MATHEMATICA Policy Research

REPORT

FINAL REPORT

Midpoint Evaluation of Oregon's Medicaid Section 1115 Demonstration:

Mid-2012 through Mid-2014

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EXECUTIVE SUMMARY

Oregon is using a Medicaid Section 1115 demonstration waiver to redesign the structure of its Medicaid delivery and payment systems and to drive transformation of the state's health care system. The focal point of the demonstration is the implementation of Coordinated Care Organizations (CCOs) which are the single point of accountability for health care access, quality, and outcomes of Medicaid beneficiaries. CCOs must institute a governance structure that includes the managed care entities (MCEs) that provide physical, behavioral, or oral health services and individual providers or community health centers. CCOs must also convene a community advisory council (CAC) that includes representatives from the community as well as representatives from local government entities, but with consumers making up the majority of the CAC. CCOs are responsible for integrating all services, including physical, behavioral, and oral health services, under a global budget based on a per member, per month payment structure. They must also have in place transformation plans that describe their activities relating to the eight elements of Medicaid delivery system transformation.

Figure ES.1. The eight elements of Medicaid delivery system transformation at the CCO level

CCO = Coordinated Care Organization

This report summarizes the results of the midpoint evaluation of Oregon's demonstration and the introduction of CCOs. The evaluation was conducted by Mathematica Policy Research under contract with the Oregon Health Authority (OHA). Most of the information presented in this report covers the program since its inception in mid-2012 through mid-2014. Given the early nature of the evaluation, the results presented below should be considered preliminary and subject to change as the demonstration evolves.

The evaluation includes both formative and summative components. The formative component is based on documentary evidence, key informant interviews, site visits, and a self-administered survey of CCOs that assessed the progress CCOs have made with their transformation activities. The summative component is based on a pre/post assessment of outcome measures that could be constructed with encounter data. The following summarizes both evaluations and whether CCO progress with their transformation activities is related to outcomes.

Key findings from the formative evaluation component

The formative evaluation assessed the extent to which OHA implemented transformation activities as specified in its Section 1115 demonstration wavier and the progress CCOs have made with the transformation activities specified in their contracts with OHA and described in their transformation plans.

Key findings from the formative evaluation component are as follows:

1. **To what extent has OHA effectively taken action to support transformation?** There is clear evidence that OHA actions have been effective in supporting transformation of the Medicaid delivery system. OHA has been effective in managing multiple strategies to provide technical assistance to CCOs and their provider networks, drive change through the development of a quality reporting system, and support progress on redesigning the Medicaid payment system. Despite a strain on staff resources, OHA has made good progress in supporting the spread of patient-centered primary care homes (PCPCHs), promoting the use of EHRs, and establishing transparent reporting on quality metrics. OHA also made significant progress on increasing supports that will enable providers to improve care for unique Medicaid populations.
2. **To what extent have CCOs—in aggregate and individually—taken action to transform care delivery and payments?** CCOs are providing strong leadership to transform care. CCOs have redesigned their organizations to focus on implementing tangible reforms to promote transformation. In particular, they have strengthened the foundation of primary care in the Medicaid delivery system and have worked with OHA to increase the number of members cared for by PCPCHs. Although the CCO global budgets are fully operational, OHA needs to address how it braids together finances from disparate systems to avoid ongoing payment silos. We found that CCOs need more support and continued attention to develop alternative payment methods for their providers. In spite of these challenges the global budget has given CCOs more flexibility to allocate resources to community-based care and on prevention
3. **To the extent that some CCOs have not taken actions for transformation, what has prevented them from doing so?** The major barriers cited by the CCOs are the burden of implementing many complex initiatives simultaneously without adequate resources, the need for more granular data on members and on the costs of comprehensive care, and the lack of focused attention on the unique needs of rural communities. CCOs also wanted more time for strategic planning and they wanted more guidance from OHA, but OHA wanted the CCOs to determine priorities according to the needs of their members. Although CCOs have encountered barriers they have also been creative about responding to the barriers and

engaging OHA in discussions about solutions. The CCOs have not made equal progress on each element of transformation but they have at least initiated activity on all the major elements.

