Information for a Healthy Oregon

Statewide Report on Health Care Quality 2015

OREGON HEALTH CARE QUALITY CORPORATION

Welcome

Letter from the Board Chair and Executive Director

This year marks a milestone anniversary for Q Corp—15 years of improving the quality and affordability of health care for all Oregonians. Fittingly, it has been a momentous year. Our efforts to make meaningful and actionable data available continue at both regional and national levels, and we proudly received grant funding to launch a number of new quality and cost initiatives.

Following two years of planning and with the involvement of countless stakeholders, Q Corp released Total Cost of Care Clinic Comparison Reports to over 150 primary care clinics in Oregon. These reports showcase clinic cost, resource use and utilization metrics across four service areas—professional, inpatient, outpatient and pharmacy. This pioneering effort was made possible by the active engagement of a multi-stakeholder steering committee, Q Corp's standing Measurement and Reporting committee, and dozens of physicians in clinics across Oregon who tested early models, helped validate findings and made valuable suggestions to improve the usefulness of this information.

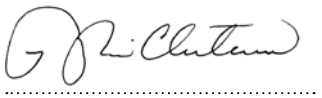
Throughout 2015, Q Corp has been working on behalf of the March of Dimes Oregon Perinatal Collaborative to launch the Oregon Maternal Data Center. With startup funding from the Robert Wood Johnson Foundation, leaders from across the state came together to develop this new approach to improve the quality of care for mothers and babies in Oregon.

Over the last several years Q Corp has managed the Patient-Centered Primary Care Institute, a partnership with the Oregon Health Authority to make technical assistance and resources available to primary care practices working on the Patient-Centered Primary Care Home (PCPCH) model of care. Since 2013, the Institute has partnered more than 80 primary care practices with transformation and improvement experts. Primary care practices continue to value technical assistance and resources, and we are looking at how the Institute can incorporate new strategies to contribute to a primary care system that can truly deliver on Triple Aim goals.

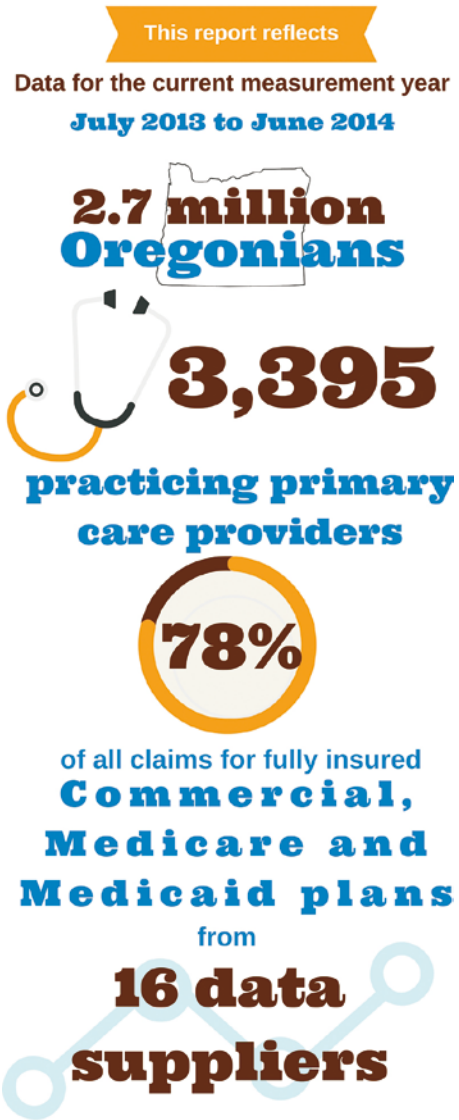
These efforts would not have been possible without access to the data and ongoing support from the sixteen data suppliers who participate in the Q Corp collaborative, the Robert Wood Johnson Foundation, the Network for Regional Health Improvement, and other sponsors and partners, listed on page 24.

A few weeks ago a Senior Policy Advisor for the White House called Q Corp to ask how we had been able to do things that other organizations across the country had not. We explained, as we always do, that Oregon is a unique place and Q Corp has been extremely fortunate to have the trusted collaboration of dozens of stakeholder organizations, hundreds of committed volunteers and a shared belief that we are at our best when we work together to solve the big challenges in health care. We look forward to continuing the great work in our 16th year!

Tom Syltebo, MD
Board Chair



Mylia Christensen
Executive Director



CONTENTS

Q Corp now has nine years of historical claims data, representing care for more than three million Oregonians since 2006. Data for the current measurement year—July 2013 to June 2014—represents care for 2.7 million members. For more information, a detailed Technical Appendix is available at Q-Corp.org.

THIS REPORT IS A COLLABORATIVE EFFORT

EXECUTIVE DIRECTOR
Mylia Christensen

PRIMARY AUTHORS
Meghan Haggard
Cindi McElhaney
Chantel Pelton

EDITOR
Betsy Boyd-Flynn

MEASUREMENT
Steve Merryman
Douglas Rupp

CONTRIBUTORS
Kate Elliott
Marissa Sweeney
Meredith Roberts Tomasi
Natalya Seibel

Producing unbiased information to improve health care in Oregon

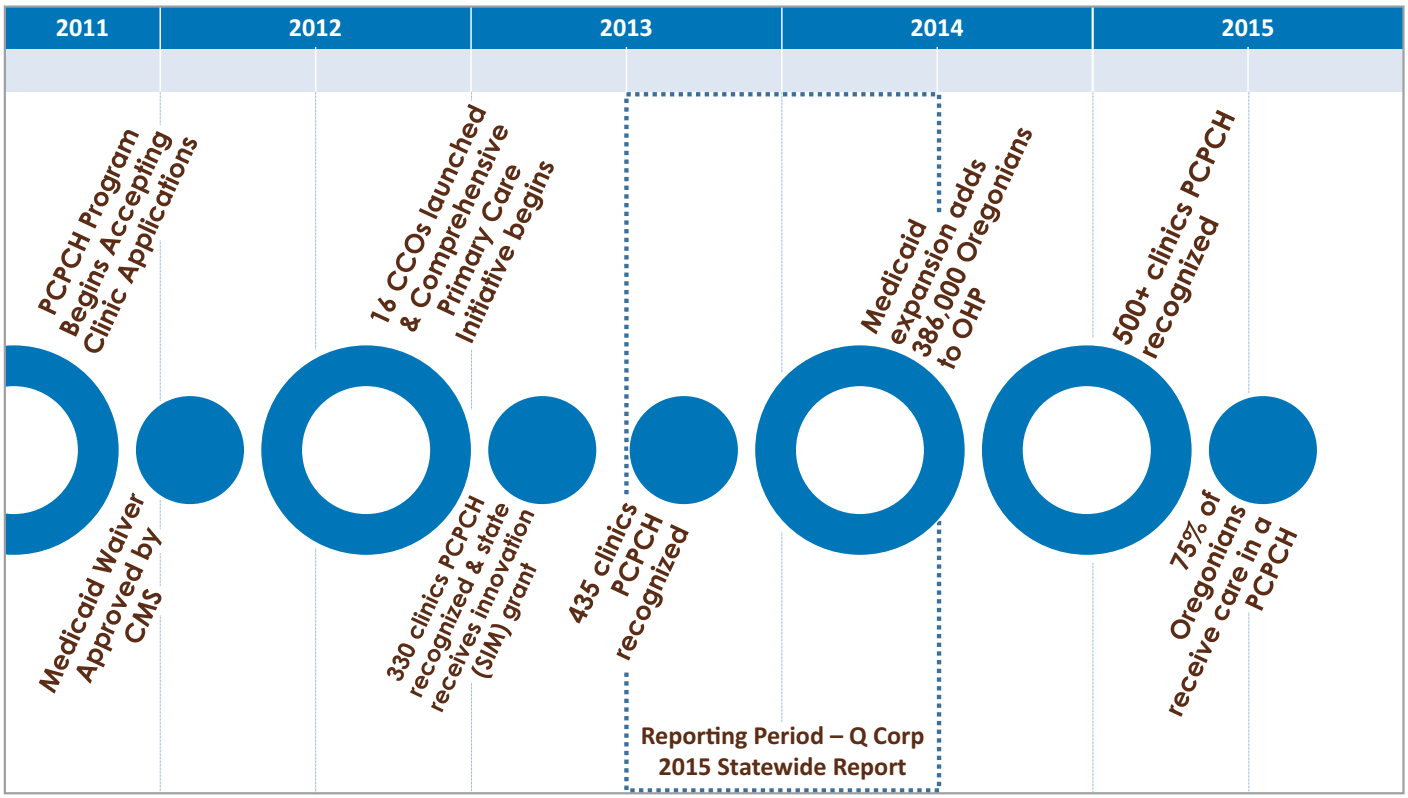
ABOUT THIS REPORT

This report features an overview of the breadth of work Q Corp has undertaken this year. Our first pages offer a deeper look at progress in some of our signature programs: Total Cost of Care reporting, the Oregon Maternal Data Center, and the Patient Centered Primary Care Institute.

Also in this report, as in other years, we have highlighted a subset of quality measures that are of particular interest. For some of these measures, the report offers a look at geographical variation, and others explore how Patient-Centered Primary Care Home (PCPCH) recognized clinics are working to improve performance on the measure. Overall, some measures in our statewide snapshot demonstrate clear improvement for Oregon, others show we may be losing ground, and still others highlight areas where there is a good deal of work ahead to match national progress.

