TECHNICAL APPENDIX

Information for a Healthy Oregon:
Statewide Report on Health Care Quality

September 2015

This technical appendix supplements the September 2015 release of *Information for a Healthy Oregon: Statewide Report on Health Care Quality* by the Oregon Health Care Quality Corporation (Q Corp).

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Data Summary

Twelve health plans, the Oregon Health Authority, and Centers for Medicare & Medicaid Services (CMS) contributed administrative medical and pharmacy claims data for this report[1].The data cover the period July 1, 2011–June 30, 2014, with a measurement year of July 1, 2013–June 30, 2014. Tables 1 and 2 provide an overview of the claims data submission on which this report is based.

Table 1: Q Corp Round 11 Data Submission Summary

Measurement period	July 1, 2013 – June 30, 2014
Round 11 data coverage period	July 1, 2011 – June 30, 2014
Data submission due date	October 31, 2014
Number of data suppliers	14
Number of continuously enrolled patients as of June 30, 2013 (end of Round 9 measurement period)	2,770,189
Total medical claim lines	523.6 million
Total pharmacy claim lines	93.3 million

Table 2: Q Corp Product Line Summary

	Oregon Total Health Insurance Enrollment† June 30, 2014	Members in Q Corp Database as of June 30, 2014	Percent of Oregon Total of Covered Lives
Commercial—All lines	2,208,936	1,321,139	85% Fully Insured 23% Self Insured
Medicare — Total Advantage and FFS	716,178	645,756	90%
Medicaid—Total	1,050,178	1,050,178	100%

†Commercial enrollment data obtained from the Oregon Department of Consumer Business Services quarterly medical insurance enrollment data set. Medicaid data obtained from the Oregon Health Plan monthly enrollment reports. Total Medicare enrollment data obtained from the CMS Monthly MA State, County Penetration data set.

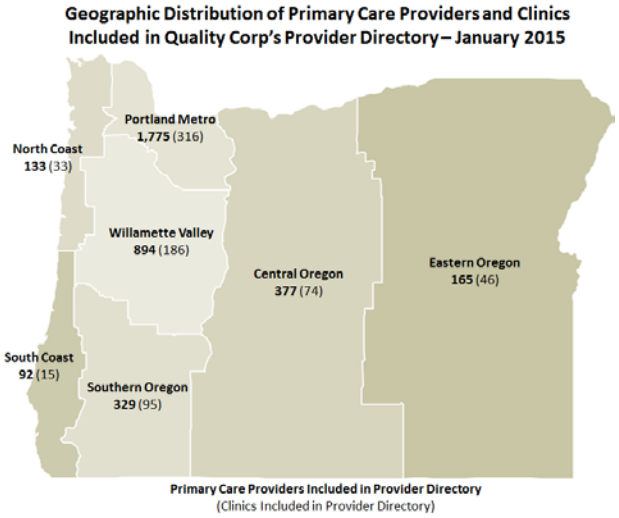
[1] The suppliers for this report that contributed data include: CareOregon, Centers for Medicaid & Medicare Services, Oregon Division of Medical Assistance Programs, FamilyCare Health Plans, Health Net of Oregon, Kaiser Permanente†, LifeWise Health Plan of Oregon, Moda Health Plans, Oregon's Health Co-op, PacificSource Health Plans, Providence Health Plans, Regence BlueCross BlueShield, Trillium Community Health Plan and Tuality Health Alliance.

†Kaiser data included in the 2015 *Information for a Healthy Oregon* report covers January 1, 2013 – December 31, 2013. This is due to a delay in data receipt and processing. It was determined that this round could be substituted because it overlaps the report period by 6 months, and Kaiser rates change minimally between Q Corp data rounds (<1%).

Provider Directory

Q Corp works with medical groups to maintain a comprehensive provider directory for Oregon. The provider directory links practicing primary care providers with the clinics and medical groups where they work. This information is used to attribute patients identified in claims data to the appropriate primary care provider and clinic.

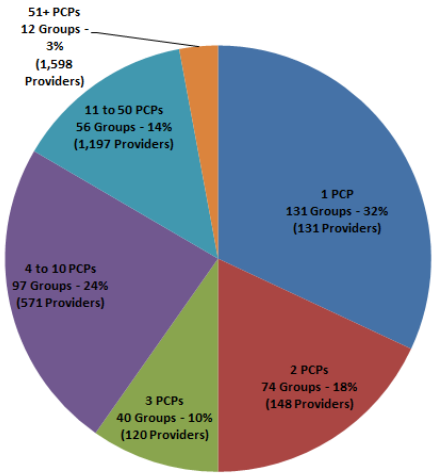
Q Corp's provider directory currently includes information for 3,765 primary care providers. Q Corp defines primary care providers as family medicine, internal medicine, general practice, and pediatric physicians (MDs/DOs), nurse practitioners (NPs), and physician assistants (PAs). These providers work in 410 medical groups at 765 clinic sites throughout the state.



Estimate of Completeness

With an eye toward public reporting and recognizing the unique challenges faced by small, often rural practices, the provider directory was initially developed in 2008 to include medical groups with four or more primary care providers. After three years of reporting and with multiple requests to understand the quality of care delivered by small practices in Oregon, Q Corp expanded its provider directory during summer and fall 2011. This entailed an extensive outreach effort to medical groups with 1-3 primary care providers. Today, the majority of medical groups in Q Corp's provider directory (60 percent) have 1-3 primary care providers, underscoring the benefit of expanding to include these smaller groups. Chart 1 illustrates the distribution of medical group sizes by number of practicing primary care providers.

Chart 1: Distribution of Medical Group Sizes – Q Corp Provider Directory January 2015



Breaking primary care physicians down by more detailed provider types shows that the only a small proportion of primary care physicians are nurse practitioners, physician assistants, or other degreed professionals, as shown below.

Table 3: Totals by Provider Type

Provider Type	Count	% of Total
MD/DO	2,702	71.8%
Nurse Practitioner	599	15.9%
Physician Assistant	420	11.2%
Other*	44	1.1%
Total	**3,765**	**100.0%**

*Other degrees include ND (12) and WHCNP (1)

Clinics

In this initiative, a *clinic* is defined as a location with a physical address that patients identify as where they receive care.

Q Corp strives to make its provider directory as complete as possible for clinics across the state. Table 4 demonstrates that 58.7 percent of the clinics in Q Corp's provider directory are located outside the Portland Metro region.

