – Inpatient Hospital	Hospital Services
Therapeutic Abortion – Outpatient Hospital	Hospital Services
Therapeutic Abortion – Physician	Physician Services

The proxy methodology assumes that the variance between Medicaid FFS reimbursement rates per unit to FFS unit cost benchmarks and Medicaid managed care billed rates per unit to managed care unit cost benchmarks is similar across the above paired services. For example, if there is a 20% increase from the FFS reimbursement per unit to the FFS unit cost benchmark for physician services, the assumption is that there is a 20% increase from the FFS reimbursement per unit to the FFS unit cost benchmark for administrative exams as well. (This illustration assumes all inherent numbers represent the same time period and no trend adjustment is necessary.)

Benchmark Rate for 2002

The historical Medicaid utilization rates were applied to 2002 unit cost benchmarks to determine PMPM rates attributable to other services. These were calculated separately for FFS and managed care.

Unit cost benchmarks for 2002, utilization rates, and PMPM rates were developed separately for each of the sub-COS services within other services. These rates were then aggregated to represent total rates for other services. The resulting 2002 FFS Unit Cost Benchmark is $43.45. The resulting 2002 Managed Care Unit Cost Benchmark is $69.95. The full complement of 2002 unit cost benchmarks is provided in Appendix E.

Benchmark Rate for 2006

Unit cost benchmarks for 2002 were trended from the midpoint of the base period to the midpoint of the benchmark period to determine the 2006 unit cost benchmarks.

Trend factors recognize changes in cost per service and utilization for other services from the base period to the projection period. Mercer reviewed several economic indicators, including both seasonally adjusted and non-seasonally adjusted CPI indicators for various related

services, as well as the DRI-CPI for the various related services, which is a projection of the CPI. Both cost and utilization trend were adjusted for the Oregon marketplace. Annual trend estimates are illustrated in Appendix F. These estimates represent the expected increase in cost per service, as well as utilization, for the applicable time period.

These historical cost and utilization indexes were estimated for both FFS and managed care, and projected forward to adjust the data from the experience period to the projection period. Annual FFS trend was 2.4% and 2.4% for reimbursement and utilization, respectively. Annual managed care trend was 2.6% and 2.0% for reimbursement and utilization, respectively. Trend factors were applied to 2002 unit cost benchmarks and 2002 utilization rates. Each point estimate represents one possible trend within a range of reasonable trends. The range of estimates was tested in our analysis to help determine the variability of the final results to the individual estimates.

The 2006 unit cost benchmarks, 2006 utilization rates, and 2006 PMPM rates were calculated separately for each of the services within Other Services COS. The rates were then summarized to represent benchmark rates for all Other Services COS, resulting in a 2006 FFS Unit Cost Benchmark of $47.69 and a 2006 Managed Care Unit Cost Benchmark of $77.40, as illustrated in Appendix F.

Program Changes

Several program changes or budget issues have been implemented by Oregon that impact the benchmark rate development. These are changes that occurred between July 1, 2001, and June 30, 2007, the begin date of our base data and end date of the benchmark report period, respectively. Each of these program changes has been reviewed. A full list of the program changes can be found in Appendix D. Highlighted below is the program change that was accounted for in the development of the 2006 Other Services COS benchmark.

- **FFS OHP Plus Copayments (Implemented January 2003)**
  Copayments were instituted for many eligibles within the FFS OHP Plus population. A 0.07% downward adjustment was applied to the 2006 FFS Other Services COS unit cost benchmark to reflect the institution of $3 copayments for some services. There is no anticipated reduction in service utilization as a result of the institution of copayments for the FFS populations.

Oregon has precluded any new enrollment into the OHP Standard program and has reduced coverage for these populations since the base data period. Due to time constraints, neither the base data nor the benchmarks reflect these reductions in coverage for the OHP Standard population, nor any potential impact from declining enrollment in the OHP Standard program.

2006 Benchmark Rates by Eligibility Group

To determine the estimate for benchmark rates for any individual eligibility group, historical reimbursement (or what was paid per visit/service), utilization rates, and PMPM rates were developed for each of the thirteen eligibility groups and for each of the other services within these eligibility groups. Based on our discussions with OMAP, we have assumed that each eligibility group has a similar reimbursement schedule.

As a result, within each sub-COS, the ratio of the historical rate per unit for any given eligibility group to the historical rate per unit for all eligibility groups is assumed to represent the differences in the mix-of-services provided for each eligibility group.

To determine the appropriate sub-COS benchmark rate for each eligibility group, the 2002 unit cost benchmark for all eligibility groups is multiplied by the historical rate per unit ratio, resulting in a mix-of-services adjusted unit cost benchmark. Cost and utilization trends were then applied to our mix-of-services adjusted 2002 benchmark rates to determine 2006 benchmark rates for each eligibility group and other services.

Summary of Results

A summary of historical rates for each of the Other Services and their corresponding 2002 2006 unit cost benchmarks is summarized in Figure 6.24 and 6.25 below:

Figure 6.24

	FFS		
Services	**Historical 2002 Reimbursement Rate per Unit**	**2002 Unit Cost Benchmarks**	**2006 Unit Cost Benchmarks**
Administrative Exams	$ 155.56	$ 232.97	$ 261.14
Home Healthcare/Private Duty Nursing	$ 133.20	$ 166.97	$ 187.85
Hospice	$ 2,380.71	$ 2,677.83	$ 3,012.73
Maternity Management	$ 128.26	$ 192.08	$ 215.30
School-Based Health Services	$ 212.81	$ 318.68	$ 357.22
Targeted Case Mgmt – Babies First	$ 140.32	$ 210.13	$ 235.54
Targeted Case Mgmt – HIV	$ 256.00	$ 383.44	$ 429.77
Targeted Case Mgmt – Substance Abuse Moms	$ 120.00	$ 179.70	$ 201.43
Therapeutic Abortion – Inpatient Hospital	$ 1,486.96	$ 2,240.34	$ 2,854.64
Therapeutic Abortion – Outpatient Hospital	$ 283.69	$ 263.74	$ 346.02
Therapeutic Abortion – Physician	$ 177.15	$ 265.29	$ 297.37
Ambulatory Transportation	$ 102.11	$ 125.25	$ 133.36
Other Transportation	$ 14.64	$ 14.63	$ 15.58
Vision Exams and Therapy	$ 43.05	$ 121.14	$ 129.96
Vision Materials and Fittings	$ 11.66	$ 23.96	$ 25.71
All Other Services	$ 31.99	$ 43.45	$ 47.69

Figure 6.25

Services	Managed Care 2002 Unit Cost Benchmarks	Managed Care 2006 Unit Cost Benchmarks
Administrative Exams	$ 0.00	$ 0.00
Home Healthcare/Private Duty Nursing	$ 167.00	$ 191.43
Hospice	$ 1,293.66	$ 1,482.92
Maternity Management	$ 105.70	$ 118.53
School-Based Health Services	$ 0.00	$ 0.00
Targeted Case Mgmt – Babies First	$ 0.00	$ 0.00
Targeted Case Mgmt – HIV	$ 0.00	$ 0.00
Targeted Case Mgmt – Substance Abuse Moms	$ 0.00	$ 0.00
Therapeutic Abortion – Inpatient Hospital	$ 0.00	$ 0.00
Therapeutic Abortion – Outpatient Hospital	$ 0.00	$ 0.00
Therapeutic Abortion – Physician	$ 0.00	$ 0.00
Ambulatory Transportation	$ 125.27	$ 134.00
Other Transportation	$ 0.00	$ 0.00
Vision Exams and Therapy	$ 120.02	$ 131.64
Vision Materials and Fittings	$ 23.97	$ 26.29
All Other Services	$ 69.95	$ 77.40

Historical 2002 rates, 2002 benchmark rates, and 2006 benchmark rates for all other services combined are summarized by the thirteen eligibility groups included in this study. Results, which are summarized separately for FFS and managed care, can be found in Appendix F.

Limitations

Although the developed benchmark rates are intended to be an approximation of the cost of services, more extensive analyses would be required to develop fee schedules or capitation rates. In addition, most of the sub-COS (all services except home health) within the Other Services COS category did not have actual cost data available for the development of benchmark rates. For these services, the developed benchmark rates are estimates of cost.

Other limitations are provided below:

- **Cost reporting and efficiency measurements**
  Medicare Cost Reports contain cost information for facility-based home healthcare and private duty nursing providers. Unfortunately, these reports did not include any information regarding non-facility based costs. Without specific evidence to indicate that non-facility based costs vary from facility based costs, the non-facility agencies were assumed to have the same unit cost benchmarks as facility-based agencies. Mercer did not audit the cost reports or assess the facility-based agencies for medical efficiency. Therefore, no savings adjustments were made to the Medicare Cost Reports information to reduce the costs associated with inefficient agencies.

- **Universal trend assumptions**
  Due to the relatively small number of expenditures associated with the Other Services COS, overall trend assumptions were developed and applied universally to each sub-COS.

- **Third-party contributions**
  Benchmark rates do not reflect actual third-party payment experience, but estimates.

Current Environmental Factors

The national nursing shortage is also impacting Oregon and the agencies that employee them for the provision of home health, hospice, and private duty nursing services. This staffing shortage could be influencing the mix-of-provider care, i.e., using a nurse practitioner versus a physician assistant.

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Appendices

Appendix A

Health Services Commission

Physicians	Social Services Worker	Public Health Nurse	Consumer Representatives
Eric Walsh, MD Chair	Kathy Savicki, LCSW	Donalda Dodson, RN, MPH	Ellen Lowe
Bryan Sohl, MD			Susan McGough
Daniel Mangum, DO			Dan Williams
Somnath Saha, MD, MPH			Jono Hildner (retired)
Andrew Glass, MD			

Appendix B

Health Services Commission Actuarial Advisory Committee

Provider Organization	Committee Member
Chemical Dependency	Rick Jones Director Choices Counseling Center
DME/Supply	Tom Coogan Vice President Care Medical
Hospital	Kevin Earls Vice President Finance & Policy Oregon Association of Hospital and Health Systems (OAHHS)
Physician	Scott Gallant Director of Government Affairs Oregon Medical Association (OMA)
Prescription Drugs	Tom Holt, CAE Executive Director Oregon State Pharmacy Association (OSPA)
Other Services (Home Health)	Sarah Reeder Executive Director Oregon Association for Home Care

Managed Care Organization	Committee Member	Alternate Committee Member
Dental Care Organizations	Rich Monnie Business Advisor Capitol & Managed Dental Care	Yuen Chin, CPA Chief Operating Officer Willamette Dental Management Corp.
Fully Capitated Health Plans	Joel Daven, MD Medical Director Douglas County Individual Practice Association (DCIPA)	
Fully Capitated Health Plans	William Murray, CPA Chief Executive Officer Doctors of Oregon Coast South (DOCS)	Bill Guest President, Chief Executive Officer Cascade Comprehensive Care Inc.
Mental Health Organizations	Kevin Campbell Interim Director Greater Oregon Behavioral Health Inc. (GOBHI)	Jim Russell, MSW Executive Manager Mid-Valley Behavioral Care Network

Appendix B

Health Services Commission Actuarial Advisory Committee *(continued)*

Other Contributors	
Dental	Jane Myers Director of Government Affairs Oregon Dental Association (ODA)
Fully Capitated Health Plans	Marc Berg Director of Finance Providence Health System
Fully Capitated Health Plans	David Cole, CPA Chief Financial Officer Lane Individual Practice Association (LIPA)
Dental Care Organizations	Jeff Peterson, CMA Director of Finance Willamette Dental Management Corp.
Chemical Dependency	Ann Uhler Consultant Government Council on Alcohol & Drugs

Appendix C

Sub-Categories of Service — Hospital

COS	Sub-COS	Sub-COS Description	OMAP Service Bucket	Unit Type
Hospital	101	Inpatient - Basic	IP HOSP - ACUTE DETOX	Admits
	101	Inpatient - Basic	IP HOSP - MEDICAL/SURGICAL	Admits
	101	Inpatient - Basic	TOBACCO CES-IP HSP	Admits
	102	Inpatient - FP	FP - IP HOSP	Admits
	103	Inpatient - HYSTERECTOMY	HYSTERECTOMY - IP HOSP	Admits
	104	Inpatient - Maternity	IP HOSP - MATERNITY	Admits
	105	Inpatient - Newborn	IP HOSP - NEWBORN	Admits
	106	Inpatient - STERILIZATION	STERILIZATION - IP HOSP FEMALE	Admits
	106	Inpatient - STERILIZATION	STERILIZATION - IP HOSP MALE	Admits
	107	Outpatient - Basic	OP HOSP - BASIC	Claims
	107	Outpatient - Basic	OP HOSP - DENTAL DIAGNOSTIC	Claims
	107	Outpatient - Basic	OP HOSP - DENTAL PREVENTIVE	Claims
	107	Outpatient - Basic	OP HOSP - DENTAL RESTORATIVE	Claims
	107	Outpatient - Basic	OP HOSP - LAB & RAD	Claims
	107	Outpatient - Basic	OP HOSP - POST HOSP EXTENDED CARE	Claims
	107	Outpatient - Basic	OP HOSP - SOMATIC MH	Claims
	107	Outpatient - Basic	TOBACCO CES-OP HSP	Claims
	108	Outpatient - ER	OP ER - SOMATIC MH	Claims
	108	Outpatient - ER	OP HOSP - EMERGENCY ROOM	Claims
	109	Outpatient - FP	FP - OP HOSP	Claims
	110	Outpatient - HYSTERECTOMY	HYSTERECTOMY - OP HOSP	Claims
	111	Outpatient - Maternity	OP HOSP - MATERNITY	Claims
	112	Outpatient - STERILIZATION	STERILIZATION - OP HOSP FEMALE	Claims
	112	Outpatient - STERILIZATION	STERILIZATION - OP HOSP MALE	Claims

Appendix C

Sub-Categories of Service — Physician

COS	Sub-COS	Sub-COS Description	OMAP Service Bucket	Unit Type
Physician	201	Physician Basic - Office Visits	PHYS OFFICE VISITS	CPT Code Units (Visits)
	202	Physician Basic - Other	ANESTHESIA	One per detail (Services)
	202	Physician Basic - Other	LAB & RAD - LAB	One per detail (Services)
	202	Physician Basic - Other	PHYS CONSULTATION, IP & ER VISITS	One per detail (Services)
	202	Physician Basic - Other	PHYS HOME OR LONG-TERM CARE VISITS	One per detail (Services)
	202	Physician Basic - Other	PHYS OTHER	One per detail (Services)
	202	Physician Basic - Other	PHYS SOMATIC MH	One per detail (Services)
	202	Physician Basic - Other	TOBACCO CES-PHYS	One per detail (Services)
	203	Physician Basic - Surgery	SURGERY	Claims
	204	Physician Basic - Xray	LAB & RAD - DIAGNOSTIC X-RAY	CPT Code Units
	204	Physician Basic - Xray	LAB & RAD - THERAPEUTIC X-RAY	CPT Code Units
	205	Physician Family Planning	FP - PHYS	One per detail (Services)
	206	Physician Hysterctomy	HYSTERECTOMY - ANESTHESIA	One per detail (Services)
	206	Physician Hysterctomy	HYSTERECTOMY - PHYS	One per detail (Services)
	207	Physician Maternity	PHYS MATERNITY	One per detail (Services)
	208	Physician Newborn	PHYS NEWBORN	One per detail (Services)
	209	Physician Sterilization	STERILIZATION - ANESTHESIA FEMALE	One per detail (Services)
	209	Physician Sterilization	STERILIZATION - ANESTHESIA MALE	One per detail (Services)
	209	Physician Sterilization	STERILIZATION - PHY FEMALE	One per detail (Services)
	209	Physician Sterilization	STERILIZATION - PHY MALE	One per detail (Services)

Appendix C

Sub-Categories of Service — Prescription Drugs

COS	Sub-COS	Sub-COS Description	OMAP Service Bucket	Unit Type
Prescription Drugs	301	Prescription Drugs - Retail	PRES DRUGS - BASIC	Scripts Filled
	301	Prescription Drugs - Retail	PRES DRUGS - FP	Scripts Filled
	301	Prescription Drugs - Retail	PRES DRUGS - MH/CD	Scripts Filled
	301	Prescription Drugs - Retail	PRES DRUGS - NEURONTIN	Scripts Filled
	301	Prescription Drugs - Retail	PRES DRUGS - TOBACCO CESSATION	Scripts Filled
	302	Prescription Drugs - OP	OP HOSP - PRES DRUGS BASIC	Claims
	302	Prescription Drugs - OP	OP HOSP - PRES DRUGS MH/CD	Claims

Sub-Categories of Service — Mental Health

COS	Sub-COS	Sub-COS Description	OMAP Service Bucket	Unit Type
Mental Health	501	Mental Health - Inpatient	MH SERVICES ACUTE INPATIENT	Days
	501	Mental Health - Inpatient	MH SERVICES PHYS IP	One per detail (Services)
	502	Mental Health - Outpatient	MH SERVICES ALTERNATIVE TO IP	One per detail (Services)
	502	Mental Health - Outpatient	MH SERVICES ANCILLARY SERVICES	One per detail (Services)
	502	Mental Health - Outpatient	MH SERVICES ASSESS & EVAL	One per detail (Services)
	502	Mental Health - Outpatient	MH SERVICES CASE MANAGEMENT	One per detail (Services)
	502	Mental Health - Outpatient	MH SERVICES CONSULTATION	One per detail (Services)
	502	Mental Health - Outpatient	MH SERVICES FAMILY SUPPORT	One per detail (Services)
	502	Mental Health - Outpatient	MH SERVICES INTENSIVE THERAPY SVCS	One per detail (Services)
	502	Mental Health - Outpatient	MH SERVICES MED MANAGEMENT	One per detail (Services)
	502	Mental Health - Outpatient	MH SERVICES OP THERAPY	One per detail (Services)
	502	Mental Health - Outpatient	MH SERVICES OTHER OP	Claims
	502	Mental Health - Outpatient	MH SERVICES PHYS OP	One per detail (Services)
	502	Mental Health - Outpatient	MH SERVICES SUPPORT DAY PROGRAM	One per detail (Services)

Appendix C

Sub-Categories of Service — DME/Supply

COS	Sub-COS	Sub-COS Description	OMAP Service Bucket	Unit Type
Chemical Dependency	701	Chemical Dependency	CD SERVICES - ALTERNATIVE TO DETOX	One per detail (Services)
	701	Chemical Dependency	CD SERVICES - METHADONE	One per detail (Services)
	701	Chemical Dependency	CD SERVICES - OP	One per detail (Services)

Sub-Categories of Service — DME/Supply

COS	Sub-COS	Sub-COS Description	OMAP Service Bucket	Unit Type
DME/Supply	401	DME	OTH MED - DME	One per detail (Services)
	401	DME	OTH MED - SUPPLIES	CPT Code Units

Sub-Categories of Service — Dental

COS	Sub-COS	Sub-COS Description	OMAP Service Bucket	Unit Type
Dental	601	Dental	DENTAL - ADJUNCTIVE GENERAL	One per detail (Services)
	601	Dental	DENTAL - ANESTHESIA SURGICAL	One per detail (Services)
	601	Dental	DENTAL - DIAGNOSTIC	One per detail (Services)
	601	Dental	DENTAL - ENDODONTICS	One per detail (Services)
	601	Dental	DENTAL - I/P FIXED	One per detail (Services)
	601	Dental	DENTAL - MAXILLOFACIAL PROS	One per detail (Services)
	601	Dental	DENTAL - ORAL SURGERY	One per detail (Services)
	601	Dental	DENTAL - ORTHODONTICS	One per detail (Services)
	601	Dental	DENTAL - PERIODONTICS	One per detail (Services)
	601	Dental	DENTAL - PREVENTIVE	One per detail (Services)
	601	Dental	DENTAL - PROS REMOVABLE	One per detail (Services)
	601	Dental	DENTAL - RESTORATIVE	One per detail (Services)
	601	Dental	DENTAL - TOBACCO CES	One per detail (Services)