REPORT HIGHLIGHTS

- New Total Cost of Care Measures were introduced in Oregon, with reports being distributed to over 150 primary care clinics across the state. Early analysis revealed that a 2% reduction in overall spending could result in savings of $283 million dollars.
- In April, Q Corp launched the Oregon Maternal Data Center (OMDC) in conjunction with the Oregon Perinatal Collaborative. The OMDC is an interactive data tool which allows for active monitoring and tracking on a host of inpatient maternity measures. There are currently 14 hospitals enrolled in the data center covering 41.7 percent of Oregon births.
- Recognized PCPCH clinics performed better in seven measures. When comparing 2010 chlamydia screening rates with the current data, four of five current high-performing PCPCH practices have moved their screening rates above the median since 2010.



Measuring and improving the affordability of care

WHY COST REPORTING MATTERS

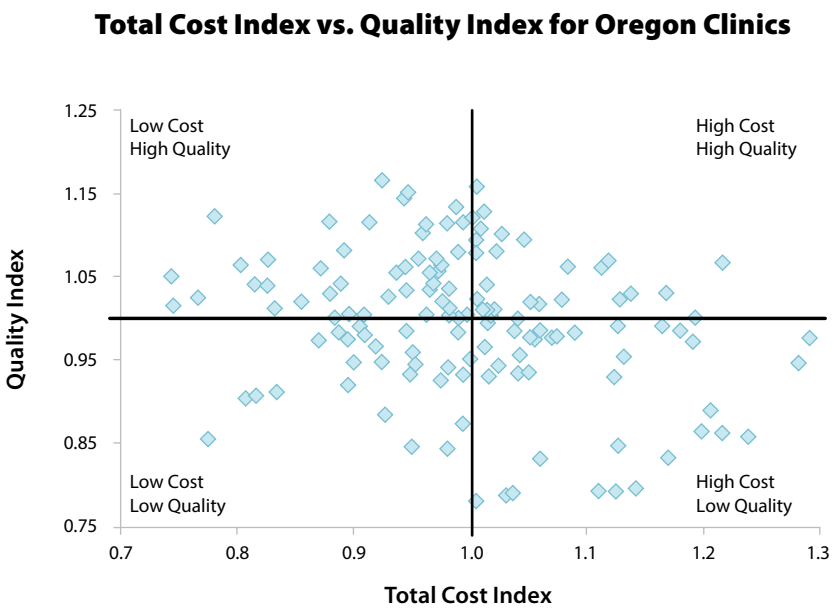
In 2007, the Institute for Healthcare Improvement developed the Triple Aim to optimize health system performance. The three objectives of the Triple Aim are: a healthy population, exceptional patient care and affordable costs. While the health care sector has been striving to achieve the first two objectives since that time, the affordable cost objective has lagged behind.

Over the last two years, Q Corp has convened a diverse group of stakeholders to discuss measurement of health care costs. This work has been guided by a multi-stakeholder Cost of Care Steering Committee. Amit Shah, MD, Chair of the committee, says the work is essential because "costs are looked at every day, but at an organization level. Q Corp has been able to bring a multitude of stakeholders together to help design and embrace a common measurement."

One theme of the community input was that cost should not be reported in isolation; rather, cost and quality must be paired in order to assess a clinic's overall performance.

THE LINK BETWEEN QUALITY AND COST

Q Corp has been reporting quality measures for seven years. The importance of displaying quality and cost together has been a cornerstone of the cost of care work that Q Corp has undertaken. The chart below shows the variation of clinics across Oregon based on quality† and cost measures for adult patients attributed to the clinic.



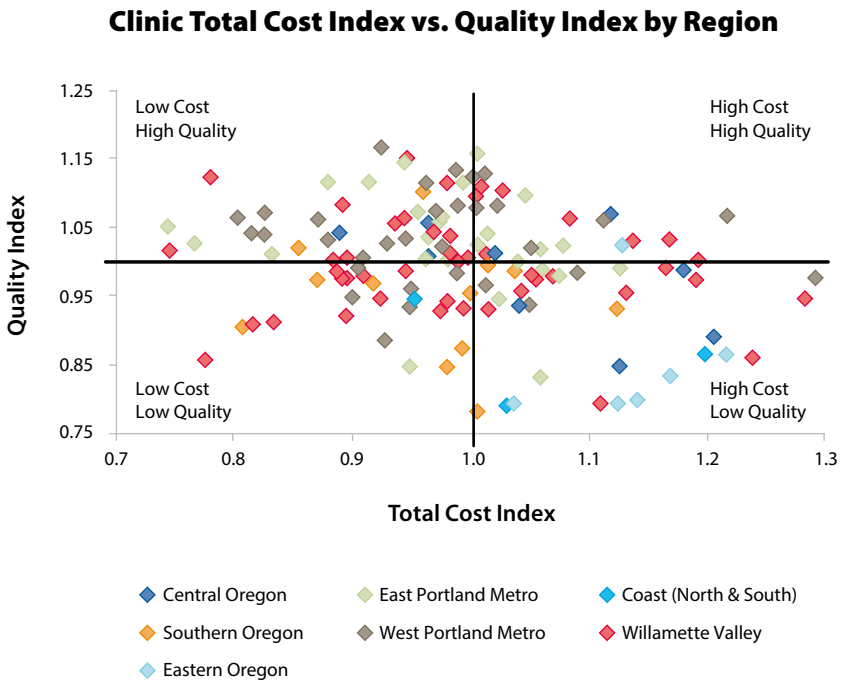
Cost and quality are not highly correlated, a conclusion others have replicated across the country, in projects using different quality and cost measures.[1] Some clinics score lower on quality and higher on costs, while others score higher on quality and lower on cost. Ideal results would be high quality care provided at a low cost. One question the data suggests is: What are the characteristics of clinics that are delivering care that is higher in quality and lower in cost? Q Corp sees this as a logical next step to explore in its cost of care work.

† Oregon's quality scores are based on seven quality measures that Q Corp reports at the clinic level, using each clinic's commercial population. For more information on how the quality composite was calculated, see the Composite Measure Methodology document online.

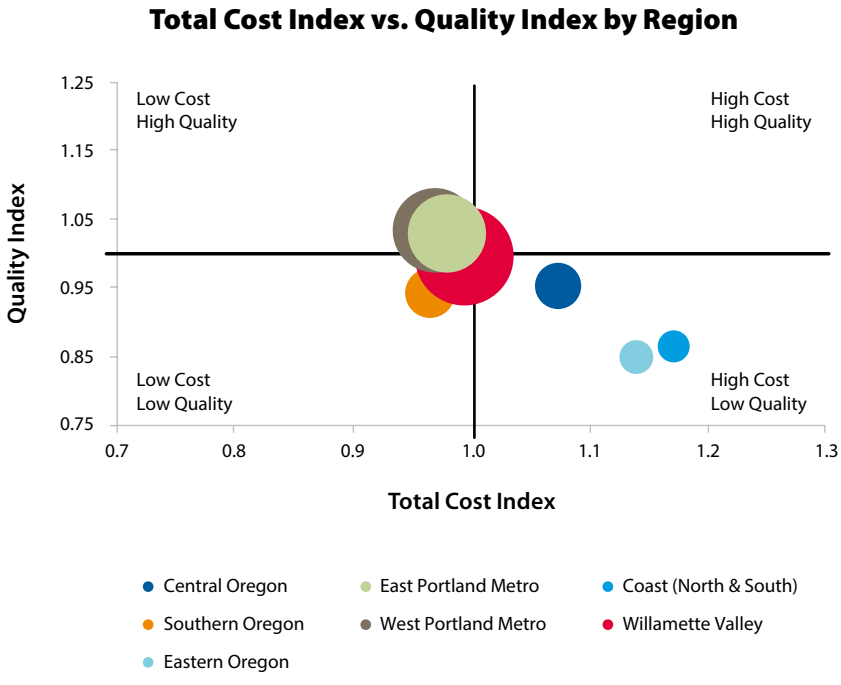
The measurement year for this data is January 1, 2013–December 31, 2013.

VARIATION IN COST OF CARE

By attributing health care costs to clinics on a per capita basis, it is possible to look at cost variations among clinics in different ways. This chart shows cost vs. quality, with each region in Oregon shown in a different color. There is considerable variation among clinics across the state and within the same region.



This chart shows average clinic scores for each region. Sphere size corresponds to the number of clinics in a region. Based on the Total Cost and Composite Quality measures that Q Corp is calculating, rural clinics show higher cost and lower quality on average. Q Corp is working to understand more about what drives regional variation in Oregon.



Measuring and improving the affordability of care

CLINIC COMPARISON REPORTS

As consumers are expected to bear a greater share of health care costs, they are relying on their providers to offer responsible guidance on how to best use their health care dollars. Certainly, physicians are the most trusted source of health care information, and control or influence most utilization decisions. Without trusted and informative data, it is unreasonable to expect physicians to change current practices or to respond effectively to their patients' concerns about the costs of various treatment or test options. Few providers have the tools that can help them make informed decisions that positively impact the overall cost of care.

To address this gap, in April Q Corp released its inaugural Clinic Comparison Reports to over 150 primary care clinics in Oregon. The Clinic Comparison Reports are based on HealthPartners' cost of care measures, Total Cost Index and Total Resource Use, which have been endorsed by the National Quality Forum (NQF). Costs were reported for all health care services, not just for those services received at the clinic. These reports have spurred many conversations with clinics about their data, which have led to further insights into practice patterns across multiple payers. The reports reveal the high level of variation among clinics on various elements of care, such as treatment, referrals, and use of ancillary services. Below is a sample summary, broken down by service category.

