

Technical Appendix

Information for a Healthy Oregon: Statewide Report on Health Quality



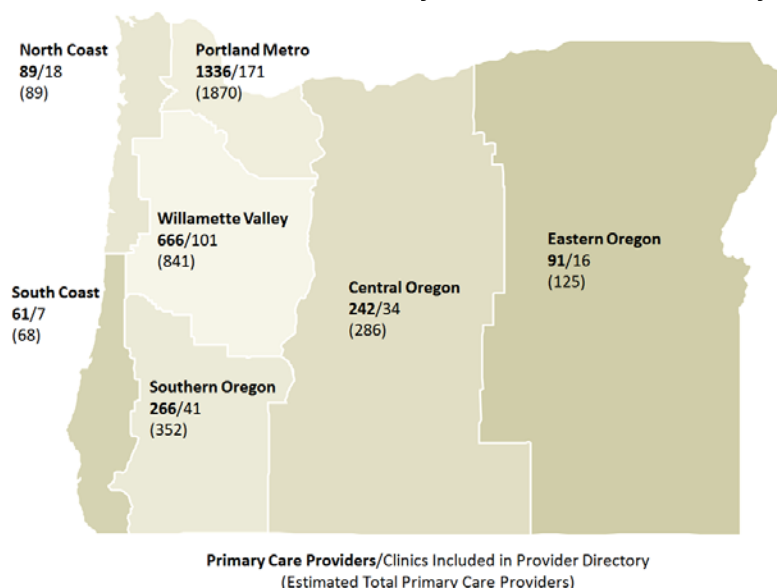
Information for a Healthy Oregon
A project of the Oregon Health Care Quality Corporation

FEBRUARY 2011

This appendix supplements *Partner for Quality Care's* "Information for a Healthy Oregon: Statewide Report on Health Care Quality," which includes information about primary care performance by Oregon medical groups and clinics. The report is based on *Partner for Quality Care's* third round of measurement, based on the collection and aggregation of administrative (billing) claims data for a measurement year of April 1, 2009 – March 31, 2010.

Partner for Quality Care maintains a comprehensive practitioner directory that is used to attribute patients from claims data to the appropriate primary care provider for purposes of measurement and reporting. The practitioner directory includes information for 2,571 practitioners (physicians, nurse practitioners and physicians assistants) in 388 primary care clinics throughout Oregon. This represents about 75 percent of practicing primary care practitioners in the state. The primary care clinics are practice sites for 141 medical groups, ranging in size from one to 42 clinics. To be included in this report, clinics must have at least four primary care practitioners and at least 25 patients appropriate for inclusion in a measure (e.g., for a diabetes measure, a clinic must have at least 25 patients between 18 and 75 years old that meet the measure definition of "diabetic"). For additional information on inclusion specifications for each measure, see Table 9 at the end of this appendix.

**Map: Geographic Distribution of Clinics and Primary Care Providers
Included in *Partner for Quality Care* Provider Directory**



Population Characteristics

Clinics

Partner for Quality Care works with medical groups to maintain an Oregon practitioner directory that includes a roster of physicians, nurse practitioners and physician assistants and maps them to the clinics and medical groups where they practice. This medical group-supplied information is used to link practitioners to the appropriate clinic(s) to create clinic-level and medical group-level results.

In this initiative, a *clinic* is defined as a doorway or place with a physical address that patients identify as where they receive care. Only clinics with four or more primary care practitioners (family practice, internal medicine and pediatrics) are included in public reports. Smaller clinics may receive reports to review privately and can opt in to public reporting. (Note: The term *doctor's office* is used in place of the term *clinic* on the public website for easier consumer understanding.)

Roughly half (51 percent) of the clinics in *Partner for Quality Care's* practitioner directory are located outside the Portland Metro region. The number of clinics in each region is given in Table 1.

Table 1: Clinic Locations by Region

Region	Number of Reported Clinics	Percent of All Reported Clinics
Central Oregon	34	9
Eastern Oregon	16	4
North Coast	18	5
Portland Metro	171	44
South Coast	7	2
Southern Oregon	41	11
Willamette Valley	101	26
Total	388	100

Practitioners

Partner for Quality Care engages in a multi-faceted measurement approach to include recommendations, expertise and feedback from practicing physicians, nurses and medical group administrators with a focus on improving the initiative and ultimately patient care. Many of the measurement and reporting methods are based on initial work by the Clinical Work Group and continuing work by the Measurement and Reporting Team, composed of practicing physicians, physician leaders, nurse leaders, health plan analysts and administrators, purchasers and consumers. Physicians and other primary care practitioners are represented at all levels of decision-making and include representation from these professional organizations:

- Oregon Medical Association
- Oregon Academy of Family Physicians
- Oregon Chapter of the American College of Physicians
- Medical Society of Metropolitan Portland
- Oregon Pediatric Society
- Children’s Health Foundation
- As well as many medical groups and independent practice associations (IPAs)

Quality reports were expanded to include measures on pediatric care during the April 1, 2010 – March 31, 2011 (current) measurement year. As a result, many pediatricians are receiving reports for the first time since *Partner for Quality Care* began in 2007. Table 2 provides a breakdown of specialties for providers in the practitioner directory this reporting round.