Appendix C

Sub-Categories of Service — Other Services

COS	Sub-COS	Sub-COS Description	OMAP Service Bucket	Unit Type
Other Services	801	Administrative Exams	ADMINISTRATIVE EXAMS	One per detail (Services)
	802	Other Miscellaneous	EXCEPT NEEDS CARE COORDINATION	One per detail (Services)
	803	Home Health	OTH MED - HHC/PDN	Claims
	803	Home Health	OTH MED - HOSPICE	Claims
	804	Maternity Management	OTH MED - MATERNITY MGT	Claims
	805	School-Based Health Services	SCHOOL-BASED HEALTH SERVICES	One per detail (Services)
	806	Targeted Case Management	TARGETED CASE MAN - BABIES FIRST	Claims
	806	Targeted Case Management	TARGETED CASE MAN - HIV	Claims
	806	Targeted Case Management	TARGETED CASE MAN - SUBS ABUSE MOMS	Claims
	807	Therapeutic Abortions - Inpatient	THERAPEUTIC ABORTION - IP HOSP	Admits
	808	Therapeutic Abortions - Outpatient	THERAPEUTIC ABORTION - OP HOSP	Claims
	809	Therapeutic Abortions - Physician	THERAPEUTIC ABORTION - PHYS	One per detail (Services)
	810	Transportation - Ambulance	TRANSPORTATION - AMBULANCE	One per detail (Services)
	811	Transportation - Non-Ambulance	TRANSPORTATION - OTHER	One per detail (Services)
	812	Vision - Exams & Therapy	VISION CARE - EXAMS & THERAPY	CPT Code Units
	813	Vision - Materials & Fitting	VISION CARE - MATERIALS & FITTING	CPT Code Units

Appendix D

Program Benefit / Eligibility Changes

Service	Effective Date	Description of Program Benefit and Eligibility Changes	Impact on Benchmark Rates
Miscellaneous	2/1/03	Copayments were instituted for the OHP Standard population and eliminated on 6/19/04.	No material impact expected — copayments in place for 1/12th of the data period
	1/1/03	Copayments were instituted for the FFS OHP Plus population; excluding children, pregnant women, and institutionalized individuals. Copayments were only instituted for some services, with one copayment per provider/per day/per visit	Downward adjustment — applied adjustment by COS
	7/1/04	Enrollment into the OHP Standard population has been precluded.	Unknown if impact from declining enrollment
		OPH Standard benefits were reduced with additional changes in benefits effective 8/1/04.	Impact has not been calculated nor applied
Hospital	10/1/02	Implementation of disease state management program, covers 7,170 asthma, diabetes, and congestive heart failure FFS clients, with an expected 5% savings, per OMAP.	Downward adjustment — Expect decrease in inpatient and emergency room utilization
	3/10/03	Outlier payments eliminated, except for children under one year of age receiving services in disproportionate share hospitals. Outlier payments restored effective 1/1/04.	No impact — Outside of hospital cost report data period
	3/10/03	Inpatient and outpatient rates were reduced 12% and then restored to their pre-3/10/03 levels effective 1/1/04.	No impact — Outside of hospital cost report data period
Physician	10/1/02	Implementation of disease state management program; covers 7,170 asthma, diabetes, and congestive heart failure FFS clients, with an expected 5% savings, per OMAP.	Downward adjustment — Expect decrease in utilization of specialist/physician services, with a minimal increase in utilization of laboratory services
	11/1/02	Anesthesia rates changed from 51% billed charges to an ASA RVU plus time basis. The new rate was $23.35 per unit codes.	No material impact expected
	5/1/03	Fluoride varnish may be applied to very young children and billed to OMAP on a FFS basis.	No material impact expected
	10/1/03	OMAP increased the base rate for codes 59400 through 59622 from $29.48 to $38.80, in response to rising obstetrical malpractice insurance costs.	Reflected in unit cost benchmark development
Prescription Drugs	10/1/01	Retail pharmacy dispensing fee reduced to $3.50; prior was $3.91 to $4.28 depending on type and volume.	Downward adjustment applied to reflect lower cost
	10/1/01	Pharmacy reimbursement was reduced from AWP-11% to AWP-13%.	Downward adjustment applied to reflect lower cost

Appendix D

Program Benefit / Eligibility Changes *(continued)*

Service	Effective Date	Description of Program Benefit and Eligibility Changes	Impact on Benchmark Rates
Prescription Drugs (cont)	3/1/02	Oregon MAC list implemented.	Downward adjustment applied to reflect lower cost
	7/1/02	Pharmacy Lock-In: Medicaid clients to designate primary pharmacy to reduce drug-seeking behavior	Downward adjustment applied to reflect expected decrease in utilization by targeted enrollees
	8/1/02	Prior authorization required for non-sedating antihistamines and nasal inhalers.	Downward adjustment applied for all prior authorization program benefit changes to reflect decrease utilization and/or cost
	8/15/02	Prescribing providers required to write diagnosis on prescriptions to reduce payments for drugs for non-covered conditions.	No material impact expected
	10/1/02	Prior authorization requirements removed for H2 Antagonists.	Downward adjustment applied for all prior authorization program benefit changes to reflect decrease utilization and/or cost
	10/1/02	Implementation of disease state management program; covers 7,170 asthma, diabetes, and congestive heart failure FFS clients, with an expected 5% savings, per OMAP.	Upward adjustment — Expect increase in prescription drug utilization
	12/6/02	Prior authorization required for sedatives exceeding 15 doses in 30 days, and for Soma exceeding 56 tablets in 90 days.	Downward adjustment applied for all prior authorization program benefit changes to reflect decrease utilization and/or cost
	2/1/03	Enrolled institutional pharmacies dispensing fee increased to $3.91, up from $3.80.	Downward adjustment applied to reflect lower cost
	4/1/03	Marinol – New prior authorization	Downward adjustment applied for all prior authorization program benefit changes to reflect decrease utilization and/or cost
	6/1/03	Pharmacies required to bill private insurance prior to OMAP.	No material impact expected
	6/1/03	Pharmacy reimbursement was reduced from AWP-13% to AWP-15%.	Downward adjustment applied to reflect lower cost
	6/15/03	Prior authorization required for multiple-source brand name drugs.	Downward adjustment applied for all prior authorization program benefit changes to reflect decrease utilization and/or cost
	7/1/03	Prior authorization required for Neurontin.	Downward adjustment applied for all prior authorization program benefit changes to reflect decrease utilization and/or cost

Appendix D

Program Benefit / Eligibility Changes *(continued)*

Service	Effective Date	Description of Program Benefit and Eligibility Changes	Impact on Benchmark Rates
Prescription Drugs (cont)	7/15/03	Pharmacies required to bill Medicare first for clients dually eligible for Medicare and Medicaid.	No material impact expected
	10/1/03	List of class 7 and 11 drugs unfrozen, allowing FCHPs to use industry definitions of drug classes for these drug carve-outs that are paid FFS.	No material impact expected
	10/1/03	Gabapentin — Carved back in from FFS to FCHP responsibility.	Downward adjustment applied to reflect lower utilization
	12/1/03	Tripan — New prior authorization	Downward adjustment applied for all prior authorization program benefit changes to reflect decrease utilization and/or cost
	3/1/04	Flumist — New prior authorization	Downward adjustment applied for all prior authorization program benefit changes to reflect decrease utilization and/or cost
	3/1/04	Polypharmacy profiling: OMAP is authorized to impose payment limits for clients using 15 or more different drugs in a six-month period and is targeting duplicate therapy within drug classes, overuse of selected classes, and underuse of generics. Annual savings conservatively projected to be $1.1 million, per OMAP.	Downward adjustment — Expect decrease in prescription drug utilization
	4/15/04	Fee for compound prescriptions, $7.50.	No material impact expected
	1/1/06	Medicare Prescription Drug Improvement and Modernization Act of 2003: Impacts prescription drug costs for the populations dually eligible for Medicaid and Medicare	Impact has not been calculated nor applied
Chemical Dependency	10/1/03	OMAP began covering Buprenorphine effective 10/1/03.	No material impact expected (Limited substitution of drugs)
DME/Supply	10/1/02	Implementation of disease state management program; covers 7,170 asthma, diabetes, and congestive heart failure FFS clients, with an expected 5% savings, per OMAP.	No adjustment — Expect minimal increase in DME/Supply utilization
	10/1/02	Reimbursement for DME, prosthetics, orthotics, and supplies was decreased from 100% of the 1999 Medicare Maximum Allowable to 80% of the 2002 Medicare Maximum Allowable. This change was rescinded effective 12/1/02.	No adjustment applied

Appendix D

Program Benefit / Eligibility Changes *(continued)*

Service	Effective Date	Description of Program Benefit and Eligibility Changes	Impact on Benchmark Rates
Other Services	1/1/03	Home enteral/parenteral rates converted to 100% of 2002 Medicare allowable rates.	No material impact expected
	11/1/03	New sole-source FFS vision hardware contract expected to result in net savings of 7% to 13%.	No adjustment applied

Appendix D

Prioritized List Changes

Effective Date	Line Number	Description of Change	Impact on Benchmark Rates
10/1/2001	715	Old line 132: Rabies was merged into old line 721	No material impact expected
10/1/2001		Deleted old line 230: Cancer of breast, treated via autologous BMT, Clinical Trial	Not material, limited exposure in the data period
10/1/2001	629	Old line 448: Hemorrhage and Infarction of thyroid was merged into old line 635	No material impact expected
1/1/2003	559	Old line 559: Sialolithiasis, mucocele, disturbance of salivary secretion, other, and unspecified diseases of salivary glands no longer funded due to movement of the funding line	No material impact expected
1/1/2003	562	Old line 560: Benign neoplasm bone & articular cartilage, including osteoid osteomas; benign neoplasm of connective and other soft tissue no longer funded due to movement of the funding line	No material impact expected
1/1/2003	550	Old line 561: Unspecified urinary obstruction and benign prostatic hyperplasia without obstruction (See Guideline Note) no longer funded due to movement of the funding line	No material impact expected
1/1/2003	551	Old line 562: Phimosis no longer funded due to movement of the funding line	No material impact expected
1/1/2003	554	Old line 563: Cystic acne no longer funded due to movement of the funding line	No material impact expected
1/1/2003	552	Old line 564: Contact dermatitis, atopic dermatitis, and other eczema no longer funded due to movement of the funding line	No material impact expected
1/1/2003	556	Old line 565: Symptomatic urticaria no longer funded due to movement of the funding line	No material impact expected
1/1/2003	557	Old line 566: Dysfunction of nasolacrimal system no longer funded due to movement of the funding line	No material impact expected
1/1/2003	553	Old line 500: Psoriasis and similar disorders moved to line 553	No material impact expected
10/1/2003	642	Old line 522: Symptomatic hydrocele was merged into old line 642	No material impact expected
10/1/2003	555	Old line 532: Closed fracture of great toe moved to line 555	No material impact expected
10/1/2003	564	Old line 533: Stomatitis and diseases of lips moved to line 564	No material impact expected
10/1/2003	624	Old line 546: Uncomplicated hernia (age 18 and over) moved to line 624	No material impact expected
8/1/2004	547	Line 547: Acute conjunctivitis no longer funded due to movement of the funding line	No material impact expected
8/1/2004	548	Line 548: Cerumen impaction, foreign body in ear & nose no longer funded due to movement of the funding line	No material impact expected
8/1/2004	549	Line 549: Vertiginous syndromes and other disorders of vestibular system no longer funded due to movement of the funding	No material impact expected
10/1/2003	128	New line 128 added: Short bowel syndrome - age 5 or under	No material impact expected, no incidence within the last 10 years
10/1/2003	545	Old line 567: Chronic anal fissure (See Guideline Note); anal fistula moved to line 545	No material impact expected
10/1/2001	685	Moved ICD-9 998.81: Emphysema (subcutaneous) surgical) resulting from a procedure from old line 5 to old line 691	No material impact expected
10/1/2001	722	Moved ICD-9 251.1: Other specified hypoglycemia from old line 34 to old line 736	No material impact expected
10/1/2001	722	Moved ICD-9 251.2: Hypoglycemia, unspecified from old line 34 to old line 736	No material impact expected
10/1/2001	584	Moved ICD-9 718.88: Other joint derangement, not elsewhere classified, other specified site from old line 113 to old line 599	No material impact expected
10/1/2001	586	Moved ICD-9 723.2: Cervicocranial syndrome from old line 145 to old line 601	No material impact expected
10/1/2001	700	Moved ICD-9 520.7: Teething syndrome from old line 146 to old line 714	No material impact expected
10/1/2001	586	Moved ICD-9 337.2: Reflex sympathetic dystrophy from old line 328 to old line 601	No material impact expected
10/1/2001	725	Moved ICD-9 333.82: Orofacial dyskinesia from old line 349 to old line 738	No material impact expected
10/1/2001	725	Moved ICD-9 333.84: Organic writers' cramp from old line 349 to old line 738	No material impact expected
10/1/2001	725	Moved ICD-9 333.91: Stiff-man syndrome from old line 349 to old line 738	No material impact expected
10/1/2001	725	Moved ICD-9 333.93: Benign shuddering attacks from old line 349 to old line 738	No material impact expected
10/1/2001	663	Moved ICD-9 056.71: Arthritis due to rubella from old line 375 to old line 678	No material impact expected
10/1/2001	719	Moved ICD-9 716.9: Unspecified arthropathy from old line 376 to old line 733	No material impact expected
10/1/2001	719	Moved ICD-9 731.2: Hypertrophic pulmonary osteoarthropathy from old line 376 to old line 733	No material impact expected
10/1/2001	714	Moved ICD-9 696.3: Pityriasis rosea from old line 508 to old line 722	No material impact expected
10/1/2001	714	Moved ICD-9 696.4: Pityriasis rubra pilaris from old line 508 to old line 722	No material impact expected
10/1/2001	714	Moved ICD-9 696.5: Other and unspecified pityriasis from old line 508 to old line 722	No material impact expected
10/1/2001	721	Moved ICD-9 372.40: Unspecified pterygium from old line 564 to old line 735	No material impact expected
10/1/2001	721	Moved ICD-9 372.41: Peripheral pterygium, stationary from old line 564 to old line 735	No material impact expected
10/1/2003	721	Moved ICD-9 363.21: Pars planitis from old line 395 to line 721	No material impact expected

Appendix D

Prioritized List Changes *(continued)*

Effective Date	Line Number	Description of Change	Impact on Benchmark Rates
10/1/2003	576	Moved ICD-9 307.81: Tension headache from old line 455 to line 576	No material impact expected
10/1/2003	576	Moved ICD-9 784.0: Headache from old line 455 to line 576	No material impact expected
10/1/2003	572	Moved ICD-9 754.42: Congenital bowing of femur from old line 481 to line 572	No material impact expected
10/1/2003	572	Moved ICD-9 754.43: Congenital bowing of tibia and fibula from old line 481 to line 572	No material impact expected
10/1/2003	572	Moved ICD-9 754.44: Congenital bowing of unspecified long bones of leg from old line 481 to line 572	No material impact expected
10/1/2003	573	Moved ICD-9 735.5: Claw toe (acquired) from old line 482 to line 573	No material impact expected
10/1/2003	572	Moved ICD-9 754.61: Congenital pes planus from old line 482 to line 572	No material impact expected
10/1/2003	578	Moved ICD-9 537.1: Gastric diverticulum from old line 484 to line 578	No material impact expected
10/1/2003	578	Moved ICD-9 537.2: Chronic duodenal ileus from old line 484 to line 578	No material impact expected
10/1/2003	578	Moved ICD-9 537.5: Gastroptosis from old line 484 to line 578	No material impact expected
10/1/2003	578	Moved ICD-9 537.6: Hourglass stricture or stenosis of stomach from old line 484 to line 578	No material impact expected
10/1/2003	578	Moved ICD-9 537.89: Other specified disorder of stomach and duodenum from old line 484 to line 578	No material impact expected
10/1/2003	578	Moved ICD-9 537.9: Unspecified disorder of stomach and duodenum from old line 484 to line 578	No material impact expected
10/1/2003	697	Moved ICD-9 805.6: Closed fracture of sacrum and coccyx without mention of spinal cord injury from old line 486 to line 697	No material impact expected
10/1/2003	697	Moved ICD-9 839.41: Closed dislocation, coccyx from old line 486 to line 697	No material impact expected
10/1/2003	558	Moved ICD-9 471: Nasal polyps from old line 490 to line 558	No material impact expected
10/1/2003	615	Moved ICD-9 472.0: Chronic rhinitis from old line 490 to line 615	No material impact expected
10/1/2003	615	Moved ICD-9 477.0: Allergic rhinitis due to pollen from old line 490 to line 615	No material impact expected
10/1/2003	615	Moved ICD-9 477.8: Allergic rhinitis due to other allergen from old line 490 to line 615	No material impact expected
10/1/2003	615	Moved ICD-9 477.9: Allergic rhinitis, cause unspecified from old line 490 to line 615	No material impact expected
10/1/2003	558	Moved ICD-9 478.1: Other diseases of nasal cavity and sinuses from old line 490 to line 558	No material impact expected
10/1/2003	558	Moved ICD-9 993.1: Barotrauma, sinus from old line 490 to line 558	No material impact expected
10/1/2003	615	Moved ICD-9 V07.1: Need for desensitization to allergens from old line 490 to line 615	No material impact expected
10/1/2003	615	Moved ICD-9 372.54: Conjunctival concretions from old line 494 to line 615	No material impact expected
10/1/2003	615	Moved ICD-9 372.56: Conjunctival deposits from old line 494 to line 615	No material impact expected
10/1/2003	702	Moved ICD-9 744.47: Congenital preauricular cyst from old line 538 to line 702	No material impact expected
10/1/2003	719	Moved ICD-9 728.84: Diastasis of muscle from old line 546 to line 719	No material impact expected
10/1/2003	721	Moved ICD-9 372.42: Peripheral pterygium, progressive from old line 558 to line 721	No material impact expected
10/1/2003	721	Moved ICD-9 372.44: Double pterygium from old line 558 to line 721	No material impact expected
10/1/2003	721	Moved ICD-9 372.45: Recurrent pterygium from old line 558 to line 721	No material impact expected
4/1/2004	628	Moved ICD-9 333.99: Restless legs syndrome from old line 335 to line 628	No material impact expected
10/1/2001	355	Moved ICD-9 373.13: Abscess of eyelid from old line 581 to old line 357	No material impact expected
10/1/2003	529	Moved ICD-9 599.81: Urethral hypermobility from old line 586 to line 529	No material impact expected
10/1/2003	338	Moved ICD-9 729.30: Panniculitis, unspecified site from old line 597 to line 338	No material impact expected
10/1/2004	182	Restricted coverage for ICD-9 170: Ewing's sarcoma	Downward adjustment - low incident rate
10/1/2004	182	Restricted coverage for ICD-9 171: Rhabdomyosarcoma (connective tissue)	Downward adjustment - low incident rate
10/1/2004	182	Restricted coverage for ICD-9 188: Rhabdomyosarcoma (bladder)	Downward adjustment - low incident rate
10/1/2004	182	Restricted coverage for ICD-9 189.0: Rhabdomyosarcoma (kidney)	Downward adjustment - low incident rate
10/1/2004	182	Restricted coverage for ICD-9 191.6: Medulloblastoma (cerebellum)	Downward adjustment - low incident rate
10/1/2004	182	Restricted coverage for ICD-9 191.7: Medulloblastoma (brain stem)	Downward adjustment - low incident rate
10/1/2004	182	Restricted coverage for ICD-9 194.0: Neuroblastoma	Downward adjustment - low incident rate
10/1/2004	125	Restricted coverage for ICD-9 282.4: Thalassemias	Downward adjustment - low incident rate
10/1/2004	125	Restricted coverage for ICD-9 282.6: Sickle-cell anemia	Downward adjustment - low incident rate
10/1/2004	125	Restricted coverage for ICD-9 282.7: Other hemoglobinopathies	Downward adjustment - low incident rate