"When we, as physicians, see something that's within our locus of control it will change our behavior. No one wants to be the high utilizer or under performer. This work matters in the sense that it will change behaviors if it is considered to be reliable information."

— Steve Mann, DO Medical Director, High Lakes Health Care

Example Overall Summary by Service Category

	CLINIC COST		OR AVERAGE	CLINIC SCORE				
	Raw PMPM	Adj PMPM	PMPM	TCI	=	RUI	x	Price Index
Professional	**$203.02**	**$183.18**	$167.12	**1.10**		0.99		1.11
Outpatient Facility	**$69.00**	**$62.25**	$115.53	**0.54**		0.60		0.90
Inpatient Facility	**$71.08**	**$64.13**	$72.21	**0.89**		0.78		1.13
Pharmacy	**$73.92**	**$66.70**	$69.20	**0.96**		0.98		0.98
Overall	**$417.03**	**$376.26**	$424.06	**0.89**		0.85		1.05

This work is based on the patented algorithm of HealthPartners, Inc. (Bloomington, MN) and is used with their permission.

COLLABORATION IN ACTION

Q Corp's stakeholders have been instrumental in guiding this work from conception to execution. The newly-formed, multi-stakeholder Cost of Care Steering Committee, along with the established Measurement and Reporting Committee, has provided valuable insights into the content and format of the Clinic Comparison Reports.

In early spring 2015, Q Corp engaged the American Institutes for Research, a renowned research nonprofit, to conduct focused interviews with six clinics receiving the reports. These interviews helped Q Corp hone the reports and the accompanying materials. Less formally, Q Corp met with dozens of health care organizations across the state to answer questions and gather feedback about the measures, the reports, and possible uses of this information.

After the distribution of the reports, Q Corp talked with numerous clinics, medical groups, and IPAs about their reports. As Dr. Shah stated, "this information provides a rich opportunity to understand costs, gives a sense of cost drivers, and offers a chance to participate in meaningful conversations about health care costs." In these conversations, the clinic's knowledge of their patient population and practice patterns, combined with performance data, has led to new insights into costs incurred and resources used not only within the clinic but also in other settings, such as specialist offices and hospitals. Some scores that appear above the state norm might simply reflect an area of particular focus for the clinic. Michael Whitbeck, Administrator for Northwest Primary Care, shared that he was pleased to see that all of its sites' reports came back showing mental health utilization higher than the average in Oregon since the group had a goal of integrating behavioral health with physical health.

Funded by the Robert Wood Johnson Foundation and led by the Network for Regional Healthcare Improvement, Q Corp and four other participating regional collaboratives have taken the first step on a journey to develop standardized methods that will allow cost of care information to be shared in communities across the nation. Indeed, this use of the Total Cost of Care measures is groundbreaking work that is garnering national attention. Q Corp is excited to continue these efforts in this area and explore how this data can be used to help the Oregon health care community achieve the Triple Aim.

What's Next for Cost of Care:

- Phase II grant proposal approved
  - Additional reporting through October 2016
  - Explore potential Medicare/Medicaid measures
  - Mentor additional regions
- Review year-over-year trend variations
- Explore ways that TCOC work can be expanded beyond grant renewal
  - Custom products and services for: IPAs, professional societies, ACOs, CCOs, etc.

For more information, please email: costofcare@q-corp.org.

"In the past, we were moving the quality measure up without looking at cost. These reports have emphasized opportunities for us to look at our processes."

— Lisa Kranz, Clinic Administrator, Family Medical Group, NE

Measuring and improving maternity care

Q CORP AND OREGON PERINATAL COLLABORATIVE LAUNCH THE OREGON MATERNAL DATA CENTER

Over the last two years, Q Corp, on behalf of the March of Dimes, convened the Oregon Perinatal Collaborative (OPC) Subcommittee on Data for Measurement and Improvement. The priority focus of the Subcommittee's work was to launch the Oregon Maternal Data Center (OMDC). The data center is a robust and rapid cycle on-line tool for hospitals, which generates over 40 quality and performance improvement metrics. Participating hospitals submit monthly data to generate immediate feedback and reports, including performance metrics at the payer, system, facility, individual provider and peer comparison levels.

The OMDC went live on March 31 with the outstanding leadership of 16 Oregon hospitals (see list at right). Throughout 2015, Q Corp will continue to recruit additional hospitals to join the effort.

The OMDC is built off the system developed by the California Maternal Quality Care Collaborative (CMQCC) based at Stanford University and led by Dr. Elliott Main and colleagues. Q Corp worked with CMQCC to customize the tool to support the work of Oregon hospitals, which now join over 25 Washington hospitals and over 100 California hospitals using the CMQCC system. The customization process involved input and engagement from a wide variety of stakeholders including the Oregon Perinatal Collaborative, the Oregon Health Authority, the Oregon Association of Hospitals & Health Systems and participating hospitals and systems.

Hospitals enrolled in the Oregon Maternal Data Center (OMDC)

Kaiser Sunnyside Medical Center

Kaiser Westside Medical Center

Legacy Good Samaritan Medical Center

Legacy Meridian Park Medical Center

Legacy Emanuel Medical Center

Legacy Mount Hood Medical Center

Providence St. Vincent Medical Center

Providence Portland Medical Center

Providence Newberg Medical Center

Providence Seaside Hospital

Providence Hood River Memorial Hospital

Providence Medford Medical Center

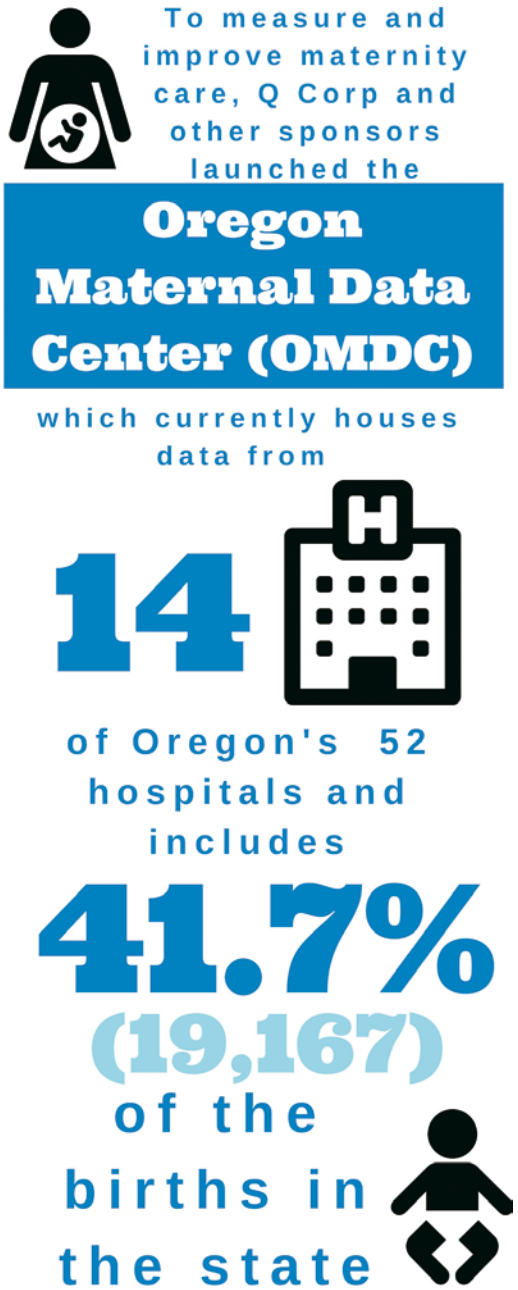
Providence Willamette Falls Medical Center

Tuality Healthcare—Hillsboro

Hospitals expected to enroll in late 2015

OHSU

Samaritan Health Services



During 2013–2014, the OPC Subcommittee worked diligently to prioritize a set of measures to add to the core measures already included in the OMDC. The prioritized list includes both inpatient and outpatient maternity measures so that in future years, the OMDC can report on the continuum of maternity care from preconception to postpartum. Such information will be of use to a wide variety of hospitals, clinicians, health plans, policy organizations and consumers interested in the state of maternity care in Oregon. To support this expanded focus, Q Corp staff will develop analytic tools to link maternity clinical data with Q Corp claims data, as well as coordinate with CMQCC staff and others to develop reporting platforms for the expanded measures and stakeholder needs.

This fall, Q Corp and a group of OMDC-enrolled hospitals will participate in an Inter-State Advisory Committee at CMQCC/Stanford to discuss collaboration and research using the maternal data centers across the three states. In addition, the OPC will host an Oregon Perinatal Summit on October 30 to report on the OMDC and other OPC efforts to improve maternity care across Oregon.

For more information about Q Corp's maternity care work, visit Q-Corp.org/maternity-care.

Transforming primary care

Transforming and strengthening primary care has been a cornerstone of Oregon's health care transformation efforts. The Oregon Health Authority's Patient-Centered Primary Care Home (PCPCH) program supports this work by recognizing practices that commit to delivering care in the PCPCH model; to date nearly 600 practices have been recognized.

One of the anticipated impacts of widespread PCPCH adoption is an increase in preventive care, including several important screening tests. The graph on the next page indicates measures where PCPCH-recognized clinics (as of June 30, 2014) have significantly higher mean scores as compared to clinics not recognized by the program. Clinics across the state are implementing new services, workflows and staffing strategies to meet PCPCH standards and offer more organized comprehensive care to their patients. Q Corp spoke to several PCPCH-recognized clinics to understand what they have done to achieve higher screening rates for these measures; their stories appear throughout the report.