Table 2: Practitioner Types in Clinics

Practitioner Type	Percent of Total Practitioners
Adult primary care physician	63.7
Nurse practitioner or physician assistant	22.4
Pediatrician	13.9

Patients

The data set for the current measurement period (January 1, 2007 – March 31, 2010) consists of aggregated administrative claims from ten of Oregon’s largest health plans and Medicaid. The data include over 188.57 million billing claims, representing care for 1.86 million patients who were members of at least one participating health plan. Of the 1.86 million patients, approximately 31 percent were members of more than one plan.

Despite the large number of patients in the data, some practitioners and clinics may notice only a small number of patients in their measure calculations. In the aggregation process, patients were “lost” because only patients who were continuously enrolled in participating health plans and/or Medicaid with no more than a 45-day gap during the measure look-back period were counted. For example, 77 percent of patients met the continuous enrollment criteria for measures with a one year look-back period (i.e. diabetes measures), while only 52 percent of patients met the continuous enrollment criteria for the cervical cancer screening measure, which has a three year look-back. Additionally, some patients were not included in the measures because 1) their condition may not have been coded in a claim, 2) they are not members of a participating health plan or 3) they don’t meet the strict inclusion criteria for a particular condition. The effect of these issues is even more striking when examining data from a single plan.

Table 3 gives a breakdown of patient insurance types for the current measurement period.

Table 3: Partner for Quality Care Round 3 Product Line Summary

	Oregon Total Health Insurance Enrollment 2009*	Partner for Quality Care Member Months as of March 31, 2010	% of State Total
Commercial—All lines	1,798,000	1,437,992	80.0
Medicare—Total	602,000	140,597**	23.4
Medicaid—Total (includes managed care and fee-for-service)	475,000	287,587	60.5
Medicaid FFS	85,015	129,449***	100+

*Oregon data derived from Department of Consumer & Business Services' *Health Insurance in Oregon*, Jan 2011

< http://insurance.oregon.gov/health_report/3458-health_report-2011.pdf> and Oregon Health Plan managed care and FFS enrollment data for March 2010 <http://www.oregon.gov/DHS/healthplan/data_pubs/enrollment/2010/1003/fchp1003.pdf>

**Partner for Quality Care receives only Medicare Advantage from selected plans

***Partner for Quality Care Medicaid FFS enrollment is based on the number of member months on March 31, 2010

Measures

Information for a Healthy Oregon presents performance information for specific primary care recommendations (measures) for diabetes care, women's preventive health care, other chronic conditions (asthma, depression and heart disease), pediatric care and utilization. The measures are calculated using administrative claims sent by medical groups to health plans for payment. Claims data tell us that a medical test was billed, but not its value or outcome. Additional information can be derived from claims data, such as emergency room visits, hospitalizations and prescription fills. The results reflect whether practitioners within clinics recommend care and whether patients follow through with recommendations.

Accreditation

The Measurement and Reporting Team studies measurement issues and makes recommendations to the Oregon Health Care Quality Corporation (Quality Corp) Board of Directors. (*Partner for Quality Care* is a project of the nonprofit Quality Corp). The Team identified the principles for measure selection and the first set of Oregon measures. Additional measures on utilization and pediatric care were introduced in 2010, raising the total number of reported measures from 11 to 20. To ensure measures adhere to national standards set by the National Quality Forum (NQF), the Team has primarily chosen Healthcare Effectiveness Data and Information Set (HEDIS) measures, a subset of measures endorsed by the NQF and the Institute of Medicine. These measures are part of the national Ambulatory Quality Alliance Starter Set and are the most widely-used set for ambulatory care. HEDIS measures of care are used by health plans and communities to describe achievement on many important dimensions of health care and service.

Only a handful of the measures in this report deviate from HEDIS. First is the set of four generic drug use measures, which have been used and are reported by the Puget Sound Health Alliance in Washington State. These measures represent *Partner for Quality Care's* expanding interest in measuring resource use and utilization, and will likely become part of the resource use reports that are currently under development. The only additional non-HEDIS measure gives the percentage of children who received five or more well-child visits during the first 15 months of life. This is a variation on the standard HEDIS measure, which reports the percentage of children who received six or more well-child visits. Input from pediatricians during the measure selection process suggested that an additional measure for children receiving five or more visits would be useful, as there are many circumstances under which a child may not receive a sixth visit, and five visits still demonstrate a child is being followed by a primary care practitioner.