Appendix D

Prioritized List Changes *(continued)*

Effective Date	Line Number	Description of Change	Impact on Benchmark Rates
10/1/2003	Various	Added coverage for CPT 62360-62: Intrathecal baclofen therapy (no coverage prior to 7/1/2001-9/30/2003)	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 92506: Evaluation of speech, language, voice, communication, auditory processing or aural rehabilitation status	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 92507: Treatment of speech, language, voice, communication or auditory processing disorder; individual	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 92508: Treatment of speech, language, voice, communication or auditory processing disorder; group	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 92607: Evaluation for prescription for speech-generating augmentative and laternative communication device; first hour	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 92608: Evaluation for prescription for speech-generating augmentative and laternative communication device; each add'l 30 minutes	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 92609: Evaluation for prescription for speech-generating augmentative and laternative communication device; including programming and modification	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 93668: Peripheral Arterial Disease Rehabilitation, per session	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 93797: Physician Services for Outpatient Cardiac Rehabilitation; without continuous ECG Monitoring	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 93798: Physician Services for Outpatient Cardiac Rehabilitation; with continuous ECG Monitoring	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 93799: Unlisted cardiovascular service or procedure	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 97001: Physical therapy evaluation	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 97002: Physical therapy re-evaluation	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 97004: Occupational therapy re-evaluation	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 97012: Application of modality; traction, mechanical	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 97014: Application of modality; electrical stimulation	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 97032: Application of modality; electrical stimulation (constant attendance)	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 97110: Therapeutic procedure, each 15 minutes; therapeutic exercises	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 97112: Therapeutic procedure, each 15 minutes; neuromuscular re-education	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 97113: Therapeutic procedure, each 15 minutes; aquatic therapy	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 97116: Therapeutic procedure, each 15 minutes; gait training	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 97124: Therapeutic procedure, each 15 minutes; massage	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 97140: Therapeutic procedure, each 15 minutes; manual therapy techniques	No material impact expected
10/1/2004	Various	Restricted coverage for CPT 97150: Therapeutic procedure, each 15 minutes; group	No material impact expected
10/1/2004	Various	Deleted coverage for CPT 99010: Application of a modality to one or more areas; hot or cold packs	Not material, limited exposure in the data period
10/1/2004	Various	Deleted coverage for CPT 99016: Application of a modality to one or more areas; vasopneumatic devices	Not material, limited exposure in the data period
10/1/2004	Various	Deleted coverage for CPT 99018: Application of a modality to one or more areas; paraffin bath	Not material, limited exposure in the data period
10/1/2004	Various	Deleted coverage for CPT 99020: Application of a modality to one or more areas; microwave	Not material, limited exposure in the data period
10/1/2004	Various	Deleted coverage for CPT 99024: Application of a modality to one or more areas; diathermy	Not material, limited exposure in the data period
10/1/2004	Various	Deleted coverage for CPT 99026: Application of a modality to one or more areas; infrared	Not material, limited exposure in the data period
10/1/2004	Various	Deleted coverage for CPT 99028: Application of a modality to one or more areas; ultraviolet	Not material, limited exposure in the data period
10/1/2004	Various	Deleted coverage for CPT 99033: Application of a modality to one or more areas; iontophoresis	Not material, limited exposure in the data period
10/1/2004	Various	Deleted coverage for CPT 99034: Application of a modality to one or more areas; contrast baths	Not material, limited exposure in the data period
10/1/2004	Various	Deleted coverage for CPT 99035: Application of a modality to one or more areas; ultrasound	Not material, limited exposure in the data period
10/1/2004	Various	Deleted coverage for CPT 99039: Unlisted modality	Not material, limited exposure in the data period
10/1/2004	Various	Deleted coverage for CPT 99139: Unlisted therapeutic procedure	Not material, limited exposure in the data period

Appendix D

Prioritized List Changes *(continued)*

Effective Date	Line Number	Description of Change	Impact on Benchmark Rates
10/1/2003	Various	Restricted coverage for hysterectomy for adenomyosis	No material impact expected
10/1/2004	Various	Restricted coverage for Colony Stimulating Factor	No material impact expected
10/1/2004	Various	Restricted coverage for Erythropoietin	No material impact expected
10/1/2004	Various	Restricted coverage for PET scans	No material impact expected
10/1/2004	Various	Restricted coverage for second bone marrow transplant	No material impact expected
10/1/2004	Various	Restricted coverage for second solid organ transplants	No material impact expected

Appendix E

Benchmark Rates by Service Category — Hospital

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Hospital Services

Fee-For-Service	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Reimbursement per unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
Inpatient - Basic	$ 3,540.66	0.1124	$ 33.18	$ 5,335.52	0.1124	$ 50.00	$ 6,766.49	0.1188	$ 66.97
Inpatient - Family Planning	$ -	-	$ -	$ -	-	$ -	$ -	-	$ -
Inpatient - Hysterectomy	$ 3,762.03	0.0020	$ 0.63	$ 5,669.11	0.0020	$ 0.95	$ 7,226.96	0.0022	$ 1.31
Inpatient - Maternity	$ 1,832.26	0.0502	$ 7.67	$ 2,761.09	0.0502	$ 11.56	$ 3,519.83	0.0545	$ 15.99
Inpatient - Newborn	$ 1,978.51	0.0527	$ 8.70	$ 2,981.47	0.0527	$ 13.10	$ 3,800.77	0.0572	$ 18.12
Inpatient - Sterilization	$ 2,942.45	0.0026	$ 0.64	$ 4,434.07	0.0026	$ 0.97	$ 5,652.54	0.0028	$ 1.34
Inpatient Services Total	$ 2,771.14	0.2200	$ 50.81	$ 4,175.91	0.2200	$ 76.57	$ 5,285.41	0.2355	$ 103.72

Fee-for-Service	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Reimbursement per unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
Outpatient - Basic	$ 103.01	2.5386	$ 21.79	$ 95.62	2.5386	$ 20.23	$ 125.09	2.7777	$ 28.95
Outpatient - Family Planning	$ 78.43	0.6478	$ 4.23	$ 72.81	0.6478	$ 3.93	$ 95.24	0.6720	$ 5.33
Outpatient - Hysterectomy	$ 61.94	0.0050	$ 0.03	$ 57.50	0.0050	$ 0.02	$ 75.22	0.0054	$ 0.03
Outpatient - Maternity	$ -	-	$ -	$ -	-	$ -	$ -	-	$ -
Outpatient - Sterilization	$ 124.29	0.1325	$ 1.37	$ 115.38	0.1325	$ 1.27	$ 150.94	0.1450	$ 1.82
Outpatient - Emergency	$ 477.42	0.0003	$ 0.01	$ 443.20	0.0003	$ 0.01	$ 579.76	0.0003	$ 0.01
Outpatient Services Total	$ 99.03	3.3242	$ 27.43	$ 91.94	3.3242	$ 25.47	$ 120.52	3.6004	$ 36.16

Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS data for Medicaid.
All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement per unit or unit cost and divided by 12.
The 2002 Benchmark UPM is equal to the Average Market UPM.
For Inpatient, the 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.2748 for trend and adjusted by -0.7% for program changes.
For Outpatient, the 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.3126 for trend and adjusted by -0.3% for program changes.
For Inpatient, the 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.0849 for trend and adjusted by -1.4% for program changes.
For Outpatient, the 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.0942 for trend and adjusted by -1.0% for program changes.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix E

Benchmark Rates by Service Category — Hospital

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Hospital Services

Managed Care	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Billed per unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
Inpatient - Basic	$ 12,926.76	0.0857	$ 92.33	$ 7,399.80	0.0857	$ 52.85	$ 9,444.05	0.0926	$ 72.91
Inpatient - Family Planning	$ 90.46	0.0000	$ 0.00	$ 51.78	0.0000	$ 0.00	$ 66.43	0.0000	$ 0.00
Inpatient - Hysterectomy	$ 10,131.91	0.0020	$ 1.72	$ 5,799.91	0.0020	$ 0.99	$ 7,440.70	0.0022	$ 1.37
Inpatient - Maternity	$ 4,851.04	0.0410	$ 16.56	$ 2,776.93	0.0410	$ 9.48	$ 3,562.52	0.0443	$ 13.14
Inpatient - Newborn	$ 4,556.72	0.0328	$ 12.47	$ 2,608.45	0.0328	$ 7.14	$ 3,346.38	0.0355	$ 9.90
Inpatient - Sterilization	$ 7,819.22	0.0024	$ 1.55	$ 4,476.03	0.0024	$ 0.89	$ 5,742.30	0.0026	$ 1.23
Inpatient Services Total	$ 9,122.99	0.1639	$ 124.63	$ 5,222.36	0.1639	$ 71.34	$ 6,674.21	0.1772	$ 98.55

Managed Care	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Billed per unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
Outpatient - Basic	$ 351.15	1.8683	$ 54.67	$ 124.14	1.8683	$ 19.33	$ 165.73	2.0392	$ 28.16
Outpatient - Family Planning	$ 245.54	0.5653	$ 11.57	$ 86.80	0.5653	$ 4.09	$ 115.89	0.6170	$ 5.96
Outpatient - Hysterectomy	$ 125.81	0.0028	$ 0.03	$ 44.48	0.0028	$ 0.01	$ 59.38	0.0030	$ 0.01
Outpatient - Maternity	$ 4,533.36	0.0001	$ 0.02	$ 1,602.62	0.0001	$ 0.01	$ 2,139.65	0.0001	$ 0.01
Outpatient - Sterilization	$ 285.53	0.1486	$ 3.53	$ 100.94	0.1486	$ 1.25	$ 134.77	0.1621	$ 1.82
Outpatient - Emergency	$ 2,594.47	0.0011	$ 0.24	$ 917.19	0.0011	$ 0.08	$ 1,224.53	0.0012	$ 0.12
Outpatient Services Total	$ 325.10	2.5861	$ 70.06	$ 114.93	2.5861	$ 24.77	$ 153.44	2.8225	$ 36.09

Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical encounter data for Medicaid.
All per member per month (PMPM) rates are the UPM multiplied by their respective billed per unit or unit cost and divided by 12.
The 2002 Benchmark UPM is equal to the Average Market UPM.
For Inpatient, the 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.2829 for trend and adjusted by -0.4% for program changes.
For Outpatient, the 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.3351 for trend with no adjustment necessary for program changes.
For Inpatient, the 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.0808 for trend and adjusted by 0.019% for program changes.
For Outpatient, the 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.0914 for trend with no adjustment necessary for program changes.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix E

Benchmark Rates by Service Category — Physician

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Physician

Fee-for-Service	Medicaid Market Reimbursement			2002 Benchmark Rates			2006 Cost Benchmark		
Service	Reimbursement per Unit[1]	UPM[2]	PMPM[3]	Unit Cost	UPM[7]	PMPM[3]	Unit Cost[8]	UPM[9]	PMPM[3]
Physician - Office Visits	$ 53.20	2.9430	$ 13.05	$ 79.50	2.9430	$ 19.50	$ 88.62	3.2770	$ 24.20
Physician - Other	$ 42.41	5.1778	$ 18.30	$ 63.37	5.1778	$ 27.34	$ 70.63	5.7924	$ 34.09
Physician - Surgery	$ 113.52	0.5301	$ 5.02	$ 169.63	0.5301	$ 7.49	$ 189.08	0.5923	$ 9.33
Physician - X-ray	$ 23.91	1.4146	$ 2.82	$ 35.74	1.4146	$ 4.21	$ 39.83	1.5805	$ 5.25
Physician - Family Planning	$ 63.12	0.2948	$ 1.55	$ 94.32	0.2948	$ 2.32	$ 105.14	0.3294	$ 2.89
Physician - Hysterectomy	$ 333.00	0.0039	$ 0.11	$ 497.60	0.0039	$ 0.16	$ 554.66	0.0043	$ 0.20
Physician - Maternity	$ 337.08	0.1443	$ 4.05	$ 503.71	0.1443	$ 6.06	$ 561.46	0.1612	$ 7.54
Physician - Newborn	$ 63.08	0.0776	$ 0.41	$ 94.27	0.0776	$ 0.61	$ 105.07	0.0867	$ 0.76
Physician - Sterilization	$ 194.70	0.0067	$ 0.11	$ 290.94	0.0067	$ 0.16	$ 324.30	0.0075	$ 0.20
Physician Total - Medicaid Market Reimbursement	$ 51.44	10.5929	$ 45.41	$ 76.87	10.5929	$ 67.86	$ 85.67	11.8315	$ 84.46
Physician Total - Medicare Market Reimbursement	$ 73.50	13.8717	$ 84.97						
Physician Total - Commercial Market Reimbursement	$ 87.21	5.0311	$ 36.56						
Physician Total - Average Market Reimbursement [4, 5, 6]	$ 77.05	7.0392	$ 45.20						

[1] Market Reimbursement per Service (MRPS) is paid claims divided by units from historical FFS data for Medicaid. This rate is multiplied by 1.43 for Medicare. The Medicare rate is multiplied by 1.19 for Commercial.

[2] Utilization per Member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS data for Medicaid. This rate is multiplied by 1.31 for Medicare. The Medicare rate is multiplied by 0.36 for Commercial.

[3] The Market Reimbursement per Member per Month (PMPM) rates for Medicaid, Medicare, Commercial, and benchmark rates are the respective MRPS rates multiplied by the respective UPM rates and divided by 12.

[4] The Average Market Reimbursement UPM rates are [the Medicaid UPM multiplied by 0.1093 plus the Medicare UPM multiplied by 0.1584 plus the Commercial UPM multiplied by 0.7323].

[5] The Average Market Reimbursement PMPM rates are [the Medicaid PMPM multiplied by 0.1093 plus the Medicare PMPM multiplied by 0.1584 plus the Commercial PMPM multiplied by 0.7323].

[6] The Average Market Reimbursement MRPS is the Average Market Reimbursement PMPM divided by the Average Market Reimbursement UPM and multiplied by 12.

[7] The 2002 Benchmark UPM is equal to the Medicaid Market Reimbursement UPM.

[8] The 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.121 for trend and adjusted by -0.9% for program changes.

[9] The 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.117 for trend and adjusted by -0.03% for program changes.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix E

Benchmark Rates by Service Category — Physician

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Physician

Managed Care	Medicaid Market Reimbursement			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Billed per Unit[1]	UPM[2]	PMPM[3]	Unit Cost	UPM[7]	PMPM[3]	Unit Cost[8]	UPM[9]	PMPM[3]
Physician - Office Visits	$ 55.33	3.73	$ 17.18	$ 76.40	3.73	$ 23.73	$ 86.27	4.15	$ 29.83
Physician - Other	$ 44.10	6.24	$ 22.93	$ 61.15	6.24	$ 31.79	$ 69.05	6.94	$ 39.96
Physician - Surgery	$ 118.06	0.69	$ 6.79	$ 162.63	0.69	$ 9.35	$ 183.63	0.77	$ 11.76
Physician - X-ray	$ 24.87	1.37	$ 2.85	$ 35.08	1.37	$ 4.01	$ 39.61	1.53	$ 5.04
Physician - Family Planning	$ 65.64	0.04	$ 0.22	$ 100.10	0.04	$ 0.34	$ 113.03	0.05	$ 0.43
Physician - Hysterectomy	$ 346.32	0.01	$ 0.15	$ 477.24	0.01	$ 0.20	$ 538.86	0.01	$ 0.25
Physician - Maternity	$ 350.57	0.14	$ 4.15	$ 493.93	0.14	$ 5.85	$ 557.71	0.16	$ 7.35
Physician - Newborn	$ 65.60	0.05	$ 0.29	$ 94.70	0.05	$ 0.42	$ 106.93	0.06	$ 0.53
Physician - Sterilization	$ 202.49	0.01	$ 0.17	$ 274.86	0.01	$ 0.24	$ 310.35	0.01	$ 0.30
Physician Total - Medicaid Market Reimbursement	$ 53.48	12.28	$ 54.73	$ 74.20	12.28	$ 75.93	$ 83.78	13.67	$ 95.44
Physician Total - Medicare Market Reimbursement	$ 76.84	15.26	$ 97.71						
Physician Total - Commercial Market Reimbursement	$ 85.17	5.28	$ 37.48						
Physician Total - Average Market Reimbursement [4, 5, 6]	$ 74.41	7.43	$ 46.04						

[1] Market Billed per Service (MBPS) is equal to the Medicaid FFS MBPS multiplied by 1.04 for the Medicaid managed care MBPS, the Medicare FFS MBPS is multiplied by 1.05 for the Medicare managed care MBPS, and the Commercial FFS MBPS is multiplied by 0.9766 for the Commercial managed care MBPS.

[2] The Utilization per Member (UPM) is units of service divided by member months and multiplied by 12 from historical encounter data for the Medicaid UPM, the Medicare FFS UPM is multiplied by 1.10 for the Medicare managed care UPM, and the Commercial FFS UPM is multiplied by 1.05 for the Commercial managed care UPM.

[3] The Market Billed per Member per Month (PMPM) rates for Medicaid, Medicare, Commercial, and benchmark rates are the respective MBPS rates multiplied by the respective UPM rates and divided by 12.

[4] The Average Market Reimbursement UPM rates are [the Medicaid UPM multiplied by 0.1752 plus the Medicare UPM multiplied by 0.0920 plus the Commercial UPM multiplied by 0.7328].

[5] The Average Market Reimbursement PMPM rates are [the Medicaid PMPM multiplied by 0.1752 plus the Medicare PMPM multiplied by 0.0920 plus the Commercial PMPM multiplied by 0.7328].

[6] The Average Market Reimbursement MBPS is the Average Market Reimbursement PMPM divided by the Average Market Reimbursement UPM and multiplied by 12.

[7] The 2002 Benchmark UPM is equal to the Medicaid Market Reimbursement UPM.

[8] The 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.129 for trend and adjusted by 0.0% for program changes.

[9] The 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.113 for trend with no adjustment necessary for program changes.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix E

Benchmark Rates by Service Category — Prescription Drugs

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Prescription Drugs

Fee-for-Service	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Reimbursement per unit	UPM[1]	PMPM[2]	Reimbursement per Unit[3]	UPM[4]	PMPM[2]	Reimbursement per Unit[5]	UPM[6]	PMPM[2]
Pres Drugs - Outpatient Hospital	$ 50.50	0.4853	$ 2.04	$ 49.66	0.4853	$ 2.01	$ 57.06	0.5792	$ 2.75
Pres Drugs - Retail and Institutional	$ 45.28	19.7235	$ 74.42	$ 44.52	19.7235	$ 73.18	$ 51.05	23.5395	$ 100.15

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement per unit and divided by 12.