Read more about the PCPCH program, including a list and map of recognized practices, and detailed information on the program standards at primarycarehome.oregon.gov. You can also access a series of online learning modules reviewing the Standards pcpci.org/online-modules. CME and CEU credit are available for physicians and nurses who complete the modules.

The Patient-Centered Primary Care Institute (PCPCI)

The PCPCI is a partnership serving as a hub of resources that connects practices to technical assistance to make primary care more accessible, comprehensive and patient-centered. Access Institute resources on a variety of topics by visiting pcpci.org.

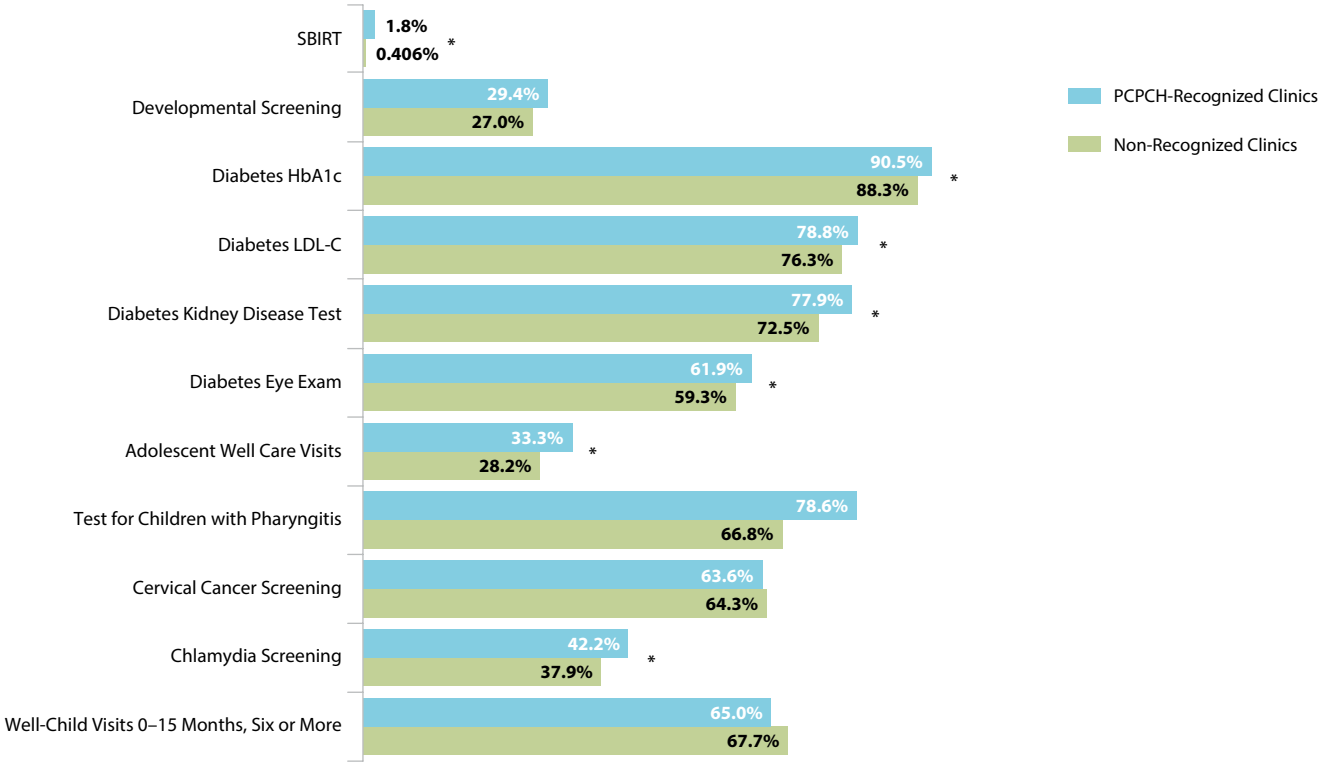
"After receiving training on Screening, Brief Intervention and Referral to Treatment, we decided to make universal SBIRT mandatory in our clinic. We work hard to ensure every patient we see is screened each year. For the first three months of every year we really hit hard on SBIRT, and related screening tools we need to identify substance use issues and offer support. Occasionally people are opposed to completing the form, but we overcame that by asking questions one-on-one with the patients when they're in the exam room. You have to make sure you communicate [to the staff] why you want to do this and why it is important for the patients."

— Sharon D. DeHart, PA-C, District Manager, Deschutes Rim Health Clinic
www.pcpci.org/blog/deschutesrimclinic

As we learn more about the results associated with the implementation of the medical home, we will be able to identify those elements that will contribute to improved care, and the standards for measuring clinic success will evolve. Rising standards support transformation as a tide raises all boats; practices that implemented medical home early strive for even greater integration and coordination, while those beginning to explore the PCPCH model are able to learn from their predecessors and to make improvements in care.

To see how this has happened in Oregon, Q Corp compared data from 2010, before the widespread adoption of the PCPCH program, and 2013 when the program had recognized 428 primary care practices. This analysis found that 80 percent of high-performing primary care practices (recognized as of June 30, 2014) were also high-performing practices in 2010. While it is clear that high performing practices continued to excel in several key quality measures after the implementation of the PCPCH program, many practices have shown significant improvement by moving from low and moderate performance into the high performance category. For example, when comparing 2010 chlamydia screening rates with the current data, four of five current high-performing practices have moved their screening rates above the median since 2010. While it is not possible to know with certainty what accounts for the change for the clinics that are improving, two possible explanations might be an actual increase in screening rates or improved accuracy in coding.

Measure Performance
PCPCH-Recognized vs. Non-Recognized Clinics



* Starred measures are statistically significant at the 95 percentile (P<0.05)

Note: The diabetes HbA1c, LDL-C, Kidney Disease Test, and Eye Exam all include Medicare Fee-For-Service data.

To make the 2010 data comparable to the 2013/2014 population, Q Corp applied weighting to clinic scores to account for payer mix changes in the Q Corp dataset between 2010 and June 30, 2014.

Transforming care across Oregon

STATE SNAPSHOT

Q Corp continually tracks the performance of primary care clinics in Oregon on a number of quality, resource use and cost metrics. 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 clinics for reporting. The table on the following page provides a snapshot of Oregon's overall clinic performance.

The table shows Oregon's mean clinic scores compared to local and national benchmarks. For the local benchmark, Q Corp calculates the Oregon Achievable Benchmark of Care (ABC), labeled Oregon's Best Benchmark. This benchmark provides a method to identify performance levels already being achieved by "best-in-class" clinics within Oregon. "Best-in-class" Oregon clinic scores are calculated using the paired mean rate of the highest performing clinics providing care to at least 10 percent of the patient population.

The national benchmarks come from National Committee for Quality Assurance (NCQA) HEDIS® (Healthcare Effectiveness Data and Information Set). For each measure, the national mean and 90th percentile were calculated by weighting the 2014 HEDIS® benchmarks for each line of business based on the proportion of each population (Commercial, Medicaid and Medicare).

KEY FINDINGS

- For adolescent well child visits, the analysis shows a significant improvement in the commercial population, and the overall rate for all payer types increased from 28.3 percent to 36.3 percent.
- For the Diabetes blood sugar (HbA1c) screening test, Oregon has seen a year-over-year improvement for both the commercial and Medicare populations, while the Medicaid population shows a slight decrease. Overall, for all payer types there was a significant improvement year over year from 86 percent to 90.1 percent. The current rate of 90.1 percent is statistically significantly better than the combined HEDIS national mean of 88.7 percent.
- The diabetes kidney disease monitoring measure showed considerable variation geographically in Oregon across all payer types. The Portland Metro area had the highest screening rate at 84.5 percent, very close to the national mean. The South Coast region had the lowest rates, with 57.5 percent, a difference of 27 points.
- Oregon's percentage of ED visits that could have been avoided for all payer types has increased for the second measurement year in a row. Analysis of potentially avoidable ED visits shows that rates have had an overall slight downward trend since 2010. Though Medicaid has the highest overall rates across the measurement years as compared to other payer types, the Medicaid population has had the greatest overall downward trend for potentially avoidable ED visits for both children and adults.