Table 4: Clinic Locations by Region

Region	Number of Clinics in Directory	Percent of Clinics in Directory
Central Oregon	74	9.7%
Eastern Oregon	35	4.8%
North Coast	43	5.6%
Portland Metro	316	41.3%
South Coast	15	1.9%
Southern Oregon	95	12.4%
Willamette Valley	186	24.3%
Total	**765**	**100.0%**

Providers

Clinics with three or more practicing primary care providers and at least 30 patients appropriate for inclusion in a measure have scores reported on the public consumer website, www.q-corp.org/compare-your-care (The term *doctor's office* is used in place of the term *clinic* on the public website for easier consumer understanding). When a medical group is added to Q Corp's provider directory, its clinic(s) receive one round of private reports before the public reporting criteria are applied. All clinics in Q Corp's provider directory, regardless of size, receive reports privately for their own internal quality improvement efforts. Clinics that don't meet the public reporting requirements for size have the option to opt in to public reporting. For more information on the inclusion specifications for each measure, see Table 8 at the end of this appendix.

Q Corp engages in a multi-faceted measurement approach including recommendations, expertise and feedback from practicing physicians, nurses and medical group. Many of the measurement and reporting methods are based on initial work by Q Corp's Clinical Work Group and continuing work by the Measurement and Reporting Committee, composed of practicing physicians, physician leaders, nurse leaders, consumers, health plan analysts and administrators, policymakers and purchasers.

Patient Characteristics

The data set for the current measurement period consists of aggregated administrative claims from 12 of Oregon's largest health plans, Oregon's Division of Medical Assistant Programs (DMAP) and Centers for Medicare & Medicaid Services (CMS). Q Corp's data set for the current measurement period represents care for 2.7 million patients who were members of at least one participating health plan.

Despite the large number of claims in the data set, some providers and clinics may have a small number of patients for some measures. Depending on the measure and its look back period, between 23 and 41

percent of patients are "lost" because only patients who are continuously enrolled in health plans during the measurement period are counted (see Continuous Enrollment below). Additionally, some patients are not captured in the measures because: 1) their condition may not have been coded in a claim, 2) they are not members of a health plan participating with Q Corp, 3) they did not meet strict inclusion criteria, or 4) they were attributed to a different provider. In some cases, the provider may not have had a full-time, full-year experience at the medical group during the measurement year (July 1, 2013 – June 30, 2014).

Continuous Enrollment

HEDIS® performance measures require continuous enrollment in a health plan as part of patient eligibility criteria. These criteria were developed to ensure that patients are enrolled long enough to have an opportunity to establish a relationship with a primary care provider and receive quality care. Continuous enrollment and an allowable gap in enrollment are defined for each measure.

Lack of continuous enrollment can result in currently enrolled patients being excluded from a measure. Table 5 demonstrates how the continuous enrollment criteria reduced the eligible patient population during this reporting period, depending on the look-back period for a particular measure. For example, 77 percent of patients met the continuous enrollment criteria for measures with a one year look-back period (e.g. diabetes measures), while 59 percent of patients met the continuous enrollment criteria for the cervical cancer screening measure, which has a three year look-back period. Within the aggregate data, Q Corp was able to track patients that moved between participating health plans, Medicaid and Medicare Fee-For-Service, which results in a greater number of patients eligible for inclusion in the measures.

Table 5: Effect of Continuous Enrollment Criteria on Eligible Patient Population

Look-Back Period for Measure	Number of Eligible Patients	Percent of Total* Patients
One Year	2,140,352	77.3
Two Years	1,858,274	67.1
Three Years	1,634,736	59.0

*Total eligible patients as of 6/30/2014 (end of Round 11 measurement year) are 2,770,189.

Measures

Information for a Healthy Oregon presents a variety of quality and resource use measures. Ambulatory quality measures are included for specific primary care recommendations for diabetes care, women's preventive care, other chronic disease care (asthma, depression and heart disease) and pediatric care. Ambulatory resource information is reported for outpatient visits, appropriate low back pain imaging, appropriate antibiotic use, and generic prescriptions. Hospital resource use measures include ED visits, potentially avoidable ED visits, hospital admissions for ambulatory-sensitive conditions and 30 day all-cause readmissions.

The measures are calculated using administrative claims sent by medical groups to health plans for payment. Claims data tells us that a medical encounter or procedure was billed, but not its value or outcome.

Measure Selection and Accreditation

Q Corp's Measurement and Reporting Committee identified principles for measure selection and the first set of Oregon measures. To ensure measures adhered to national standards set by the National Quality Forum (NQF), the Committee initially chose measures from the National Committee for Quality Assurance (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS®), a subset of the measures endorsed by the NQF and the most widely-used set for ambulatory care.

Q Corp's first set of ambulatory quality measures included four diabetes care measures, three women's preventive care measures and five measures of other chronic disease care (asthma, heart disease, depression). These were first reported to Oregon medical groups and providers in June 2009 and a subset were publicly reported beginning February 2010. Since that time, the Measurement and Reporting Committee has selected additional measures of quality and resource use. The committee has also retired some measures from the measure set. (Current measures and descriptions can be found in Table 8) Q Corp will continue to test and add or retire measures over time.

A small subset of the measures in this report were not developed by NCQA (HEDIS®), including:

- Q Corp currently reports on generic prescription fills for three drug classes – SSRIs and other second generation antidepressants, Statins, and Anti-hypertensives. (Previous drug classes include NSAIDs and PPIs.) These measures were developed by the Washington Health Alliance and their adoption reflects Q Corp's expanding interest in measuring resource use and efficiency.
- The potentially avoidable ED visit measures were developed by the MediCal Managed Care Division of the California Department of Healthcare Services.
- The measures of hospital admissions for ambulatory-sensitive conditions are among the set of the U.S. Agency for Healthcare Research and Quality's (AHRQ) Prevention Quality Indicators (PQIs).
- Though not included in this report, Q Corp's medical group reports include a measure of the percentage of children that had five or more well-child visits during the first 15 months of life. Input from pediatricians during the measure selection process suggested that an additional measure for children having five or more visits would be useful, as there are many circumstances under which a child may not have a sixth visit, and five visits still demonstrate a child is being followed by a primary care provider.
- Q Corp reports the Alcohol Misuse: Screening, Brief Intervention, and Referral for Treatment (SBIRT) measure which was developed by the Oregon Health Authority. It is one of the measures used for Coordinated Care Organization (CCO) incentives.
- The developmental screening measure for children in the first 36 months of life is another measure used for CCO incentives. Although it is not a HEDIS measure, it was developed by the NCQA and is a part of the Initial Core Set of Children's Health Quality Measures.

Additionally Q Corp deviates from the HEDIS® specifications for the following measures:

- Breast cancer screenings – The NCQA HEDIS® specifications were updated with version 2014 to report patients ages 50-74 as recommended by the U.S. Preventive Services Task Force. Q Corp continues to privately report the measure for patients ages 40-69, which is the previous age band.
- Diabetes screening measures – The NCQA HEDIS® definition requires only a single face-to-face encounter in an acute inpatient or emergency room setting with a diagnosis of diabetes. Based on clinic chart review results, Q Corp modified the definition to require two or more face-to-face encounters beginning with fall 2012 reporting. The modified definition is expected to impact less than 2.5 percent of patients identified in the measure.
- 30 Day Plan All-Cause Readmissions – Q Corp does not risk adjust this measure; raw rates (readmissions/total index admissions) are reported.
- Well-Child Visits Ages 3-6 Years, Well-Child Visits in First 15 Months of Life and Adolescent Well-Care Visits measures – Q Corp allows well-child visits to be with any provider type. The rationale behind this deviation is that PCP designation is not consistent across data suppliers.