[3] The 2002 Benchmark Rate is equal to the Average Market Reimbursement per unit

[4] The 2002 Benchmark UPM is equal to the Average Market UPM.

[5] The 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.2028 for trend and adjusted by -6.3% for program changes.

[6] The 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.2012 for trend and adjusted by -0.6% for program changes.

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Prescription Drugs

Managed Care	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Billed per Unit	UPM[1]	PMPM[2]	Billed per Unit	UPM	PMPM	Billed per Unit	UPM	PMPM
Pres Drugs - Outpatient Hospital	$ 109.38	0.3649	$ 3.33	**No benchmark rates developed for Managed Care**					
Pres Drugs - Retail and Institutional	$ 42.36	16.6034	$ 58.62						

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical encounter data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective billed per unit and divided by 12.

Please see Limitation section for the Prescription Drugs Benchmark

NOTE: Sum of numbers may differ from totals due to rounding

Appendix E

Benchmark Rates by Service Category — Mental Health Services

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Mental Health Services

Fee-for-Service	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Reimbursement per unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
Mental Health Inpatient	$ 244.98	0.1289	$ 2.63	$ 540.47	0.1289	$ 5.81	$ 672.15	0.1407	$ 7.88
Mental Health Outpatient	$ 65.37	1.2260	$ 6.68	$ 90.17	1.2260	$ 9.21	$ 101.11	1.3696	$ 11.54
Mental Health Total	$ 82.46	1.3550	$ 9.31	$ 133.03	1.3550	$ 15.02	$ 154.31	1.5103	$ 19.42

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement per unit or unit cost and divided by 12.

[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

[4] For Mental Health Inpatient, the 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.2447 for trend and adjusted by -0.1% for program changes.
For Mental Health Outpatient, the 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.1295 for trend and adjusted by -1.0% for program changes.

[5] For Mental Health Inpatient, the 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.0913 for trend with no adjustment necessary for program changes.
For Mental Health Outpatient, the 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.1171 for trend with no adjustment necessary for program changes.

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Mental Health Services

Managed Care	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Billed per unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
Mental Health Inpatient	$ 1,184.71	0.0928	$ 9.16	$ 634.94	0.0928	$ 4.91	$ 795.99	0.1009	$ 6.69
Mental Health Outpatient	$ 75.75	3.1069	$ 19.61	$ 49.62	3.1069	$ 12.85	$ 56.64	3.4578	$ 16.32
Mental Health Total	$ 107.91	3.1997	$ 28.77	$ 66.59	3.1997	$ 17.76	$ 77.60	3.5586	$ 23.01

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical encounter data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective billed per unit or unit cost and divided by 12.

[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

[4] For Mental Health Inpatient, the 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.2536 for trend with no adjustment necessary for program changes.
For Mental Health Outpatient, the 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.1415 for trend with no adjustment necessary for program changes.

[5] For Mental Health Inpatient, the 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.0872 for trend with no adjustment necessary for program changes.
For Mental Health Outpatient, the 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.1129 for trend with no adjustment necessary for program changes.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix E

Benchmark Rates by Service Category — Chemical Dependency

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Chemical Dependency

Fee-for-Service	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Reimbursement per unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
Chemical Dependency	$ 39.69	1.6390	$ 5.42	$ 58.14	1.6390	$ 7.94	$ 64.92	1.8310	$ 9.91

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement per unit or unit cost and divided by 12.

[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

[4] The 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.1295 for trend and adjusted by -1.58% for program changes.

[5] The 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.1171 for trend with no adjustment necessary for program changes.

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Chemical Dependency

Managed Care	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Billed per unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
Chemical Dependency	$ 41.39	1.7852	$ 6.16	$ 28.84	1.7852	$ 4.29	$ 32.92	1.9868	$ 5.45

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical encounter data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective billed per unit or unit cost and divided by 12.

[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

[4] The 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.1415 for trend with no adjustment necessary for program changes.

[5] The 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.1129 for trend with no adjustment necessary for program changes.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix E

Benchmark Rates by Service Category — DME/Supply

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for DME/Supply

Fee-for-Service	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Reimbursement per unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
OTH MED - DME	$ 85.64	0.6544	$ 4.67	$ 72.92	0.6544	$ 3.98	$ 77.51	0.6805	$ 4.40
OTH MED - SUPPLIES	$ 0.69	75.3860	$ 4.36	$ 0.79	75.3860	$ 4.96	$ 0.84	78.3969	$ 5.49
DME/Supply Total	$ 1.43	76.0404	$ 9.03	$ 1.41	76.0404	$ 8.94	$ 1.50	79.0774	$ 9.88

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement per unit or unit cost and divided by 12.

[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

[4] The 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.063 for trend with no adjustment necessary for program changes.

[5] The 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.0399 for trend and adjusted by 0.0% for program changes.

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for DME/Supply

Managed Care	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Billed per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
OTH MED - DME	$ 166.91	0.3711	$ 5.16	$ 88.77	0.3711	$ 2.75	$ 94.60	0.3844	$ 3.03
OTH MED - SUPPLIES	$ 1.40	23.5174	$ 2.74	$ 1.15	23.5174	$ 2.26	$ 1.23	24.3636	$ 2.50
DME/Supply Total	$ 3.97	23.8885	$ 7.90	$ 2.52	23.8885	$ 5.01	$ 2.68	24.7480	$ 5.53

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical encounter data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective billed per unit or unit cost and divided by 12.

[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

[4] The 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.0657 for trend and adjusted by 0.0% for program changes.

[5] The 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.036 for trend and adjusted by 0.0% for program changes.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix E

Benchmark Rates by Service Category — Dental

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Dental

Fee-for-Service	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Reimbursement per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
Dental - Adjunctive General	$ 38.81	0.0034	$ 0.01	$ 65.50	0.0034	$ 0.02	$ 75.90	0.0037	$ 0.02
Dental - Anesthesia Surgical	$ 19.50	0.0061	$ 0.01	$ 44.31	0.0061	$ 0.02	$ 51.35	0.0067	$ 0.03
Dental - Diagnostic	$ 17.41	0.1265	$ 0.18	$ 22.59	0.1265	$ 0.24	$ 26.18	0.1375	$ 0.30
Dental - Endodontics	$ 82.74	0.0063	$ 0.04	$ 155.59	0.0063	$ 0.08	$ 180.30	0.0068	$ 0.10
Dental - I/P Fixed*	$ 22.50	0.0000	$ 0.00	$ 24.31	0.0000	$ 0.00	$ 28.17	0.0000	$ 0.00
Dental - Maxillofacial Pros*	$ -	-	$ -	$ -	-	$ -	$ -	-	$ -
Dental - Oral Surgery	$ 53.34	0.0339	$ 0.15	$ 64.51	0.0339	$ 0.18	$ 74.75	0.0368	$ 0.23
Dental - Orthodontics[6*]	$ 900.00	0.0000	$ 0.00	$ -	0.0000	$ -	$ -	0.0000	$ -
Dental - Periodontics	$ 45.09	0.0061	$ 0.02	$ 85.92	0.0061	$ 0.04	$ 99.57	0.0067	$ 0.06
Dental - Preventive	$ 25.16	0.0369	$ 0.08	$ 29.92	0.0369	$ 0.09	$ 34.68	0.0401	$ 0.12
Dental - Pros Removable	$ 125.88	0.0044	$ 0.05	$ 243.64	0.0044	$ 0.09	$ 282.34	0.0047	$ 0.11
Dental - Restorative	$ 41.16	0.0576	$ 0.20	$ 61.42	0.0576	$ 0.29	$ 71.17	0.0626	$ 0.37
Dental - Tobacco Ces*	$ -	0.0001	$ -	$ -	0.0001	$ -	$ -	0.0002	$ -
Dental Total	$ 31.69	0.2813	$ 0.74	$ 45.31	0.2813	$ 1.06	$ 52.51	0.3058	$ 1.34

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement per unit or unit cost and divided by 12.

[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

[4] The 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.1606 for trend and adjusted by -0.2% for program changes.

[5] The 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.087 for trend with no adjustment necessary for program changes.

[6] Orthodontic treatment is tracked differently than other dental services, and is generally not reported on a claims or # of units basis.
Therefore the number of units were not available in the base data we reviewed and hence we show a conversion factor of 0%.
It is also important to note that the roll up data does contain a unit count of "2" for orthodontics. This number is small enough to be considered insignificant for the purposes of this analysis.

* Sub-COS categories that contain fewer than 200 units

NOTE: Sum of numbers may differ from totals due to rounding

Appendix E

Benchmark Rates by Service Category — Dental

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Dental

Managed Care	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Billed per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
Dental - Adjunctive General	$ 74.92	0.0610	$ 0.38	$ 55.62	0.0610	$ 0.28	$ 64.99	0.0661	$ 0.36
Dental - Anesthesia Surgical	$ 66.20	0.0597	$ 0.33	$ 34.90	0.0597	$ 0.17	$ 40.78	0.0646	$ 0.22
Dental - Diagnostic	$ 31.35	1.4696	$ 3.84	$ 23.04	1.4696	$ 2.82	$ 26.93	1.5914	$ 3.57
Dental - Endodontics	$ 215.83	0.0778	$ 1.40	$ 171.50	0.0778	$ 1.11	$ 200.39	0.0843	$ 1.41
Dental - I/P Fixed	$ 197.60	0.0007	$ 0.01	$ 154.38	0.0007	$ 0.01	$ 180.39	0.0008	$ 0.01
Dental - Maxillofacial Pros	$ 0.67	0.0013	$ 0.00	$ 0.23	0.0013	$ 0.00	$ 0.27	0.0014	$ 0.00
Dental - Oral Surgery	$ 101.42	0.3055	$ 2.58	$ 66.46	0.3055	$ 1.69	$ 77.66	0.3309	$ 2.14
Dental - Orthodontics[6*]	$ 430.71	0.0002	$ 0.01	$ 506.96	0.0002	$ 0.01	$ 592.38	0.0002	$ 0.01
Dental - Periodontics	$ 106.32	0.1093	$ 0.97	$ 81.46	0.1093	$ 0.74	$ 95.18	0.1184	$ 0.94
Dental - Preventive	$ 45.62	0.5843	$ 2.22	$ 31.46	0.5843	$ 1.53	$ 36.76	0.6328	$ 1.94
Dental - Pros Removable	$ 382.39	0.0827	$ 2.64	$ 279.21	0.0827	$ 1.92	$ 326.26	0.0896	$ 2.44
Dental - Restorative	$ 89.75	0.7252	$ 5.42	$ 67.10	0.7252	$ 4.06	$ 78.40	0.7854	$ 5.13
Dental - Tobacco Ces	$ 25.66	0.0047	$ 0.01	$ 18.26	0.0047	$ 0.01	$ 21.34	0.0051	$ 0.01
Dental Total[7]	$ 68.27	3.4822	$ 19.81	$ 49.49	3.4822	$ 14.36	$ 57.83	3.7709	$ 18.17

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical encounter data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective billed per unit or unit cost and divided by 12.

[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

[4] The 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.1685 for trend with no adjustment necessary for program changes.

[5] The 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.0829 for trend with no adjustment necessary for program changes.

[6] Orthodontic treatment involves many visits, typically over a period of about 24 months. As a result, services are usually tracked on a "per course of treatment" basis rather than a "by visit" basis. To calculate the average cost/price shown in these exhibits, Mercer used "course of treatment" data and converted it to an annual cost figure, assuming that the average course of treatment will take 24 months to complete.

[7] It is interesting to note that for the managed care program, both the 2002 and 2006 benchmark rates are lower than the 2002 historical data. One explanation would be that it is due to discrepancies in the way that the DCO's report billed charges, relative to the way that commercial carriers report them. For example, it is our understanding that the DCO's utilize a "billed charges" field, which may or may not represent actual paid amounts, depending on the DCO submitting the information. As a result, the value of the historical billed charges data could be inflated, thus overstating actual charges or reimbursement to providers.

* Sub-COS categories that contain fewer than 200 units

NOTE: Sum of numbers may differ from totals due to rounding

Appendix E

Benchmark Rates by Service Category — Other Services

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Other Services

Fee-for-Service	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Reimbursement per unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
Administrative Exams	$ 155.56	0.0534	$ 0.69	$ 232.97	0.0534	$ 1.04	$ 261.14	0.0596	$ 1.30
Home Healthcare/Private Duty Nursing	$ 133.20	0.0624	$ 0.69	$ 166.97	0.0624	$ 0.87	$ 187.85	0.0703	$ 1.10
Hospice	$ 2,380.71	0.0039	$ 0.77	$ 2,677.83	0.0039	$ 0.87	$ 3,012.73	0.0044	$ 1.10
Maternity Management	$ 128.26	0.0681	$ 0.73	$ 192.08	0.0681	$ 1.09	$ 215.30	0.0761	$ 1.37
School-Based Health Services	$ 212.81	0.0853	$ 1.51	$ 318.68	0.0853	$ 2.26	$ 357.22	0.0953	$ 2.84
Targeted Case Management - Babies First	$ 140.32	0.0530	$ 0.62	$ 210.13	0.0530	$ 0.93	$ 235.54	0.0593	$ 1.16
Targeted Case Management - HIV	$ 256.00	0.0005	$ 0.01	$ 383.44	0.0005	$ 0.01	$ 429.77	0.0005	$ 0.02
Targeted Case Management - Substance Abuse Moms	$ 120.00	0.0002	$ 0.00	$ 179.70	0.0002	$ 0.00	$ 201.43	0.0002	$ 0.00
Therapeutic Abortion - Inpatient Hospital	$ 1,486.96	0.0000	$ 0.00	$ 2,240.34	0.0000	$ 0.00	$ 2,854.64	0.0000	$ 0.01
Therapeutic Abortion - Outpatient Hospital	$ 283.69	0.0032	$ 0.08	$ 263.74	0.0032	$ 0.07	$ 346.02	0.0035	$ 0.10
Therapeutic Abortion - Physician	$ 177.15	0.0214	$ 0.32	$ 265.29	0.0214	$ 0.47	$ 297.37	0.0239	$ 0.59
Ambulatory Transportation	$ 102.11	0.2294	$ 1.95	$ 125.25	0.2294	$ 2.39	$ 133.36	0.2529	$ 2.81
Other Transportation	$ 14.64	3.5136	$ 4.29	$ 14.63	3.5136	$ 4.29	$ 15.58	3.8726	$ 5.03
Vision Exams and Therapy	$ 43.05	0.2217	$ 0.80	$ 121.14	0.2217	$ 2.24	$ 129.96	0.2392	$ 2.59
Vision Materials and Fittings	$ 11.66	0.5594	$ 0.54	$ 23.96	0.5594	$ 1.12	$ 25.71	0.6037	$ 1.29
Other Services Total	$ 31.99	4.8754	$ 13.00	$ 43.45	4.8754	$ 17.65	$ 47.69	5.3616	$ 21.31

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement per unit or unit cost and divided by 12.

[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

[4] The 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.098 for trend and adjusted by -0.1% for program changes.

[5] The 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.0997 for trend with no adjustment necessary for program changes.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix E

Benchmark Rates by Service Category — Other Services

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Other Services

Managed Care	2002 Historical Experience			2002 Benchmark Rates			2006 Benchmark Rates		
Service	Billed per unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost[4]	UPM[5]	PMPM[2]
Home Healthcare/Private Duty Nursing	$ 305.75	0.0448	$ 1.14	$ 167.00	0.0448	$ 0.62	$ 191.43	0.0503	$ 0.80
Hospice	$ 1,220.24	0.0048	$ 0.49	$ 1,293.66	0.0048	$ 0.52	$ 1,482.92	0.0054	$ 0.67
Maternity Management	$ 75.71	0.0004	$ 0.00	$ 105.70	0.0004	$ 0.00	$ 118.53	0.0005	$ 0.00
Ambulatory Transportation	$ 427.32	0.1386	$ 4.93	$ 125.27	0.1386	$ 1.45	$ 134.00	0.1522	$ 1.70
Vision Exams and Therapy	$ 68.35	0.3486	$ 1.99	$ 120.02	0.3486	$ 3.49	$ 131.64	0.3752	$ 4.12
Vision Materials and Fittings	$ 23.97	0.7699	$ 1.54	$ 23.97	0.7699	$ 1.54	$ 26.29	0.8287	$ 1.82
Other Services Total	$ 92.67	1.3072	$ 10.09	$ 69.95	1.3072	$ 7.62	$ 77.40	1.4123	$ 9.11

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical encounter data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective billed per unit or unit cost and divided by 12.

[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

[4] The 2006 Benchmark Rate is the 2002 Benchmark Rate multiplied by 1.1065 for trend with no adjustment necessary for program changes.