KEY: Higher than HEDIS national mean | Lower than HEDIS national mean | No national benchmarks

Primary Care Measure	Oregon Mean Clinic Score	N / Clinics	Oregon Clinic Low – High Score	Standard Deviation	2014 Combined HEDIS National Mean*	2014 Combined HEDIS National 90th Percentile*	Oregon's Best Benchmark
Antidepressant Medication Management (Long Term)	52.8%	13,406 / 176	25.5 – 80.9	10.2	44.3%	56.8%	77.9%
Antidepressant Medication Management (Short Term)	67.0%	13,406 / 176	37.2 – 88	8.8	59.4%	69.9%	84.6%
Appropriate Low Back Pain Imaging	85.5%	9,156 / 129	60 – 100	8.0	74.7%	82.5%	99.7%
Appropriate Testing for Children with Pharyngitis	78.2%	7,203 / 94	23.3 – 97.1	16.8	71.3%	85.9%	95.3%
Breast Cancer Screening‡	71.2%	178,063 / 355	44 – 93.2	10.6	68.3%	77.8%	90.2%
Diabetes Blood Sugar (HbA1c) Screening‡	90.2%	78,995 / 339	57.9 – 100	6.2	88.7%	93.9%	97.5%
Diabetes Eye Exam‡	62.2%	78,995 / 339	31.6 – 81.9	9.9	58.3%	71.9%	79.3%
Emergency Department Visits per 1,000†‡	357.6	1,226,253 / 739	75.6 – 1454.8	186.4	463.3	n/a	156.6
Well-Child Visits in the First 15 Months of Life, Six or More	67.9%	22,344 / 149	28.6 – 99.4	12.3	65.8%	79.7%	86.8%
Adolescent Well-Care Visits	31.7%	148,474 / 366	4 – 64.2	12.1	45.8%	63.3%	58.1%
Chlamydia Screening	42.0%	28,782 / 283	6.5 – 71.4	10.6	48.9%	61.7%	64.1%
Cholesterol (LDL-C) Screening for People with Heart Disease‡	82.2%	18,541 / 206	52.8 – 98.3	9.1	86.8%	92.6%	96.5%
Diabetes Cholesterol (LDL-C) Screening‡	79.6%	78,995 / 339	7.9 – 97.8	11.8	83.3%	89.5%	95.0%
Well-Child Visits in the 3rd, 4th, 5th and 6th Years of Life	60.2%	98,458 / 262	9.5 – 88	13.3	71.1%	83.4%	83.0%
Diabetes Kidney Disease Monitoring‡	77.8%	78,995 / 339	26.6 – 97.3	12.0	84.4%	90.3%	95.7%
30-Day All-Cause Readmissions, Unadjusted†‡	13.7%	39,927 / 266	2 – 28.6	4.5	n/a	n/a	7.7%
Alcohol and Drug Misuse (SBIRT), Adult‡	1.6%	704,020 / 408	0 – 38.9	4.2	n/a	n/a	14.9%
Appropriate Asthma Medications, Child	91.7%	1,700 / 29	75.9 – 100	5.3	n/a	n/a	98.5%
Cervical Cancer Screening	65.5%	183,097 / 355	14.7 – 94.7	11.0	n/a	n/a	90.0%
Developmental Screening	29.9%	70,545 / 218	0 – 82.1	25.2	n/a	n/a	76.1%
Generic Prescriptions Fills, Antihypertensives	95.6%	753,318 / 363	81.3 – 100	3.3	n/a	n/a	99.9%
Generic Prescriptions Fills, SSRIs	93.6%	794,677 / 404	69.7 – 100	4.2	n/a	n/a	97.9%
Generic Prescriptions Fills, Statins	91.5%	474,553 / 361	49.2 – 100	6.8	n/a	n/a	98.9%
Admissions for Ambulatory Sensitive Conditions - Overall per 1,000†‡	10.4	964,426 / 709	0.0 – 87.0	9.1	n/a	n/a	1.0
Admissions for Ambulatory Sensitive Conditions - Acute per 1,000†‡	3.7	964,426 / 709	0.0 – 58.0	4.1	n/a	n/a	0.1
Admissions for Ambulatory Sensitive Conditions - Chronic per 1,000†‡	6.6	964,426 / 709	0.0 – 53.3	6.7	n/a	n/a	0.3
Outpatient Visits per 1,000‡	5,324	1,226,253 / 739	1,644 – 13,206	1,607	n/a	n/a	n/a

* Benchmarks use a weighted formula based on the proportion of Q Corp Commercial, Medicaid and Medicare members in each measure

† Lower scores indicate higher quality

‡ Measure includes Medicare Fee-For-Service data

Transforming care across Oregon

These pages explore statewide averages by payer type or geography to find variations in care on measures related to four treatment areas: adolescent care, care for children, chronic care and emergency department use. Q Corp data from this period shows notable variation among payer types and geographic regions.

ADOLESCENT CARE

At 31 percent, Oregon performs well below the national mean of 45.8 percent on adolescent well-care visits, however this year does demonstrate a significant increase in the overall rate of screening from 28.3 percent to 31 percent. Notably, the Oregon Health Authority's Metrics and Scoring Committee prioritized this measure for the Coordinated Care organizations.

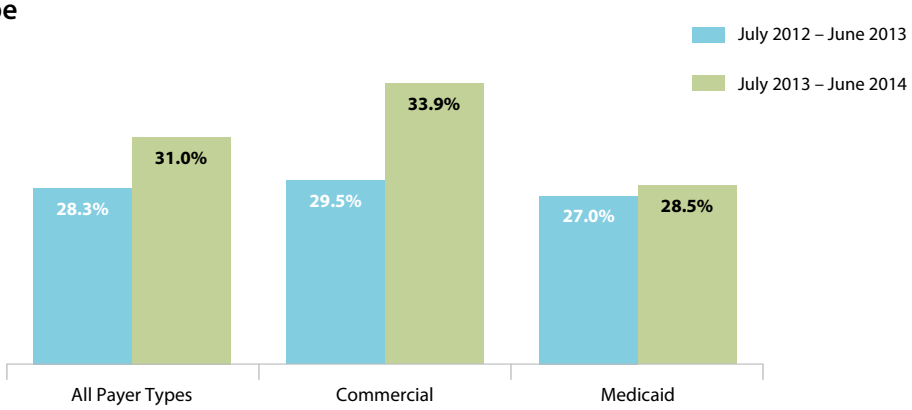
The analysis shows a significant improvement in the commercial population, and the overall rate for all payer types increased by three percentage points; one of the largest improvements seen in a single year. Feedback from primary care providers across the state indicate that additional incentives for improving the CCO metric performance are likely responsible for the improvement in the commercial population, also.

Adolescence is a critical period for preventing high risk behaviors. Adolescents are more likely to engage in activities that risk their overall health, including the use and abuse of alcohol and other substances, unprotected sex, poor eating and exercise habits, and physically endangering behaviors. This is also a time when many chronic physical, mental health and substance use conditions first emerge.[2] Adolescent well-care visits can foster early screening, intervention and treatment for both substance abuse and chronic conditions.

However, barriers remain that block more adolescents from receiving this care, including a lack of knowledge among parents and providers of the importance of these visits. Another factor is that opportunities to combine well-care visits with other care are often missed, such as when an adolescent visits a clinic for a sports physical.[3]

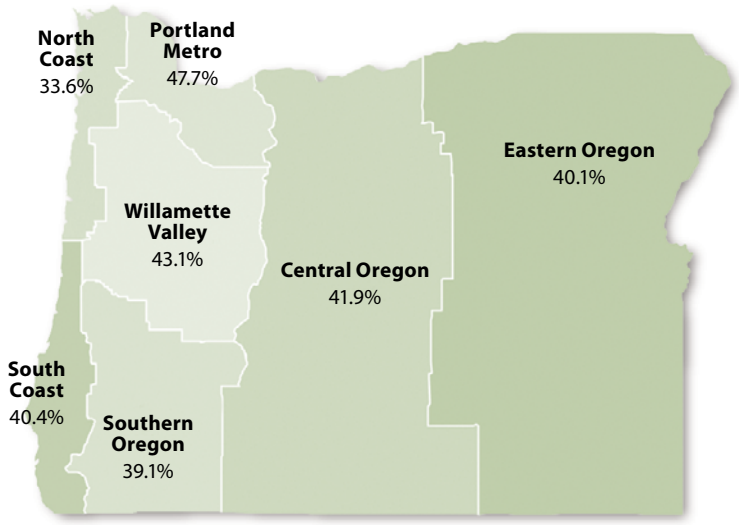
Institute resources to help improve **Adolescent Well Care** visits are available at bit.ly/pcpciADOLESCENTS

Adolescent Well Care Visits by Payer Type



Note: Q Corp data includes Medicaid fee for service as well as CCO members which accounts for the variation from the Medicaid rates reported by OHA

Geographic Distribution of Chlamydia Screening Measure Rate
All Payer Types



"Engaging patients and their parents was a little difficult. Until a few years ago it was common standard practice after the age of five for children to only need to be seen every two years, so parents were not prioritizing scheduling well-care visits. The recommendation changed to every year, and we had to explain that change to the parents and get them to understand… automated reminder calls were not enough; we needed to remind the patients face-to-face or on the phone and really impress how important it is to do this. We found that patients don't really check their voicemails and call back anymore — no one ever responds."

— Lisa Weida, Practice Administrator, Westside Pediatric Clinic, P.C.
www.pcpci.org/blog/westsidepeds

Concerns about confidentiality have historically reduced the numbers of adolescents seeking well-care visits. Adolescent patients may not be assured that the information discussed or discovered during the visit will stay between the patient and the provider.

This concern about confidentiality also affects related measures such as chlamydia screening rates for young people. Chlamydia is one of the most commonly reported sexually transmitted disease in both Oregon and nationally.[4,5] Although Q Corp noted an upward trend in this screening in previous years, this year the rate fell by 3.5 percent and the clinic screening rate of 42 percent in Oregon is significantly below both the national mean and the Oregon best benchmark (see page 13). Q Corp highlighted the confidentiality issues related to chlamydia screening of young people in the 2014 Information for a Healthy Oregon report.

Chlamydia disproportionately affects younger people, with 69 percent of US cases occurring in men and women aged 15 to 24 in 2012. For young women, early diagnosis and treatment of chlamydia can help avoid further complications, including infertility. Regional variation in chlamydia screening also continues, with Portland Metro having the highest screening rate at 47.7 percent and the North Coast the lowest at 33.6 percent.

How does Q Corp set regional boundaries?

The regions represent distinct geographic areas within the state of Oregon, and are defined by county. The rates reported in these maps represent the rates for the clinics located in those regions.