See Table 6 for a complete list of measures and indicators of which measures are HEDIS.

Continuous Enrollment

The National Committee for Quality Assurance (NCQA) HEDIS performance measures require continuous enrollment in a health plan as part of eligibility criteria. These criteria were developed to ensure that patients are enrolled long enough to have an opportunity to receive quality care and establish a relationship with a primary care practitioner.

Excluding patients who did not experience continuous enrollment can result in enrolled patients being excluded from a measure. Up to one 45-day gap in enrollment is allowed. Within the aggregate data, Quality Corp was able to account for patients with insurance coverage from multiple health plans.

Table 4 demonstrates how the continuous enrollment criteria reduced the eligible patient population, depending on the look-back period for a particular measure.

Table 4: Effect of Continuous Enrollment Criteria on Eligible Patient Population

Look-Back Period for Measure	Number of Eligible Patients	Percent of Total* Patients
One Year	1,430,885	77.0
Two Years	1,184,920	63.8
Three Years	967,941	52.1

*Total eligible patients as of 3/31/2010 (end of Round 3 measurement year) is 1,858,687

Assigning Patients to Practitioners (Attribution)

Assigning the correct patients to practitioners was an important part of developing accurate quality measurement reporting. The general consensus among the *Partner for Quality Care* Clinical Work Group and Measurement and Reporting Team was that the method chosen must

be fair, consistent and transparent. The Clinical Work Group discussed potential methods for attributing patients to an adult primary care practitioner (PCP). The logic for attribution adheres to the following formula:

- Use the health plan-designated PCP when that exists and the information is kept up to date and considered accurate by the health plan.
- If a PCP is not designated by the health plan, use the PCP the patient has seen the most based on outpatient visit relative value units (RVUs) across a two-year period including the measurement year and the year prior. (This is termed the *attribution period*; the current attribution period is April 1, 2008 – March 31, 2010.)
- In the case of a tie, attribution goes to the PCP with the most recent visit date. A patient will be attributed to a single primary care physician.

Patients were assigned only to primary care practitioners contained in the *Partner for Quality Care* practitioner directory. If a patient received care solely from specialists, urgent care clinics or other providers not included in the practitioner directory they were not assigned a primary care practitioner (*unattributed*). While this method attributes fewer patients overall (smaller denominator sizes), it results in physicians confirming 95% accuracy of the patients assigned to them.

Attribution of patients within the *Appropriate Imaging for Low Back Pain* measure is a unique exception to the above attribution model. During the measure validation process, Quality Corp staff and the Measurement and Reporting Team recognized that the patient’s PCP may not be the practitioner who ordered the image, and claims data do not identify the ordering provider. Working with data from the previous round of reporting, calculations revealed that of 1,621 patients with low back pain who had an inappropriate image taken (image within 28 days of the initial diagnosis), almost a third of the images were ordered by someone other than the patient’s PCP. Furthermore, almost two-thirds of the time someone other than the patient’s PCP made the initial low back pain diagnosis. A look at the provider specialties as listed in the image claims revealed that many of the diagnoses came from orthopedists, chiropractors and other non-primary care providers. For this reason, a “Specialty Attribution” method is used for this measure, which follows the same logic as outlined above but allows for low back images to attribute to either a PCP or a provider from a list of designated specialties. The following specialties are included in the available attribution pool:

- Chiropractor
- Family Medicine
- General Practice
- Internal Medicine
- Naturopathy
- Nurse Practitioner
- Orthopaedic Surgery
- Osteopathy
- Physical Medicine & Rehabilitation
- Physician Assistant
- Women’s Health

Overall, roughly 45 percent of patients in this round of reporting were unattributed to a primary care practitioner (Table 5).

Table 5: Summary of Patient Attribution to Practitioner by Measure

Measure	Attributed Patients	Un-Attributed Patients	Percent Un-Attributed
Appropriate Imaging for Low Back Pain	14,531	15,987	52.4
Appropriate Strep Tests	9,944	5,592	36.0
Asthma Medication	6,023	3,570	37.2
Breast Cancer Screening	145,552	121,843	45.6
Cervical Cancer Screening	149,060	133,869	47.3
Chlamydia Screening	21,917	19,282	46.8
Cholesterol Screening	7,233	4,689	39.3
Antidepressant Medication	7,984	4,597	36.5
Diabetes Measures	40,999	27,747	40.4
Well-Child Visits 0-15 mths	13,555	6,546	32.6
Well-Child Visits 3-6 yrs	53,191	30,021	36.1

Public vs. Private Measures

At this time, only quality information for adult primary care clinics and medical groups on *Partner for Quality Care's* original nine measures of care is posted on the consumer website www.PartnerForQualityCare.org. Two depression measures and nine new measures on utilization and pediatric care are reported privately to clinics and practitioners for internal use and quality improvement. Measures are reported as indicated in Table 6, with data for public measures refreshed on the public website as of February 2011. Some of the privately-reported measures will likely be included on the public website in the future.