[5] The 2006 Benchmark UPM is the 2002 Benchmark UPM multiplied by 1.0805 for trend with no adjustment necessary for program changes.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix F

Benchmark Rates by Eligibility Group — Hospital

Oregon Health Plan Benchmark Rates Report - Summary Exhibit for Hospital by Eligibility Category

Fee-for-Service Inpatient			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Category of Aid	Service	Type of Units	Reimbursment per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Hospital	Various	$ 5,658.03	0.3014	$ 142.13	$ 8,526.24	0.3014	$ 214.18	6.3%	2.1%	-0.7%	-1.4%	$ 10,791.66	0.3226	$ 290.13
AB/AD with Medicare	Hospital	Various	$ 169.40	0.2567	$ 3.62	$ 257.56	0.2567	$ 5.51	6.3%	2.1%	-0.7%	-1.4%	$ 325.99	0.2747	$ 7.46
CAWEM	Hospital	Various	$ 2,347.44	0.2314	$ 45.26	$ 3,537.43	0.2314	$ 68.21	6.3%	2.1%	-0.7%	-1.4%	$ 4,477.32	0.2476	$ 92.39
PLM/CHIP/TANF <1	Hospital	Various	$ 2,173.51	1.5980	$ 289.43	$ 3,275.32	1.5980	$ 436.15	6.3%	2.1%	-0.7%	-1.4%	$ 4,145.56	1.7102	$ 590.80
PLM/CHIP/TANF 1-5	Hospital	Various	$ 3,463.65	0.0275	$ 7.93	$ 5,219.47	0.0275	$ 11.94	6.3%	2.1%	-0.7%	-1.4%	$ 6,606.27	0.0294	$ 16.18
PLM/CHIP/TANF 6-18	Hospital	Various	$ 3,593.85	0.0261	$ 7.81	$ 5,415.67	0.0261	$ 11.77	6.3%	2.1%	-0.7%	-1.4%	$ 6,854.60	0.0279	$ 15.94
OAA without Medicare	Hospital	Various	$ 5,471.36	0.2616	$ 119.30	$ 8,244.95	0.2616	$ 179.77	6.3%	2.1%	-0.7%	-1.4%	$ 10,435.62	0.2800	$ 243.51
OAA with Medicare	Hospital	Various	$ 446.48	0.2603	$ 9.68	$ 672.82	0.2603	$ 14.59	6.3%	2.1%	-0.7%	-1.4%	$ 851.58	0.2786	$ 19.77
OHP Adults & Couples	Hospital	Various	$ 5,411.18	0.2132	$ 96.14	$ 8,154.26	0.2132	$ 144.88	6.3%	2.1%	-0.7%	-1.4%	$ 10,320.84	0.2282	$ 196.25
OHP Families	Hospital	Various	$ 4,530.91	0.0981	$ 37.02	$ 6,827.76	0.0981	$ 55.79	6.3%	2.1%	-0.7%	-1.4%	$ 8,641.89	0.1049	$ 75.57
PLM Adults	Hospital	Various	$ 1,907.24	1.0598	$ 168.45	$ 2,874.07	1.0598	$ 253.84	6.3%	2.1%	-0.7%	-1.4%	$ 3,637.71	1.1343	$ 343.84
SCF Children	Hospital	Various	$ 4,348.59	0.0497	$ 17.99	$ 6,553.01	0.0497	$ 27.11	6.3%	2.1%	-0.7%	-1.4%	$ 8,294.14	0.0531	$ 36.73
TANF Adults	Hospital	Various	$ 3,151.06	0.2053	$ 53.92	$ 4,748.42	0.2053	$ 81.25	6.3%	2.1%	-0.7%	-1.4%	$ 6,010.07	0.2197	$ 110.06
Inpatient Total	Hospital	Various	$ 2,771.14	0.2200	$ 50.81	$ 4,175.91	0.2200	$ 76.57	6.3%	2.1%	-0.7%	-1.4%	$ 5,285.41	0.2355	$ 103.72

Fee-for-Service Outpatient			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Category of Aid	Service	Type of Units	Reimbursment per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Hospital	Various	$ 161.10	6.9182	$ 92.88	$ 149.55	6.9182	$ 86.22	7.0%	2.3%	-0.3%	-1.0%	$ 196.05	7.4930	$ 122.41
AB/AD with Medicare	Hospital	Various	$ 30.67	6.1507	$ 15.72	$ 28.47	6.1507	$ 14.59	7.0%	2.3%	-0.3%	-1.0%	$ 37.32	6.6618	$ 20.72
CAWEM	Hospital	Various	$ 160.84	0.2411	$ 3.23	$ 149.31	0.2411	$ 3.00	7.0%	2.3%	-0.3%	-1.0%	$ 195.73	0.2611	$ 4.26
PLM/CHIP/TANF <1	Hospital	Various	$ 74.35	3.4297	$ 21.25	$ 69.02	3.4297	$ 19.73	7.0%	2.3%	-0.3%	-1.0%	$ 90.48	3.7146	$ 28.01
PLM/CHIP/TANF 1-5	Hospital	Various	$ 92.60	1.7700	$ 13.66	$ 85.96	1.7700	$ 12.68	7.0%	2.3%	-0.3%	-1.0%	$ 112.69	1.9171	$ 18.00
PLM/CHIP/TANF 6-18	Hospital	Various	$ 107.30	1.5098	$ 13.50	$ 99.61	1.5098	$ 12.53	7.0%	2.3%	-0.3%	-1.0%	$ 130.57	1.6352	$ 17.79
OAA without Medicare	Hospital	Various	$ 223.69	4.8014	$ 89.50	$ 207.65	4.8014	$ 83.08	7.0%	2.3%	-0.3%	-1.0%	$ 272.21	5.2004	$ 117.97
OAA with Medicare	Hospital	Various	$ 23.68	3.6092	$ 7.12	$ 21.98	3.6092	$ 6.61	7.0%	2.3%	-0.3%	-1.0%	$ 28.82	3.9090	$ 9.39
OHP Adults & Couples	Hospital	Various	$ 120.83	5.5696	$ 56.08	$ 112.16	5.5696	$ 52.06	7.0%	2.3%	-0.3%	-1.0%	$ 147.04	6.0323	$ 73.92
OHP Families	Hospital	Various	$ 113.95	3.5662	$ 33.87	$ 105.78	3.5662	$ 31.44	7.0%	2.3%	-0.3%	-1.0%	$ 138.67	3.8625	$ 44.64
PLM Adults	Hospital	Various	$ 95.82	7.6695	$ 61.24	$ 88.95	7.6695	$ 56.85	7.0%	2.3%	-0.3%	-1.0%	$ 116.61	8.3067	$ 80.72
SCF Children	Hospital	Various	$ 119.15	1.6743	$ 16.62	$ 110.61	1.6743	$ 15.43	7.0%	2.3%	-0.3%	-1.0%	$ 145.00	1.8134	$ 21.91
TANF Adults	Hospital	Various	$ 101.19	5.4652	$ 46.09	$ 93.93	5.4652	$ 42.78	7.0%	2.3%	-0.3%	-1.0%	$ 123.14	5.9193	$ 60.74
Outpatient Total	Hospital	Various	$ 99.03	3.3242	$ 27.43	$ 91.93	3.3242	$ 25.47	7.0%	2.3%	-0.3%	-1.0%	$ 120.52	3.6004	$ 36.16

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement per unit or unit cost and divided by 12.

[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix F

Benchmark Rates by Eligibility Group — Hospital

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Hospital by Eligibility Category

Managed Care Inpatient			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Category of Aid	Service	Type of Units	Billed per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Hospital	Various	$ 14,302.66	0.2417	$ 288.13	$ 8,187.41	0.2417	$ 164.94	6.4%	2.0%	-0.4%	0.0%	$ 10,463.81	0.2613	$ 227.81
AB/AD with Medicare	Hospital	Various	$ 14,335.56	0.1895	$ 226.39	$ 8,206.25	0.1895	$ 129.60	6.4%	2.0%	-0.4%	0.0%	$ 10,487.89	0.2048	$ 178.99
CAWEM	Hospital	Various	$ 6,988.58	0.2021	$ 117.72	$ 4,000.54	0.2021	$ 67.39	6.4%	2.0%	-0.4%	0.0%	$ 5,112.84	0.2184	$ 93.07
PLM/CHIP/TANF <1	Hospital	Various	$ 5,331.65	0.8304	$ 368.94	$ 3,052.05	0.8304	$ 211.20	6.4%	2.0%	-0.4%	0.0%	$ 3,900.63	0.8974	$ 291.70
PLM/CHIP/TANF 1-5	Hospital	Various	$ 8,004.44	0.0227	$ 15.11	$ 4,582.07	0.0227	$ 8.65	6.4%	2.0%	-0.4%	0.0%	$ 5,856.04	0.0245	$ 11.95
PLM/CHIP/TANF 6-18	Hospital	Various	$ 9,362.59	0.0216	$ 16.84	$ 5,359.52	0.0216	$ 9.64	6.4%	2.0%	-0.4%	0.0%	$ 6,849.66	0.0233	$ 13.32
OAA without Medicare	Hospital	Various	$ 14,050.27	0.1926	$ 225.51	$ 8,042.94	0.1926	$ 129.09	6.4%	2.0%	-0.4%	0.0%	$ 10,279.17	0.2081	$ 178.29
OAA with Medicare	Hospital	Various	$ 12,150.01	0.3445	$ 348.82	$ 6,955.15	0.3445	$ 199.68	6.4%	2.0%	-0.4%	0.0%	$ 8,888.93	0.3723	$ 275.79
OHP Adults & Couples	Hospital	Various	$ 12,971.69	0.1257	$ 135.93	$ 7,425.52	0.1257	$ 77.81	6.4%	2.0%	-0.4%	0.0%	$ 9,490.07	0.1359	$ 107.47
OHP Families	Hospital	Various	$ 10,760.97	0.0723	$ 64.82	$ 6,160.01	0.0723	$ 37.10	6.4%	2.0%	-0.4%	0.0%	$ 7,872.71	0.0781	$ 51.25
PLM Adults	Hospital	Various	$ 5,241.86	1.3604	$ 594.26	$ 3,000.65	1.3604	$ 340.18	6.4%	2.0%	-0.4%	0.0%	$ 3,834.93	1.4702	$ 469.85
SCF Children	Hospital	Various	$ 15,233.26	0.0279	$ 35.41	$ 8,720.13	0.0279	$ 20.27	6.4%	2.0%	-0.4%	0.0%	$ 11,144.63	0.0301	$ 28.00
TANF Adults	Hospital	Various	$ 7,347.60	0.2091	$ 128.03	$ 4,206.06	0.2091	$ 73.29	6.4%	2.0%	-0.4%	0.0%	$ 5,375.49	0.2260	$ 101.23
Inpatient Total	Hospital	Various	$ 9,122.99	0.1639	$ 124.63	$ 5,222.36	0.1639	$ 71.34	6.4%	2.0%	-0.4%	0.0%	$ 6,674.21	0.1772	$ 98.55

Managed Care Outpatient			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Category of Aid	Service	Type of Units	Billed per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	UnitCost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Hospital	Various	$ 357.84	5.0092	$ 149.38	$ 126.50	5.0092	$ 52.81	7.5%	2.2%	0.0%	0.0%	$ 168.89	5.4673	$ 76.95
AB/AD with Medicare	Hospital	Various	$ 470.35	3.4711	$ 136.05	$ 166.28	3.4711	$ 48.10	7.5%	2.2%	0.0%	0.0%	$ 221.99	3.7884	$ 70.08
CAWEM	Hospital	Various	$ 291.34	1.4727	$ 35.76	$ 102.99	1.4727	$ 12.64	7.5%	2.2%	0.0%	0.0%	$ 137.50	1.6074	$ 18.42
PLM/CHIP/TANF <1	Hospital	Various	$ 212.35	2.5965	$ 45.95	$ 75.07	2.5965	$ 16.24	7.5%	2.2%	0.0%	0.0%	$ 100.22	2.8339	$ 23.67
PLM/CHIP/TANF 1-5	Hospital	Various	$ 261.81	1.3997	$ 30.54	$ 92.56	1.3997	$ 10.80	7.5%	2.2%	0.0%	0.0%	$ 123.56	1.5277	$ 15.73
PLM/CHIP/TANF 6-18	Hospital	Various	$ 257.04	1.0682	$ 22.88	$ 90.87	1.0682	$ 8.09	7.5%	2.2%	0.0%	0.0%	$ 121.31	1.1659	$ 11.79
OAA without Medicare	Hospital	Various	$ 527.11	3.4491	$ 151.51	$ 186.35	3.4491	$ 53.56	7.5%	2.2%	0.0%	0.0%	$ 248.78	3.7645	$ 78.04
OAA with Medicare	Hospital	Various	$ 458.29	3.2063	$ 122.45	$ 162.02	3.2063	$ 43.29	7.5%	2.2%	0.0%	0.0%	$ 216.30	3.4995	$ 63.08
OHP Adults & Couples	Hospital	Various	$ 338.56	3.5316	$ 99.64	$ 119.69	3.5316	$ 35.22	7.5%	2.2%	0.0%	0.0%	$ 159.78	3.8545	$ 51.32
OHP Families	Hospital	Various	$ 328.56	2.6616	$ 72.88	$ 116.15	2.6616	$ 25.76	7.5%	2.2%	0.0%	0.0%	$ 155.07	2.9050	$ 37.54
PLM Adults	Hospital	Various	$ 248.03	7.1234	$ 147.24	$ 87.68	7.1234	$ 52.05	7.5%	2.2%	0.0%	0.0%	$ 117.06	7.7748	$ 75.84
SCF Children	Hospital	Various	$ 296.80	1.1930	$ 29.51	$ 104.93	1.1930	$ 10.43	7.5%	2.2%	0.0%	0.0%	$ 140.08	1.3021	$ 15.20
TANF Adults	Hospital	Various	$ 305.05	3.9212	$ 99.68	$ 107.84	3.9212	$ 35.24	7.5%	2.2%	0.0%	0.0%	$ 143.97	4.2797	$ 51.35
Outpatient Total	Hospital	Various	$ 325.10	2.5861	$ 70.06	$ 114.93	2.5861	$ 24.77	7.5%	2.2%	0.0%	0.0%	$ 153.43	2.8226	$ 36.09

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical encounter data for Medicaid.
[2] All per member per month (PMPM) rates are the UPM multiplied by their respective billed per unit or unit cost and divided by 12.
[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix F

Benchmark Rates by Eligibility Group — Physician

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Physician by Eligibility Group

Fee-for-Service			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Reimbursment per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Physician	Various	$ 58.99	22.5835	$ 111.02	$ 88.14	22.5835	$ 165.88	2.9%	2.8%	-0.9%	0.0%	$ 98.23	25.2242	$ 206.48
AB/AD with Medicare	Physician	Various	$ 11.29	18.0396	$ 16.97	$ 16.88	18.0396	$ 25.38	2.9%	2.8%	-0.9%	0.0%	$ 18.81	20.1489	$ 31.58
CAWEM	Physician	Various	$ 244.91	0.7215	$ 14.72	$ 365.96	0.7215	$ 22.00	2.9%	2.8%	-0.9%	0.0%	$ 407.85	0.8058	$ 27.39
PLM/CHIP/TANF <1	Physician	Various	$ 51.13	24.4033	$ 103.98	$ 76.40	24.4033	$ 155.37	2.9%	2.8%	-0.9%	0.0%	$ 85.14	27.2568	$ 193.39
PLM/CHIP/TANF 1-5	Physician	Various	$ 54.08	6.1118	$ 27.54	$ 80.81	6.1118	$ 41.16	2.9%	2.8%	-0.9%	0.0%	$ 90.06	6.8264	$ 51.23
PLM/CHIP/TANF 6-18	Physician	Various	$ 66.89	5.1349	$ 28.62	$ 99.95	5.1349	$ 42.77	2.9%	2.8%	-0.9%	0.0%	$ 111.40	5.7353	$ 53.24
OAA without Medicare	Physician	Various	$ 51.69	17.1767	$ 73.99	$ 77.25	17.1767	$ 110.57	2.9%	2.8%	-0.9%	0.0%	$ 86.09	19.1851	$ 137.63
OAA with Medicare	Physician	Various	$ 9.55	11.6965	$ 9.31	$ 14.28	11.6965	$ 13.92	2.9%	2.8%	-0.9%	0.0%	$ 15.91	13.0641	$ 17.32
OHP Adults & Couples	Physician	Various	$ 58.54	15.3607	$ 74.93	$ 87.48	15.3607	$ 111.98	2.9%	2.8%	-0.9%	0.0%	$ 97.50	17.1567	$ 139.39
OHP Families	Physician	Various	$ 54.30	10.0796	$ 45.61	$ 81.14	10.0796	$ 68.15	2.9%	2.8%	-0.9%	0.0%	$ 90.43	11.2582	$ 84.84
PLM Adults	Physician	Various	$ 93.27	21.6015	$ 167.90	$ 139.38	21.6015	$ 250.90	2.9%	2.8%	-0.9%	0.0%	$ 155.33	24.1274	$ 312.30
SCF Children	Physician	Various	$ 63.61	8.5294	$ 45.21	$ 95.05	8.5294	$ 67.56	2.9%	2.8%	-0.9%	0.0%	$ 105.93	9.5267	$ 84.10
TANF Adults	Physician	Various	$ 64.62	13.6233	$ 73.36	$ 96.56	13.6233	$ 109.62	2.9%	2.8%	-0.9%	0.0%	$ 107.62	15.2163	$ 136.46
Physician Total	Physician	Various	$ 51.44	10.5929	$ 45.41	$ 76.87	10.5929	$ 67.85	2.9%	2.8%	-0.9%	0.0%	$ 85.67	11.8315	$ 84.46

Managed Care			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Billed per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Physician	Various	$ 54.45	21.1859	$ 96.13	$ 75.44	21.1859	$ 133.19	3.1%	2.7%	0.0%	0.0%	$ 85.19	23.5827	$ 167.42
AB/AD with Medicare	Physician	Various	$ 54.48	16.2595	$ 73.82	$ 75.48	16.2595	$ 102.27	3.1%	2.7%	0.0%	0.0%	$ 85.22	18.0990	$ 128.53
CAWEM	Physician	Various	$ 59.27	7.5946	$ 37.51	$ 82.34	7.5946	$ 52.11	3.1%	2.7%	0.0%	0.0%	$ 92.98	8.4538	$ 65.50
PLM/CHIP/TANF <1	Physician	Various	$ 44.26	25.5118	$ 94.10	$ 61.39	25.5118	$ 130.51	3.1%	2.7%	0.0%	0.0%	$ 69.32	28.3980	$ 164.05
PLM/CHIP/TANF 1-5	Physician	Various	$ 43.65	7.9285	$ 28.84	$ 60.37	7.9285	$ 39.89	3.1%	2.7%	0.0%	0.0%	$ 68.17	8.8255	$ 50.14
PLM/CHIP/TANF 6-18	Physician	Various	$ 46.39	5.0476	$ 19.51	$ 64.26	5.0476	$ 27.03	3.1%	2.7%	0.0%	0.0%	$ 72.57	5.6187	$ 33.98
OAA without Medicare	Physician	Various	$ 53.46	17.1794	$ 76.53	$ 74.03	17.1794	$ 105.98	3.1%	2.7%	0.0%	0.0%	$ 83.60	19.1230	$ 133.22
OAA with Medicare	Physician	Various	$ 56.80	16.7962	$ 79.50	$ 78.68	16.7962	$ 110.13	3.1%	2.7%	0.0%	0.0%	$ 88.85	18.6964	$ 138.43
OHP Adults & Couples	Physician	Various	$ 53.27	15.2239	$ 67.58	$ 73.79	15.2239	$ 93.61	3.1%	2.7%	0.0%	0.0%	$ 83.32	16.9462	$ 117.66
OHP Families	Physician	Various	$ 50.35	11.9071	$ 49.96	$ 69.82	11.9071	$ 69.28	3.1%	2.7%	0.0%	0.0%	$ 78.83	13.2542	$ 87.07
PLM Adults	Physician	Various	$ 98.74	26.7110	$ 219.79	$ 138.47	26.7110	$ 308.22	3.1%	2.7%	0.0%	0.0%	$ 156.36	29.7329	$ 387.42
SCF Children	Physician	Various	$ 54.07	7.8020	$ 35.15	$ 74.89	7.8020	$ 48.69	3.1%	2.7%	0.0%	0.0%	$ 84.57	8.6846	$ 61.20
TANF Adults	Physician	Various	$ 59.56	14.7632	$ 73.27	$ 82.83	14.7632	$ 101.90	3.1%	2.7%	0.0%	0.0%	$ 93.53	16.4334	$ 128.08
Physician Total	Physician	Various	$ 53.48	12.2807	$ 54.73	$ 74.20	12.2807	$ 75.93	3.1%	2.7%	0.0%	0.0%	$ 83.78	13.6700	$ 95.44

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS/encounter data for Medicaid.
[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement/billed per unit or unit cost and divided by 12.
[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix F

Benchmark Rates by Eligibility Group — Prescription Drug

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Prescription Drugs by Eligibility Group