Transforming care across Oregon

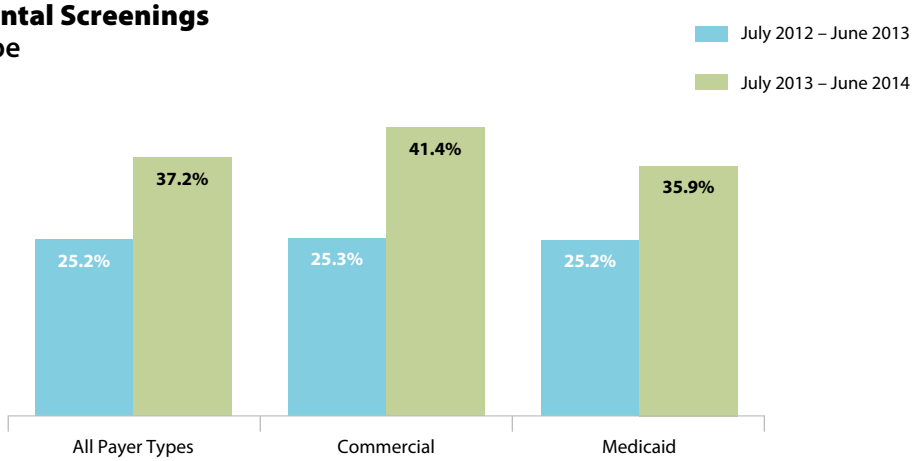
DEVELOPMENTAL SCREENING

This measure tracks children who have received a developmental screening during the first 36 months of life, with the intent of improving early detection of developmental and behavioral delays.[6] This measure was developed through a collaborative process between the Children's Health Insurance Program, the Oregon Health Authority where the work was led by Charles Gallia, PhD, Senior Policy Advisor and a member of the Q Corp Measurement & Reporting committee, and the Oregon Pediatric Improvement Partnership where the work was led by Colleen Reuland. The Oregon Health Authority's Metrics and Scoring Committee has adopted this measure as a CCO incentive measure, and providers across the state are focused on improvement.

As this version of the developmental screening measure is newly adopted, benchmarks have not been developed for comparison. However, one way to look at the measure is to compare it to well child visits in the first 15 months of life (six or more) where the Oregon clinic average is 67.9 percent (see chart, p. 13). This number tells us that children are being seen by primary care providers during the window for developmental screenings, yet the clinic average for this screening is only 29.9 percent. This low clinic average on developmental screenings could indicate that clinics that have not yet shifted their processes to ensure eligible children are receiving the screening. It could also be attributed to provider billing and coding practices, which may not capture all performed services.

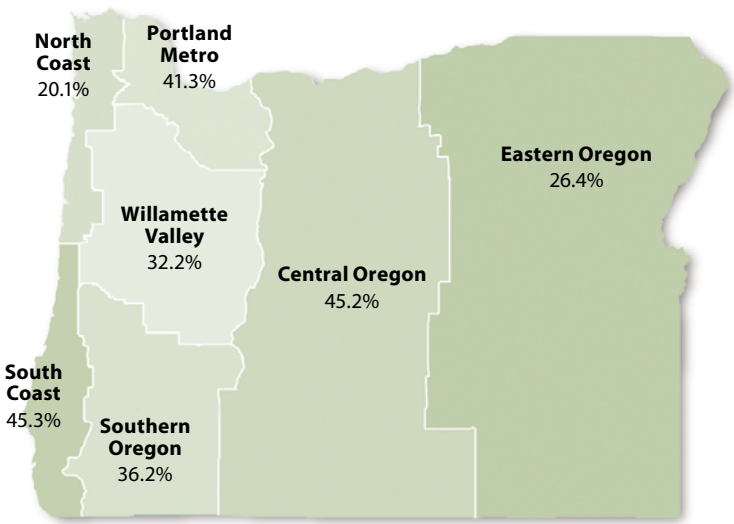
Institute resources to help improve **Developmental Screening** rates are available at bit.ly/pcpciDEVSCREEN

Developmental Screenings by Payer Type



Note: Q Corp data includes Medicaid fee for service as well as CCO members which accounts for the variation from the Medicaid rates reported by OHA

Geographic Distribution of Developmental Screening Measure Rates
All Payer Types



It is interesting to note that during the previous public reporting period, there was very little or no variation among payer types for this measure.

Though clinic average screening rates are low, rates statewide have significantly increased across payers, from 25.2 percent last year to 37.2 percent this year. This increase may be due to more focus on this area. However, there is still significant regional variation in this measure, with an over 20 percentage point difference between the lowest and the highest scoring regions. This is the first year Q Corp has tracked this measure, so it will be important to carefully monitor the rate over time to help identify sources of regional variation.

Transforming care across Oregon

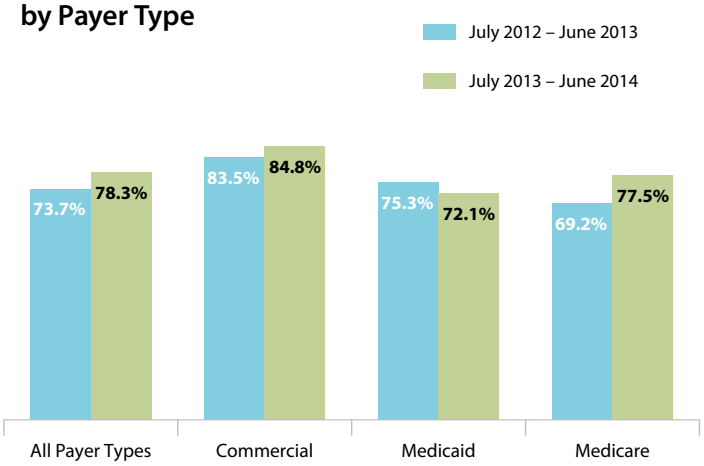
DIABETES CARE

Q Corp has reported on several diabetes measures for six years, including a blood sugar (HbA1c) screening rate and a kidney disease monitoring measure.

Statewide, scores for kidney tests, which are more important for patients with advanced disease, are increasing among all populations except Medicaid. However, they remain markedly below the combined HEDIS® national mean of 84.4 percent.

The kidney disease monitoring measure also showed considerable variation geographically in Oregon across all payer types. The Portland Metro area had the highest rate at 84.5 percent, very close to the national mean. The South Coast region had the lowest rates, with 57.5 percent, a difference of 27 points. Oregon Public Health estimates that diabetes costs the state nearly $3 billion per year; more comprehensive care for patients with this condition has the potential to save significant resources.[7]

Diabetes Kidney Tests by Payer Type

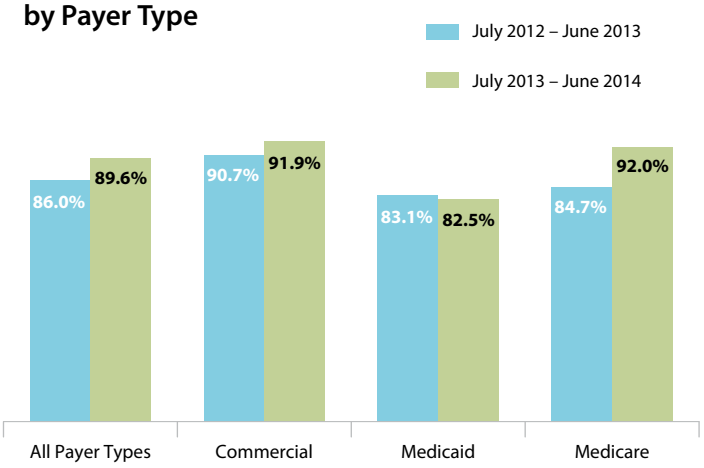


Note: Q Corp data includes Medicaid fee for service as well as CCO members which accounts for the variation from the Medicaid rates reported by OHA

"The Portland Clinic continues to strive for great outcomes for patients with diabetes. We have dedicated nurse practitioners and a registered nurse who focus specifically on patients with diabetes. We also provide informational classes and other specific education, such as insulin pump training. We are currently working on having outside sources come in and do additional training for the primary care providers. Also sometimes patients have difficulty accessing care. To make it more feasible for the patient we try to meet a variety of needs in just one visit. That can mean scheduling all their lab work, ophthalmology appointments, and others, back-to-back so they don't have to juggle multiple appointments. The last key is our online patient portal. Many records systems offer this feature, and it really helps the patient to be able to access their information. Patient engagement is the most important part of the equation."

— Tara Bergeron,
The Portland Clinic
www.pcpci.org/blog/theportlandclinic

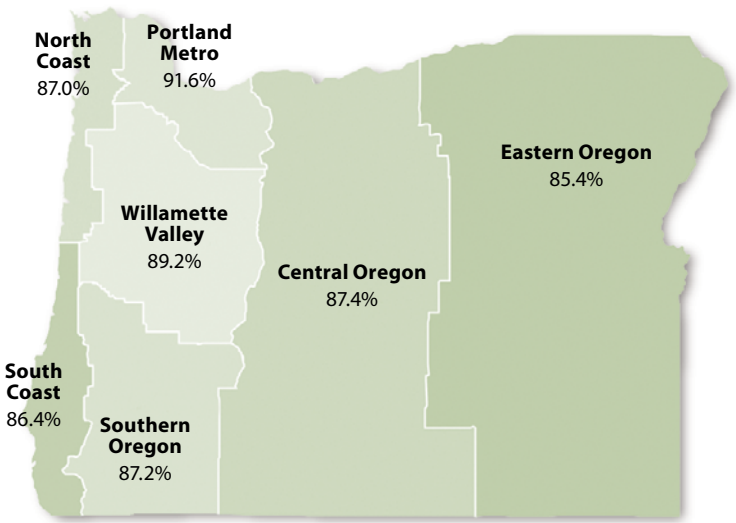
Diabetes Blood Sugar (HbA1c) Tests by Payer Type



Note: Q Corp data includes Medicaid fee for service as well as CCO members which accounts for the variation from the Medicaid rates reported by OHA

For the blood sugar (HbA1c) screening test, Oregon has seen a year-over-year improvement for both the commercial and Medicare populations, while the Medicaid population shows a slight decrease. Overall, for all payer types there was a significant improvement year over year. The current rate of 89.6 percent is significantly better than the combined HEDIS national mean of 88.7 percent, but is not significantly different from the combined HEDIS national 90th Percentile of 93.9 percent. In other words, Oregon is performing at the national 90th percentile for this measure.

