Information for a Healthy Oregon

Statewide Report on Health Care Quality 2013

OREGON HEALTH CARE QUALITY CORPORATION

Welcome

Letter from the Board Chair and Executive Director

How do we measure value? That question was posed at a recent Oregon Health Care Quality Corporation meeting, where a small committee of health care professionals, consumers and employers came together to help us begin developing new cost of care reports. The goal of this new initiative is to support payment reform efforts that aim to improve the quality of health care in Oregon while reducing costs. As the committee members worked through the guiding principles for cost of care reporting, it became clear that the notion of value — and the tools to measure it — are a critical part of reforming health care.

That's just one example of our efforts to address the needs of a rapidly changing health care environment by expanding and enhancing the information we provide. As an independent, multi-stakeholder organization we play a unique role in convening our community members to continually identify and develop the most valuable health care data and analytics. Those reporting efforts began in 2008, when together with our many partners we produced our first quality reports using claims data aggregated across multiple payers.

Today many of the measures we use in our annual report, *Information for a Healthy Oregon,* have been adopted by local initiatives to help inform and evaluate efforts to improve health care (see page 5).

Though we're delighted that these measures are increasingly being used by our community, with new Oregon transformation opportunities come new challenges. With a growing call for timely and actionable information, new data sources and measure sets need to be developed. Q Corp's Board of Directors and technical committees are committed to exploring new technologies and capabilities. At the same time there has never been a greater need to align measurements than now. Over the next year Q Corp plans to engage public and private stakeholders in meaningful conversations that will plan for future measurement needs.

As health care reform efforts continue to ramp up, we'll help overcome new challenges while continuing to be a trusted community resource for unbiased information. Throughout this fourth edition of *Information for a Healthy Oregon,* you'll find examples of how we're enhancing our analyses to help meet the Triple Aim goals of improving overall health, enhancing the patient experience of care and reducing costs. We're also working to include new data sources, such as clinical information from Electronic Medical Records and Medicare Fee for Service data from the Centers for Medicare and Medicaid Services. We believe that through these efforts, and with your continued support, we can achieve our mission to improve the health of all Oregonians.

Steven D. Marks, MD, MHA
Board Chair

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Executive Director

In February 2013, Q Corp hosted an event to share information about measuring and improving the patient experience of care.

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Among the many local and national efforts to improve health care, Oregon stands out as a regional champion of innovation. The Oregon Health Care Quality Corporation (Q Corp) is playing a vital role in our community as a trusted resource for unbiased and actionable health care information. The goal of this report is to analyze information across populations to identify opportunities for improving the quality, affordability and patient experience of health care for all Oregonians. This report, and future reports, will also help track the progress and impact of local and national health care reform efforts.

Overview

The data in this report is based on administrative (billing) claims from eight of Oregon's largest health plans, two managed Medicaid organizations and the Oregon Health Authority Division of Medical Assistance Programs (Medicaid). Q Corp now has six years of historical claims data, representing care for three million Oregonians since 2006. Data for the current measurement year — July 2011 to June 2012 — represents care for nearly two million members. The aggregated dataset allows Q Corp to track care even when patients change health care coverage, providing a more complete view of health care quality and utilization than would be possible with data from a single source. The data in this report represents 83 percent of the commercially insured population, 67 percent of the Medicaid population and 41 percent of the Medicare Advantage population in Oregon. More information about Q Corp data sources can be found on page 24. A detailed Technical Appendix is also available at Q-Corp.org. Some key findings include:

- Potentially avoidable Emergency Department use has decreased significantly over the last year.
- Wide variation in clinic breast cancer screening patterns by age group indicates a lack of consensus regarding screening practices. A considerable number of women are receiving breast cancer screenings both before and long after the ages recommended by the United States Preventive Services Task Force.
- Clinics recognized by the Oregon Health Authority as Patient-Centered Primary Care Homes (PCPCH) achieve significantly higher scores than non-recognized clinics on several measures of care. On no measure was the mean clinic score among PCPCH-recognized clinics lower than among non-recognized clinics.

Q Corp receives national recognition as a CMS Qualified Entity

In November 2012 the Centers for Medicare and Medicaid Services announced that Q Corp is one of the first three organizations in the U.S. to become a certified Qualified Entity to receive Medicare Fee for Service (FFS) and Medicare Part D data. In this report, an estimated 41 percent of Medicare members are included in the data through participation in Medicare Advantage plans; with the addition of the Medicare FFS and Part D data, Q Corp's reports will capture an estimated 96 percent of Medicare enrollees in the state of Oregon.

What's being measured

Since its first public reporting of health care quality information in 2008, Q Corp has become both a local and national model for translating data from multiple health plans, Medicaid, and Medicare Advantage into objective, actionable information for policymakers, consumers, providers, health plans, employers, and other stakeholders. Q Corp's core measure set has evolved and expanded year after year, aided by the technical expertise of its multi-stakeholder Measurement and Reporting Committee.

Over time, the push for increased transparency in health care has grown, and quality reporting has been included in many local and national initiatives to improve care. The table below includes Q Corp measures that are featured in this report, and illustrates the adoption of these measures for multiple purposes by other health care improvement efforts.

Q Corp 2013 Measures	**Oregon Health Authority State Performance**	**Cover Oregon** (Health Insurance Exchange)	**OHA Patient-Centered Primary Care Home** (Core/Menu)	**CMS 5-Star Performance**
Antidepressant Medication Management		✓		
Appropriate Asthma Medications			✓	
Appropriate Low Back Pain Imaging				
Appropriate Use of Antibiotics for Children with Sore Throats	✓		✓	
Breast Cancer Screening		✓	✓	✓
Cervical Cancer Screening	✓		✓	
Chlamydia Screening	✓			
Cholesterol (LDL-C) Screening for People with Heart Disease		✓		✓
Diabetes Eye Exam		✓		✓
Diabetes Blood Sugar (HbA1c) Screening	✓	✓	✓	
Diabetes Cholesterol (LDL-C) Screening	✓	✓		✓
Diabetes Kidney Disease Monitoring		✓		✓
Generic Prescription Fills				
Potentially Avoidable ED Visits				
Potentially Avoidable Hospital Admissions	✓	✓		
Well-Child Visits in the First 15 Months of Life	✓	✓	✓	
Well-Child Visits in the 3rd, 4th, 5th and 6th Years of Life			✓	
30 Day All-Cause Readmissions	✓			✓

Producing unbiased information to improve health care in Oregon

State snapshot

Q Corp continues to track Oregon clinic performance on several important measures of quality and resource use. The combination of Q Corp's expansive claims dataset and unique Oregon provider directory allows patient care to be assigned to the appropriate provider and clinic for reporting. (For more about Q Corp's provider directory, which includes 3,394 practicing primary care providers in Oregon, see page 19).

For the measures in the table on page 7, which are analyzed in greater depth later in this report, Q Corp calculates the Oregon mean clinic score for comparison against national benchmarks from the National Committee for Quality Assurance (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS®).

Q Corp also calculates the Oregon Achievable Benchmark of Care (ABC) to determine performance already being achieved by "best-in-class" clinics in the state (the aggregate rate of the best performing clinics providing care to at least 10 percent of the population). The clinics included in this report must have at least 30 patients who meet the measure criteria. For these measures, higher scores indicate a higher level of performance.

Key findings

- Oregon's mean clinic score is higher than the national 90th percentile on diabetes eye exams and appropriate low back pain imaging.
- Oregon's mean clinic score is less than the national mean on six measures of chronic disease care and preventive care for women and children.
- Oregon's mean clinic score is between the national mean and national 90th percentile on seven measures.