4. **To the extent that some CCOs have been successful in taking action, what have been the keys to their success?** CCOs cited OHA support as an important key to success, especially the technical assistance provided by the Transformation Center and the liaison role provided by the innovator agents. The diverse CCO board representation, including providers from primary care, behavioral health, hospitals, and in some cases oral health, represents a significant change from how MCE governance had operated in the past. The partnership with providers is seen by CCOs as another key to success. Several CCOs also noted that they had historically strong relationships or built new relationships in the communities that they are serving. These relationships were important for building trust and helping them move forward with their transformation activities. The CACs represent a major improvement in engaging Medicaid beneficiaries and community members. Their involvement informed CCO efforts to transform the Medicaid delivery system.

5. **To what extent are CCO members experiencing improved care coordination, with emphasis on PCPCHs?** The collective effect of the CCOs is demonstrated in the overall progress they have made in increasing PCPCHs, increasing member enrollment in PCPCHs, and in testing approaches to providing integrated physical health and behavioral health care. OHA's role in certifying PCPCHs has been vital to the ability of CCOs to enroll their members in PCPCHs. The analysis of CCO self-assessment data demonstrates that CCOs have made the most progress on transformation of the Medicaid delivery system in the area of developing PCPCHs. CCOs and their providers are using more team-based care to address members' issues and the teams are more diverse than historically defined, with increasing representation from traditional health workers (THWs).

6. **To what extent have OHA and CCOs implemented payment methods that focus on value, not volume?** Although the midpoint evaluation found that OHA successfully implemented global budgets and incentive payments for all the CCOs, the CCOs are at the early stages of implementing alternative payment methods for their providers. To continue to move forward, CCOs reported that they require infrastructure supports, including systems that move away from encounter data as the basis for payment, and they need more information on their members and the costs of their care. Strategies for using alternative payment methods for small practices are a particular area of concern for CCOs. Finally, provider engagement, education, and participation in policy are necessary.

7. **To what extent have CCOs integrated physical, behavioral, and oral health services? Other services?** CCOs are making progress on the integration of services and the CCO self-assessment data suggest this is an area where CCOs have made more progress relative to the other areas of transformation. All CCOs have established relationships with mental health providers and have been testing different approaches to integration. However, they are still learning about the systems that care for the population with severe and persistent mental illness and developing a better understanding of effective approaches to integrating care for this population.

8. **To what extent are best practices being tested and disseminated?** CCOs describe the opportunity to learn from OHA and from each other about innovations and best practices as

a valuable aspect of their transformation activities. They noted the key role played by the Transformation Center and the innovator agents in this learning process and dissemination of knowledge. They would like more opportunities to establish feedback loops and time to formally test changes to learn more about what specific strategies are effective, to learn where course corrections are necessary, and to know whether they are achieving the desired outcomes.

Key findings from the summative evaluation component

The summative component of the midpoint evaluation was designed to assess the extent to which a selected set of outcome measures changed after Oregon began to implement the CCO model for its Medicaid program in 2012. The term outcome is used generically to refer to all the measures considered in the evaluation, which include process and utilization measures. In addition to assessing whether outcomes changed after CCOs were established, the summative evaluation component examined whether any detected changes could be attributed to the CCOs' transformation activities. Given the timing of the midpoint evaluation, the analyses of outcomes focus on the first 21 months of a 60-month demonstration. Therefore, the findings are considered preliminary and reflect the first phase of the demonstration—a period in which OHA and the CCOs focused on establishing foundational aspects of their transformation plans.