Table 6 provides a complete list of measures in Q Corp's 2015 medical group reports, including an indicator of which measures are HEDIS®. The column on the right provides information on how measures are reported (privately to medical groups and providers only versus reported publicly at the clinic level on Q Corp's consumer website www.q-corp.org/compare-your-care. Note Q Corp's statewide report contains several measures that are not reported publicly on the consumer website; they are reported in the statewide report in aggregate or as blinded clinic results.

Table 6: Complete List of Q Corp Measures

HEDIS®	Area of Care / Measure	Public or Private
Diabetes Care		
√	– Eye Exam	Private
√	– HbA1c Test	**Public**
√	– LDL-C Test	**Public**
√	– Kidney Disease Test	Private
Women's Preventive Care		
√	– Breast Cancer Screening (age 40-69)	Private
	– Breast Cancer Screening (age 50-74)	**Public**
√	– Cervical Cancer Screening	**Public**
√	– Chlamydia Screening	**Public**
Other Chronic Disease Care		
√	– Heart Disease Cholesterol Test	**Public**
√	– Asthma Medications – Children (Age 5-18)	**Public**
	– Alcohol Misuse: Screening, Brief Intervention, Referral for Treatment (SBIRT) – Adults (age 18+)	Private
Ambulatory Resource Use		
√	– Appropriate Strep Tests	**Public**
√	– Appropriate Testing for Children with Upper Respiratory Infection	Private
√	– Avoidance of Antibiotic Treatment for Adults with Acute Bronchitis	Private
√	– Annual Monitoring for Patients on Persistent Medications	Private
√	– Appropriate Low Back Pain Imaging	**Public**
	– Generic Prescription Fills: SSRIs, SNRIs & DNRIs	**Public**
	– Generic Prescription Fills: Statins	**Public**
	– Generic Prescription Fills: Anti-hypertensives	Private
√	– Ambulatory Care: Outpatient Visits – Adults (age 18+)	Private
√	– Ambulatory Care: Outpatient Visits – Children (age 0-17)	Private
Pediatric Care		
	– Well-Child Visits 0-15 Months, 5 or More	Private
√	– Well-Child Visits 0-15 Months, 6 or More	**Public**
√	– Well-Child Visits 3-6 Years	**Public**
(NCQA)	– Developmental Screenings in the First 36 Months of Life	Private
√	– Adolescent Well-Care Visits (age 12-21)	Private
√	– Follow-up Care for Children Prescribed ADHD Medications: Initiation & Continuation (age 6-12)	Private
Hospital Resource Use		
	– Potentially Avoidable ED Visits – Adults (18+)	Private
	– Potentially Avoidable ED Visits – Children (1-17)	Private
(AHRQ)	– Hospital Admissions for Ambulatory-Sensitive Conditions – Acute Composite	Private
(AHRQ)	– Hospital Admissions for Ambulatory-Sensitive Conditions – Chronic Composite	Private
(AHRQ)	– Hospital Admissions for Ambulatory-Sensitive Conditions – Overall Composite	Private
√	– Plan 30 day All-Cause Readmissions	Private
√	– Ambulatory Care: ED Visits – Adults (age 18+)	Private
√	– Ambulatory Care: ED Visits – Children (age 0-17)	Private

Assigning Patients to Providers (Attribution)

Assigning the correct patients to providers is an important part of developing accurate measurement reports. The consensus among Q Corp's committees is that the method for attributing patients to a primary care provider must be fair, consistent and transparent.

Standard method (most measures)

Patients are assigned to a primary care provider (PCP) contained in the Q Corp provider directory. The logic model for attribution then adheres to the following formula:

- Use the health plan designated PCP when that exists and the information is kept up to date (one plan).
- Otherwise, use the PCP the patient has seen the most across the two-year attribution period (July 1, 2012 – June 30, 2014).
- A patient will be attributed to a single PCP.
- If there is a tie, use the most recently seen PCP.

If a patient received care solely from specialists, urgent care clinics or other providers not included in the provider directory they are not assigned a primary care provider (in which case they are categorized as "*unattributed*"). In addition, if there were no office visit claims for a primary care physician in Q Corp's provider directory, the patient is not attributed. For example, unattributed patients for the cervical cancer screening measure might include healthy young women that only receive care from an OB/GYN.

For the first time this year, OB/GYN providers have been added to the directory under a volunteer medical group and attribution is currently being tested and validated. Q Corp intends to build out the provider directory to include more OB/GYN providers and other specialties in the near future.

Alternate method (Appropriate Low Back Pain Imaging)

Attribution of patients for the appropriate low back pain imaging measure is a unique exception to the above attribution model. During the measure validation process, Q Corp staff and the Measurement and Reporting Committee recognized that the patient's primary care provider may not be the provider who ordered the image, and claims data do not identify the ordering provider. Additional research showed 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 was used for this measure, which follows the same logic as outlined above but allows for low back images to attribute to either a primary care provider or a

provider from a list of designated specialties. The following specialties are included in the available attribution pool for the low back pain imaging measure:

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

Alternate Method: Avoidable ED Visits/Hospital Admissions, Readmissions

Analysis of feedback from four medical groups who volunteered to validate Q Corp's results for the potentially avoidable ED visit measure revealed that 44 percent of discrepancies were due to the patient not establishing primary care with the provider prior to the ED visit. With the majority of Q Corp's measures, a provider has a chance to perform a measure requirement even if a patient establishes care part way through the measurement period (e.g. a provider performs a breast cancer screening if a woman is due at the time of establishing care). It is also acknowledged that it is the responsibility of the provider to "catch up" on missing preventive screenings for new patients. However, if a patient has had an avoidable ED visit prior to establishing care there is nothing the provider can do to prevent the ED visit. The same is true for the measure of ambulatory-sensitive hospital admissions and readmissions.

Q Corp's Measurement and Reporting Committee decided to limit PCP attribution to the most visits that occur prior to the first ED visit, looking over the 24 month period ending with the measurement year. This method does not hold PCPs responsible who did not initiate care with patients before the first ED visit. This attribution method is applied to all three hospital resource use measures, i.e. Potentially Avoidable ED Visits, Ambulatory-Sensitive Hospital Admissions and 30 Day All-Cause Readmissions.