	Oregon Mean Clinic Score	95% Confidence Interval	Number of Patients / Clinics	Low / High Clinic Score	2012 HEDIS National Mean	2012 HEDIS National 90th Percentile	Oregon ABC Benchmark
Diabetes Care							
Blood Sugar (HbA1c) Screening	88.3%	87.6 – 89.0	59,977 / 409	56.3 / 100.0	87.0	92.1	95.9
Cholesterol (LDL-C) Screening	79.5%	78.5 – 80.6	59,977 / 409	36.7 / 98.1	81.3	86.8	93.4
Eye Exam	61.2%	60.1 – 62.3	59,977 / 409	25.0 / 90.9	48.4	61.0	79.4
Kidney Disease Monitoring	78.5%	77.4 – 79.6	59,977 / 409	37.5 / 100.0	77.9	85.2	92.3
Women's Preventive Care							
Breast Cancer Screening	69.0%	68.1 – 70.0	193,489 / 570	29.4 / 96.1	66.7	72.2	87.2
Cervical Cancer Screening	69.5%	68.6 – 70.5	188,655 / 581	32.0 / 100.0	74.4	79.1	90.0
Chlamydia Screening	41.1%	39.5 – 42.7	28,412 / 305	7.4 / 84.5	42.4	54.5	78.4
Other Chronic Disease Care							
Appropriate Asthma Medications	91.0%	90.0 – 92.0	10,783 / 148	68.6 / 100.0	91.6	93.9	97.8
Antidepressant Medication Management (Short Term)	69.5%	67.3 – 71.7	2,856 / 60	50.0 / 97.2	64.9	70.4	83.2
Antidepressant Medication Management (Long Term)	54.5%	52.4 – 56.7	2,856 / 60	34.4 / 80.6	48.8	55.4	69.6
Cholesterol (LDL-C) Screening for People with Heart Disease	85.3%	83.5 – 87.2	7,548 / 92	54.8 / 97.3	83.5	89.6	96.2
Ambulatory Resource Use							
Appropriate Low Back Pain Imaging	85.9%	84.9 – 86.9	9,817 / 155	68.6 / 100.0	73.8	81.3	94.5
Generic Prescriptions Fills, Statins	82.0%	81.3 – 82.7	846,188 / 625	15.0 / 100.0	n/a	n/a	92.6
Generic Prescriptions Fills, SSRIs	84.4%	83.8 – 85.0	973,456 / 686	41.5 / 100.0	n/a	n/a	94.9
Appropriate Use of Antibiotics for Children with Sore Throats	79.7%	76.1 – 83.2	10,033 / 105	12.9 / 99.4	79.3	89.4	97.1
Pediatric Care							
Well-Child Visits in the First 15 Months of Life, Six or More	66.2%	63.7 – 68.7	15,138 / 135	6.7 / 96.7	76.1	86.2	87.7
Well-Child Visits in the 3rd, 4th, 5th and 6th Years of Life	59.3%	57.6 – 61.0	77,393 / 300	17.1 / 88.6	69.8	85.1	82.9

The HEDIS® diabetes 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.

HEDIS® national mean and 90th percentile based on commercial PPO benchmarks.

KEY

- Oregon mean clinic score is higher than the national mean and 90th percentile
- Oregon mean clinic score is higher than the national mean, lower than the 90th percentile
- Oregon mean clinic score is less than the national mean
- No national benchmarks are available for comparison

Producing unbiased information to improve health care in Oregon

Last year Q Corp introduced new statewide measures focusing on potentially avoidable Emergency Department (ED) visits and hospital admissions. This year Q Corp has added an additional measure examining readmissions to the hospital occurring within 30 days of a previous hospital stay. The following tables illustrate Oregon's overall performance in these areas. For these measures, lower scores indicate a higher level of performance.

Key findings

- Avoidable ED visits constitute 13.9 percent of total ED visits among children, down from 16.8 percent a year ago. Similarly, the percentage of avoidable ED visits among adults has decreased to 10.1 percent, down from 11.0 percent last year.
- Similar to last year, Oregon's rate of potentially avoidable hospital admissions is slightly lower than the national observed rate for acute conditions (628 admits per 100,000 members versus 672) and slightly higher than the observed rate for chronic conditions (1,123 admits per 100,000 members versus 1,042). Although Oregon's rates appear slightly lower than those reported by Q Corp last year, the changes are not statistically significant.
- One in nine hospital admissions by adults are followed by a readmission within 30 days. Medicare members have twice the rate of 30 day readmissions compared to members covered by commercial insurance.

Measure	**Oregon Score** (Potentially Avoidable ED Visits/Total Visits)	**95% Confidence Interval**	**N** (Total ED Visits)	**Oregon Rate of Potentially Avoidable ED Visits per 100,000 Insured Members**
Potentially Avoidable ED Visits (Child age 1–17)	13.9%	(13.7% – 14.1%)	108,096	3,312
Potentially Avoidable ED Visits (Adult age 18+)	10.1%	(10.0% – 10.2%)	296,852	2,318

Measure	Oregon Rate (Potentially Avoidable Admits/100,000 Members)	95% Confidence Interval	N (Total Members)	AHRQ National Observed Rate per 100,000
Potentially Avoidable Hospital Admissions Overall (Adult age 18+)	1,752	(1,728 – 1,775)	1,164,007	1,714
Potentially Avoidable Hospital Admissions Acute (Adult age 18+)	628	(614 – 643)	1,164,007	672
Potentially Avoidable Hospital Admissions Chronic (Adult age 18+)	1,123	(1,104 – 1,143)	1,164,007	1,042

Measure	Oregon Score (Readmissions/ Index Admissions*)	95% Confidence Interval	N (Total Index Admissions)
30 Day All-Cause Readmissions (Adult age 18+)	11.4%	(11.1% – 11.7%)	49,270

* Index admissions are initial admissions to the hospital that do not follow a discharge date for a previous admission within 30 days. Includes commercial and Medicare members 18 years of age or older. For more information, see Technical Appendix at Q-Corp.org.

Oregon opportunities

In addition to providing statewide snapshots of health care quality and resource use, Q Corp's dataset can be used to study variation in care by geography, insurance type, patient characteristics and various other attributes. Here we take a deeper look at Oregon's current performance and where opportunities may exist to improve coordination of care across settings, transform primary care, keep people healthy through preventive care and improve population health.

Coordinating care across settings

Potentially avoidable Emergency Department visits

Quality improvement and cost reduction are focal points of private and public health policy agendas. Increasing attention has been focused on Emergency Department (ED) utilization and efforts to reduce potentially avoidable ED visits. The analyses in this section are based on a measure developed by the Medi-Cal Managed Care Division of the California Department of Health Care Services. This measure identifies potentially avoidable ED visits by using a conservative list of diagnosis codes for conditions that are typically treated by a primary care provider in an outpatient setting (for example, colds). The list of diagnosis codes includes common medical conditions but does not include mental health, dental care or exacerbation of chronic conditions — as a result this measure is likely to underreport the actual number of avoidable ED visits.

Similar to last year's findings, Q Corp's data reveals stark contrasts in ED use among members covered by commercial insurance, Medicaid and Medicare. This is particularly true for children covered by Medicaid, who experience nearly double the rate of potentially avoidable ED visits as compared to children covered by commercial insurance.