To conduct the summative evaluation, Mathematica obtained enrollment and claims records directly from Oregon and its Medicaid Management Information System. Because we were not able to access Medicare records, the analysis excluded beneficiaries dually enrolled in Medicare and Medicaid and all beneficiaries age 65 and older. We also excluded beneficiaries in the fee-for-service system and those not eligible for the full range of Medicaid benefits. Lastly, Mathematica did not receive denied claims, which are frequently included in the specifications for preventive care measures and some of the measures relating to the integration of physical and behavioral health services. As a result of these enrollment and claims exclusions, the results may differ when the full population and all relevant claims are included.

In the summative evaluation component, we found few widespread state-level associations between outcome measures and the introduction of CCOs (Table ES.1), which may reflect the early stages of activities being pursued by OHA and the CCOs (Table ES.1). It may be unreasonable to expect the transformation activities of OHA and the CCOs to influence outcomes significantly within the first 21 months. It is also possible that the outcome measures selected for the summative evaluation may not have been sensitive enough to the transformation activities. Conversely, the results do not suggest widespread negative results as a consequence of introducing the CCO model. Table ES.1 summarizes the results.

Table ES.1. Summary of summative evaluation results by outcome measure

Measure	Changed after the introduction of CCOs	Associated with the stage of CCO transformation activities [a]	Race/Ethnicity differences changed after the introduction of CCOs [b]
Improving primary care for all populations			
Developmental screening by 36 months	--	√	--
At least six well-child visits in the first 15 months of life	√+	√	√Blacks
Child and adolescent preventive care visit (age 12 months through 19 years)	--	--	√Asians
Adolescent well-care visit (age 12 through 21 years)	--	√	√Asians
Adult preventive care visit (age 18 through 64 years)	--	√	√Asians
Cervical cancer screening (age 21 through 64 years)	√+	--	√AI/AN
Ensuring appropriate care in appropriate places			
Total ED and ambulatory care visits	--	√	--
Total ED visits	--	√	--
Total ambulatory care visits	--	√	--
Improving behavioral and physical health coordination			
Total ED and ambulatory care visits for mental health/psychiatric care	--	--	--
Total ED visits for mental health/psychiatric care	--	--	√Blacks and Pacific Islanders
Total ambulatory care visits for mental health/psychiatric care	--	--	--
Follow-up within seven days after hospitalization for mental illness (age 6 through 64 years)	--	--	--
Reducing preventable hospitalizations			
Total number of inpatient admissions	--	√	--
PQI acute care composite measure	--	--	√Blacks
PQI chronic care composite measure	--	--	--
PQI 01: Diabetes short-term complication admission rate (age 18 through 64 years)	--	--	--
PQI 05: Chronic obstructive pulmonary disease or asthma admission rate (age 40 through 64 years)	--	--	--
PQI 08: Congestive heart failure admission rate (age 18 through 64 years)	--	--	--
PQI 15: Adult asthma admission rate (age 18 through 30 years)	--	--	--
Addressing discrete health issues (diabetes care)			
LDL-C screening (age 18 through 64 years)	--	--	--
Hemoglobin A1c testing (age 18 through 64 years)	--	--	--

[a] Tested for a statistically significant difference between the three CCOs that had progressed the most with their transformation activities relative to the three CCOs in the earliest stages of their activities.

[b] Tested for a statistically significant difference between the each racial/ethnic minority group and white enrollees.

√ = A statistically significant association. √+ = A positive association with the introduction of CCOs. √- = A negative association with the introduction of CCOs; -- = no statistically significant association was found.

AI/AN = American Indian/Alaskan Native. CCO = Coordinated Care Organization; ED = emergency department; LDL-C = low-density lipoprotein cholesterol; PQI = prevention quality indicator

Even though few state-level demonstrations effects were detected, our results suggest that some effects may be occurring within specific subgroups of enrollees. For example, we found that inpatient admissions declined among members of the three CCOs in the most advanced stages of their transformation activities relative to those who were members of the three CCOs in the earliest stages of their activities. Conversely, the measures for ambulatory and emergency department (ED) visits and adolescent and adult preventive care indicate that the introduction of CCOs in 2012 was associated with improved participation rates among enrollees in the three CCOs in the earliest stages of their transformation activities relative to those in the three CCOs in the most advanced stages. Although these last results are not consistent with the expectation that the CCOs in the most advanced stages of activities may see the greatest improvements in outcomes, several factors may account for this unanticipated result; for example, the analysis may not capture the full range of transformation activities, or it may not adequately control for baseline differences among CCOs, or it may be capturing other CCO-specific factors such as outreach initiatives.