Unattributed Patients

Overall, roughly 47.5[2] percent of patients were unattributed to a primary care provider (Table 7). In the case of measures that share exactly the same population of patients – e.g. the four diabetes measures – only one of the measures is considered so as to not give one measure type a disproportionate weight in the calculation of the overall percentage of unattributed patients. Note, it is possible for a patient to be included in more than one measure – for example, a female patient may be diabetic and may also be eligible for a breast cancer screening. While Q Corp's restrictive attribution methods do attribute fewer patients overall (resulting in smaller denominator sizes), they have resulted in providers confirming 95 percent accuracy of the patients assigned to them.

[2] Based on combination of ED visit population measures for children 1-17 and adults 18+ years.

Table 7: Summary of Patient Attribution to Primary Care Provider by Measure

Measure	Attributed Patients/Member Months	Unattributed Patients/Member Months	Percentage Unattributed
Adolescent Well-Care Visits (age 12-21)	170,527	124,582	42.2
Ambulatory Care: ED and Outpatient Visits	14,715,844	13,330,150	47.5
Annual Monitoring for Patients on Persistent Medications	183,113	104,296	36.3
Antidepressant Medication, Age 5 to 18	19,155	10,437	35.3
Appropriate Low Back Pain Imaging	15,066	11,355	43.0
Appropriate Asthma Medications	4,200	1,030	19.7
Appropriate Strep Tests	10,892	4,402	28.8
Appropriate Testing for Children with Upper Respiratory Infections	19,409	7,746	28.5
Avoidance of Antibiotic Treatment for Adults with Acute Bronchitis	9,649	4,254	30.6
Breast Cancer Screening	212,126	131,857	38.3
Cervical Cancer Screening	222,613	180,796	44.8
Chlamydia Screening	36,968	29,070	44.0
Cholesterol Screening For Patients with Heart Disease	24,912	9,045	26.6
Developmental Screenings in the First 36 Months	74,182	24,267	24.9
Diabetes Measures	92,774	39,249	29.7
Follow Up Care for Children Prescribed ADHD Medications: Initiation	3,921	1,398	26.3
Follow Up Care for Children Prescribed ADHD Medications: Continuation	2,088	652	23.8
Generic Prescription Fills: Anti-hypertensives	773,175	364,378	32.0
Generic Prescription Fills: SSRIs, SNRIs & DNRIs	945,573	394,720	29.5
Generic Prescription Fills: Statins	557,719	216,462	28.0
Plan 30-day All Cause Readmissions	49,855	29,520	37.2
Potentially Avoidable ED Visits	508,835	272,372	34.9
Potentially Avoidable Hospital Admissions 18+	964,804	1,052,664	52.2
Well-Child Visits 0-15 months, 6 or more visits	24,952	8,538	25.5
Well-Child Visits 3-6 years	105,910	40,046	27.4

Measurement period: July 1, 2013 – June 30, 2014

Public vs. Private Measures

Q Corp's Measurement and Reporting Committee assesses measure accuracy and the appropriateness and usefulness of measures for public reporting prior to approving their inclusion on the public website. New measures are always reported privately to medical groups and providers for at least one round before clinic level results are considered for inclusion in public reports.

Medical groups have the opportunity to review their data and provide feedback through Q Corp's secure online portal prior to the public release of clinic results. For the October 2015 release, the medical group review period occurred during the months of July and August 2015. Q Corp has established policies for groups that wish to have their data reconsidered and for groups that believe they have special circumstances that should exclude them from public reporting. These policies are available at q-corp.org/reports/provider-reports.

Calculation of Medical Group, Clinic and Provider Scores

Q Corp distributes reports to all medical groups and providers in Q Corp's provider directory that have at least one attributed patient for any measure. Reports contain data displays and confidence intervals to help with interpretation when the number of patients is small.

Percentages

The vast majority of measure results in Q Corp's reports are reported as the percentage of patients who are in need of a specific screening or care and received the necessary service. NCQA's HEDIS® definitions for the eligible population (denominator) consist of patients who satisfied all specified criteria, including age, diagnosis, continuous health plan enrollment and event or anchor date requirements.

These percentages are calculated as follows:

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

The percentage of potentially avoidable ED visits is calculated as:

$$\text{Percentage} = 100 \times \frac{\text{Number of potentially avoidable ED visits}}{\text{Number of total ED Visits}}$$

The percentage of generic prescription fills are calculated as:

$$\text{Percentage} = 100 \times \frac{\text{Number of generic prescription fills}}{\text{Number of total prescription fills}}$$

Percentages are calculated for each medical group, clinic and provider. For a more detailed description of the measure definitions, see Table 8.

Rates

The measures of hospital admissions for ambulatory-sensitive conditions are reported as rates instead of percentages. These measures were developed by the Agency for Health Research and Quality (AHRQ) and are among the set of Prevention Quality Indicators (PQIs). These measures report the rate of hospital admissions per 100,000 patients that could have been avoided, at least in part, through better access to high-quality outpatient care. The measures are calculated as:

$$\text{Rate} = 100{,}000 \times \frac{\text{Number of ambulatory-sensitive hospital admissions}}{\text{Number of eligible patients}}$$

Note: In reports to medical group and providers, Q Corp lists the rate per 100 patients to provide a scale more in line with the size of an average medical group's patient panel.

Q Corp also reports the ambulatory care measure, which is reported as a rate. Q Corp reports both for adults and children separately. This measure has two parts, ED visits and outpatient visits, calculated as follows:

$$\text{Rate} = 1{,}000 \times \frac{\text{Total number of ED visits}}{\text{Total member months}}$$

$$\text{Rate} = 1{,}000 \times \frac{\text{Total number of Outpatient visits}}{\text{Total member months}}$$

Benchmarks

Q Corp provides comparative benchmarks to help recipients of the reports interpret the results, identify opportunities for improvement, and recognize areas of high performance where best practices may be spread. Q Corp calculates two state benchmarks for Oregon and includes NCQA HEDIS® national benchmarks when applicable.

State Benchmarks

The Oregon mean clinic score included in the state snapshot table is calculated as the mean clinic score among clinics with at least 30 patients in the measure denominator, regardless of clinic size (number of practicing primary care providers). This calculation includes many of the small rural clinics added to Q Corp's Provider Directory during the 2011 expansion, providing a more comprehensive picture of the care that is being provided by clinics across the state.

The Oregon mean score included in medical group and provider reports is calculated as the mean clinic score among clinics that meet Q Corp's public reporting criteria – three or more practicing primary care providers, at least 30 patients in the measure denominator, and belonging to a group that has been included in at least one round of private reports. These inclusion criteria are more restrictive and result in fewer patients being included in the calculation. Because this score is the basis for which the public

category cutoffs are determined, Q Corp's Measurement and Reporting Committee advised that clinics included in public reports should only be compared to other publicly reported clinics.

In addition, Q Corp calculates the Oregon Achievable Benchmark of Care (ABC) for each measure. This benchmark, developed at the University of Alabama at Birmingham, indicates the pared 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 article: http://intqhc.oxfordjournals.org/content/10/5/443.full.pdf.