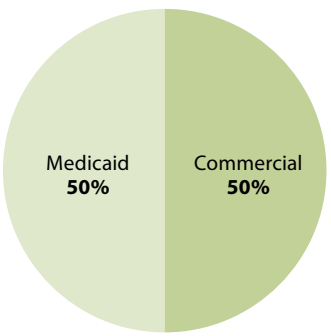
	COMMERCIAL		MEDICAID		MEDICARE	
Measure	**Score** (Potentially Avoidable ED Visits/Total Visits)	**N** (Total ED Visits)	**Score** (Potentially Avoidable ED Visits/Total Visits)	**N** (Total ED Visits)	**Score** (Potentially Avoidable ED Visits/Total Visits)	**N** (Total ED Visits)
Potentially Avoidable ED Visits (Child age 1–17)	8.6% (8.2% – 9.0%)	22,193	15.3% (15.0% – 15.5%)	85,884	*	*
Potentially Avoidable ED Visits (Adult age 18+)	9.1% (8.9% – 9.3%)	76,920	11.2% (11.0% – 11.4%)	165,872	8.0% (7.8% – 8.2%)	54,060

* Dataset includes a small number of Medicare patients under 18 years of age. Under certain conditions, Oregon Health Plan members under 18 may receive Medicare benefits.

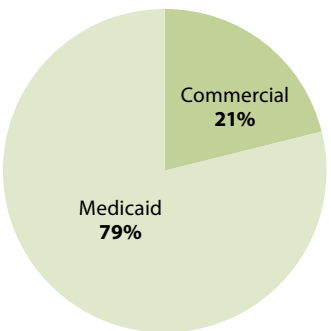
While equal proportions of children under age 18 in Q Corp's dataset are covered by commercial insurance and Medicaid, 79 percent of all ED visits and 87 percent of potentially avoidable ED visits are made by children covered by Medicaid. Similarly, Medicaid members represent roughly 17 percent of the adult insured population but account for 56 percent of all ED visits and 62 percent of avoidable ED visits.

Potentially Avoidable ED Visits
Child (age 1–17)

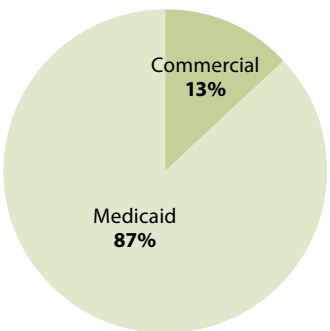
Proportion of Members



Proportion of Total ED Visits

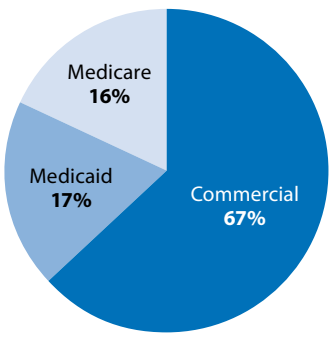


Proportion of Avoidable ED Visits

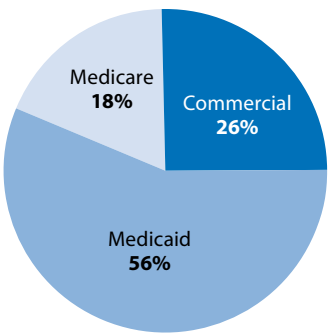


Potentially Avoidable ED Visits
Adult (age 18+)

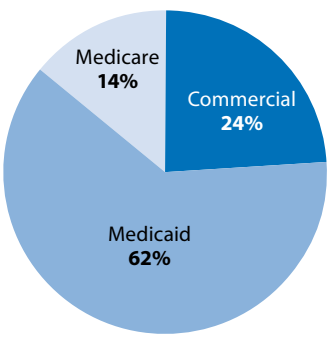
Proportion of Members



Proportion of Total ED Visits



Proportion of Avoidable ED Visits



Oregon opportunities

Further analysis reveals striking geographical variation in ED utilization for children younger than 18 years, after controlling for type of health care coverage. In all counties where data is available, patients covered by Medicaid demonstrate a higher percentage of potentially avoidable ED visits than commercially insured patients. In some counties this gap is especially large — for example, Lake County's scores range from 7 to 25 percent for residents covered by commercial insurance and Medicaid, respectively. Armed with information about the geographic distribution of results, community resources can be dedicated in a way that achieves the greatest impact.

Potentially Avoidable ED Visits — Child (age 1–17)

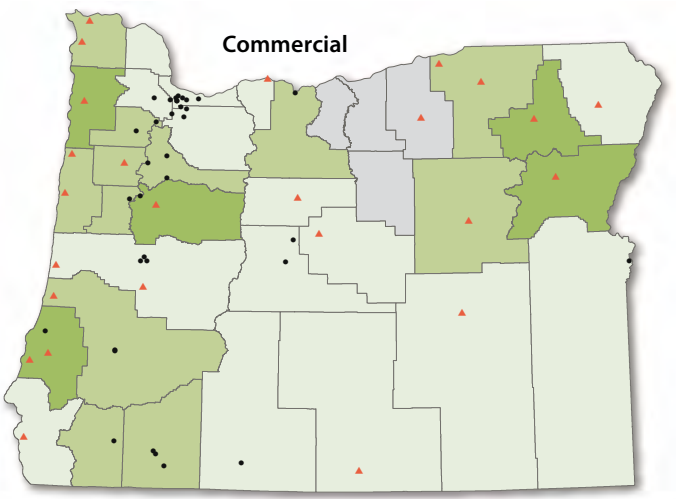
Hospital Type

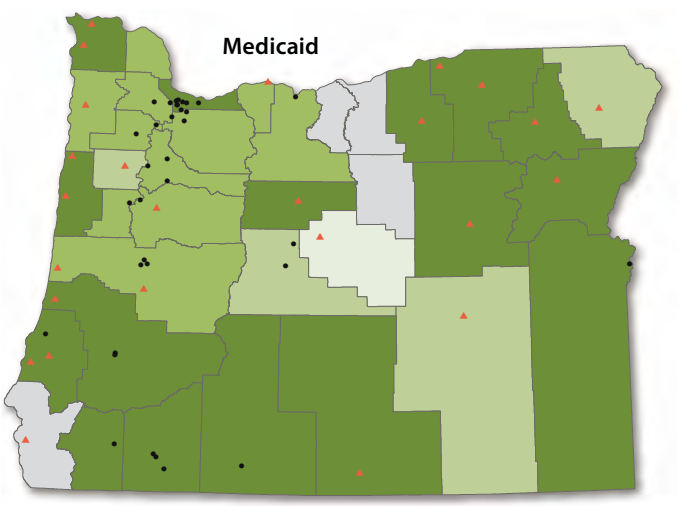
- Acute Care Hospitals
- Critical Access Hospitals

Adjusted County Rate per 100,000

- Insufficient Data
- 0 – 8.7%
- 8.8 – 11.8%
- 11.9 – 16.4%
- 16.5 – 25%

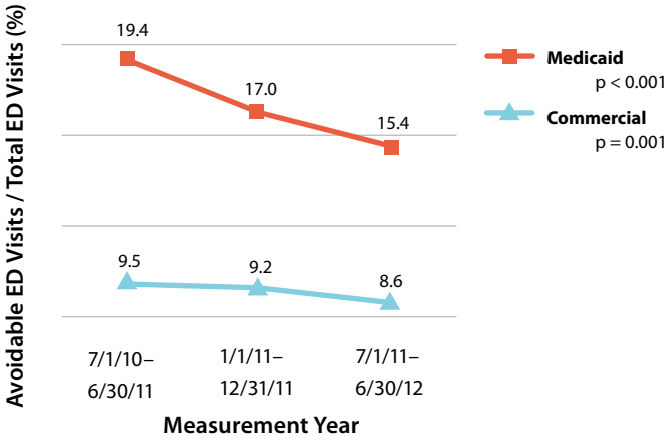
Data Sources: Oregon Health Care Quality Corporation and Oregon Geospatial Enterprise Office Geospatial Library. Prepared by Northwest Economic Research Center. www.pdx.edu/nerc