For a more detailed description of the measure definitions and methodologies, see Table 9. Measures will continue to be tested and added or deleted as the effort matures.

Calculation of Clinic and Medical Group Rates

Measure results are reported as the rate of patients who are in need of a particular screening or care and received the necessary service. Rates are calculated as follows:

$$\text{Rate} = 100 \times \frac{\text{Number of eligible patients who met the measure specification}}{\text{Number of eligible patients}}$$

NCOA's HEDIS definitions for the eligible population (denominator) consists of patients who satisfied all specified criteria, including age, diagnosis, continuous health plan enrollment and event or anchor date enrollment requirements. Clinic-level rates were first calculated for each clinic and then an overall medical group rate average was calculated.

Table 6: Round 3 Measures

HEDIS	Publicly Reported	New in Round 3	Area of Care / Measure
			<i>Diabetes Care</i>
√	√		– Eye Exam
√	√		– Blood Sugar Control (HbA1c) Screening
√	√		– Cholesterol (LDL-C) Screening
√	√		– Kidney Function Screening
			<i>Women’s Preventive Care</i>
√	√		– Breast Cancer Screening
√	√		– Cervical Cancer Screening
√	√		– Chlamydia Screening
			<i>Other Chronic Disease Care</i>
√	√		– Asthma Medication
√	√		– Cholesterol Test for People with Heart Disease
√			– Antidepressant Medication (short term- 12 weeks)
√			– Antidepressant Medication (long term- 6 months)
			<i>Utilization</i>
√		√	– Appropriate Strep Tests for Children with Pharyngitis
√		√	– Appropriate Imaging for Low Back Pain
		√	– Generic Drug Prescriptions—NSAIDs
		√	– Generic Drug Prescriptions—PPIs
		√	– Generic Drug Prescriptions—SSRIs
		√	– Generic Drug Prescriptions—Statins
			<i>Pediatric Care</i>
√		√	– Well-Child Visits in the First 15 Months of Life, 5 or more
√		√	– Well-Child Visits in the First 15 Months of Life, 6 or more
		√	– Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life

Calculation of Public Reporting Cut-offs

The actual measure rates for clinics and medical groups are not presented on the public website at this time. Instead, after much debate, the Measurement and Reporting Team recommended that data be presented in categories. Clinics with rates that are more than one standard deviation above the Oregon statewide mean rate are reported as “Better” on the public website. Clinics that are more than one standard deviation below the mean rate are reported as “Below.” Using this method, approximately two-thirds of Oregon clinics are reported as “Average.” In an effort to prevent clinics that do not meet the criteria for public reporting from skewing the cut-offs, the statewide mean rates are calculated based only on the rates of publicly-reported clinics.

Medical group rates are calculated across all patients, including patients in clinics with less than four primary care providers. The category cut-off points for public reporting for medical groups are not calculated separately; they are based on the cut-offs calculated for clinics.

Calculation of State Mean Rate

Statewide means are based on the rates of clinics that meet the public reporting criteria. The exception to this is the set of means for the four new measures focusing on pediatric care and utilization. Most clinics practicing purely pediatric care are new to the initiative and have been withheld from public reporting for this round to give them an opportunity to familiarize themselves with the data and measures. Since these measures are not being publicly reported, the initiative deemed it appropriate to use the rates of all clinics with at least 25 patients in the measure denominator to calculate statewide means.

National Benchmarks

NCQA publishes an annual report entitled *The State of Health Care Quality*. Nationwide, most health plans voluntarily report information on the achievement of their patients to NCQA creating a Healthcare Effectiveness Data and Information Set (HEDIS). HEDIS measures of care are used to describe achievement on many important dimensions of health care and service. Oregon's clinic-level means are presented and compared to national HEDIS means and national top 10 percent (90th percentile)¹.

As *Partner for Quality Care's* claims data comes primarily from commercial PPOs (seven of the ten participating health plans), the PPO benchmarks were considered most appropriate for comparisons with this data set and are used in reports. The benchmark rates include only administrative claims data for PPOs.

Comparing all Oregon clinics to a benchmark set by a data system that represents voluntarily participating health plans is not ideal. However, it is the only large database available at this time.

Achievable Benchmark of Care (ABC)

The ABC Benchmark, developed at the University of Alabama at Birmingham, indicates the mean rate of best-performing Oregon clinics providing care to at least 10 percent of the patient population. The achievable benchmark for each measure was calculated using data from this initiative and provides an objective method for comparing care against performance levels already achieved by "best-in-class" clinics within Oregon. For detailed information, see the website: <http://main.uab.edu/show.asp?durki=14503>.