National Benchmarks

More than 90 percent of U.S. health plans use NCQA HEDIS® measures to evaluate performance on important dimensions of health care and service, and more than 1,100 health plans nationwide voluntarily disclose their clinical quality and resource use data to NCQA. In turn, NCQA uses the data to create benchmarks and publish an annual report entitled *The State of Health Care Quality*.

Q Corp's private reports include the HEDIS® national mean and 90th percentile (top 10 percent) benchmarks for each HEDIS® measure. For this report, combined 2014 HEDIS® national mean and 90th percentile benchmarks were created for the state snapshot table using the proportions of payer type specific to each measure.

For example, the combined national mean for breast cancer screening was calculated as follows:

	Commercial	Medicaid	Medicare
Proportion of members in denominator	57.43%	10.44%	32.13%

Combined HEDIS® national mean = Proportion of commercial x (2013 commercial HEDIS® national mean)
+ proportion of Medicaid x (2013 Medicaid HEDIS® national mean)
+ proportion of Medicare x (2013 Medicare HEDIS® national mean)
= 0.5743 x (66.5) + 0.1044 x (50.4) + 0.3213 x (67.9)
= **65.3**

Comparing Oregon clinics to a benchmark set by a data system that represents voluntarily participating health plans is not ideal. However, the NCQA HEDIS data set provided are the only benchmarks available at this time.

Public Reporting Category Cut-offs

Q Corp's public consumer web pages, www.q-corp.org/compare-your-care, includes performance results for Oregon clinics that meet the following criteria: three or more primary care providers, 30 or more patients in a given measure, and whose group has been included in at least one round of private reports. See the "Criteria for Clinic Inclusion in Public Reports" section for more information.

To facilitate consumer understanding, Q Corp presents clinic results using category icons reading “Better”, “Average” and “Below.” Clinics with rates that are above or below one standard deviation from the statewide mean clinic rate are reported as “Better” or “Below”, respectively. As a result, 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 results of clinics meeting the public reporting criteria.

During initial rounds of public reporting, clinic results were presented only with these performance category icons (no raw rates) on the public website www.q-corp.org/compare-your-care. In March 2012, following the second release of scores on the public website, the Robert Wood Johnson Foundation provided funding for usability testing to be conducted by the American Institutes for Research (AIR). Among the findings was that displaying raw clinic rates (in addition to the category icons) made consumers trust the data more, though consumers could not reliably interpret the rates. In response, Q Corp’s Measurement and Reporting Committee recommended that results still be displayed using category icons, but that raw rates have been included in clinic pop-ups on the website since 2012. Committee members emphasized the need to include additional text to help users accurately interpret the information.

Trends

Q Corp’s statewide report includes a trend for potentially avoidable ED visits over four overlapping measurement periods. Trend lines in the graphs are based on linear regression with R-squared values based on the goodness of fit of each trend line to the data.

Reports

Q Corp’s Senior Director of Informatics oversees Q Corp’s measurement and reporting initiative. The multi stakeholder Measurement and Reporting Committee provides guidance on the reporting initiative.

Provider Reports for Quality Improvement

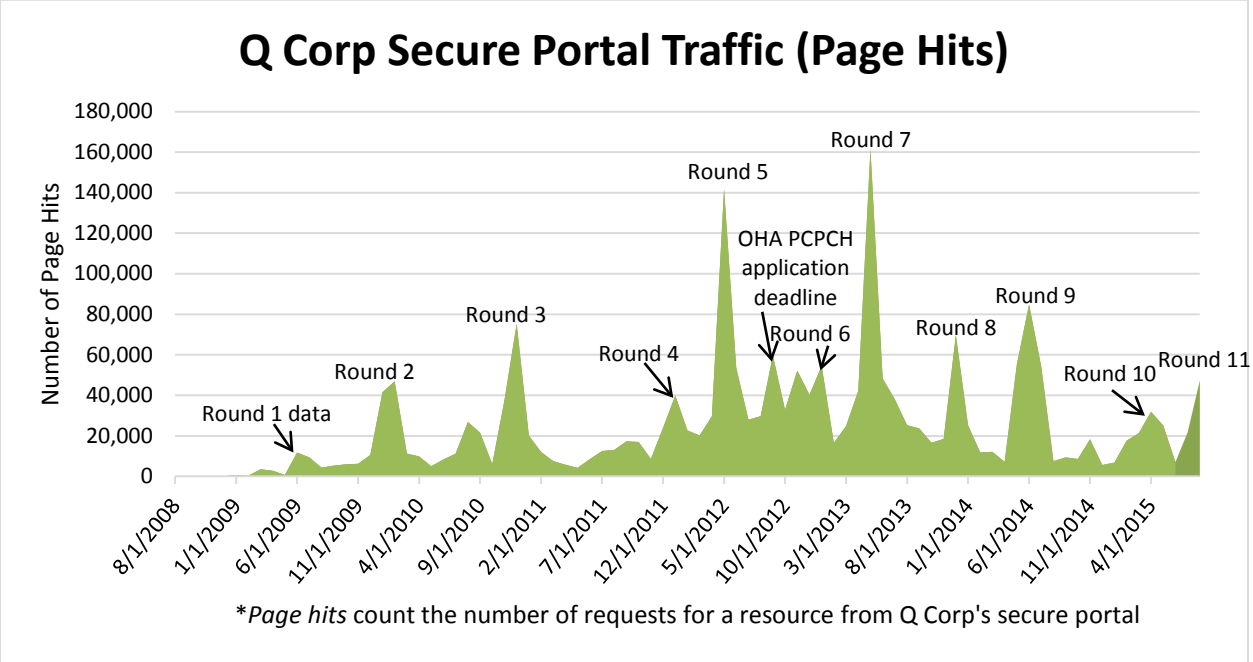
Q Corp creates and distributes quality and resource use reports for medical groups and providers twice per year. These are distributed as mailed hard copy reports as well as online reports accessible through a secure provider portal, allowing users to view data at the medical group, clinic, provider, and patient levels. In response to feedback from practicing primary care providers, mailed reports and communications from Q Corp are sent to medical group administrators for initial review. Administrators are often medical group managers, quality improvement directors and/or medical directors. After reviewing the reports, which contain results at the medical group and provider levels, administrators are then asked to distribute the provider-level reports to providers within the group.

The physicians, nurses and medical group administrators who helped design this effort emphasized that providing clinic, provider and patient-level detail to medical groups is essential if claims information is to

be validated, trusted and useful. In response, Q Corp created a secure online portal to deliver this information to medical groups and providers. 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. Creating provider reports and making patient-level data available is considered an important component of Q Corp's effort to assist medical groups with tools for effective quality improvement. Reporting of this information complies with *Health Insurance Portability and Accountability Act* (*HIPAA*) regulations.

To meet the requirements for publicly reporting Medicare Fee-Service data, Q Corp extended its 30 day review period to 60 days in Spring 2014, as required by the Centers for Medicare & Medicaid Services (CMS). Q Corp's secure online portal received approximately 70,000 page hits from medical group users and providers during the two month medical group review period in Spring 2015 (see graph below).