The results related to variations by race/ethnicity also indicate that the introduction of CCOs may be associated with improved parity in some outcome measures for some subgroups, such as improvements in potentially preventable hospital admissions for chronic conditions among black enrollees, wellness care for Asian enrollees, and cervical cancer screening for American Indian/Alaska Native women. Even though we did not observe widespread reductions in racial/ethnic disparities immediately after CCOs were introduced to the Medicaid program, we also did not detect growing disparities.

Discussion

The midpoint evaluation of Oregon's Medicaid Section 1115 demonstration waiver demonstrates that OHA and the CCOs have been working hard to transform Oregon's Medicaid program. Most of this work, particularly at the CCO level, has been focused on laying foundational elements and building basic infrastructure. Since the demonstration began in 2012, OHA has accomplished much of what it set out to do, particularly in the areas of (1) contracting with CCOs and establishing their global budgets that cover physical and mental health and addiction services, (2) establishing and tracking a set of quality metrics, and (3) creating the Transformation Center and launching its work to accelerate and spread effective innovations and best practices. The CCOs have also covered a lot of ground during the first 21 months of the demonstration, particularly in the areas of developing PCPCHs and integrating physical and mental health and addiction services.

This work has not been without its challenges, especially in managing the fast pace and addressing OHA's legacy of state-level silos for Medicaid, mental health, and public health services that have created barriers to care coordination and improved efficiency. As might be expected, more work remains to fully transform the Medicaid delivery and payment systems. OHA is reassessing it structure and continues to work on developing a certification process for traditional health workers and effective approaches that promote the use of flexible services. Among the CCOs, the CCO Transformation Assessment Tool (CTAT) results also clearly indicated that, as of March 2014 when the CTAT was administered, the CCOs were still designing and pilot testing many of their transformation activities. Given that Oregon's

transformation is in its initial stages, it is not surprising that the summative evaluation did not find widespread improvements in outcomes after the demonstration started.

The analyses presented in this midpoint evaluation represent a starting point for the assessment of Oregon's Medicaid Section 1115 demonstration waiver. A longer post-demonstration period is needed to assess the robustness of these early results and whether they become more pronounced as the demonstration matures and OHA and the CCOs continue with their transformation activities. In addition, a longer post-demonstration period is necessary to detect changes in mid- and long-term outcomes that may occur as more of the transformation activities move from pilot testing phases to full scale-up across the CCOs and their networks.

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I. INTRODUCTION

Oregon seeks to transform its Medicaid program by enhancing the individual's experience of care, improving population health, and reducing the per capita costs of care or at least reining in the growth of these costs. To cause this transformation, the Oregon Health Authority (OHA) began implementing a five-year Medicaid Section 1115 demonstration waiver in mid-2012 after receiving approval from the Centers for Medicare & Medicaid Services (CMS).[1] Oregon is using the Section 1115 demonstration waiver to redesign its Medicaid delivery system and payment structure and to drive transformation of the state's health care system. This report summarizes the results of the midpoint evaluation of Oregon's efforts to redesign its Medicaid program through this Section 1115 demonstration waiver.