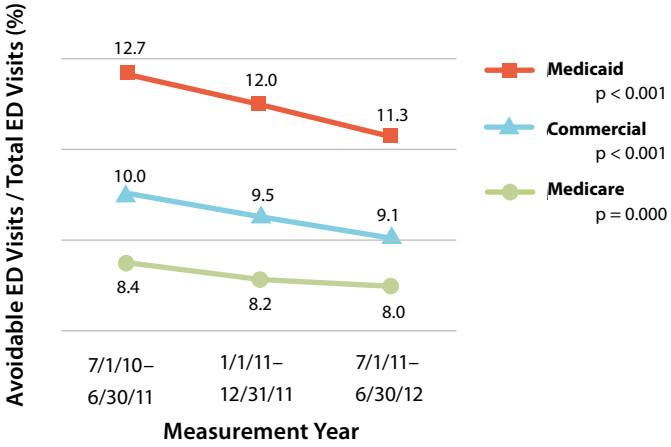


Q Corp's data shows a significant decrease in potentially avoidable ED visits across three reporting periods and across all payer types. This trend is visible for both children and adults, and likely reflects increased attention to access and coordination of care as well as incentives for improving performance in this area.

Reductions in Potentially Avoidable ED Visits — Child (age 1–17)



Reductions in Potentially Avoidable ED Visits — Adult (age 18+)



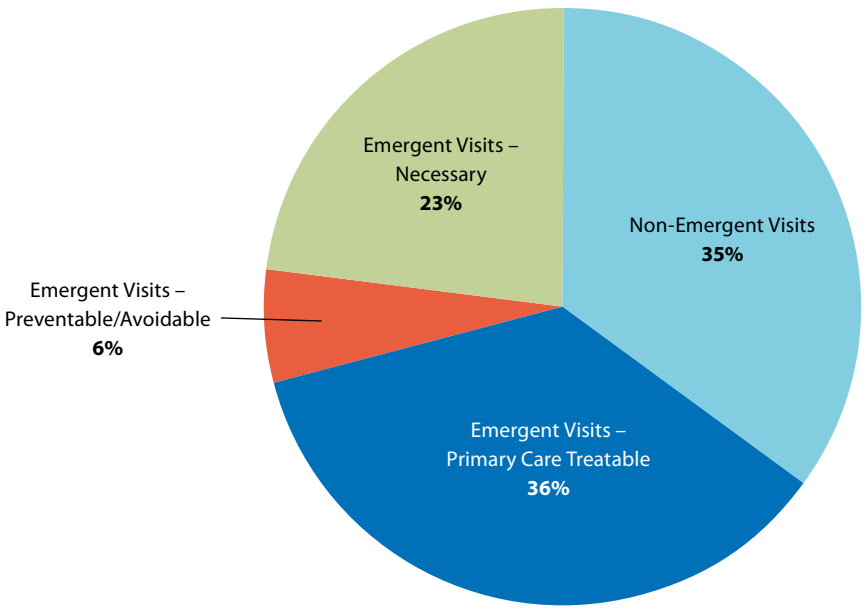
Oregon opportunities

Although many initial efforts to reduce avoidable ED visits have centered on diverting less complex visits (sore throats and ear infections), recent research suggests that even greater potential for cost savings lies in the management of intermediate or complex cases. For example, nearly 50 percent of hospital admissions enter from the ED, and preventing a single hospital admission for congestive heart failure may result in larger savings ($10,400) than diverting 100 ED visits for sore throats ($10,000 total savings) (Smulowitz 2012).

The Medi-Cal ED visit measure Q Corp has used over the last two years does not include intermediate or complex conditions. Therefore, this year Q Corp has added a second measure of avoidable ED visits developed by researchers at New York University's Center for Health and Public Service Research. This alternate methodology differentiates ED visits into necessary emergent visits, preventable/avoidable emergent visits, primary care treatable emergent visits and non-emergent visits (immediate care not required within 12 hours).

After accounting for ED visits due to mental health (5 percent), substance abuse (1 percent) and injury (28 percent), over two thirds of the remaining ED visits in Oregon were non-emergent or emergent but treatable in a primary care setting. Of the 29 percent of visits for which care in the ED was required, roughly one quarter were among the types of preventable/avoidable visits that may represent the greatest potential cost savings, such as asthma exacerbations or complications from diabetes or heart failure.

ED Utilization by Category
New York University Algorithm



Potentially avoidable hospital admissions and readmissions

Avoiding unnecessary hospital admissions represents another opportunity to improve care while simultaneously lowering costs. Similar to our 2012 report, Q Corp's data reveals significantly higher rates of ambulatory-sensitive admissions among patients covered by Medicaid and Medicare than those covered by commercial insurance. Results across three points of time do not indicate any clear trend, though Q Corp will continue to assess performance in this area. As noted in the table on page 5, measuring the number of hospital admissions for ambulatory-sensitive conditions is included in other Oregon initiatives. This further emphasizes the importance of improving this area of care.

	COMMERCIAL		MEDICAID		MEDICARE	
Measure	**Score** Potentially Avoidable ED Visits/Total Visits	**N** Total ED Visits	**Score** Potentially Avoidable ED Visits/Total Visits	**N** Total ED Visits	**Score** Potentially Avoidable ED Visits/Total Visits	**N** Total ED Visits
Potentially Avoidable Hospital Admissions Overall (age 18+)	354 (341 – 367)	773,232	4,431 (4,341 – 4,521)	200,879	4,608 (4,514 – 4,702)	189,896
Potentially Avoidable Hospital Admissions Acute (age 18+)	124 (116 – 132)	773,232	1,576 (1,522 – 1,630)	200,879	1,680 (1,622 – 1,738)	189,896
Potentially Avoidable Hospital Admissions Chronic (age 18+)	230 (219 – 241)	773,232	2,855 (2,782 – 2,928)	200,879	2,928 (2,852 – 3,004)	189,896

This year Q Corp is also examining another important category of hospitalizations — those that occur within 30 days of a previous hospital stay (index admission). Many factors influence readmissions to the hospital, and it is imperative for the health care delivery system to use the data available to address the underlying factors that reduce the risk of readmission and promote health after discharge from an acute care facility.

Readmissions among Medicare beneficiaries are of particular interest given provisions in the Patient Protection and Affordable Care Act that tie reimbursement to hospital performance on this measure. The CMS Office of the Actuary estimates that beyond improving the quality of care for Medicare beneficiaries with chronic conditions — nearly 80 percent of all Medicare enrollees — the creation of a hospital readmissions reduction program will reduce Medicare costs by $8.2 billion from implementation through 2019 (CMS 2010).