Q Corp is currently on a spring/fall reporting schedule. The spring reports are distributed privately to medical groups as well as publicly (at the clinic-level only) on Q Corp's consumer website, www.q-corp.org/compare-your-care. The fall reports have been added to Q Corp's reporting schedule in response to multiple requests from groups saying that more frequent reports are helpful for quality improvement purposes. The fall reports are only distributed privately to medical groups and participating Q Corp data suppliers.



**Page hits* count the number of requests for a resource from Q Corp's secure portal

Criteria for Clinic Inclusion in Public Reports

Criteria for inclusion on Q Corp's public consumer website www.q-corp.org/compare-your-care are as follows:

- Three or more primary care providers practicing at the clinic
- Minimum 30 patients that meet the specifications for the measure
- Medical group has been included in at least one round of private reports

In previous rounds of reporting, only clinics with four or more practicing primary care providers and at least 25 patients appropriate for inclusion in a measure were eligible for public reporting. These criteria were revised by Q Corp's multi-stakeholder Measurement and Reporting Committee, beginning in 2013. All clinics in Q Corp's provider directory, regardless of size, receive reports privately for their own internal quality improvement efforts and have the option to opt in to public reporting. For more information on the inclusion specifications for each measure, see Table 8 at the end of this appendix.

Medical groups that are new to receiving Q Corp's reports have their results 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 around measurement.

Results for individual providers are not publicly reported at this time, but are provided in hard copy and online for internal clinic/provider use and quality improvement efforts. Clinics with fewer than three providers that wish to have their data included in public reports may opt-in to the initiative. Health plans receive unblinded information on providers and clinics for their insured members.

Annotation for Federally-Qualified Health Centers (FQHCs)

Prior to the public release of data in January 2010, Q Corp heard from a number of safety net clinics facing unique data quality issues. These issues fell into a few distinct areas: 1) patient factors; 2) claims billing practices; 3) clinic and provider differences; and 4) methodological issues. Some factors identified by safety net clinics are inherent in the measurement process and may affect results among all Oregon clinics. A special Safety Net Subcommittee meeting was assembled in January 2011 to investigate coding issues particular to FQHCs and their possible impact on measure results. Present were members from Q 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 for all quality measures reported on Q Corp's consumer website, www.q-corp.org/compare-your-care, with a footnote reading:

> *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. *Q Corp* is working with Oregon FQHCs to address any discrepancies.

Administrative Claims Data

The clinic results included in *Information for a Healthy Oregon* are based on administrative and pharmacy claims supplied by 14 data suppliers. The aggregated data include information for 523.6 million test, diagnosis and service claim lines provided by physicians and other practitioners and 93.3 million prescription claim lines through June 30, 2014. The cumulative data represent care provided to nearly three million commercial, Medicare Advantage, Medicaid managed care, and Medicaid fee-for-service patients continuously enrolled as of June 30, 2014 (approximately 2.8 million enrolled during the 2013 – 2014 measurement year). See Tables 1 and 2 for a detailed summary of Q Corp's claims database.

Validation

Claims data are submitted by health plans to Milliman, Q Corp's data services vendor. Milliman works with each data supplier to validate the submitted data. Two distinct levels of validation are performed – one that ensures the correct transmission of the data and another that ensures measure results are consistent between Milliman and each data supplier. Once validated, the data is aggregated across data suppliers prior to measure calculation. This allows Q Corp to track members whose coverage changed during the measurement period, which results in a greater number of members that meet continuous enrollment criteria for the measures.

Medical Group Pre-Testing

Prior to adding new measures to reports, Q Corp recruits volunteer medical groups to compare preliminary results on Q Corp's secure portal to patient records. This validation ensures that measures are running as expected and are producing accurate and useful results. Q Corp provides the volunteer medical groups with detailed instructions to ensure that a random selection of patient records are considered and all pertinent information is reviewed. Medical groups submit patient-level feedback through the secure portal, after which Q Corp and Milliman review the results and make any needed adjustments to the measures or methods.

This year, Q Corp elected to add a small handful of measures that were included on the preliminary list for the federal exchange:

- Appropriate Testing for Children with Upper Respiratory Infections
- Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis
- Annual Monitoring for Patients on Persistent Medications

Medical groups are still validating these measures to be included in the 2016 Statewide Report.

Q Corp's Measurement and Reporting Committee performs a final review of the findings from the medical group validations and determines whether measures should be added to Q Corp's reports.

Advantages and Limitations of Administrative Claims Data

Claims data reflect information submitted by providers to payers as 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 Q Corp's data set is that the claims are aggregated across 12 of Oregon's largest health plans, DMAP and Medicare fee for service, assembling the most comprehensive and useful set of claims to date. The data include information for patients that receive care across settings (outpatient, inpatient, ED, etc.) and throughout the regions of Oregon.

The limitations of claims data include timeliness 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, or patients served by a plan that does not participate in the initiative. Q Corp is actively working with additional data suppliers to fill in some of these gaps for future reports.

Claims may also be missing information that would exclude patients from the denominator for clinical reasons (e.g. hysterectomies performed before the start of the claims capture period, which should exclude women from the cervical cancer screening measure) and billing workarounds on the part of clinics that prevent accurate data capture. Billing workarounds sometimes include billing from a provider 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.

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 health record (EHR) data or chart abstraction. However, plans for obtaining EHR and other data sources are underway as part of Q Corp's technology planning process.

Table 8: Quality Measure Descriptions and Definitions

Measure Name	Numerator: Definition for Compliance of Measure	Denominator: Definition of Condition and Exclusions
Breast Cancer Screening	Women who had a mammogram during the measurement period* or the year prior.	**Women eligible for breast cancer screening include:** 1st measure: Women 40-69 years of age 2nd measure: Women 50-74 years of age **Exclusions:** Women who had a bilateral mastectomy or 2 separate mastectomies billed in 2005 – June 2013.
Cervical Cancer Screening	Women who had a Pap test during the measurement period* or the two years prior. *Note: The U.S. Preventive Services Task Force released updated guidelines in March 2012 that allow for a five year interval between cervical cancer screenings, when administered in combination with HPV testing, for women aged 30-65 years. The 2014 HEDIS specifications will change to align with USPSTF recommendations which will impact measure results reported in 2015.*	**Women eligible for a Pap test include:** Women 21-64 years of age. **Exclusions**: Women who had a hysterectomy billed in 2005 – June 2013.
Chlamydia Screening	Women who had a Chlamydia test during the measurement period*.	**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 period* or had at least 1 claim with a code to identify sexually active women. **Exclusions:** Women who had a pregnancy test during the measurement period followed within 7 days by either a prescription for Accutane or an x-ray are excluded.
Depression: Antidepressant medication management: short term	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 period* 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: long term	Patients who remained on an antidepressant medication for at least 180 days (6 months) as determined by prescription fills.	