Fee-for-Service - Outpatient Hospital			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Reimbursment per Unit	UPM[1]	PMPM[2]	Reimbursment per Unit	UPM[3]	PMPM[2]	Reimbursment per Unit	UPM	Reimbursment per Unit	UPM	Reimbursment per Unit	UPM	PMPM[2]
AB/AD without Medicare	Prescription Drugs	Claims	$ 96.98	1.1129	$ 8.99	$ 95.37	1.1129	$ 8.84	4.7%	4.7%	-6.1%	-0.6%	$ 109.58	1.3282	$ 12.13
AB/AD with Medicare	Prescription Drugs	Claims	$ 27.07	0.8642	$ 1.95	$ 26.62	0.8642	$ 1.92	4.7%	4.7%	-6.1%	-0.6%	$ 30.58	1.0314	$ 2.63
CAWEM	Prescription Drugs	Claims	$ 42.64	0.0576	$ 0.20	$ 41.93	0.0576	$ 0.20	4.7%	4.7%	-6.1%	-0.6%	$ 48.18	0.0687	$ 0.28
PLM/CHIP/TANF <1	Prescription Drugs	Claims	$ 27.29	0.4471	$ 1.02	$ 26.84	0.4471	$ 1.00	4.7%	4.7%	-6.1%	-0.6%	$ 30.84	0.5336	$ 1.37
PLM/CHIP/TANF 1-5	Prescription Drugs	Claims	$ 24.94	0.3296	$ 0.68	$ 24.52	0.3296	$ 0.67	4.7%	4.7%	-6.1%	-0.6%	$ 28.18	0.3934	$ 0.92
PLM/CHIP/TANF 6-18	Prescription Drugs	Claims	$ 30.16	0.2138	$ 0.54	$ 29.66	0.2138	$ 0.53	4.7%	4.7%	-6.1%	-0.6%	$ 34.08	0.2552	$ 0.72
OAA without Medicare	Prescription Drugs	Claims	$ 51.70	0.6040	$ 2.60	$ 50.84	0.6040	$ 2.56	4.7%	4.7%	-6.1%	-0.6%	$ 58.42	0.7209	$ 3.51
OAA with Medicare	Prescription Drugs	Claims	$ 10.84	0.3705	$ 0.33	$ 10.66	0.3705	$ 0.33	4.7%	4.7%	-6.1%	-0.6%	$ 12.25	0.4422	$ 0.45
OHP Adults & Couples	Prescription Drugs	Claims	$ 64.61	0.8711	$ 4.69	$ 63.53	0.8711	$ 4.61	4.7%	4.7%	-6.1%	-0.6%	$ 73.00	1.0396	$ 6.32
OHP Families	Prescription Drugs	Claims	$ 54.73	0.5382	$ 2.45	$ 53.82	0.5382	$ 2.41	4.7%	4.7%	-6.1%	-0.6%	$ 61.84	0.6424	$ 3.31
PLM Adults	Prescription Drugs	Claims	$ 38.86	0.8075	$ 2.61	$ 38.21	0.8075	$ 2.57	4.7%	4.7%	-6.1%	-0.6%	$ 43.91	0.9637	$ 3.53
SCF Children	Prescription Drugs	Claims	$ 54.69	0.1769	$ 0.81	$ 53.78	0.1769	$ 0.79	4.7%	4.7%	-6.1%	-0.6%	$ 61.80	0.2112	$ 1.09
TANF Adults	Prescription Drugs	Claims	$ 42.11	0.8420	$ 2.95	$ 41.41	0.8420	$ 2.91	4.7%	4.7%	-6.1%	-0.6%	$ 47.58	1.0049	$ 3.98
TOTAL	Prescription Drugs	Claims	$ 50.50	0.4853	$ 2.04	$ 49.66	0.4853	$ 2.01	4.7%	4.7%	-6.1%	-0.6%	$ 57.06	0.5792	$ 2.75

Fee-for-Service - Retail and Institutional			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Reimbursment per Unit	UPM[1]	PMPM[2]	Reimbursment per Unit	UPM[3]	PMPM[2]	Reimbursment per Unit	UPM	Reimbursment per Unit	UPM	Reimbursment per Unit	UPM	PMPM[2]
AB/AD without Medicare	Prescription Drugs	Scripts	$ 62.17	45.7222	$ 236.88	$ 61.14	45.7222	$ 232.94	4.7%	4.7%	-6.3%	-0.6%	$ 70.10	54.5681	$ 318.79
AB/AD with Medicare	Prescription Drugs	Scripts	$ 59.37	66.3578	$ 328.32	$ 58.38	66.3578	$ 322.86	4.7%	4.7%	-6.3%	-0.6%	$ 66.95	79.1961	$ 441.85
CAWEM	Prescription Drugs	Scripts	$ 25.40	0.0001	$ 0.00	$ 24.98	0.0001	$ 0.00	4.7%	4.7%	-6.3%	-0.6%	$ 28.64	0.0001	$ 0.00
PLM/CHIP/TANF <1	Prescription Drugs	Scripts	$ 25.21	3.8848	$ 8.16	$ 24.79	3.8848	$ 8.03	4.7%	4.7%	-6.3%	-0.6%	$ 28.43	4.6364	$ 10.98
PLM/CHIP/TANF 1-5	Prescription Drugs	Scripts	$ 21.49	2.8857	$ 5.17	$ 21.13	2.8857	$ 5.08	4.7%	4.7%	-6.3%	-0.6%	$ 24.23	3.4440	$ 6.95
PLM/CHIP/TANF 6-18	Prescription Drugs	Scripts	$ 38.16	3.1934	$ 10.16	$ 37.53	3.1934	$ 9.99	4.7%	4.7%	-6.3%	-0.6%	$ 43.03	3.8112	$ 13.67
OAA without Medicare	Prescription Drugs	Scripts	$ 33.99	38.4822	$ 108.99	$ 33.42	38.4822	$ 107.18	4.7%	4.7%	-6.3%	-0.6%	$ 38.33	45.9274	$ 146.68
OAA with Medicare	Prescription Drugs	Scripts	$ 34.57	70.9306	$ 204.33	$ 33.99	70.9306	$ 200.93	4.7%	4.7%	-6.3%	-0.6%	$ 38.98	84.6536	$ 274.98
OHP Adults & Couples	Prescription Drugs	Scripts	$ 43.93	19.0539	$ 69.76	$ 43.20	19.0539	$ 68.60	4.7%	4.7%	-6.3%	-0.6%	$ 49.54	22.7402	$ 93.88
OHP Families	Prescription Drugs	Scripts	$ 39.08	12.1729	$ 39.64	$ 38.43	12.1729	$ 38.98	4.7%	4.7%	-6.3%	-0.6%	$ 44.07	14.5279	$ 53.35
PLM Adults	Prescription Drugs	Scripts	$ 25.64	8.5200	$ 18.21	$ 25.22	8.5200	$ 17.90	4.7%	4.7%	-6.3%	-0.6%	$ 28.92	10.1684	$ 24.50
SCF Children	Prescription Drugs	Scripts	$ 57.94	8.6326	$ 41.68	$ 56.97	8.6326	$ 40.99	4.7%	4.7%	-6.3%	-0.6%	$ 65.33	10.3027	$ 56.09
TANF Adults	Prescription Drugs	Scripts	$ 39.11	15.7471	$ 51.32	$ 38.46	15.7471	$ 50.47	4.7%	4.7%	-6.3%	-0.6%	$ 44.10	18.7937	$ 69.07
TOTAL	Prescription Drugs	Scripts	$ 45.28	19.7235	$ 74.42	$ 44.52	19.7235	$ 73.18	4.7%	4.7%	-6.3%	-0.6%	$ 51.05	23.5395	$ 100.15

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement per unit and divided by 12.

[3] The 2002 Benchmark Rate is equal to the Average Market Reimbursement per unit

Please see Limitation section for the Prescription Drugs Benchmark

NOTE: Sum of numbers may differ from totals due to rounding

Appendix F

Benchmark Rates by Eligibility Group — Prescription Drug

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Prescription Drugs by Eligibility Group

Managed Care - Outpatient Hospital			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Billed per Unit	UPM[1]	PMPM[2]	Billed per Unit	UPM	PMPM	Billed per Unit	UPM	Billed per Unit	UPM	Billed per Unit	UPM	PMPM
AB/AD without Medicare	Prescription Drugs	Claims	$ 166.64	0.6574	$ 9.13										
AB/AD with Medicare	Prescription Drugs	Claims	$ 126.79	0.5360	$ 5.66										
CAWEM	Prescription Drugs	Claims	$ 76.17	0.1733	$ 1.10										
PLM/CHIP/TANF <1	Prescription Drugs	Claims	$ 80.96	0.3421	$ 2.31										
PLM/CHIP/TANF 1-5	Prescription Drugs	Claims	$ 56.05	0.2574	$ 1.20										
PLM/CHIP/TANF 6-18	Prescription Drugs	Claims	$ 74.84	0.1540	$ 0.96	**No benchmark rates developed for Managed Care**									
OAA without Medicare	Prescription Drugs	Claims	$ 263.67	0.3543	$ 7.78										
OAA with Medicare	Prescription Drugs	Claims	$ 170.91	0.3965	$ 5.65										
OHP Adults & Couples	Prescription Drugs	Claims	$ 114.06	0.4860	$ 4.62										
OHP Families	Prescription Drugs	Claims	$ 112.49	0.3647	$ 3.42										
PLM Adults	Prescription Drugs	Claims	$ 87.29	0.7741	$ 5.63										
SCF Children	Prescription Drugs	Claims	$ 95.61	0.1391	$ 1.11										
TANF Adults	Prescription Drugs	Claims	$ 88.31	0.6032	$ 4.44										
TOTAL	Prescription Drugs	Claims	$ 109.38	0.3649	$ 3.33										

Managed Care - Retail and Institutional			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Billed per Unit	UPM[1]	PMPM[2]	Billed per Unit	UPM	PMPM	Billed per Unit	UPM	Billed per Unit	UPM	Billed per Unit	UPM	PMPM
AB/AD without Medicare	Prescription Drugs	Scripts	$ 52.11	44.0984	$ 191.51										
AB/AD with Medicare	Prescription Drugs	Scripts	$ 56.08	58.5036	$ 273.39										
CAWEM	Prescription Drugs	Scripts	$ 21.81	3.3810	$ 6.14										
PLM/CHIP/TANF <1	Prescription Drugs	Scripts	$ 16.50	4.6915	$ 6.45										
PLM/CHIP/TANF 1-5	Prescription Drugs	Scripts	$ 18.12	3.5071	$ 5.30										
PLM/CHIP/TANF 6-18	Prescription Drugs	Scripts	$ 32.27	3.5266	$ 9.48	**No benchmark rates developed for Managed Care**									
OAA without Medicare	Prescription Drugs	Scripts	$ 32.89	31.1742	$ 85.44										
OAA with Medicare	Prescription Drugs	Scripts	$ 32.94	60.0407	$ 164.79										
OHP Adults & Couples	Prescription Drugs	Scripts	$ 40.38	20.1623	$ 67.85										
OHP Families	Prescription Drugs	Scripts	$ 36.66	13.5744	$ 41.47										
PLM Adults	Prescription Drugs	Scripts	$ 22.92	10.9441	$ 20.91										
SCF Children	Prescription Drugs	Scripts	$ 51.48	8.5261	$ 36.58										
TANF Adults	Prescription Drugs	Scripts	$ 34.98	16.4407	$ 47.93										
TOTAL	Prescription Drugs	Scripts	$ 42.36	16.6034	$ 58.62										

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical encounter data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective billed per unit and divided by 12.

Please see Limitation section for the Prescription Drugs Benchmark

NOTE: Sum of numbers may differ from totals due to rounding

Appendix F

Benchmark Rates by Eligibility Group — Mental Health

Oregon Health Plan Benchmark Rates Report - Summary Exhibit for Mental Health by Eligibility Group

Fee-for-Service Inpatient			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Reimbursement per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Mental Health	Various	$ 237.34	0.6146	$ 12.16	$ 523.63	0.6146	$ 26.82	5.6%	2.2%	-0.1%	0.0%	$ 651.20	0.6707	$ 36.40
AB/AD with Medicare	Mental Health	Various	$ 34.50	0.6175	$ 1.78	$ 76.11	0.6175	$ 3.92	5.6%	2.2%	-0.1%	0.0%	$ 94.65	0.6739	$ 5.32
CAWEM	Mental Health	Various	$ 239.63	0.0070	$ 0.14	$ 528.69	0.0070	$ 0.31	5.6%	2.2%	-0.1%	0.0%	$ 657.49	0.0077	$ 0.42
PLM/CHIP/TANF <1	Mental Health	Various	$ 502.52	0.0014	$ 0.06	$ 1,108.67	0.0014	$ 0.13	5.6%	2.2%	-0.1%	0.0%	$ 1,378.76	0.0016	$ 0.18
PLM/CHIP/TANF 1-5	Mental Health	Various	$ 721.74	0.0009	$ 0.05	$ 1,592.32	0.0009	$ 0.12	5.6%	2.2%	-0.1%	0.0%	$ 1,980.24	0.0010	$ 0.16
PLM/CHIP/TANF 6-18	Mental Health	Various	$ 279.71	0.0677	$ 1.58	$ 617.10	0.0677	$ 3.48	5.6%	2.2%	-0.1%	0.0%	$ 767.44	0.0739	$ 4.73
OAA without Medicare	Mental Health	Various	$ 1,071.36	0.0272	$ 2.43	$ 2,363.65	0.0272	$ 5.37	5.6%	2.2%	-0.1%	0.0%	$ 2,939.49	0.0297	$ 7.28
OAA with Medicare	Mental Health	Various	$ 15.34	0.0747	$ 0.10	$ 33.85	0.0747	$ 0.21	5.6%	2.2%	-0.1%	0.0%	$ 42.10	0.0815	$ 0.29
OHP Adults & Couples	Mental Health	Various	$ 279.14	0.3024	$ 7.03	$ 615.84	0.3024	$ 15.52	5.6%	2.2%	-0.1%	0.0%	$ 765.87	0.3300	$ 21.06
OHP Families	Mental Health	Various	$ 333.95	0.0695	$ 1.93	$ 736.76	0.0695	$ 4.27	5.6%	2.2%	-0.1%	0.0%	$ 916.26	0.0758	$ 5.79
PLM Adults	Mental Health	Various	$ 430.17	0.0219	$ 0.79	$ 949.05	0.0219	$ 1.74	5.6%	2.2%	-0.1%	0.0%	$ 1,180.26	0.0239	$ 2.35
SCF Children	Mental Health	Various	$ 295.52	0.3873	$ 9.54	$ 651.98	0.3873	$ 21.04	5.6%	2.2%	-0.1%	0.0%	$ 810.82	0.4226	$ 28.55
TANF Adults	Mental Health	Various	$ 272.83	0.0785	$ 1.79	$ 601.92	0.0785	$ 3.94	5.6%	2.2%	-0.1%	0.0%	$ 748.56	0.0857	$ 5.35
Mental Health Inpatient Total	Mental Health	Various	$ 244.98	0.1289	$ 2.63	$ 540.47	0.1289	$ 5.81	5.6%	2.2%	-0.1%	0.0%	$ 672.15	0.1407	$ 7.88

Fee-for-Service Outpatient			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Reimbursement per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Mental Health	Various	$ 58.63	7.4906	$ 36.59	$ 80.87	7.4906	$ 50.48	3.1%	2.8%	-1.0%	0.0%	$ 90.68	8.3678	$ 63.23
AB/AD with Medicare	Mental Health	Various	$ 50.85	11.5396	$ 48.90	$ 70.14	11.5396	$ 67.45	3.1%	2.8%	-1.0%	0.0%	$ 78.65	12.8909	$ 84.49
CAWEM	Mental Health	Various	$ 41.35	0.0027	$ 0.01	$ 57.04	0.0027	$ 0.01	3.1%	2.8%	-1.0%	0.0%	$ 63.95	0.0030	$ 0.02
PLM/CHIP/TANF <1	Mental Health	Various	$ 32.05	0.0047	$ 0.01	$ 44.22	0.0047	$ 0.02	3.1%	2.8%	-1.0%	0.0%	$ 49.58	0.0053	$ 0.02
PLM/CHIP/TANF 1-5	Mental Health	Various	$ 61.54	0.1949	$ 1.00	$ 84.89	0.1949	$ 1.38	3.1%	2.8%	-1.0%	0.0%	$ 95.19	0.2178	$ 1.73
PLM/CHIP/TANF 6-18	Mental Health	Various	$ 70.18	0.7973	$ 4.66	$ 96.80	0.7973	$ 6.43	3.1%	2.8%	-1.0%	0.0%	$ 108.54	0.8907	$ 8.06
OAA without Medicare	Mental Health	Various	$ 39.77	0.4540	$ 1.50	$ 54.86	0.4540	$ 2.08	3.1%	2.8%	-1.0%	0.0%	$ 61.52	0.5072	$ 2.60
OAA with Medicare	Mental Health	Various	$ 70.75	0.4168	$ 2.46	$ 97.59	0.4168	$ 3.39	3.1%	2.8%	-1.0%	0.0%	$ 109.42	0.4656	$ 4.25
OHP Adults & Couples	Mental Health	Various	$ 63.95	1.8335	$ 9.77	$ 88.21	1.8335	$ 13.48	3.1%	2.8%	-1.0%	0.0%	$ 98.91	2.0482	$ 16.88
OHP Families	Mental Health	Various	$ 67.67	0.6158	$ 3.47	$ 93.34	0.6158	$ 4.79	3.1%	2.8%	-1.0%	0.0%	$ 104.66	0.6879	$ 6.00
PLM Adults	Mental Health	Various	$ 67.48	0.2197	$ 1.24	$ 93.08	0.2197	$ 1.70	3.1%	2.8%	-1.0%	0.0%	$ 104.37	0.2454	$ 2.13
SCF Children	Mental Health	Various	$ 92.60	5.1129	$ 39.45	$ 127.73	5.1129	$ 54.42	3.1%	2.8%	-1.0%	0.0%	$ 143.22	5.7116	$ 68.17
TANF Adults	Mental Health	Various	$ 71.36	0.9603	$ 5.71	$ 98.44	0.9603	$ 7.88	3.1%	2.8%	-1.0%	0.0%	$ 110.38	1.0728	$ 9.87
Mental Health Outpatient Total	Mental Health	Various	$ 65.37	1.2260	$ 6.68	$ 90.17	1.2260	$ 9.21	3.1%	2.8%	-1.0%	0.0%	$ 101.11	1.3696	$ 11.54

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS data for Medicaid.
[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement per unit or unit cost and divided by 12.
[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix F

Benchmark Rates by Eligibility Group — Mental Health

Oregon Health Plan Benchmark Rates Report - Summary Exhibit for Mental Health by Eligibility Group

Managed Care Inpatient			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Billed per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Mental Health	Various	$ 1,149.23	0.3750	$ 35.91	$ 615.93	0.3750	$ 19.25	5.8%	2.1%	0.0%	0.0%	$ 772.15	0.4077	$ 26.23
AB/AD with Medicare	Mental Health	Various	$ 1,202.76	0.3401	$ 34.09	$ 644.62	0.3401	$ 18.27	5.8%	2.1%	0.0%	0.0%	$ 808.11	0.3697	$ 24.90
CAWEM	Mental Health	Various	$ -	-	$ -	$ -	-	$ -	5.8%	2.1%	0.0%	0.0%	$ -	-	$ -
PLM/CHIP/TANF <1	Mental Health	Various	$ 2,134.18	0.0001	$ 0.02	$ 1,143.80	0.0001	$ 0.01	5.8%	2.1%	0.0%	0.0%	$ 1,433.91	0.0001	$ 0.02
PLM/CHIP/TANF 1-5	Mental Health	Various	$ 1,528.75	0.0005	$ 0.07	$ 819.33	0.0005	$ 0.04	5.8%	2.1%	0.0%	0.0%	$ 1,027.14	0.0006	$ 0.05
PLM/CHIP/TANF 6-18	Mental Health	Various	$ 1,288.98	0.0289	$ 3.11	$ 690.83	0.0289	$ 1.67	5.8%	2.1%	0.0%	0.0%	$ 866.04	0.0315	$ 2.27
OAA without Medicare	Mental Health	Various	$ 4,151.35	0.0029	$ 1.00	$ 2,224.91	0.0029	$ 0.54	5.8%	2.1%	0.0%	0.0%	$ 2,789.21	0.0031	$ 0.73
OAA with Medicare	Mental Health	Various	$ 1,220.37	0.0695	$ 7.07	$ 654.05	0.0695	$ 3.79	5.8%	2.1%	0.0%	0.0%	$ 819.94	0.0756	$ 5.16
OHP Adults & Couples	Mental Health	Various	$ 1,154.77	0.1187	$ 11.42	$ 618.89	0.1187	$ 6.12	5.8%	2.1%	0.0%	0.0%	$ 775.87	0.1290	$ 8.34
OHP Families	Mental Health	Various	$ 1,172.69	0.0363	$ 3.55	$ 628.50	0.0363	$ 1.90	5.8%	2.1%	0.0%	0.0%	$ 787.91	0.0395	$ 2.59
PLM Adults	Mental Health	Various	$ 1,391.99	0.0074	$ 0.85	$ 746.03	0.0074	$ 0.46	5.8%	2.1%	0.0%	0.0%	$ 935.25	0.0080	$ 0.62
SCF Children	Mental Health	Various	$ 1,218.43	0.1225	$ 12.44	$ 653.01	0.1225	$ 6.67	5.8%	2.1%	0.0%	0.0%	$ 818.64	0.1332	$ 9.09
TANF Adults	Mental Health	Various	$ 1,269.18	0.0441	$ 4.67	$ 680.22	0.0441	$ 2.50	5.8%	2.1%	0.0%	0.0%	$ 852.74	0.0480	$ 3.41
Mental Health Inpatient Total	Mental Health	Various	$ 1,184.71	0.0928	$ 9.16	$ 634.94	0.0928	$ 4.91	5.8%	2.1%	0.0%	0.0%	$ 795.99	0.1009	$ 6.69