¹ HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA). The HEDIS benchmarks contained herein are owned and copyrighted by NCQA and are included in this publication with the permission of NCQA. The HEDIS benchmarks pertain to performance measured at the health plan level and do not represent any standard of medical care. The benchmarks are provided "AS-IS" without any warranty of any kind including but not limited to any warranty of accuracy or fitness for a particular purpose. ©2011 National Committee for Quality Assurance. All rights reserved.

Reports

The Quality Corp medical director oversees the quality measurement and reporting process and quality improvement activities of the *Partner for Quality Care* initiative. While all committees include a representative from each stakeholder group, the initiative worked hard to involve practitioners in the decisions that most affected them. Four listening sessions with over 40 physicians and clinic managers were conducted initially to get feedback on the measurement process, report design and distribution.

Practitioner Reports for Quality Improvement

In response to feedback from practicing primary care practitioners, reports and communications from *Partner for Quality Care* are sent to medical group administrators for initial review. Administrators are often medical group managers, quality improvement directors and/or medical directors. Hard copy reports which include results at the medical group, clinic, and practitioner levels are mailed to each medical group administrator. Administrators are then asked to distribute the practitioner-level reports to their providers.

The physicians, nurses and medical group administrators who helped design this effort emphasized that providing clinic, practitioner and patient-level detail to medical groups is essential if claims information is to be validated, trusted and useful. In response, *Partner for Quality Care* and Milliman (data services vendor) created a secure online system to deliver this information to medical groups and practitioners. In an effort to maintain the highest security and confidentiality, medical group administrators must undergo an identity verification process before obtaining a username and password to access the system. This secure portal and delivery of patient-level data derived from claims for quality improvement and better patient treatment is one of the first in the nation. Reporting of this information complies with Health Insurance Portability and Accountability Act (HIPAA) regulations. Creating practitioner reports and making patient-level data available is considered an important component of *Partner for Quality Care's* effort to assist medical groups with tools for effective quality improvement.

Criteria for Clinic/Medical Group Inclusion in Public Reports

Criteria for inclusion on the public website www.PartnerForQualityCare.com are as follows:

- Four or more primary care practitioners in the clinic or medical group
- Minimum 25 patients that meet the specifications for the measure

Medical groups that are new to *Partner for Quality Care* have their scores withheld from public reporting for one round, to give them time to review the format of the reports and learn more about the initiative and its policies. As this year marks the first year that pediatric medical groups are receiving reports, their results are not publicly reported. Pediatricians that belong to general

family practice clinics that are already being publicly reported may contribute to the overall clinic and medical group scores.

Results for individual practitioners are not publicly reported, but are provided in hard copy and online for internal clinic/practitioner use and quality improvement.

Annotation for Federally-Qualified Health Centers (FQHCs)

Before the public release of data in January 2010, Quality Corp heard from a number of safety net clinics facing unique data quality issues. These issues fall into a few distinct areas: 1) patient factors; 2) claims billing practices; 3) clinic and provider differences; and 4) methodological issues. Many factors identified by safety net clinics are inherent in the measurement process and may affect results among all Oregon clinics.

These safety net clinics were concerned about having their quality scores compared to commercial clinics on the public website; however, there was no common solution identified. As a result, exclusion from public reporting of results from the April 2008-March 2009 measurement year was allowed on a case-by-case basis. Prior to the release of data from the April 2009-March 2010 (current) measurement year, Quality Corp sought to establish a general policy for public reporting of safety net clinics for consistency and to be responsive to safety net partners.

The Quality Corp Program Committee and Measurement and Reporting Team met on this issue. There was unanimous agreement within both groups on the initiative's commitment to transparency and the use of public reporting to improve the quality of care. As all patients are deserving of high-quality health care, it seemed to follow that all clinics should be publicly reported. Furthermore, it was recognized that safety net clinics and clinics serving a high proportion of Medicaid patients have already proven themselves capable of providing high quality care.

Upon the Measurement and Reporting Team's recommendation, a special Safety Net Meeting was held in January 2011 to investigate coding issues particular to FQHCs and their possible impact on measure results. Present were members from Quality Corp's staff, Oregon Primary Care Association (OPCA), Division of Medical Assistance Programs (DMAP), CareOregon, OCHIN, commercial health plans, clinic administrators from several safety net clinics and consumers. It was recommended to include a special annotation for FQHCs on the public website. The footnote appears for all quality measures refreshed in February 2011 and reads:

*Federally Qualified Health Center (FQHC): *Partner for Quality Care* scores are based on claims data. FQHCs use a claims process that may differ from other health plans. *Partner for Quality Care* is working with Oregon FQHCs to address any discrepancies in the next 12 months.