Measure Name	Numerator: Definition for Compliance of Measure	Denominator: Definition of Condition and Exclusions
Asthma: Use of appropriate medications for children with persistent asthma	Dispensed at least one prescription for a preferred therapy during the measurement period*. Preferred asthma medications include antiasthmatic combinations, antibody inhibitor, inhaled steroid combinations, inhaled corticosteroids, leukotriene modifiers, mast cell stabilizers, and methylxanthines.	**Asthma is defined by:** Patients 5–18 years of age during the measurement period* 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. Exclude from the eligible population all members diagnosed with emphysema, COPD, cystic fibrosis or acute respiratory failure.
Diabetes: HbA1c testing	Had at least one HbA1c test performed during the measurement period*.	**Diabetes is defined by:** 1. Patients 18-75 years of age who were dispensed insulin or oral hypoglycemics/antihyperglycemics 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 two† or more face-to-face encounter in an acute inpatient or emergency room setting with a diagnosis of diabetes. **Exclusions**: Patients with gestational diabetes, steroid-induced diabetes, or polycystic ovaries. *† The NCQA HEDIS definition requires only a single face-to-face encounter in an acute inpatient or emergency room setting with a diagnosis of diabetes. Based on clinic chart review results, Q Corp modified the definition to require two or more face-to-face encounters beginning with Fall 2012 reporting. The modified definition is expected to impact less than 2.5% of patients identified in the measure.*
Diabetes: LDL-C test	Had at least one LDL-C screening test done during the measurement period*.	
Diabetes: Eye exam (retinal) performed	Had an eye screening for diabetic retinal disease. This includes those diabetics who had a retinal or dilated eye exam, or a *negative* retinal or eye exam (negative for retinopathy), by an eye care professional (optometrist or ophthalmologist) during the measurement period*.	
Diabetes: Evidence of nephropathy assessment, treatment, or prevention	Screening for nephropathy or evidence of nephropathy during the measurement period*. Evidence of nephropathy includes a nephrologist visit, a urine macroalbumin test as documented by claims, and/or treatment with ACE inhibitor/ARB therapy.	
Coronary Artery Disease: Cholesterol management (LDL-C test) for patients with cardiovascular conditions	Had at least one LDL-C test during the measurement period*.	**Coronary artery disease is defined by:** 1. Patients 18-75 years discharged alive for AMI, CABG, or PCI between July 1, 2012 and May 1, 2013; or 2. Patients 18-75 years who had a diagnosis of any ischemic vascular disease (IVD) between July 1, 2012 and June 30, 2014. *Note: AMI and CABG are from inpatient claims using facility claims only.*
Use of Imaging Studies for Low Back Pain	Patients on whom an imaging study was not conducted on or within the 28 days following the episode date.	**Low back pain is defined by:** Patients aged 18-50 during the measurement period* who had an outpatient or ED encounter with a primary diagnosis of low back pain during the intake period (July 1, 2013 – June 3, 2014). **Exclusions:**

Measure Name	Numerator: Definition for Compliance of Measure	Denominator: Definition of Condition and Exclusions
	Episode date: Earliest date of service for an encounter during the intake period with a primary diagnosis code for low back pain.	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.
Generic Prescription Fills: Anti-hypertensives	Number of prescription fills for anti-hypertensives identified as generic.	**A prescription fill is defined by:** A prescription fill for at least a 30-day supply of anti-hypertensives, both brand-name and generic, during the 12-month measurement period* by a patient aged 18 years or older. *Note that Medicare Part D data is not included in this measure.*
Generic Prescription Fills: Statins	Number of prescription fills for statins identified as generic.	**A prescription fill is defined by:** A prescription fill for at least a 30-day supply of statins, both brand-name and generic, during the 12-month measurement period* by a patient aged 18 years or older. *Note that Medicare Part D data is not included in this measure.*
Generic Prescription Fills: SSRIs and other Second Generation Antidepressants	Number of prescription fills for second generation antidepressant prescriptions identified as generic.	**A prescription fill is defined by:** A prescription fill for at least a 30-day supply of second or third generation antidepressants, both brand-name and generic, during the 12-month measurement period* by a patient aged 18 years or older. Includes SSRIs, SNRIs and DNRIs. *Note that Medicare Part D data is not included in this measure.*
Appropriate Testing for Children with Pharyngitis	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.	**Eligible children are defined by:** Children aged 2 years as of the beginning of the intake period (Jan 1, 2013) to 18 years as of the end of the intake period (Dec 31, 2014) that had an outpatient or ED visit with only a diagnosis of pharyngitis and a dispensed antibiotic for that episode of care. **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.

Measure Name	Numerator: Definition for Compliance of Measure	Denominator: Definition of Condition and Exclusions
Well-Child Visits in the First 15 Months of Life	Children who had 6 or more well-child visits with a PCP during their first 15 months of life. Note: The PCP does not have to be the practitioner assigned to the child.	**Eligible children are defined by:** Children aged 15 months anytime during the measurement period*.
Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life	Children who had at least one well-child visit with a PCP during the measurement period*. Note: The PCP does not have to be the practitioner assigned to the child.	**Eligible children are defined by:** Children aged 3-6 years as of June 30 of the measurement period*.
Potentially Avoidable ED Visits, % of Total	The total number of emergency department visits with a primary diagnosis code that appears on California MediCal's list of Avoidable ICD-9 Diagnosis Codes for ED Care (see link below), among the eligible population. Link to MediCal Avoidable Visits ICD-9 diagnosis codes – see Appendix A: http://www.dhcs.ca.gov/dataandstats/reports/Documents/MMCD_Qual_Rpts/EQRO_QIPs/CA2010-11_QIP_Coll_ER_Remeasure_Report_F1.pdf	1st measure (Adult): The total number of emergency department visits among the patients aged 18 years and older. 2nd measure (Child): The total number of emergency department visits among patients aged 1-17 years. **Exclusions (Adult and Child):** Visits that result in an inpatient stay. Patients with mental health and chemical dependency services. Infants less than 12 months of age on the date of the emergency department visit.
30-Day All-Cause Readmissions, Unadjusted		The number of acute inpatient discharges for members 18 years of age and older who had one or more discharges during the measurement period*. **Exclusions:** • Nonacute inpatient rehabilitation services, including nonacute inpatient stays at acute rehabilitation facilities • Hospital stays where the Index Admission Date is the same as the Index Discharge Date • Any acute inpatient stay with a discharge date in the 30 days prior to the Index Admission Date • Inpatient stays with discharges for death • Acute inpatient discharge with a principal diagnosis for pregnancy or for any other condition originating in the perinatal period *Notes: For commercial, ages 18 to 64 years as of the index discharge date. For Medicare, ages 18 years and older as of the index discharge date. Q Corp modified the measure to include Medicaid beginning with Spring2014 reporting.*