Geographic Distribution of Diabetes Blood Sugar (HbA1c) Test Measure All Payer Types



Though state performance is good overall, there is geographic variation in the rates of blood sugar (HbA1c) screenings, with a difference of 6.2 percentage points between lowest and highest scoring regions.

Transforming care across Oregon

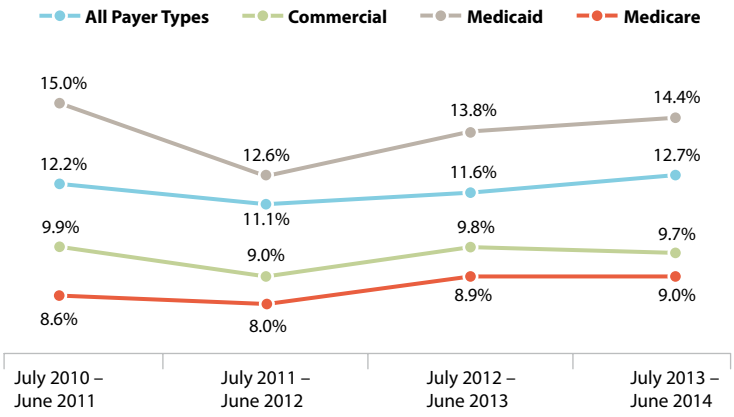
EMERGENCY DEPARTMENT VISIT DATA

This is the fourth year Q Corp has tracked the rates of potentially avoidable ED visits. This measure helps to identify areas where care could have been provided in a more appropriate and affordable setting. 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, which uses a conservative list of diagnosis codes for conditions that are typically treated by a primary care provider in an outpatient setting (e.g., colds). Importantly, the list of diagnosis codes does not include mental health, dental care or exacerbation of certain chronic conditions. The table [at right] shows the rate of potentially avoidable ED visits for both children and adults. Oregon's percentage of ED visits that could have been avoided for all payer types has increased for the second measurement year in a row.

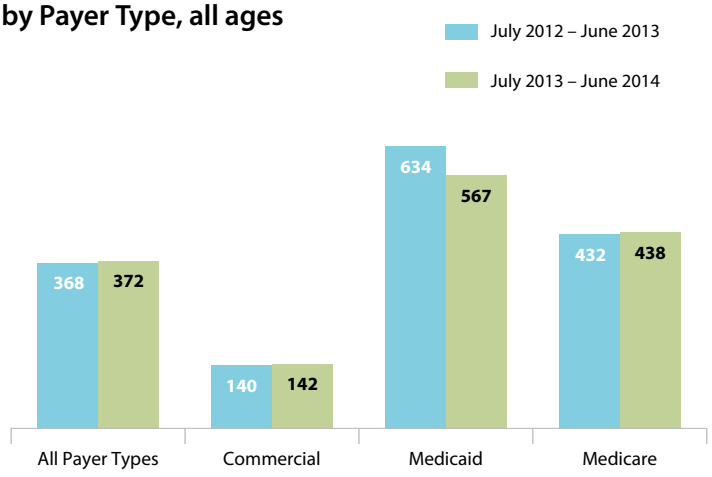
While avoidable ED visit frequency has climbed during this period, overall emergency department utilization has remained relatively flat, increasing from 368 visits per thousand to 372 visits per thousand, or one percent. There was a slight (two percent) increase in utilization for the commercial population, and a one percent increase in utilization for the Medicare population. It is notable that there was a significant decrease in emergency department utilization by the Medicaid population—11 percent—from 634 visits per thousand to 567 visits per thousand.

Intuitively, it seems that such a significant decrease in emergency department utilization as seen in Medicaid might derive from a decrease in unnecessary emergency department visits. However, the results reported for the potentially avoidable emergency department measure suggest otherwise. It is probable that the Medicaid expansion is influencing these results; the Oregon Health Authority has hypothesized that new Medicaid enrollees are younger and healthier than originally anticipated, thus using services less frequently.[8]

Potentially Avoidable ED Visits by Payer Type, all ages



ED Visits per 1,000 by Payer Type, all ages



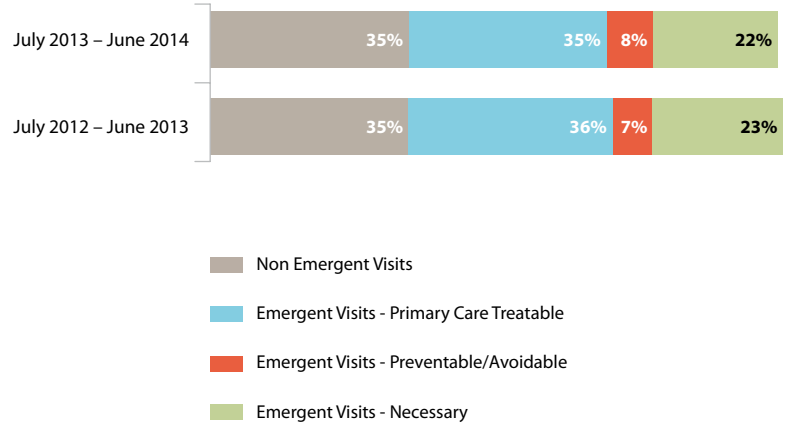
Note: Q Corp data includes Medicaid fee for service as well as CCO members which accounts for the variation from the Medicaid rates reported by OHA

As another way of looking at potentially avoidable ED visits, Q Corp classified ED visits into four groups: necessary, preventable/avoidable, primary care treatable and non-emergent. The algorithm for this classification system was developed by the New York University Center for Health and Public Service Research, which excludes ED visits related to injuries, mental health, substance abuse and certain other diagnoses. According to the NYU algorithm, 71 percent of ED visits in Oregon during this period were for non-emergent or primary care treatable conditions, up very slightly over the previous year, and the mix of visit types remains substantially the same.[9]

For the proportion of cases in Oregon where ED care was not indicated, it is assumed that eight percent could have been avoided if timely and effective care in another setting was received during the episode of illness. These preventable/avoidable visits, which include visits for asthma exacerbations and complications from heart disease or diabetes, may represent one of Oregon's greatest potential areas for improving care and affordability.

The results reported using the NYU algorithm show that there have been no significant changes in the mix of visit types. The health care cost savings from reduced ED visits could be significant, so continuing to track this measure in conjunction with measures related to conditions associated with high rates of avoidable visits will be important.

Emergency Department Utilization
NYU Algorithm



What's next for Q Corp

CENTER FOR HEALTHCARE TRANSPARENCY

In 2015, the Network for Regional Healthcare Improvement (NRHI), in partnership with the Pacific Business Group on Health, launched the Center for Healthcare Transparency. The Center's vision is big and audacious: Meaningful provider cost and quality information for 50 percent of the US by 2020. Q Corp is one of 11 Regional Health Improvement Collaboratives (RHICs) working together to share best practices, reach consensus on practical recommendations for the future, and contribute to a resource library.

The Center is leveraging local expertise to drive national transformation, working with organizations representing all pieces of the health care puzzle—providers, patients, health plans, employers and public purchasers. Currently there are three performance information methodology pilots underway. The Center will look to the findings of these pilots to inform work moving forward. Q Corp is excited to be a part of this national effort, and looks forward to helping to implement learnings here in Oregon.

CHOOSING WISELY

Q Corp has been a partner with Consumer Reports on the Choosing Wisely initiative since 2013. In the coming year, Q Corp and other RHICs will begin to focus more on how we can evaluate and report on a subset of Choosing Wisely measures. Q Corp has selected measures for their relevance to Oregon's population, and because they are feasible to produce with our current data set. Q Corp will be producing results at a statewide level for validation with our Measurement and Reporting committee this fall. Q Corp has also been in close contact with the Washington Health Alliance about their Choosing Wisely reporting program, and will continue to seek ways to collaborate on these nationally-significant measurement efforts.

PAYMENT REFORM

Q Corp continues to work with interested stakeholders on payment reform projects. The data collected for the Total Cost of Care work can serve as a platform for a wide variety of payment reform initiatives, including collaborative projects that focus on a specific region, population or condition.

PATIENT-CENTERED PRIMARY CARE INSTITUTE

Q Corp continues to work closely with the Oregon Health Authority and other stakeholders who support the Institute's wide range of online and in-person activities to make information, resources and technical assistance available to primary care. Later this year, Q Corp will launch a pilot to explore whether a primary care extension program could serve as a more efficient way of leveraging and organizing technical assistance to support transformation work.