A. Overview of Oregon's Medicaid Section 1115 demonstration

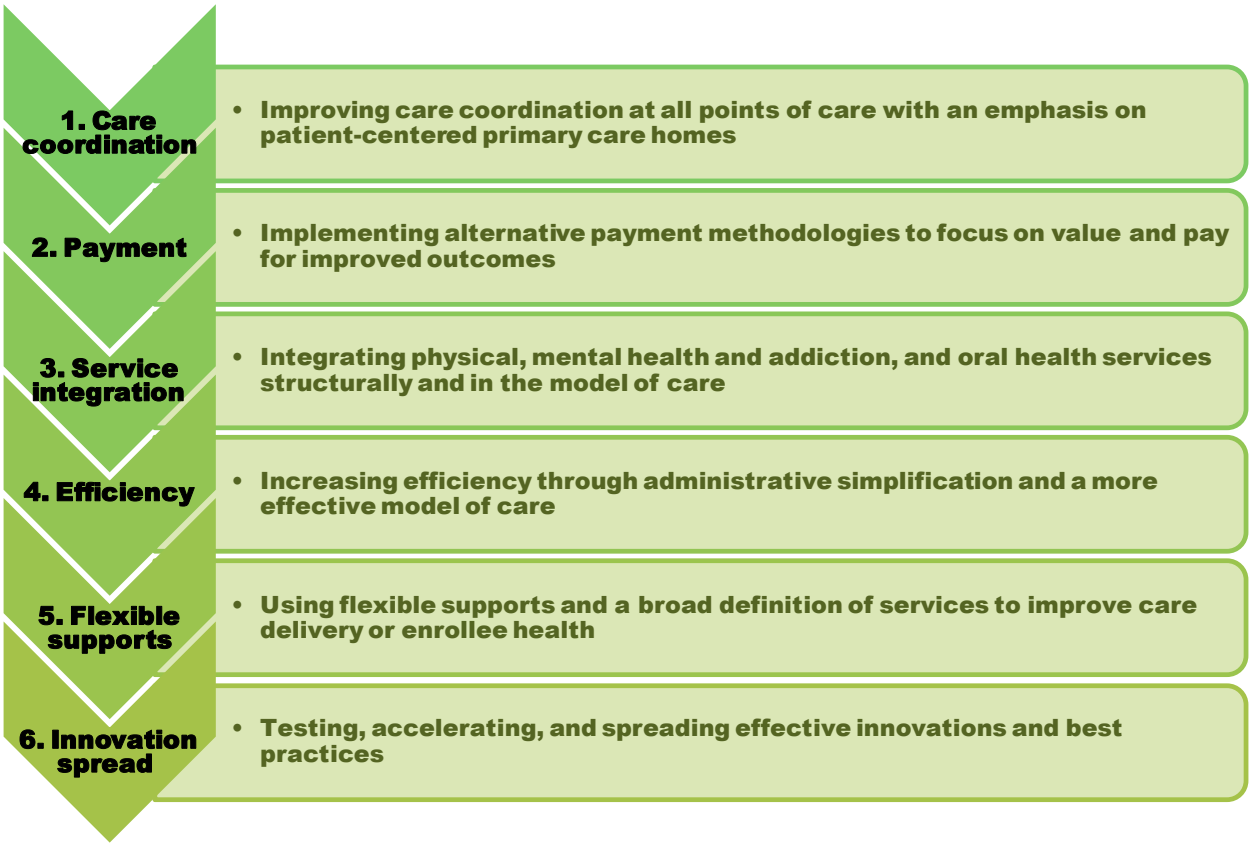
The current demonstration project runs from July 2012 through June 2017 and covers most populations eligible for Medicaid services (including the new Medicaid expansion populations that began enrolling in January 2014). In August 2012, the state began the transformation of the delivery system by shifting delivery of care from managed care entities (MCEs) responsible for a subset of services (such as physical health services only) to Coordinated Care Organizations (CCOs), which are community-based organizations governed by a partnership among care providers, community members, and those sharing a CCO's financial risk. CCOs are the single point of accountability for health care access, quality, and outcomes of Medicaid beneficiaries and are responsible for managing and integrating physical, behavioral, and oral health care. The state requires most Medicaid-eligible individuals to enroll in a CCO, although people dually eligible for Medicare and Medicaid and American Indians/Alaska Natives (AI/ANs) are allowed to opt out of the program.