Measure Name	Numerator: Definition for Compliance of Measure	Denominator: Definition of Condition and Exclusions
Potentially Avoidable ED Visits, % of Total	The total number of emergency department visits with a primary diagnosis code that appears on California MediCal's list of Avoidable ICD-9 Diagnosis Codes for ED Care (see link below), among the eligible population. Link to MediCal Avoidable Visits ICD-9 diagnosis codes – see Appendix A: http://www.dhcs.ca.gov/dataandstats/reports/Documents/MMCD_Qual_Rpts/EQRO_QIPs/CA2010-11_QIP_Coll_ER_Remeasure_Report_F1.pdf	1st measure (Adult): The total number of emergency department visits among the patients aged 18 years and older. 2nd measure (Child): The total number of emergency department visits among patients aged 1-17 years. **Exclusions (Adult and Child):** Visits that result in an inpatient stay. Patients with mental health and chemical dependency services. Infants less than 12 months of age on the date of the emergency department visit.
Potentially Avoidable ED Visits, Rate per 100 Patients **(See Notes)**	The total number of emergency department visits among patients enrolled for the entire last month of the measurement period (June 2013) with a primary diagnosis code that appears on California MediCal's list of Avoidable ICD-9 Diagnosis Codes for ED Care (see link below), among the eligible population. Link to MediCal Avoidable Visits ICD-9 diagnosis codes – see Appendix A: http://www.dhcs.ca.gov/dataandstats/reports/Documents/MMCD_Qual_Rpts/EQRO_QIPs/CA2010-11_QIP_Coll_ER_Remeasure_Report_F1.pdf	1st measure (Adult): The number of patients aged 18 years and older enrolled for the entire last month of the measurement period (June 2014). 2nd measure (Child): The number of patients aged 1-17 years and older enrolled for the entire last month of the measurement period (June 2014). **Exclusions (Adult and Child):** Visits that result in an inpatient stay. Patients with mental health and chemical dependency services. Infants less than 12 months of age on the date of the emergency department visit. *Notes: In medical group reports, Q Corp reports results as ED visits per 100 patients to facilitate interpretation by medical groups and providers. In other reporting, Q Corp may scale results to ED visits per 100,000 patients.*
Hospital Admissions for Ambulatory-Sensitive Conditions	Overall Composite: The number of patients with a discharge with ICD-9-CM principal diagnosis code for any of the conditions listed in the Acute/Chronic Composite measures (below). Acute Composite: The number of patients with a discharge with ICD-9-CM principal diagnosis code for any of the following: • PQI #10 – Dehydration • PQI #11 – Bacterial Pneumonia • PQI #12 – Urinary Tract Infection Chronic Composite: The number of patients with a discharge with ICD-9-CM principal diagnosis code for any of the following: • PQI #1 – Diabetes Short-Term Complications	The number of patients aged 18 years and older enrolled for the entire last month of the measurement period (June 2014). **Exclusions:** Maternal/neonatal discharges. Transfers from another institution. *Notes: Q Corp reports results as hospital admissions per 100 patients to facilitate interpretation by medical groups and providers. The Agency for Healthcare Research and Quality (ARHQ) scales results per 100,000 patients.*

Measure Name	Numerator: Definition for Compliance of Measure	Denominator: Definition of Condition and Exclusions
	• PQI #3 – Diabetes Long-Term Complications Admission Rate • PQI #5 – Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults • PQI #7 – Hypertension Admission Rate • PQI #8 – Congestive Heart Failure (CHF) • PQI #13 – Angina without Procedure • PQI #14 – Uncontrolled Diabetes • PQI #15 – Asthma in Younger Adults • PQI #16 – Rate of Lower-Extremity Amputation Among Patients with Diabetes	
Ambulatory Care: Emergency Department and Outpatient Utilization	The total number of emergency department visits that do not result in an inpatient stay for the eligible population. The total number of outpatient visits for the eligible population.	1st measure (Adult): The number of member months for patients aged 18 years and older during the measurement period*. 2nd measure (Child): The number of member months for patients aged 1-17 years during the measurement period*. 3rd measure (Adult): The number of member months for patients aged 18 years and older during the measurement period*. 4th measure (Child): The number of member months for patients aged 1-17 years during the measurement period*. *Note: Ambulatory Care rates reported in medical group reports as per 1,000 member months. In this report, rates are reported as per 1,000 members.*
Developmental Screenings in the First 36 Months of Life	Children who had a developmental screening during the measurement period*.	Children aged 1, 2, or 3 years during the measurement period* and were continuously enrolled for the 12 months prior to their birthdate in the measurement period*.
Adolescent Well-Care Visits	Patients with at least one comprehensive well-care visit during the measurement period*. *Note: Q Corp follows the OHA deviation which drops the requirement that a well-care visit be with only a PCP or OB/GYN practitioner.*	Patients aged 12-21 years as of the last day of the measurement period*.
Appropriate Treatment for Children With Upper Respiratory Infection	Children who were dispensed an antibiotic on or in the three days after the diagnosis.	**Eligible children are defined by:** Children aged 3 months to 18 years as of the beginning of the intake period (Jan 1, 2013) to 18 years as of the end of the intake period (Dec 31, 2014) that had an outpatient or ED visit with only a diagnosis of acute respiratory infection. Child must be continuously enrolled from 30 days prior to diagnosis through 3 days after diagnosis.

Measure Name	Numerator: Definition for Compliance of Measure	Denominator: Definition of Condition and Exclusions
Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis	Dispensed prescription for antibiotic medication (Table AAB-D) on or three days after the index episode date.	**Eligible adults are defined by:** Adults 18 years as of July 1 of the year prior to the measurement year (July 1, 2012) to 64 years as of June 30 of the measurement year (June 30, 2014), who had an outpatient or ED visit during the report period (July 1, 2013 through June 30,2014) with any diagnosis of acute bronchitis. Patient must be continuously enrolled for one year prior to the index episode date through 7 days after the index episode date.
Annual Monitoring of Patients on Persistent Medications	There are three rates reported for each therapeutic agent as follows: • For patients receiving an angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB), at least one serum potassium and a serum creatinine therapeutic monitoring test in the measurement year • For patients receiving digoxin, at least one serum potassium, at least one serum creatinine, and at least one serum digoxin therapeutic monitoring test in the measurement year • For patients receiving a diuretic, at least one serum potassium and a serum creatinine therapeutic monitoring test in the measurement year • In addition, an overall rate is reported (total of all numerators divided by total of all denominators)	**Eligible adults are defined by:** Adults 18 years of age and older who received at least 180 treatment days of ambulatory medication therapy for one of the following therapeutic agents during the measurement period*: 1. Angiotensin converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARB) 2. Digoxin 3. Diuretics

* Results are based on administrative claims data with dates of service between July 1, 2011 – June 30, 2014, and the measurement period July1, 2013 – June 30, 2014.