This is a one-time annotation for the purpose of allowing FQHCs to improve their coding for services provided before the next round of performance reporting. Current processes for data reconsideration or exclusion from public reporting remain in place for all clinics that can prove unique problems/hardships.

Data

The clinic results included in *Information for a Healthy Oregon* are based on administrative and pharmacy claims supplied by ten health plans. The aggregated data include information from more than 188 million tests, diagnoses and services provided by physicians and other practitioners and over 121 million prescription fills through March 31, 2010. The data represent care provided to nearly 1.86 million commercial, managed care and fee-for-service Medicaid patients enrolled as of March 31, 2010. Statistics on the three data submissions to date and the Round 3 (current) data submission in particular are given in Tables 7 and 8.

Table 7: Three Rounds of Data Submissions

Round	Measurement Year	Concurrent Achievements
1	Jan 1, 2007 – Dec 31, 2007	2009 Statewide Report, secure practitioner website and primary care practitioner directory
2	Apr 1, 2008 – Mar 31, 2009	Implementation of consumer website and refreshed data on secure practitioner website
3	Apr 1, 2009 – Mar 31, 2010	2011 Statewide Report, refreshed data on consumer and secure practitioner websites and online practitioner directory tool added to practitioner website

Table 8: Round 3 Data Submission

Measurement year	April 1, 2009 – March 31, 2010
Round 3 data coverage period	April 1, 2006 – March 31, 2010
Data submission due date	July 31, 2010
Number of data suppliers	10*
Number of unique patients in Round 3	3,290,837
Number of eligible patients as of March 31, 2010 (end of Round 3 measurement year)	1,858,687
Number of unique providers in Round 3	497,643
Total medical claim records submitted in Round 3	188.57 million
Total pharmacy claims submitted in Round 3	121.18 million

Validation

Claims data were submitted by health plans to the data services vendor, Milliman. Milliman worked with each data supplier to validate the submitted data. There were two levels of validation – one that ensured the correct transmission of the data and another that ensured

measure results were consistent between Milliman and the data supplier. Once validated, the data were aggregated for measure calculation.

Medical Group Pre-Testing

Six medical groups engaged in a data validation process to assess the accuracy and usefulness of the two new HEDIS utilization measures (Appropriate Low Back Pain Imaging, Appropriate Use of Strep Tests for Children with Pharyngitis) and the new HEDIS pediatric measures (Well-Child Visits in the First 15 Months of Life, Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life). The validation process occurred September – October 2010, before final reports to physicians were created and delivered. Random selections of data were downloaded for review and 164 patient records were compared with medical groups' electronic medical record systems. Milliman then reviewed the claims history for any patient records where a discrepancy was noted. Discrepancies were discussed with clinics and used to refine the methods for assigning patients to practitioners and some data coding.

Advantages and Limitations of Administrative Claims Data

Claims data reflect information submitted by practitioners to payers as a part of the billing process. While not all medical care shows up in billing data, it does include useful information about diagnoses and services provided. Using claims data, for example, one can measure care processes such as "What percentage of patients with diabetes were given an HbA1c test at least once during the measurement year?" However, one cannot measure actual control/ outcomes such as "What is a patient's HbA1c level?"

While administrative claims data may have limitations for quality improvement, they provide basic information for a very large segment of the Oregon health care delivery network. For accurate measurement and comparison across the state, large data sets are essential. The advantage of *Partner for Quality Care's* data set is that the claims are aggregated across ten of Oregon's largest health plans, assembling the most comprehensive set of claims to date. Additionally, the data include a comprehensive representation of medical groups with four or more primary care practitioners throughout the regions of Oregon.

Currently, claims data are the only type of high-volume data readily available in electronic format. Claims data are also relatively inexpensive for assessing care quality in comparison to other data sources such as assembling structured data from electronic medical records or chart abstraction. Over time, *Partner for Quality Care* intends to expand the report to reflect data from other sources, such as electronic medical records and laboratory values.

Claims data also have limitations such as timeliness (data are from 2009 – 2010) and completeness. For example, data in this report do not include a clinic’s entire patient population, such as uninsured patients, patients who pay for their own health care services, Medicare patients, or patients served by a plan or Medicaid provider that did not participate in the initiative. *Partner for Quality Care* is actively working with additional data suppliers to fill in some of these gaps for future reports. Some measures include only a small proportion of patients with the relevant medical conditions. This is because the denominators for these measures were designed to include only patients with a very high likelihood of needing the services being measured; therefore the care of many of the patients with asthma, depression and vascular disease is not addressed.