1. Redesigning the delivery system

Transformation of Oregon's Medicaid delivery system is occurring at several levels, including at the state and CCO levels. As specified in the special terms and conditions of the waiver for this demonstration, OHA has focused its activities around six levers of Medicaid delivery system transformation to promote statewide reforms (Figure I.1). In turn, the CCOs are focusing their activities around eight elements that OHA specified for transforming the Medicaid delivery system. Although closely related, the six levers and eight elements do not have a direct correspondence to one another. Within the six levers, OHA is responsible for building the infrastructure needed to promote Medicaid system transformation, such as providing the learning environment required to determine which services would qualify as a flexible support and how payment for these services would be structured. OHA specified that each CCO had to develop a transformation plan that describes how it will implement Medicaid system redesign activities within the eight elements of the Medicaid delivery system transformation (Figure I.2).

[1] This demonstration waiver is not a new waiver, but a revision of an established Section 1115 demonstration waiver.

Figure I.1. The six levers of Medicaid delivery system transformation at the state level



To be certified as a CCO for the Medicaid program, CCOs had to meet several formation requirements relating to adequate financial reserves; board representation of entities sharing financial risk; and formation of a community advisory council (CAC) in which consumers constitute the majority, but also include community and local government entities. CCOs also have contractual requirements, including developing a detailed transformation plan that describes their goals and activities for each of the eight elements, creating a written plan for using health information technology (HIT) to improve care and enhance efficiency, and identifying and implementing three performance improvement plans (PIPs), one of which must focus on integrating primary care and behavioral health.[2]

[2] The performance improvement plans are a federal requirement.

Figure I.2. The eight elements of Medicaid delivery system transformation at the CCO level

CCO = Coordinated Care Organization

2. Redesigning the payment structure

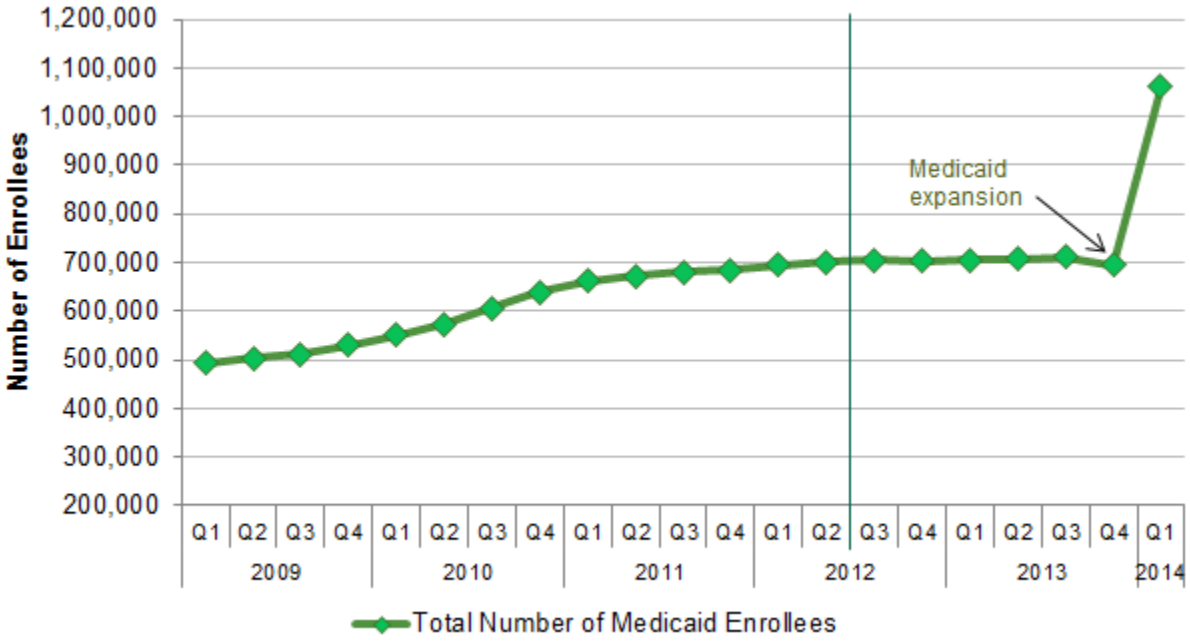
Using the authority of the demonstration project, Oregon is transitioning to a Medicaid payment system that rewards health outcomes rather than the volume of services through the required adoption of alternative payment methodologies. CCOs operate with a global budget that represents the total costs of care for all services for which the CCOs are responsible and held accountable for managing. The global budget consists of two parts: (1) a capitated per member per month (PMPM) payment and (2) a separate PMPM payment for services not included under the capitation rate (in particular, specialized addiction and mental health services and administrative costs). CCOs also receive incentive payments from a quality pool if they meet certain performance benchmarks and targets. The CCO Incentive Measures Set defines the outcomes that determine how incentive payments are distributed among CCOs from a pool of resources created by withholding a percentage of CCOs' global budgets. The measures in the CCO Incentive Measure Set are listed in Appendix A.