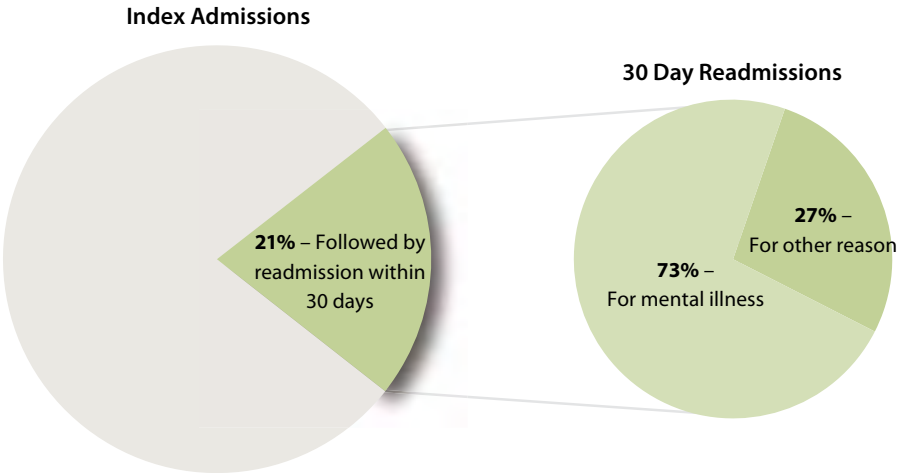
Oregon opportunities

In Oregon, Q Corp's data reveals that initial hospital admissions for mental illness yield higher 30 day readmission rates (21 percent) than almost any other reason among the Medicare population, and 73 percent of those readmissions also have a primary diagnosis related to mental illness. (These results exclude admissions for "organic" mental illnesses such as delirium, dementia and other cognitive disorders.) At a more granular level, the data shows a 23 percent readmission rate among admissions that first occurred for mood disorders (e.g. depression, bipolar) as well as for schizophrenia and other psychotic disorders. Behavioral health is a field of medicine that represents a tremendous opportunity for improved care, better patient experience and reduced costs.

Patient-Centered Primary Care Institute and behavioral health integration

The Patient-Centered Primary Care Institute, a public-private partnership between Q Corp, the Oregon Health Authority and the Northwest Health Foundation, launched a behavioral health integration initiative in July 2013. This initiative will bring together national experts to deliver introductory workshops and core competency training for both primary care physicians and behavioral health consultants. The trainers will share tools to help clinics gauge their readiness to integrate behavioral health, as well as brief intervention skills that can be used by health care professionals in various settings. For more information, visit PCPCI.org.

Hospital 30 Day Readmissions for Mental Illness
Medicare Beneficiaries



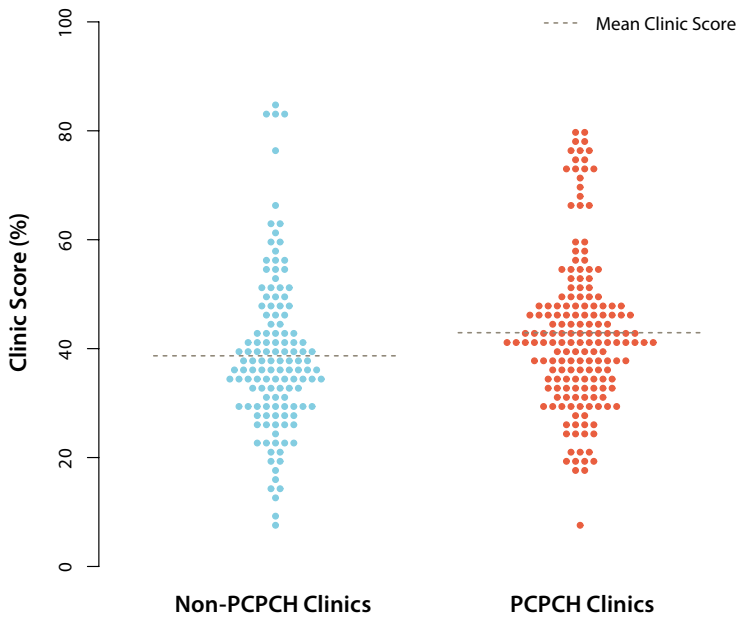
Transforming primary care

Oregon has been among the leaders of medical home implementation, including the Oregon Health Authority's Patient-Centered Primary Care Home (PCPCH) program. The goal of PCPCH clinics is to improve the quality of health services delivery by coordinating care and focusing on strong relationships with patients and their families. Q Corp is proud to play a role in the PCPCH program in the following ways:

- Linking Q Corp's secure provider portal to the online PCPCH web application, which gives clinics the option of using Q Corp practice information and quality scores to complete their application and meet required standards for recognition.
- Establishing and maintaining the Patient-Centered Primary Care Institute, a public-private partnership between Q Corp, the Oregon Health Authority and the Northwest Health Foundation. The Institute brings together technical experts, health care providers and staff, patient advisors, policymakers, academic centers and others to gather and share valuable practice transformation knowledge and resources.

In addition to facilitating the program and coordinating technical assistance provided through the Institute, Q Corp is working to further support PCPCH practices through patient-, provider- and clinic-level reporting of health care quality and utilization. This year, for the first time, Q Corp has been able to compare performance between recognized PCPCH clinics and those not recognized. As an example, the graph below illustrates the distribution of clinic scores for Chlamydia screenings.

Chlamydia Screenings: Oregon Clinic Variation
PCPCH-Recognized versus Non-Recognized Clinics



Oregon opportunities

Chlamydia screening is an area where Oregon has demonstrated room for improvement over several rounds of measurement. This year, like last year, Oregon's mean clinic score is less than the national mean and much lower than the other women's preventive screening measures being tracked (breast and cervical cancer screenings). Q Corp's data shows that the average clinic score for Chlamydia screenings among recognized PCPCH clinics (42.9 percent) is significantly higher than among non-recognized clinics (38.7 percent). In addition, clinics recognized as Tier 3 status demonstrated significantly higher scores than clinics recognized as Tier 2.

The table below demonstrates that in addition to Chlamydia screenings, PCPCH clinics achieved significantly higher mean scores than non-PCPCH clinics on diabetes eye exams and kidney disease monitoring, appropriate use of antibiotics for children with sore throats and well-child visits for children ages three to six years. In no case was the mean PCPCH clinic score significantly less than the mean non-PCPCH clinic score.

It should be noted that the Oregon Health Authority PCPCH program is one of several medical home initiatives. It is reasonable to expect that some of the high performing clinics not recognized as medical homes by OHA may be certified by the National Committee for Quality Assurance (NCQA), The Joint Commission, or others.

Measure	Mean PCPCH Clinic Score (n)	Mean Non-PCPCH Clinic Score (n)	Percent Difference	p-value
Chlamydia Screening	42.9% (175)	38.7% (130)	+10.9	0.011
Diabetes Eye Exam	62.4% (210)	59.9% (199)	+4.2	0.030
Diabetes Kidney Disease Monitoring	80.4% (210)	76.5% (199)	+5.1	<0.001
Appropriate Use of Antibiotics for Children with Sore Throats	83.4% (58)	75.0% (47)	+11.2	0.030
Well-Child Visits in the 3rd, 4th, 5th and 6th Years of Life	63.3% (148)	55.3% (152)	+14.5	<0.001