Additional limitations with claims data in this initiative include: information that would exclude patients from the denominator for clinical reasons are not always available (i.e. hysterectomies performed before the start of the claims capture period, which should exclude women from the cervical cancer screening measure); and clinics have many billing workarounds that prevent accurate capture of data. Billing workarounds sometimes include billing from a practitioner who was different than the person who actually provided care. With help from medical groups, the data will become more timely, accurate and useful for future reports. Despite these limitations, the initiative provides the most comprehensive quality reports available in Oregon because data suppliers have come together to pool data for quality improvement.

Table 9: Quality Measures Descriptions and Definitions

Measure Name	Numerator: Definition for Compliance of Measure	Denominator: Definition of Condition and Exclusions
<p>Asthma: Use of Appropriate Medications for People with Asthma*</p>	<p>Dispensed at least one prescription for a preferred therapy during the measurement year**. Preferred asthma medications include anti-asthmatic combinations, antibody inhibitor, inhaled steroid combinations, inhaled corticosteroids, leukotriene modifiers, mast cell stabilizers, and methylxanthines.</p>	<p>Asthma is defined by: Patients 5–50 years of age during the measurement year** and the year prior who were identified as having persistent asthma because of at least four asthma medication dispensing events, at least one ED visit with asthma as the primary diagnosis, at least one acute patient discharge with asthma as the principal diagnosis, or at least four outpatient asthma visits. <i>(Note: The age range decreased from last year’s reporting of 5-55 years, so results will not be directly comparable.)</i></p> <p>Exclusions: Patients diagnosed with emphysema or COPD.</p>
<p>Coronary Artery Disease: Cholesterol Management for Patients with Cardiovascular Conditions*</p>	<p>Had at least one LDL-C test during the measurement year**.</p>	<p>Coronary artery disease is defined by:</p> <ol style="list-style-type: none"> 1. Patients 18-75 years discharged alive for AMI, CABG, or PTCA on or between April 1, 2008 – February 1, 2009; or 2. Patients 18-75 years who had a diagnosis of any ischemic vascular disease (IVD) between April 1, 2008 – March 31, 2010. <p>Note: AMI and CABG are from inpatient claims only.</p>
<p>Diabetes: HbA1C Testing*</p>	<p>Had at least one HbA1c test performed during the measurement year**.</p>	<p>Diabetes is defined by:</p> <ol style="list-style-type: none"> 1. Patients 18-75 years of age who were dispensed insulin or a hypoglycemic/anti-hyperglycemic on an ambulatory basis; 2. Patients who had two face-to-face encounters with different dates of service in an outpatient setting or non-acute inpatient setting with a diagnosis of diabetes; or, 3. Patients with one face-to-face encounter in an acute inpatient or emergency room setting with a diagnosis of diabetes.
<p>Diabetes: LDL-C Test*</p>	<p>Had at least one LDL-C screening test done during the measurement year**.</p>	
<p>Diabetes: (Retinal) Eye Exams*</p>	<p>Had an eye screening for diabetic retinal disease. This includes those diabetics who had a retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) during the measurement year**.</p>	<p>Exclusions: Patients with gestational diabetes, steroid-induced diabetes, or polycystic ovaries.</p>
<p>Diabetes: Medical Attention for Nephropathy*</p>	<p>Screening for nephropathy or evidence of nephropathy during the measurement year**. Evidence of nephropathy includes a nephrologist visit, a positive urine macroalbumin test as documented by claims, or treatment with ACE inhibitor/ARB therapy.</p>	

Measure Name	Numerator: Definition for Compliance of Measure	Denominator: Definition of Condition and Exclusions
Depression: Antidepressant Medication Management: Acute Phase Treatment*	Patients who remained on an antidepressant medication for at least 84 days (12 weeks) as determined by prescription fills.	Depression is defined by: Patients aged 18 and older diagnosed with a new episode of major depression during the measurement year** and prescribed antidepressant medication. Exclusions: Patients who had an acute inpatient stay with a principal diagnosis of mental health or substance abuse during the 245 days after the episode start date. Patients with brief depressive reaction are excluded since the diagnosis includes grief reaction.
Depression: Antidepressant Medication Management: Continuous Phase Treatment*	Patients who remained on an antidepressant medication for at least 180 days (6 months) as determined by prescription fills.	Exclusions: Patients who had an acute inpatient stay with a principal diagnosis of mental health or substance abuse during the 245 days after the episode start date. Patients with brief depressive reaction are excluded since the diagnosis includes grief reaction.
Breast Cancer Screening*	Women who had a mammogram during the measurement year** and the year prior.	Women eligible for breast cancer screening include: Women 40-69 years of age. <i>(Note: The new age guidelines released by the U.S. Preventative Services Task Force do not apply to the data for the current measurement year. The eligibility for this measure will be revised according to the new standards for our next round of reporting.)</i> Exclusions: Women who had a bilateral mastectomy or 2 separate mastectomies billed in 2005 – first quarter of 2010.
Cervical Cancer Screening*	Women who had a Pap test during the measurement year** and two years prior. <i>(Note: This is in alignment with ACOG's new guidelines recommending a Pap test every three years.)</i>	Women eligible for a Pap test include: Women 21-64 years of age. Exclusions: Women who had a hysterectomy billed in 2005 – first quarter of 2010.
Chlamydia Screening in Women*	Women who had a Chlamydia test during the measurement year**.	Women eligible for a Chlamydia screen include: Sexually active women 16-24 years of age. Sexually active women are identified by either having filled a prescription for contraceptives during the measurement year** or had at least 1 claim with a code to identify sexually active women. Exclusions: Women who had a pregnancy test during the measurement year followed within 7 days by either a prescription for Accutane or an x-ray are excluded.