MEASURE ALIGNMENT

Q Corp continues to work with partners locally and nationally on measure alignment. By aligning measurement efforts, Q Corp anticipates the reporting burden on providers can be greatly decreased as they seek a standard of measures useful for a range of efforts. This measure alignment also would allow for improved comparison across regions and the country to be able to compare measure results equitably and easily. This comparison would in turn provide the opportunity to identify high performing areas and gather information on emerging and best practices, which can then be distributed and used broadly.

Q Corp's goal is to align measures across stakeholders for 2016 and 2017

Each year with the guidance of Q Corp's multi-stakeholder Measurement and Reporting Committee, quality, cost and resource use measures are reviewed and selected for reporting to a variety of audiences to support health transformation efforts. Regionally and nationally, there are currently over 25 different initiatives either creating or promoting new measure lists (see a subset of initiatives on the chart below). The Q Corp Board of Directors and a number of community partners are working to identify a common set of core high level measures that would address the needs of public and private stakeholders across Oregon. While there will always be a need for organizations and agencies to sponsor individual measures of importance, Q Corp and others are trying to reduce the fatigue and distraction caused by tracking the volume of measures to create greater alignment and focus on the Triple Aim. As part of Q Corp's annual review process, committee members evaluate both existing and new measures to produce a relevant and actionable measure set. The table below shows the alignment of Q Corp's measures across these initiatives.

Alignment of Q Corp 2015 Measures	OHA CCO Performance Measures	PCPCH Quality Measures	CMS 5-Star Performance	Meaningful Use Stage 2	Physician Quality Reporting System (PQRS)
30-Day All-Cause Readmissions ‡	✓		✓		
Adolescent Well-Care Visits	✓ *	✓			
Alcohol Misuse: Screening, Brief Intervention, Referral for Treatment (SBIRT) ‡	✓ *	✓			
Ambulatory Care: Emergency Department Utilization ‡	✓ *				
Ambulatory Care: Outpatient Visit Utilization ‡	✓ *				
Antidepressant Medication Management			✓ ‡		
Appropriate Asthma Medications - Child		✓			
Appropriate Testing for Children with Pharyngitis	✓	✓		✓	✓
Breast Cancer Screening ‡			✓ ‡	✓	✓
Cervical Cancer Screening	✓	✓		✓	
Chlamydia Screening	✓			✓	
Cholesterol (LDL-C) Screening for People With Heart Disease ‡			✓		
Developmental Screenings in the First 36 Months of Life	✓ *	✓			
Diabetes Blood Sugar (HbA1c) Screening ‡	✓	✓			
Diabetes Cholesterol (LDL-C) Screening ‡	✓	✓	✓		
Diabetes Eye Exam ‡			✓		
Diabetes Kidney Disease Monitoring ‡			✓	✓	
Admissions for Ambulatory Sensitive Conditions ‡	✓				
Well-Child Visits in the 3rd, 4th, 5th and 6th Years of Life		✓			
Well-Child Visits in the First 15 Months of Life	✓	✓			

‡ Measure includes Medicare Fee-for-Service data.

* CCO Incentive Measure

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 relies on clinics and practices to process billing information accurately and comprehensively for services rendered. Limitations of claims data include timeliness and completeness of the information. Data in this report does not include: uninsured patients, patients who pay for their own health care services, 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**.

2014–2015 FUNDING PARTNERS*

Bridgespan Health Company

CareOregon

FamilyCare, Inc.

Health Net of Oregon

Health Republic

Kaiser Permanente

LifeWise Health Plan of Oregon

Moda Health

Northwest Health Foundation

Oregon Health Authority Division of Medical Assistance Programs

Oregon's Health CO-OP

PacificSource Health Plans

Providence Health Plans

Regence BlueCross BlueShield of Oregon

Robert Wood Johnson Foundation

Trillium Community Health Plan

Tuality Health Alliance

* Data suppliers for this report appear in **bold**. The Centers for Medicare and Medicaid Services (Medicare fee-for service) is also a data supplier for this report through the Qualified Entity Program. Q Corp's partnership with these organizations 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 2013 through June 2014 and includes the following measures. More detailed information is available in the Technical Appendix online at Q-Corp.org.

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 18 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

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).

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.

Women's Preventive Care

Breast cancer screening: Measures the percentage of women ages 50 to 74 who had a mammogram during the measurement year or the 15 months prior.

Cervical cancer screening: Measures the percentage of women ages 21 to 64 who received one or more Pap tests 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.

Hospital Resource Use

Ambulatory Care - ED visits: Measures the number of rate of emergency department (ED) visits during the measurement year.

Potentially avoidable ED visits: Measures the percentage of ED 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.

Hospital Admissions for Ambulatory-Sensitive Conditions, Rate per 1,000 Patients – Overall Composite: A composite measuring the rate per 1,000 patients of twelve acute and chronic ambulatory sensitive conditions.

Hospital Admissions for Ambulatory-Sensitive Conditions, Rate per 1,000 Patients – Acute Composite: A composite measuring the rate per 1,000 patients of three acute ambulatory sensitive conditions.

Hospital Admissions for Ambulatory-Sensitive Conditions, Rate per 1,000 Patients – Chronic Composite: A composite measuring the rate per 1,000 patients of nine chronic ambulatory sensitive conditions.

Measure definitions

Ambulatory Resource Use

Ambulatory Care - Outpatient visits: Measures the rate of outpatient services such as doctor's office visits, home visits and urgent care during the measurement year.

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.

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 and other second generation antidepressants
2) Statins
3) Antihypertensives

Alcohol and drug misuse (SBIRT): Measures the percentage of patients 18 and older who had one or more screening, brief intervention, and referral to treatment (SBIRT) services.

Outpatient Visits per 1,000: Measures the rate of outpatient services such as doctor's office visits, home visits and urgent care during the measurement year.

Outpatient Emergency Department Visits per 1,000: Measures the rate of outpatient emergency department visits during the measurement year.

Cost of Care

Total Cost Index (TCI): A risk-adjusted measure of the *overall cost effectiveness* of managing patient health relative to the Oregon average. This measure includes both the frequency and price of services provided.

Resource Use Index (RUI): A risk-adjusted measure of the *frequency and intensity* of the services used to manage patient health relative to a benchmark.

Price Index: A risk-adjusted measure of the *price component* of managing patient health relative to the Oregon Average. The Price Index is affected by fee schedules, referral patterns and place of service.

Pediatric Care

Adolescent well-care visits: Measures the percentage of adolescents ages 12 to 21 who had at least one well-care visit during the measurement year.

Developmental screening: Measures the percentage of children ages 1 to 3 who were screened for risk in delays in development, behavior and social delays during the measurement year.

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 during the measurement year.

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 US 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. Additionally, in 2012 Q Corp was one of the first three organizations in the US to become selected as a Qualified Entity by the Centers for Medicare and Medicaid Services.

For more information visit **Q-Corp.org**.

References

1 Hussey PS, Wertheimer S, Mehrotra A. The Association Between Health Care Quality and Cost. *Annals of Internal Medicine Ann Intern Med* 2013:27–27.

2 Centers for Medicare & Medicaid Services. Paving the Road to Good Health: Strategies for Increasing Medicaid Adolescent Well-Care Visits. 2014.

3 Hargunani, Dana. Adolescent Well Visit Measure: Understanding Barriers to Performance Improvement. *OHA Metrics & Scoring Committee* 2015.

4 Public Health. Oregon STD Statistics. *Oregon Health Authority* 2014.

5 Sexually Transmitted Disease Surveillance. National Profile: Chlamydia. *Centers for Disease Control and Prevention* 2013.

6 Public Health Division. Improving Early Childhood Screening, Surveillance and Referral Practices in Oregon. *Department of Human Services* 2008.

7 Health Promotion & Chronic Disease Prevention Section. Diabetes, Heart Disease and Stroke in Oregon. *Public Health Division, Oregon Health Authority* 2013.

8 Office of Health Analytics. Oregon's Health System Transformation: 2014 Final Report. *Oregon Health Authority* 2015.

9 Billings J, Parikh N, Mijanovich T. Emergency Department Use in New York City: A Substitute for Primary Care? *The Commonwealth Fund* 2000.

Federal Highway Administration. Estimated 2012 Costs to Replace or Rehabilitate Structurally Deficient Bridges. US Department of Transportation 2015.

Department of Education. Pricing and Ordering Guide For School Buses 2010–2011. State of Florida 2010.

Bureau of Labor Statistics. Occupational Outlook Handbook. US Department of Labor 2014.

Office of Health Analytics. Sustainable Healthcare Expenditures for the State of Oregon. Oregon Health Authority 2014.

Vital Statistics. Oregon Birth Data: 2014. Oregon Health Authority 2014.

Note: Because of a delay in data availability, this report includes data from Kaiser Permanente's Calendar Year 2013 data submission.

The source for some benchmark data contained in this publication is Quality Compass® 2013 and is used with the permission of the National Committee for Quality Assurance (NCQA). Quality Compass 2013 includes certain CAHPS data. Any data display, analysis, interpretation, or conclusion based on these data is solely that of the authors, and NCQA specifically disclaims responsibility for any such display, analysis, interpretation, or conclusion. Quality Compass is a registered trademark of NCQA. CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).

Oregon Health Care Quality Corporation
520 SW Sixth Avenue Suite 830, Portland, Oregon 97204
Phone 503.241.3571 | Fax 503.972.0822 | info@q-corp.org

NON-PROFIT ORG
US POSTAGE
PAID
PORTLAND OR
PERMIT NO 5300

OREGON HEALTH CARE
QUALITY
CORPORATION

A Regional Health Improvement Collaborative