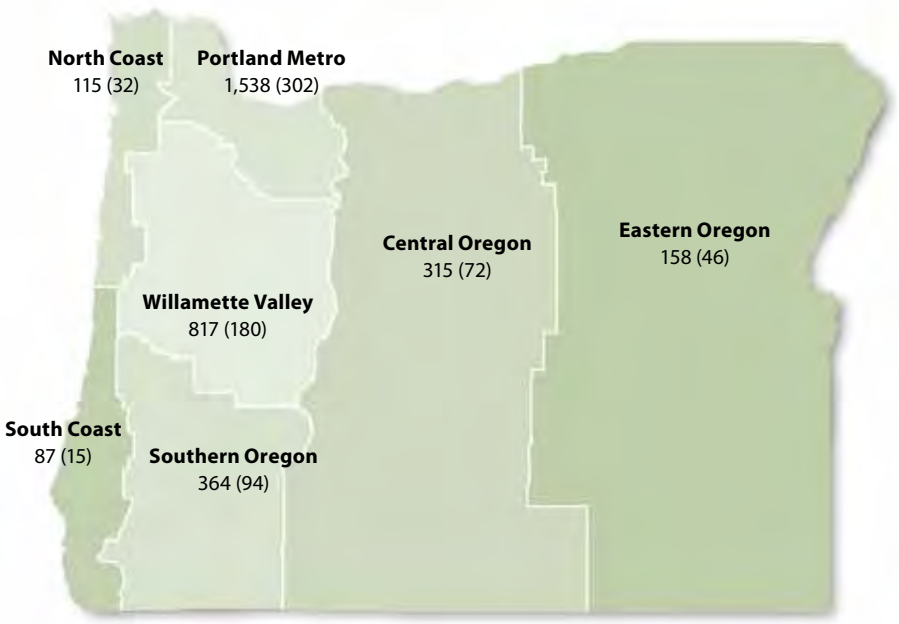
Provider directory includes 3,394 primary care providers

Q Corp maintains the most comprehensive provider directory in Oregon. This directory links practicing primary care providers with the clinics and medical groups where they work, allowing Q Corp to attribute patients to the appropriate provider, clinic and medical group for reporting. The provider directory now includes information for 3,394 practicing primary care providers in Oregon, including adult and family primary care physicians (65 percent), pediatricians (13 percent), nurse practitioners and physician assistants (22 percent). The map below illustrates the regional distribution of clinics and providers in the provider directory. More information can be found in the Technical Appendix available online at Q-Corp.org.

Q Corp's public reports of primary care quality now include patient experience

For consumers and employers, Q Corp publishes public reports of health care quality and utilization on the website PartnerforQualityCare.org. For the first time, in June 2013 Q Corp began publicly reporting on the patient experience of care at the clinic level. This information was collected using a nationally endorsed survey that asks patients about communications with their doctor, access to timely care when they need it, and whether they were treated with courtesy and respect by all staff at a doctor's office. This milestone event was a collaboration between Q Corp, OHA and other community partners, and was made possible because of the commitment of 10 pioneering clinics to measure, report and improve the patient experience of care.

Geographic Distribution of Primary Care Providers and Clinics Included in Quality Corp's Provider Directory



Primary Care Providers Included in Provider Directory
(Clinics Included in Provider Directory)

Oregon opportunities

Keeping people healthy through preventive care

Breast cancer screenings

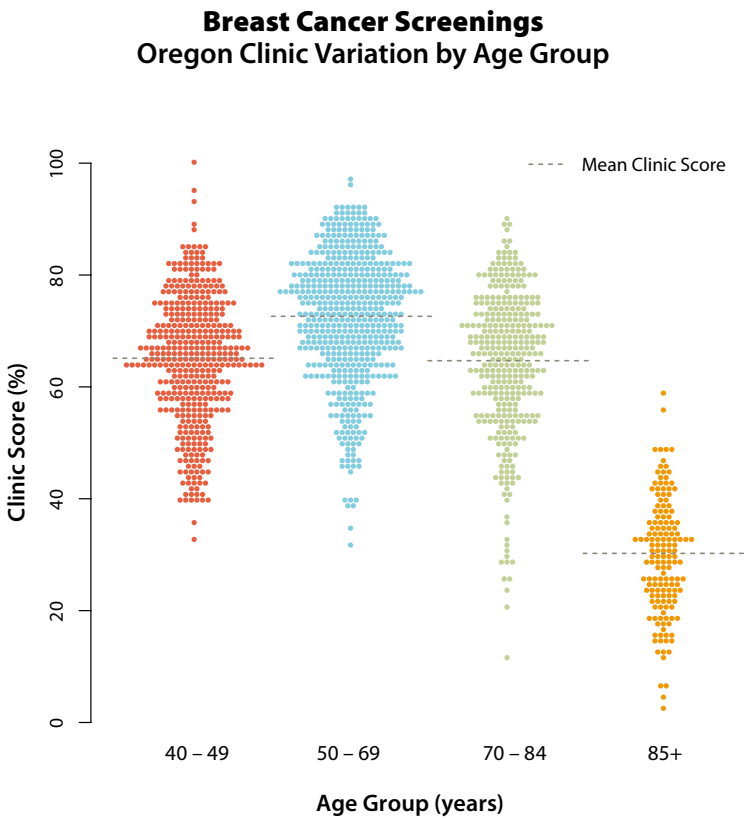
Each year Q Corp's Measurement and Reporting Committee, composed of providers, consumers, employers, policymakers and health insurers, studies measurement issues and reviews Q Corp's list of measures. Measures are added or retired based on performance, importance to public health, interest in the community and new evidence and guidelines. Last year this committee reviewed the United States Preventive Services Task Force's (USPSTF) updated recommendations on breast cancer screening. The updated recommendation includes biennial screening for women 50 to 74 years of age, and states that the decision to start regular, biennial screening mammography before 50 years of age should take into account a patient's individual circumstances. Furthermore, the USPSTF concluded that there is insufficient evidence to assess the additional benefits and harms of screening mammography in women 75 years or older.

After reviewing the change in the USPSTF recommendations, Q Corp's Measurement and Reporting Committee elected to deviate slightly from the HEDIS® measure specifications for breast cancer screening. Q Corp's public reports now include only women ages 50 – 69, rather than the wider 40 – 69 age group specified by HEDIS®. Q Corp continues to report the HEDIS® 40 – 69 age range privately to medical groups for their own quality reporting and improvement efforts.

Members of Q Corp's Measurement and Reporting Committee asked staff to conduct further analyses into breast cancer screening rates for women outside the recommended age group to assess how the USPSTF recommendations are being applied. The following results by age group indicate significant opportunity for improvement in meeting the USPSTF guidelines for breast cancer screening in women ages 50 – 74. They also reveal a diverse pattern of screening in women younger than 50 years and older than 85, with individual clinic scores ranging as low as 34.2 percent and 3.4 percent respectively, and as high as 94.6 percent and 59.0 percent, respectively.

Age Group	Oregon Aggregate Breast Cancer Screening Rate	Denominator (n)
40 – 49	64.5%	97,793
50 – 69	74.6%	190,903
70 – 84	63.9%	71,465
85 and older	26.3%	23,421

Variation in clinic breast cancer screening patterns, shown in the graph below, indicates a lack of consensus within the profession and community regarding screening practices. Q Corp is working with clinics to better understand the factors that drive breast cancer screening practices in women over the age of 85. An informal interview with nine Oregon clinics identified considerable variation in the approach to screening, including: some providers are holding conversations with individual patients to determine whether or not to screen for breast cancer; other clinics allow patients to self-refer for mammograms without any review by providers; and some mammograms are being ordered by physicians other than the patient's primary care physician. One clinic noted that its physicians prefer to follow the American College of Radiology and American Cancer Society guidelines regarding breast cancer screening. These guidelines state that women ages 40 and over should have yearly mammograms, and that screening should continue if the patient and provider believe that there is a benefit. Several clinics were surprised by their rates of women over 85 years that had received a screening in the previous two years and requested provider level results, which Q Corp supplied.