Measure Name	Numerator: Definition for Compliance of Measure	Denominator: Definition of Condition and Exclusions
Pediatric Care: Well-Child Visits in the First 15 Months of Life*	<p>1st measure: Children who had 5 or more well-child visits with a PCP during their first 15 months of life.</p> <p>Note: The PCP does not have to be the practitioner assigned to the child.</p> <p>2nd measure: Children who had 6 or more well-child visits with a PCP during their first 15 months of life. (Note: This is the standard HEDIS measure.)</p> <p>Note: The PCP does not have to be the practitioner assigned to the child.</p>	<p>Eligible children are defined by: Children who turned 15 months during the measurement year**.</p>
Pediatric Care: Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life*	<p>Children who had at least one well-child visit with a PCP during the measurement year**.</p> <p>Note: The PCP does not have to be the practitioner assigned to the child.</p>	<p>Eligible children are defined by: Children aged 3-6 years as of March 31 of the measurement year**.</p>
Utilization: Appropriate Testing for Children with Pharyngitis*	<p>Children who had a group A streptococcus test in the seven-day period starting three days prior to the episode date to three days after the episode date.</p>	<p>Eligible children are defined by: Children aged 2 years as of October 1 of the year prior to the measurement year** to 18 years as of September 30 of the measurement year who had an outpatient or ED visit with only a diagnosis of pharyngitis and a dispensed antibiotic for that episode of care.</p> <p>Exclusions: Children who received more than one diagnosis on the episode date. Children who were dispensed antibiotics more than three days after the episode date. Children who were dispensed a new or refill antibiotic prescription within the 30 days prior to the episode date, or still had an active antibiotics prescription from more than 30 days prior.</p>
Utilization: Use of Imaging Studies for Low Back Pain*	<p>Patients on whom an imaging study was conducted on or within the 28 days following the episode date.</p>	<p>Low back pain is defined by: Patients aged 18-50 during the measurement year** who had an outpatient or ED encounter with a primary diagnosis of low back pain.</p> <p>Exclusions: Patients with a low back pain diagnosis during the 180 days (6 months) prior to the episode date. Patients for whom an imaging study in the presence of low back pain is clinically indicated: cancer anytime in the patient's medical history; recent trauma, intravenous drug use, or neurological impairment within 12 months of the episode date.</p>

Measure Name	Numerator: Definition for Compliance of Measure	Denominator: Definition of Condition and Exclusions
Generic Prescriptions: Statins	Number of prescribing events for statins identified as generic.	Prescribing event is defined by: A prescription for at least a 30-day supply of statins, both brand-name and generic, during the 12-month measurement year**.
Generic Prescriptions: SSRIs and other Second Generation Antidepressants	Number of prescribing events for second generation antidepressant prescriptions identified as generic.	Prescribing event is defined by: A prescription for at least a 30-day supply of second generation antidepressants, both brand-name and generic, during the 12-month measurement year**.
Generic Prescriptions: PPIs	Number of prescribing events for PPI prescriptions identified as generic.	Prescribing event is defined by: A prescription for at least a 30-day supply of proton pump inhibitors, both brand-name and generic, during the 12-month measurement year**.
Generic Prescriptions: NSAIDs	Number of prescribing events for NSAID prescribing events identified as generic.	Prescribing event is defined by: A prescription for at least a 30-day supply of non-steroidal anti-inflammatory drugs, both brand-name and generic, during the 12-month measurement year**.

* HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA). The HEDIS benchmarks contained herein are owned and copyrighted by NCQA and are included in this publication with the permission of NCQA. The HEDIS benchmarks pertain to performance measured at the health plan level and do not represent any standard of medical care. The benchmarks are provided “AS-IS” without any warranty of any kind including but not limited to any warranty of accuracy or fitness for a particular purpose. ©2011 National Committee for Quality Assurance. All rights reserved.

** Results are based on administrative claims data with dates of service between January 1, 2007 – March 31, 2010, and the measurement year April 1, 2009 – March 31, 2010.