Managed Care Outpatient			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Billed per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Mental Health	Various	$ 69.72	10.7594	$ 62.51	$ 45.67	10.7594	$ 40.95	3.4%	2.7%	0.0%	0.0%	$ 52.13	11.9744	$ 52.02
AB/AD with Medicare	Mental Health	Various	$ 64.70	12.2031	$ 65.79	$ 42.38	12.2031	$ 43.10	3.4%	2.7%	0.0%	0.0%	$ 48.38	13.5812	$ 54.75
CAWEM	Mental Health	Various	$ 88.37	1.2590	$ 9.27	$ 57.88	1.2590	$ 6.07	3.4%	2.7%	0.0%	0.0%	$ 66.08	1.4012	$ 7.72
PLM/CHIP/TANF <1	Mental Health	Various	$ 85.57	0.0042	$ 0.03	$ 56.06	0.0042	$ 0.02	3.4%	2.7%	0.0%	0.0%	$ 63.99	0.0047	$ 0.02
PLM/CHIP/TANF 1-5	Mental Health	Various	$ 75.95	0.3638	$ 2.30	$ 49.75	0.3638	$ 1.51	3.4%	2.7%	0.0%	0.0%	$ 56.79	0.4049	$ 1.92
PLM/CHIP/TANF 6-18	Mental Health	Various	$ 84.39	1.4980	$ 10.53	$ 55.28	1.4980	$ 6.90	3.4%	2.7%	0.0%	0.0%	$ 63.10	1.6672	$ 8.77
OAA without Medicare	Mental Health	Various	$ 56.80	1.0259	$ 4.86	$ 37.21	1.0259	$ 3.18	3.4%	2.7%	0.0%	0.0%	$ 42.47	1.1417	$ 4.04
OAA with Medicare	Mental Health	Various	$ 67.50	1.1491	$ 6.46	$ 44.22	1.1491	$ 4.23	3.4%	2.7%	0.0%	0.0%	$ 50.47	1.2788	$ 5.38
OHP Adults & Couples	Mental Health	Various	$ 82.90	2.4369	$ 16.83	$ 54.30	2.4369	$ 11.03	3.4%	2.7%	0.0%	0.0%	$ 61.99	2.7121	$ 14.01
OHP Families	Mental Health	Various	$ 89.76	0.9872	$ 7.38	$ 58.80	0.9872	$ 4.84	3.4%	2.7%	0.0%	0.0%	$ 67.12	1.0987	$ 6.15
PLM Adults	Mental Health	Various	$ 92.35	0.5259	$ 4.05	$ 60.49	0.5259	$ 2.65	3.4%	2.7%	0.0%	0.0%	$ 69.05	0.5853	$ 3.37
SCF Children	Mental Health	Various	$ 96.40	9.8381	$ 79.04	$ 63.15	9.8381	$ 51.77	3.4%	2.7%	0.0%	0.0%	$ 72.09	10.9490	$ 65.77
TANF Adults	Mental Health	Various	$ 84.86	2.1062	$ 14.89	$ 55.59	2.1062	$ 9.76	3.4%	2.7%	0.0%	0.0%	$ 63.46	2.3441	$ 12.40
Mental Health Outpatient Total	Mental Health	Various	$ 75.75	3.1069	$ 19.61	$ 49.62	3.1069	$ 12.85	3.4%	2.7%	0.0%	0.0%	$ 56.64	3.4578	$ 16.32

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical encounter data for Medicaid.

[2] All per member per month (PMPM) rates are the UPM multiplied by their respective billed per unit or unit cost and divided by 12.

[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix F

Benchmark Rates by Eligibility Group — Chemical Dependency

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Chemical Dependency by Eligibility Group

Fee-for-Service			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Reimbursement per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Chemical Dependency	Various	$ 29.49	3.2165	$ 7.91	$ 43.20	3.2165	$ 11.58	3.1%	2.8%	-1.6%	0.0%	$ 48.24	3.5931	$ 14.45
AB/AD with Medicare	Chemical Dependency	Various	$ 29.17	1.7570	$ 4.27	$ 42.73	1.7570	$ 6.26	3.1%	2.8%	-1.6%	0.0%	$ 47.71	1.9628	$ 7.80
CAWEM	Chemical Dependency	Various	$ 50.35	0.0015	$ 0.01	$ 73.75	0.0015	$ 0.01	3.1%	2.8%	-1.6%	0.0%	$ 82.36	0.0017	$ 0.01
PLM/CHIP/TANF <1	Chemical Dependency	Various	$ 61.84	0.0021	$ 0.01	$ 90.59	0.0021	$ 0.02	3.1%	2.8%	-1.6%	0.0%	$ 101.15	0.0023	$ 0.02
PLM/CHIP/TANF 1-5	Chemical Dependency	Various	$ 61.84	0.0006	$ 0.00	$ 90.59	0.0006	$ 0.00	3.1%	2.8%	-1.6%	0.0%	$ 101.15	0.0007	$ 0.01
PLM/CHIP/TANF 6-18	Chemical Dependency	Various	$ 58.62	0.3212	$ 1.57	$ 85.86	0.3212	$ 2.30	3.1%	2.8%	-1.6%	0.0%	$ 95.88	0.3588	$ 2.87
OAA without Medicare	Chemical Dependency	Various	$ 38.26	0.0167	$ 0.05	$ 56.04	0.0167	$ 0.08	3.1%	2.8%	-1.6%	0.0%	$ 62.58	0.0187	$ 0.10
OAA with Medicare	Chemical Dependency	Various	$ 42.27	0.0215	$ 0.08	$ 61.92	0.0215	$ 0.11	3.1%	2.8%	-1.6%	0.0%	$ 69.15	0.0240	$ 0.14
OHP Adults & Couples	Chemical Dependency	Various	$ 40.94	7.2545	$ 24.75	$ 59.98	7.2545	$ 36.26	3.1%	2.8%	-1.6%	0.0%	$ 66.97	8.1040	$ 45.23
OHP Families	Chemical Dependency	Various	$ 36.63	2.1221	$ 6.48	$ 53.65	2.1221	$ 9.49	3.1%	2.8%	-1.6%	0.0%	$ 59.91	2.3706	$ 11.83
PLM Adults	Chemical Dependency	Various	$ 39.97	0.9884	$ 3.29	$ 58.54	0.9884	$ 4.82	3.1%	2.8%	-1.6%	0.0%	$ 65.37	1.1041	$ 6.01
SCF Children	Chemical Dependency	Various	$ 50.34	3.0827	$ 12.93	$ 73.74	3.0827	$ 18.94	3.1%	2.8%	-1.6%	0.0%	$ 82.34	3.4437	$ 23.63
TANF Adults	Chemical Dependency	Various	$ 42.01	3.9665	$ 13.89	$ 61.53	3.9665	$ 20.34	3.1%	2.8%	-1.6%	0.0%	$ 68.71	4.4310	$ 25.37
Chemical Dependency Total	Chemical Dependency	Various	$ 39.69	1.6390	$ 5.42	$ 58.14	1.6390	$ 7.94	3.1%	2.8%	-1.6%	0.0%	$ 64.92	1.8310	$ 9.91

Managed Care			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Billed per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Chemical Dependency	Various	$ 34.26	3.1195	$ 8.91	$ 23.87	3.1195	$ 6.21	3.4%	2.7%	0.0%	0.0%	$ 27.25	3.4718	$ 7.88
AB/AD with Medicare	Chemical Dependency	Various	$ 43.00	1.2210	$ 4.38	$ 29.96	1.2210	$ 3.05	3.4%	2.7%	0.0%	0.0%	$ 34.20	1.3589	$ 3.87
CAWEM	Chemical Dependency	Various	$ 46.92	0.5266	$ 2.06	$ 32.69	0.5266	$ 1.43	3.4%	2.7%	0.0%	0.0%	$ 37.31	0.5861	$ 1.82
PLM/CHIP/TANF <1	Chemical Dependency	Various	$ -	-	$ -	$ -	-	$ -	3.4%	2.7%	0.0%	0.0%	$ -	-	$ -
PLM/CHIP/TANF 1-5	Chemical Dependency	Various	$ 85.97	0.0003	$ 0.00	$ 59.90	0.0003	$ 0.00	3.4%	2.7%	0.0%	0.0%	$ 68.38	0.0003	$ 0.00
PLM/CHIP/TANF 6-18	Chemical Dependency	Various	$ 55.43	0.2514	$ 1.16	$ 38.62	0.2514	$ 0.81	3.4%	2.7%	0.0%	0.0%	$ 44.09	0.2798	$ 1.03
OAA without Medicare	Chemical Dependency	Various	$ 71.09	0.0406	$ 0.24	$ 49.53	0.0406	$ 0.17	3.4%	2.7%	0.0%	0.0%	$ 56.54	0.0452	$ 0.21
OAA with Medicare	Chemical Dependency	Various	$ 49.04	0.0755	$ 0.31	$ 34.17	0.0755	$ 0.22	3.4%	2.7%	0.0%	0.0%	$ 39.00	0.0841	$ 0.27
OHP Adults & Couples	Chemical Dependency	Various	$ 41.55	6.5976	$ 22.84	$ 28.95	6.5976	$ 15.91	3.4%	2.7%	0.0%	0.0%	$ 33.04	7.3426	$ 20.22
OHP Families	Chemical Dependency	Various	$ 39.53	1.8758	$ 6.18	$ 27.54	1.8758	$ 4.30	3.4%	2.7%	0.0%	0.0%	$ 31.44	2.0876	$ 5.47
PLM Adults	Chemical Dependency	Various	$ 47.51	1.0301	$ 4.08	$ 33.10	1.0301	$ 2.84	3.4%	2.7%	0.0%	0.0%	$ 37.79	1.1465	$ 3.61
SCF Children	Chemical Dependency	Various	$ 52.86	1.0406	$ 4.58	$ 36.83	1.0406	$ 3.19	3.4%	2.7%	0.0%	0.0%	$ 42.04	1.1581	$ 4.06
TANF Adults	Chemical Dependency	Various	$ 43.88	3.3427	$ 12.22	$ 30.57	3.3427	$ 8.52	3.4%	2.7%	0.0%	0.0%	$ 34.90	3.7202	$ 10.82
Chemical Dependency Total	Chemical Dependency	Various	$ 41.39	1.7852	$ 6.16	$ 28.84	1.7852	$ 4.29	3.4%	2.7%	0.0%	0.0%	$ 32.92	1.9868	$ 5.45

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS/encounter data for Medicaid.
[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement/billed per unit or unit cost and divided by 12.
[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix F

Benchmark Rates by Eligibility Group — DME/Supply

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for DME/Supply by Eligibility Group

Fee-for-Service			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Reimbursement per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	DME/Supplies	Various	$ 2.32	291.7173	$ 56.49	$ 2.09	291.7173	$ 50.69	1.5%	1.0%	0.0%	0.0%	$ 2.22	303.3685	$ 56.03
AB/AD with Medicare	DME/Supplies	Various	$ 0.91	327.8803	$ 24.79	$ 0.70	327.8803	$ 19.22	1.5%	1.0%	0.0%	0.0%	$ 0.75	340.9759	$ 21.25
CAWEM	DME/Supplies	Various	$ 31.81	0.0031	$ 0.01	$ 258.41	0.0031	$ 0.07	1.5%	1.0%	0.0%	0.0%	$ 274.68	0.0032	$ 0.07
PLM/CHIP/TANF <1	DME/Supplies	Various	$ 8.59	4.1058	$ 2.94	$ 6.52	4.1058	$ 2.23	1.5%	1.0%	0.0%	0.0%	$ 6.93	4.2697	$ 2.47
PLM/CHIP/TANF 1-5	DME/Supplies	Various	$ 3.57	2.2001	$ 0.66	$ 2.76	2.2001	$ 0.51	1.5%	1.0%	0.0%	0.0%	$ 2.93	2.2879	$ 0.56
PLM/CHIP/TANF 6-18	DME/Supplies	Various	$ 3.51	1.8677	$ 0.55	$ 4.43	1.8677	$ 0.69	1.5%	1.0%	0.0%	0.0%	$ 4.71	1.9423	$ 0.76
OAA without Medicare	DME/Supplies	Various	$ 1.47	163.8059	$ 20.08	$ 1.39	163.8059	$ 18.97	1.5%	1.0%	0.0%	0.0%	$ 1.48	170.3483	$ 20.97
OAA with Medicare	DME/Supplies	Various	$ 0.90	332.9208	$ 24.88	$ 1.11	332.9208	$ 30.67	1.5%	1.0%	0.0%	0.0%	$ 1.18	346.2177	$ 33.90
OHP Adults & Couples	DME/Supplies	Various	$ 5.17	8.4421	$ 3.64	$ 5.52	8.4421	$ 3.88	1.5%	1.0%	0.0%	0.0%	$ 5.86	8.7792	$ 4.29
OHP Families	DME/Supplies	Various	$ 5.16	3.7624	$ 1.62	$ 5.78	3.7624	$ 1.81	1.5%	1.0%	0.0%	0.0%	$ 6.15	3.9127	$ 2.00
PLM Adults	DME/Supplies	Various	$ 7.12	3.8724	$ 2.30	$ 8.60	3.8724	$ 2.77	1.5%	1.0%	0.0%	0.0%	$ 9.14	4.0270	$ 3.07
SCF Children	DME/Supplies	Various	$ 1.87	29.4305	$ 4.59	$ 1.59	29.4305	$ 3.91	1.5%	1.0%	0.0%	0.0%	$ 1.70	30.6060	$ 4.32
TANF Adults	DME/Supplies	Various	$ 5.28	4.7623	$ 2.10	$ 6.44	4.7623	$ 2.56	1.5%	1.0%	0.0%	0.0%	$ 6.84	4.9525	$ 2.82
TOTAL	DME/Supplies	Various	$ 1.43	76.0404	$ 9.03	$ 1.41	76.0404	$ 8.94	1.5%	1.0%	0.0%	0.0%	$ 1.50	79.0774	$ 9.88

Managed Care			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Billed per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	DME/Supplies	Various	$ 3.85	106.1356	$ 34.02	$ 3.58	106.1356	$ 31.70	1.6%	0.9%	0.0%	0.0%	$ 3.82	109.9545	$ 35.00
AB/AD with Medicare	DME/Supplies	Various	$ 3.29	119.0290	$ 32.64	$ 0.45	119.0290	$ 4.45	1.6%	0.9%	0.0%	0.0%	$ 0.48	123.3118	$ 4.91
CAWEM	DME/Supplies	Various	$ -	-	$ -	$ -	-	$ -	0.0%	0.0%	0.0%	0.0%	$ -	-	$ -
PLM/CHIP/TANF <1	DME/Supplies	Various	$ 20.73	1.7437	$ 3.01	$ 21.83	1.7437	$ 3.17	1.6%	0.9%	0.0%	0.0%	$ 23.27	1.8064	$ 3.50
PLM/CHIP/TANF 1-5	DME/Supplies	Various	$ 7.04	1.4248	$ 0.84	$ 3.50	1.4248	$ 0.41	1.6%	0.9%	0.0%	0.0%	$ 3.72	1.4760	$ 0.46
PLM/CHIP/TANF 6-18	DME/Supplies	Various	$ 10.22	0.7355	$ 0.63	$ 19.44	0.7355	$ 1.19	1.6%	0.9%	0.0%	0.0%	$ 20.71	0.7619	$ 1.32
OAA without Medicare	DME/Supplies	Various	$ 3.03	74.6150	$ 18.86	$ 2.22	74.6150	$ 13.78	1.6%	0.9%	0.0%	0.0%	$ 2.36	77.2997	$ 15.21
OAA with Medicare	DME/Supplies	Various	$ 2.97	153.7272	$ 38.07	$ 0.59	153.7272	$ 7.57	1.6%	0.9%	0.0%	0.0%	$ 0.63	159.2585	$ 8.36
OHP Adults & Couples	DME/Supplies	Various	$ 15.48	3.5907	$ 4.63	$ 14.86	3.5907	$ 4.45	1.6%	0.9%	0.0%	0.0%	$ 15.83	3.7199	$ 4.91
OHP Families	DME/Supplies	Various	$ 19.00	1.3288	$ 2.10	$ 16.35	1.3288	$ 1.81	1.6%	0.9%	0.0%	0.0%	$ 17.42	1.3766	$ 2.00
PLM Adults	DME/Supplies	Various	$ 11.58	1.2191	$ 1.18	$ 14.78	1.2191	$ 1.50	1.6%	0.9%	0.0%	0.0%	$ 15.76	1.2630	$ 1.66
SCF Children	DME/Supplies	Various	$ 2.49	12.6185	$ 2.61	$ 1.67	12.6185	$ 1.76	1.6%	0.9%	0.0%	0.0%	$ 1.78	13.0725	$ 1.94
TANF Adults	DME/Supplies	Various	$ 14.45	2.2192	$ 2.67	$ 12.26	2.2192	$ 2.27	1.6%	0.9%	0.0%	0.0%	$ 13.06	2.2990	$ 2.50
TOTAL	DME/Supplies	Various	$ 3.97	23.8885	$ 7.90	$ 2.52	23.8885	$ 5.01	1.6%	0.9%	0.0%	0.0%	$ 2.68	24.7480	$ 5.53

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS/encounter data for Medicaid.
[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement/billed per unit or unit cost and divided by 12.
[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix F