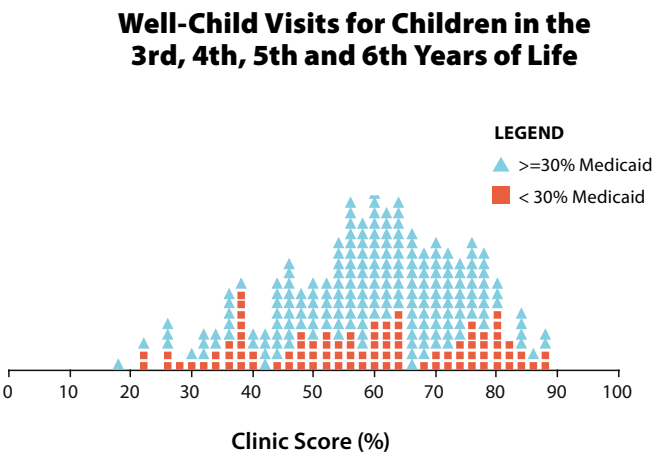
Cancer screening in the elderly is a controversial topic. An analysis of several studies compared mortality rates between women that had received a cancer screening and those that had not. The results showed that 10.7 years after screening, only one death from breast cancer was prevented per 1,000 women screened (Lee et al 2013). Even 16 years after screening, only two deaths from breast cancer were prevented per 1,000 women screened. Some interpret this evidence to indicate that screening for breast cancer is most appropriate for patients with a life expectancy greater than 10 years, and even then, some argue that the absolute risk reduction is not as high as desirable. The SPECTRUM model, developed at Georgetown University, estimated the costs and benefits of screening women from age 50 until ages 70, 79, or for a lifetime. This analysis concluded that even under idealized treatment, the benefit of mammography after age 79 is too low relative to its cost to justify continued screening (Mendelblatt et al 2005). Q Corp will continue to explore this issue and share information about the guidelines and data with stakeholders across Oregon.

Oregon opportunities

Pediatric care

Well-child visits represent an important opportunity for children to develop a relationship with their primary care provider as well as to receive immunizations and other necessary screenings. Recent research shows that young children who miss well-child visits are more likely to be admitted to the hospital for preventable reasons (Tom et al 2013). Among children with chronic conditions such as asthma, those missing more than half of their recommended well-child visits had over three times the risk of being hospitalized compared to children with chronic conditions that attended most of their visits. Well-child and adolescent well-care visits are among the Oregon Health Authority's state performance metrics for which Oregon is accountable to CMS.

Consistent with last year's statewide report findings, Oregon clinic performance for well-child visits falls below the national average for both age groups assessed. This year Oregon's mean clinic scores are approximately ten percentage points below the national well-child visit mean for children in their first 15 months of life (66.2 percent versus 76.1 percent) as well as for children ages three to six years (59.3 percent versus 69.8 percent). Furthermore, the plot below illustrates wide variation in compliance across clinics and populations, and a clear opportunity to share best practices.



Oregon efforts to improve pediatric care

The Oregon Pediatric Improvement Partnership (OPIP) and Oregon Rural Practice-Based Research Network (ORPRN) have partnered with the Tri-State Children's Health Improvement Consortium (T-CHIC) — an alliance with the Medicaid and CHIP programs of Alaska and West Virginia — to facilitate the Enhancing Child Health Outcomes (ECHO) Learning Collaborative. Through this partnership, eight Oregon clinics in a wide range of practice settings are receiving support and technical assistance in an effort to aid in medical home transformation and improve the quality of health care provided to children.

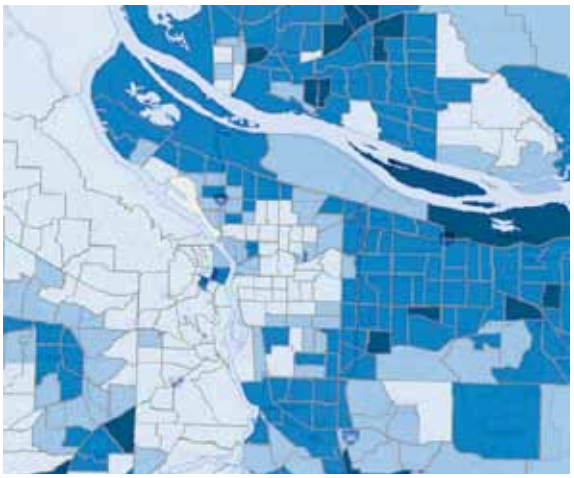
Q Corp has supported this work by providing baseline data to the ECHO clinics, relieving them of the time and burden involved in producing the measures themselves. By also stratifying clinic results by type of insurance (commercial and Medicaid) Q Corp's information allows practices to understand if there are differences that are the results of access, reimbursement policies, office procedures or other demographics. It also means that Oregon's Medicaid program can rely on this information rather than going through a more costly and obtrusive chart review process.

Improving population health

Nearly half of adults in the U.S. live with one or more chronic diseases, which account for seven out of ten deaths among Americans (CDC 2013). Q Corp has been providing information on how often Oregon patients with diabetes, cardiovascular disease, asthma and depression receive recommended screenings and other care to manage their illness and maintain a high quality of life. However, many factors that lead to good health are not contained within the health care setting.

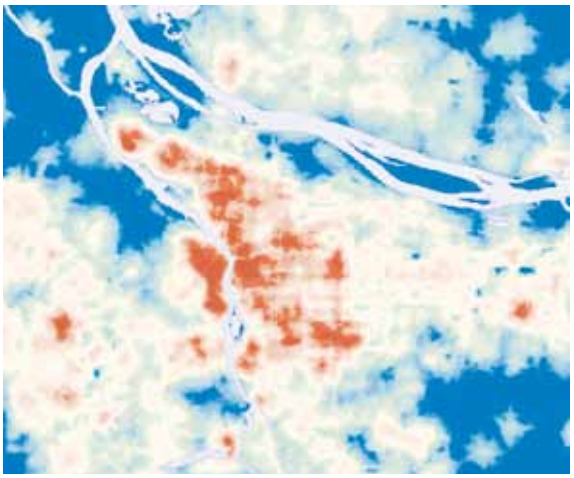
Q Corp is pleased to have contributed information on chronic disease incidence, pediatric preventive care and potentially avoidable ED visits, for the Coalition for a Livable Future's Regional Equity Atlas 2.0. This ambitious project resulted in a web-based mapping tool that shows how well different populations across the four-county Portland metro region can access key resources for meeting their basic needs and advancing their health and well-being, demonstrating how social determinants play a critical role in the health of the population. Such information can help to inform policy decisions, direct the efforts of Oregon's Coordinated Care Organizations, and support a variety of initiatives targeted at improving the health of Oregonians.

The maps below illustrate how diabetes incidence rates (left, based on Q Corp data) relate to the geographic distribution of factors that support healthy eating and active living (HEAL), such as neighborhood walkability, access to transit, proximity to supermarkets, and others. There are several areas that demonstrate an inversely proportional relationship between diabetes incidence and HEAL score (low diabetes incidence corresponding to high HEAL scores, and vice versa). However, this relationship is not true for all areas, suggesting our understanding of variation in diabetes rates would be improved by incorporating other factors known or suspected to play a role — for example, race.



Diabetes Incidence Rates by Census Tract

Darker shaded regions indicate higher rates



Healthy Eating Active Living Composite

Darker shaded regions indicate higher HEAL composite scores

The power of the Equity Atlas tool comes from its unique combination of data sources. Q Corp's collaboration with the Coalition for a Livable Future represents not only a successful leveraging of Oregon resources to transform health care in Oregon, but an important milestone in Q Corp's commitment to providing data that supports efforts to improve overall population health. This project was supported by the Robert Wood Johnson Foundation's *Aligning Forces for Quality* program. For more information about the Equity Atlas, visit equityatlas.org.