Benchmark Rates by Eligibility Group — Dental

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Dental by Eligibility Group

Fee-for-Service			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Reimbursement per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Dental	Various	$ 32.87	0.4987	$ 1.37	$ 44.62	0.4987	$ 1.85	3.8%	2.1%	-0.2%	0.0%	$ 51.71	0.5420	$ 2.34
AB/AD with Medicare	Dental	Various	$ 37.05	0.3128	$ 0.97	$ 56.52	0.3128	$ 1.47	3.8%	2.1%	-0.2%	0.0%	$ 65.50	0.3400	$ 1.86
CAWEM	Dental	Various	$ -	-	$ -	$ -	-	$ -	0.0%	0.0%	0.0%	0.0%	$ -	-	$ -
PLM/CHIP/TANF <1	Dental	Various	$ 46.67	0.0029	$ 0.01	$ 54.92	0.0029	$ 0.01	3.8%	2.1%	-0.2%	0.0%	$ 63.64	0.0032	$ 0.02
PLM/CHIP/TANF 1-5	Dental	Various	$ 29.04	0.2675	$ 0.65	$ 40.35	0.2675	$ 0.90	3.8%	2.1%	-0.2%	0.0%	$ 46.76	0.2908	$ 1.13
PLM/CHIP/TANF 6-18	Dental	Various	$ 26.61	0.3860	$ 0.86	$ 35.25	0.3860	$ 1.13	3.8%	2.1%	-0.2%	0.0%	$ 40.85	0.4196	$ 1.43
OAA without Medicare	Dental	Various	$ 36.22	0.1353	$ 0.41	$ 48.52	0.1353	$ 0.55	3.8%	2.1%	-0.2%	0.0%	$ 56.23	0.1471	$ 0.69
OAA with Medicare	Dental	Various	$ 56.70	0.1075	$ 0.51	$ 82.63	0.1075	$ 0.74	3.8%	2.1%	-0.2%	0.0%	$ 95.76	0.1169	$ 0.93
OHP Adults & Couples	Dental	Various	$ 35.32	0.5535	$ 1.63	$ 54.07	0.5535	$ 2.49	3.8%	2.1%	-0.2%	0.0%	$ 62.66	0.6017	$ 3.14
OHP Families	Dental	Various	$ 33.06	0.4876	$ 1.34	$ 50.76	0.4876	$ 2.06	3.8%	2.1%	-0.2%	0.0%	$ 58.82	0.5301	$ 2.60
PLM Adults	Dental	Various	$ 35.86	0.1595	$ 0.48	$ 49.03	0.1595	$ 0.65	3.8%	2.1%	-0.2%	0.0%	$ 56.82	0.1733	$ 0.82
SCF Children	Dental	Various	$ 26.27	0.6326	$ 1.39	$ 35.13	0.6326	$ 1.85	3.8%	2.1%	-0.2%	0.0%	$ 40.70	0.6877	$ 2.33
TANF Adults	Dental	Various	$ 35.38	0.3712	$ 1.09	$ 48.83	0.3712	$ 1.51	3.8%	2.1%	-0.2%	0.0%	$ 56.58	0.4035	$ 1.90
Dental Total	Dental	Various	$ 31.69	0.2813	$ 0.74	$ 45.31	0.2813	$ 1.06	3.8%	2.1%	-0.2%	0.0%	$ 52.51	0.3058	$ 1.34

Managed Care			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Billed per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Dental	Various	$ 80.37	3.2740	$ 21.93	$ 55.31	3.2740	$ 15.09	4.0%	2.0%	0.0%	0.0%	$ 64.63	3.5455	$ 19.10
AB/AD with Medicare	Dental	Various	$ 80.10	3.6982	$ 24.69	$ 58.70	3.6982	$ 18.09	4.0%	2.0%	0.0%	0.0%	$ 68.59	4.0048	$ 22.89
CAWEM	Dental	Various	$ 65.61	3.4127	$ 18.66	$ 53.16	3.4127	$ 15.12	4.0%	2.0%	0.0%	0.0%	$ 62.12	3.6957	$ 19.13
PLM/CHIP/TANF <1	Dental	Various	$ 43.20	0.0218	$ 0.08	$ 31.36	0.0218	$ 0.06	4.0%	2.0%	0.0%	0.0%	$ 36.64	0.0236	$ 0.07
PLM/CHIP/TANF 1-5	Dental	Various	$ 59.18	2.6265	$ 12.95	$ 38.78	2.6265	$ 8.49	4.0%	2.0%	0.0%	0.0%	$ 45.31	2.8443	$ 10.74
PLM/CHIP/TANF 6-18	Dental	Various	$ 50.89	4.0743	$ 17.28	$ 35.67	4.0743	$ 12.11	4.0%	2.0%	0.0%	0.0%	$ 41.68	4.4121	$ 15.32
OAA without Medicare	Dental	Various	$ 92.96	2.9607	$ 22.93	$ 79.41	2.9607	$ 19.59	4.0%	2.0%	0.0%	0.0%	$ 92.79	3.2062	$ 24.79
OAA with Medicare	Dental	Various	$ 95.11	1.9769	$ 15.67	$ 73.65	1.9769	$ 12.13	4.0%	2.0%	0.0%	0.0%	$ 86.06	2.1408	$ 15.35
OHP Adults & Couples	Dental	Various	$ 82.61	4.7384	$ 32.62	$ 63.28	4.7384	$ 24.99	4.0%	2.0%	0.0%	0.0%	$ 73.94	5.1313	$ 31.62
OHP Families	Dental	Various	$ 74.72	4.5058	$ 28.05	$ 56.67	4.5058	$ 21.28	4.0%	2.0%	0.0%	0.0%	$ 66.22	4.8794	$ 26.93
PLM Adults	Dental	Various	$ 62.93	2.7986	$ 14.68	$ 46.96	2.7986	$ 10.95	4.0%	2.0%	0.0%	0.0%	$ 54.87	3.0306	$ 13.86
SCF Children	Dental	Various	$ 50.61	3.9523	$ 16.67	$ 37.31	3.9523	$ 12.29	4.0%	2.0%	0.0%	0.0%	$ 43.60	4.2800	$ 15.55
TANF Adults	Dental	Various	$ 77.14	3.8553	$ 24.78	$ 55.27	3.8553	$ 17.76	4.0%	2.0%	0.0%	0.0%	$ 64.58	4.1749	$ 22.47
Dental Total	Dental	Various	$ 68.27	3.4822	$ 19.81	$ 49.49	3.4822	$ 14.36	4.0%	2.0%	0.0%	0.0%	$ 57.83	3.7709	$ 18.17

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS/encounter data for Medicaid.
[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement/billed per unit or unit cost and divided by 12.
[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix F

Benchmark Rates by Eligibility Group — Other Services

Oregon Health Plan Benchmark Rates Report — Summary Exhibit for Other Services by Eligibility Group

Fee-for-Service			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Reimbursement per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Other Services	Various	$ 41.79	15.6569	$ 54.53	$ 56.76	15.6569	$ 74.06	2.4%	2.4%	-0.07%	0.00%	$ 62.30	17.2180	$ 89.39
AB/AD with Medicare	Other Services	Various	$ 16.72	18.3424	$ 25.56	$ 22.71	18.3424	$ 34.72	2.4%	2.4%	-0.07%	0.00%	$ 24.93	20.1712	$ 41.90
CAWEM	Other Services	Various	$ 186.61	0.0438	$ 0.68	$ 253.45	0.0438	$ 0.92	2.4%	2.4%	-0.07%	0.00%	$ 278.16	0.0481	$ 1.12
PLM/CHIP/TANF <1	Other Services	Various	$ 134.17	1.2845	$ 14.36	$ 182.22	1.2845	$ 19.50	2.4%	2.4%	-0.07%	0.00%	$ 199.98	1.4125	$ 23.54
PLM/CHIP/TANF 1-5	Other Services	Various	$ 86.42	0.5151	$ 3.71	$ 117.37	0.5151	$ 5.04	2.4%	2.4%	-0.07%	0.00%	$ 128.81	0.5665	$ 6.08
PLM/CHIP/TANF 6-18	Other Services	Various	$ 41.08	1.2322	$ 4.22	$ 55.79	1.2322	$ 5.73	2.4%	2.4%	-0.07%	0.00%	$ 61.23	1.3551	$ 6.91
OAA without Medicare	Other Services	Various	$ 31.81	7.4276	$ 19.69	$ 43.21	7.4276	$ 26.74	2.4%	2.4%	-0.07%	0.00%	$ 47.42	8.1682	$ 32.28
OAA with Medicare	Other Services	Various	$ 17.68	8.3922	$ 12.37	$ 24.01	8.3922	$ 16.79	2.4%	2.4%	-0.07%	0.00%	$ 26.36	9.2289	$ 20.27
OHP Adults & Couples	Other Services	Various	$ 26.45	7.4858	$ 16.50	$ 35.92	7.4858	$ 22.41	2.4%	2.4%	-0.07%	0.00%	$ 39.42	8.2322	$ 27.04
OHP Families	Other Services	Various	$ 33.55	2.1372	$ 5.98	$ 45.57	2.1372	$ 8.12	2.4%	2.4%	-0.07%	0.00%	$ 50.01	2.3502	$ 9.80
PLM Adults	Other Services	Various	$ 89.51	4.2800	$ 31.92	$ 121.57	4.2800	$ 43.36	2.4%	2.4%	-0.07%	0.00%	$ 133.42	4.7067	$ 52.33
SCF Children	Other Services	Various	$ 64.96	2.9837	$ 16.15	$ 88.22	2.9837	$ 21.94	2.4%	2.4%	-0.07%	0.00%	$ 96.82	3.2812	$ 26.47
TANF Adults	Other Services	Various	$ 36.82	4.3823	$ 13.45	$ 50.01	4.3823	$ 18.26	2.4%	2.4%	-0.07%	0.00%	$ 54.88	4.8193	$ 22.04
Other Total	Other Services	Various	$ 31.99	4.8754	$ 13.00	$ 43.45	4.8754	$ 17.65	2.4%	2.4%	-0.07%	0.00%	$ 47.69	5.3616	$ 21.31

Managed Care			2002 Historical Experience			2002 Benchmark Rates			Trend		Program Changes		2006 Benchmark Rates		
Eligibility Group	Service	Type of Units	Billed Per Unit	UPM[1]	PMPM[2]	Unit Cost	UPM[3]	PMPM[2]	Unit Cost	UPM	Unit Cost	UPM	Unit Cost	UPM	PMPM[2]
AB/AD without Medicare	Other Services	Various	$ 165.77	2.0519	$ 28.35	$ 125.13	2.0519	$ 21.40	2.6%	2.0%	0.00%	0.00%	$ 138.45	2.2170	$ 25.58
AB/AD with Medicare	Other Services	Various	$ 105.36	1.7312	$ 15.20	$ 79.53	1.7312	$ 11.47	2.6%	2.0%	0.00%	0.00%	$ 88.00	1.8705	$ 13.72
CAWEM	Other Services	Various	$ 45.05	0.9818	$ 3.69	$ 34.00	0.9818	$ 2.78	2.6%	2.0%	0.00%	0.00%	$ 37.62	1.0608	$ 3.33
PLM/CHIP/TANF <1	Other Services	Various	$ 683.80	0.1765	$ 10.06	$ 516.17	0.1765	$ 7.59	2.6%	2.0%	0.00%	0.00%	$ 571.13	0.1907	$ 9.08
PLM/CHIP/TANF 1-5	Other Services	Various	$ 126.64	0.2348	$ 2.48	$ 95.59	0.2348	$ 1.87	2.6%	2.0%	0.00%	0.00%	$ 105.77	0.2537	$ 2.24
PLM/CHIP/TANF 6-18	Other Services	Various	$ 48.17	1.1483	$ 4.61	$ 36.36	1.1483	$ 3.48	2.6%	2.0%	0.00%	0.00%	$ 40.23	1.2407	$ 4.16
OAA without Medicare	Other Services	Various	$ 139.01	1.9834	$ 22.98	$ 104.93	1.9834	$ 17.34	2.6%	2.0%	0.00%	0.00%	$ 116.10	2.1430	$ 20.73
OAA with Medicare	Other Services	Various	$ 144.88	1.9980	$ 24.12	$ 109.36	1.9980	$ 18.21	2.6%	2.0%	0.00%	0.00%	$ 121.01	2.1587	$ 21.77
OHP Adults & Couples	Other Services	Various	$ 76.24	2.0986	$ 13.33	$ 57.55	2.0986	$ 10.06	2.6%	2.0%	0.00%	0.00%	$ 63.68	2.2674	$ 12.03
OHP Families	Other Services	Various	$ 53.82	1.7216	$ 7.72	$ 40.62	1.7216	$ 5.83	2.6%	2.0%	0.00%	0.00%	$ 44.95	1.8601	$ 6.97
PLM Adults	Other Services	Various	$ 99.74	1.3950	$ 11.59	$ 75.29	1.3950	$ 8.75	2.6%	2.0%	0.00%	0.00%	$ 83.31	1.5072	$ 10.46
SCF Children	Other Services	Various	$ 57.63	1.1591	$ 5.57	$ 43.50	1.1591	$ 4.20	2.6%	2.0%	0.00%	0.00%	$ 48.13	1.2524	$ 5.02
TANF Adults	Other Services	Various	$ 76.72	1.4380	$ 9.19	$ 57.92	1.4380	$ 6.94	2.6%	2.0%	0.00%	0.00%	$ 64.08	1.5537	$ 8.30
Other Total	Other Services	Various	$ 92.67	1.3072	$ 10.09	$ 69.95	1.3072	$ 7.62	2.6%	2.0%	0.00%	0.00%	$ 77.40	1.4123	$ 9.11

[1] Utilization per member (UPM) is units of service divided by member months and multiplied by 12 from historical FFS/encounter data for Medicaid.
[2] All per member per month (PMPM) rates are the UPM multiplied by their respective reimbursement/billed per unit or unit cost and divided by 12.
[3] The 2002 Benchmark UPM is equal to the Average Market UPM.

NOTE: Sum of numbers may differ from totals due to rounding

Appendix G

Glossary

Term	Definition
AAC (Actual Acquisition Cost)	The retailer's cost to buy drugs (from wholesalers). This is the final cost of the drug to the pharmacy after all discounts are subtracted.
AB/AD (Aid to Blind /Aid to Disabled)	Medicaid population consisting of blind and disabled individuals. Eligibility is also determined by income as a percent of the FPL.
AWP (Average Wholesale Price)	A price of prescription drugs, which is supposed to represent the average price at which wholesalers sell drugs to pharmacies and other providers. The AWP is published by commercial publishers of drug pricing data and is based on information provided by manufacturers.
Capitation	The payment per capita for a defined package of services. A specific amount per member is paid to managed care plans, providers, or organizations of providers regardless of the quantity of services provided.
CAWEM (Citizen Alien Waived Emergency Medical)	A population that does not qualify for Medicaid based on their alien status. This population receives a limited set of services, restricted to emergency situations, which includes labor and delivery.
CMS (Centers for Medicare & Medicaid Services)	The federal agency that oversees and partially finances state Medicaid programs.
CPI (Consumer Price Index)	Demographic publication established by the Bureau of Labor Statistics. Contains estimates of increase in costs for selected services.
CPT (Current Procedural Terminology)	A medical codeset of physician and other services, maintained and copyrighted by the American Medical Association (AMA), and adopted by the Secretary of HHS as the standard for reporting physician and other services on standard transactions.
DME (Durable Medical Equipment)	Equipment which can stand repeated use and is used for medical purposes.
DRG (Diagnostic Related Group)	The classification of patients into clinically cohesive groups that demonstrate similar consumption of hospital resources and length of stay patterns.
DRI (Data Resources, Incorporated)	Often associated with trend measurement studies.
DSH (Disproportionate Share Hospital)	Funds allocated to hospitals with a larger amount of indigent patients.
FPL (Federal Poverty Level)	A national benchmark of poverty status based on income level that is maintained by CMS.
FFS (Fee-for-Service)	Traditional provider reimbursement in which provider is paid according to the service performed. This is the reimbursement system used by conventional indemnity insurers.

Appendix G

Glossary

Term	Definition
FFSE (Fee-for-Service Equivalent)	Equivalent program costs for a future period if services are rendered on a FFS basis to eligible recipients.
FUL (Federal Upper Limit)	Payments for multiple source drugs identified and listed must not exceed, in the aggregate, payment levels determined by applying to each drug entity a reasonable dispensing fee, plus an amount based on the limit per unit which CMS has determined to be equal to 150 percent applied to the lowest price listed (in package sizes of 100 units, unless otherwise noted) in any of the published compendia of cost information of drugs.
GCN (Generic Code Number)	Sequence number assigned to generic drugs where the number represents a generic formulation that is made up of identical chemical, strength, form, and route of administration.
GME (Graduate Medical Education)	Funds allocated to teaching hospitals.
HCFA (Health Care Financing Administration)	The federal agency that oversees and partially finances state Medicaid programs. This agency was renamed the Centers for Medicare and Medicaid Services.
HCPCS (Healthcare Common Procedure Coding System)	A system that provides for a uniform method for health care providers and medical suppliers to report professional services, procedures, and supplies. The system includes three levels for reporting: 1 — CPT; 2 — HCPCS/National Codes; and 3 — Local Codes.
IBNR (Incurred But Not Reported)	The estimated cost of claims that must be paid in future accounting periods for claims that occur during the current accounting period.
IME (Indirect Medical Education)	An additional payment for a Medicare discharge to reflect higher patient care costs for teaching hospitals relative to non-teaching hospitals.
MAC (Maximum Allowable Cost or Charge)	A list of prescriptions where the reimbursement will be based on the cost of the generic product.
Managed Care	An array of cost-containment/quality assurance techniques, such as full or partial capitation to providers, explicit standards for selecting participating providers preadmission certification, or other forms of utilization management designed to reduce the inappropriate use of health care services and to improve overall quality of care. Includes HMOs, PPOs, POS, and PCCM programs.

Appendix G

Glossary

Term	Definition
Medicare Cost Reports	Filings from hospitals and certain other facilities presenting their costs according to Provider Reimbursement Manual (HIM-15) guidelines.
Member Months	A count which records one member month for each month the member is eligible for Medicaid services.
MMIS (Medicaid Management Information System)	The state's required mechanized claims processing and information retrieval system.
MSIS (Medicaid Statistical Information System)	The detailed national database of program information capable of supporting a broad range of analytic and user needs. Made up of eligibility and paid claims information supplied by states through their MMIS.
NDC (National Drug Code)	The national classification system for identifying prescription drugs.
OAA (Old Age Assistance)	Medicaid population consisting of individuals over age 65. Eligibility is also determined by income as a percent of the FPL.
OHP (Oregon Health Plan)	The Oregon Medicaid Demonstration programs, consisting of the OHP Plus and OHP Standard populations (See PLM below).
PLM (Poverty Level Medical)	Medicaid population consisting of pregnant women and children. Eligibility is also determined by income as a percent of the FPL. Oregon also has expanded eligibility to parents and adults/couples that exceed the basic income guidelines. This expansion population (OHP Standard, see above) receives a more restrictive benefit package.
PMPM (Per Member Per Month)	A cost measurement related to each enrollee for each month of eligibility.
QMB (Qualified Medicare Beneficiaries)	A person whose income falls below 100% of FPL guidelines, for whom the state must pay the Medicare Part B premiums, deductibles, and copayments.
RBRVS (Resource-Based Relative Value Scale)	A financing mechanism originating with Medicare that reimburses providers on a classification system that measures training and skill required to perform a given health care service.
SCHIP (State Children's Health Insurance Program)	Title XXI of the Supplemental Security Act. Appropriation of $21 billion to cover health costs for children, 200% FPL or 50 percentage points above state's current FPL level. State matches funds by using enhanced matching rate and state determines criteria of eligibility.

Appendix G

Glossary

Term	Definition
SCF (Services for Children and Families)	Medicaid population consisting of children age 18 and younger (some up to age 21) who are in the legal custody of the Department of Human Services and placed outside their parental home.
TANF (Temporary Aid to Needy Families)	Medicaid population consisting of single parent families with children and two-parent families when the primary wage earner is unemployed. Eligibility is also determined by income as a percent of the FPL.
Trend	The adjustment for medical inflation from a historical period to a more recent/future period (usually stated in an annual number).

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