Using claims data

The information in this report comes from administrative (billing) claims. Claims data reflects information submitted by providers to payers as part of the billing process. While claims data has limitations, it provides useful information about services provided by a very large segment of the Oregon health care delivery network.

Use of claims data assumes clinics and practices are billing accurately and comprehensively for services rendered. Limitations of claims data include timeliness and completeness of the information. For example, data in this report does not include uninsured patients, patients who pay for their own health care services, Medicare Fee for Service patients, or patients served by a health plan that is not providing data to Q Corp. More information about claims data is available in the Technical Appendix, available online at Q-Corp.org.

2012–2013 Funding partners*

CareOregon

FamilyCare

Health Net of Oregon

Kaiser Permanente

LifeWise Health Plan of Oregon

Moda Health

Northwest Health Foundation

Oregon Health Authority Division of Medical Assistance Programs

PacificSource Health Plans

Providence Health Plans

Regence BlueCross BlueShield of Oregon

Robert Wood Johnson Foundation

Tuality Health Alliance

UnitedHealthcare

*Data suppliers for this report appear **in bold.** Q Corp's partnership with Oregon's largest health plans and Medicaid fee-for-service allows for more reliable and useful information than any single data supplier can provide on its own.

Measure definitions

This report is based on a measurement year of July 2011 through June 2012 and includes the following measures. More detailed information is available in the Technical Appendix online at Q-Corp.org.

Hospital Resource Use

Potentially avoidable ED visits: Measures the percentage of Emergency Department visits during the measurement year for clinical problems that could have been managed in a more appropriate care setting.

Potentially avoidable hospital admissions: Measures the rate of hospital admissions per 100,000 members for which appropriate outpatient care and early intervention can potentially prevent the need for hospitalization.

30 day all-cause readmissions: Measures the percentage of acute inpatient stays during the measurement year for patients 18 and older that were followed by an acute readmission within 30 days.

Ambulatory Resource Use

Appropriate low back pain imaging: Measures the percentage of patients ages 18 to 50 who did not have an imaging study conducted within the 28 days following a new episode of low back pain.

Appropriate use of antibiotics for children with sore throats: Measures the percentage of children ages 2 to 18 that had a group A streptococcus test within three days of prescribing antibiotics to treat pharyngitis (sore throat).

Generic prescription fills: Measures the percentage of prescription fills for patients ages 18 and older that were filled with a generic drug, among the following classes of medications:

1) Selective serotonin reuptake inhibitors (SSRIs) and other second generation antidepressants
2) Statins

Pediatric Care

Well-child visits in the first 15 months of life: Measures the percentage of children who had six or more well-child visits with a primary care provider during their first 15 months of life.

Well-child visits in the third, fourth, fifth and sixth years of life: Measures the percentage of children ages 3, 4, 5 or 6 years who had at least one well-child visit with a primary care provider.

Measure definitions

Women's Preventive Care

Breast cancer screening: Measures the percentage of women ages 40 to 69 who had a mammogram during the measurement year or the year prior.

Cervical cancer screening: Measures the percentage of women ages 21 to 64 who had a Pap test during the measurement year or two years prior.

Chlamydia screening: Measures the percentage of sexually active women ages 16 to 24 who had a test for Chlamydia infection during the measurement year.

Diabetes Care

Diabetes blood sugar (HbA1c) screening: Measures the percentage of patients with diabetes ages 18 to 75 who received a blood sugar (HbA1c) screening during the measurement year.

Diabetes cholesterol (LDL-C) screening: Measures the percentage of patients with diabetes ages 18 to 75 who received a cholesterol (LDL-C) screening during the measurement year.

Diabetes eye exam: Measures the percentage of patients with diabetes ages 18 to 75 who received a dilated eye exam by an eye care professional during the measurement year.

Diabetes kidney disease monitoring: Measures the percentage of patients with diabetes ages 18 to 75 who received a kidney screening or were treated for kidney disease, or who had already been diagnosed with kidney disease during the measurement year.

Other Chronic Disease Care

Appropriate asthma medications: Measures the percentage of patients ages 5 to 50 with persistent asthma who were appropriately prescribed and who filled long-term controller medications during the measurement year.

Antidepressant medication management: Measures the percentage of patients ages 18 and older diagnosed with a new episode of major depression during the measurement year who were prescribed and filled an antidepressant medication, and who remained on the medication for the following time intervals:

1) SHORT TERM: At least 12 weeks after the diagnosis

2) LONG TERM: At least 180 days (6 months) after the diagnosis

Cholesterol (LDL-C) screening for people with heart disease: Measures the percentage of patients ages 18 to 75 with a heart condition who had at least one cholesterol test (LDL-C) during the measurement year.

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About the Oregon Health Care Quality Corporation

The Oregon Health Care Quality Corporation is an independent, nonprofit organization dedicated to improving the quality and affordability of health care in Oregon by leading community collaborations and producing unbiased information. We work with the members of our community — including consumers, providers, employers, policymakers and health insurers — to improve the health of all Oregonians.

Q Corp's work is nationally recognized. In 2007, Q Corp became one of 16 organizations nationwide selected to participate in *Aligning Forces for Quality,* the Robert Wood Johnson Foundation's signature effort to improve the overall quality of health care in targeted communities. In 2008, Q Corp received the Chartered Value Exchange designation from the U.S. Department of Health and Human Services in recognition of its leadership to improve care in Oregon. Q Corp is also a member of the Network for Regional Healthcare Improvement, a national coalition of regional health improvement collaboratives working to improve the quality and value of health care delivery.

For more information visit Q-Corp.org.

Coming up: What's next for Q Corp

Measuring and reporting cost of care

As part of the fourth phase of the Robert Wood Johnson Foundation's *Aligning Forces for Quality* program, Q Corp will be expanding its measurement and reporting initiative to include cost of care. An expert steering committee convened in the first half of 2013 to discuss potential products and services for multiple stakeholders. These products could include analyses of top cost drivers and variations in costs for procedures and treatments. The goal is to support payment reform efforts that are aimed at reducing costs while improving quality of care.

Tom Ewing, MD, Executive Vice President and Chief Medical Officer at PacificSource Health Plans, is a member of the cost of care steering committee. "When consumers go out and purchase any other product, there is no mystery about the price they will pay. In health care? Consumers are shopping in a store without price tags and getting too little information about the quality of care they will receive," says Dr. Ewing. "Providing all health care stakeholders — consumers, payers, providers, etc. — with information about both price and quality will enable a shift toward a value-based health care system."

Electronic medical record/claims integration project

Q Corp has completed a pilot project with the Central Oregon Independent Practice Association (COIPA) and three volunteer medical groups — High Lakes Medical, Mosaic Medical, Bend Memorial Clinic — to collect and integrate Electronic Medical Record (EMR) information with the Q Corp claims database. The project resulted in a nearly 95 percent match rate at the patient level among individuals in the EMR data that are also in Q Corp's claims database, indicating that EMR data can be successfully crosswalked to claims data.

Among the initial findings, the clinics volunteering for this pilot were surprised to learn about the amount of care delivered outside of their clinic. The integration of EMR and claims data is essential for enhanced reporting of outcome and process measures. Project sponsors included CareOregon, the Robert Wood Johnson Foundation, Oregon Health Authority, and the Oregon Educator's Benefit Board/ODS (now Moda Health) Healthcare Innovations Grant program.

OREGON HEALTH CARE
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