Oregon also tracks CCO performance on 17 quality and access measures, 19 Children's Health Insurance Program Reauthorization Act (CHIPRA) core quality measures, and 19 Medicaid adult core quality measures (see Appendix A). Collectively, the measures provide OHA with information to track health care improvements in several target areas—such as primary care, prenatal and postpartum care, and screening for alcohol or other substance misuse—to ensure that CCOs are not reducing spending by compromising access and quality, and to reward value, not volume, in the delivery of care.

B. Status as of the end of March 2014

As of the end of March 2014, Oregon's Medicaid program was serving 1,061,026 enrollees according to the data received by Mathematica.[3] Enrollment had been relatively stable through 2013 but then increased by 52 percent during the first quarter of calendar year 2014 when Oregon implemented its Medicaid expansion for adults under the authority of the Patient Protection and Affordable Care Act (Figure I.3).

Figure I.3. Medicaid enrollment by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA enrollment records from January 1, 2009, through March 31, 2014.

Notes: The enrollment records were extracted from Oregon's Medicaid management information system and submitted to Mathematica on January 12, 2015. The count is based on the number of unique identification numbers in each quarter, but excludes small groups of beneficiaries dually eligible for Medicare and Medicaid, beneficiaries with missing eligibility program codes, and reinstated transplant beneficiaries who are eligible only for prescription medications. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

OHA = Oregon Health Authority

C. Overview of the midpoint evaluation

Under the terms and conditions of its Medicaid Section 1115 demonstration waiver, OHA is required to conduct an independent evaluation of the demonstration. In October 2013, OHA contracted with Mathematica Policy Research to conduct a midpoint evaluation and to provide an early assessment of the implementation of the demonstration and a foundation for longer-term evaluation activities. Mathematica's evaluation only assesses managed care populations and does not include Medicaid beneficiaries in the fee-for-service system. In addition, the focus was only on the transformation activities that OHA and the CCOs began in mid 2012 and not other aspects

[3] These counts exclude very small groups of beneficiaries dually eligible for Medicare and Medicaid, beneficiaries with missing eligibility program codes, and reinstated transplant beneficiaries who are eligible only for prescription medications.

of Oregon's Medicaid 1115 demonstration waiver. Mathematica used a multilevel, mixed-methods approach to conduct the midpoint evaluation, which included three components:

1. A ***formative evaluation*** component that assessed the extent to which OHA and the CCOs supported and implemented transformation activities as specified in the Medicaid Section 1115 demonstration waiver. The assessment was based on (1) abstracting key information on implementation activities from existing documents, (2) performing structured interviews with key informants at the state and local levels, and (3) conducting site visits to a sample of CCOs to assess their implementation status and organizational capacity.
2. A ***summative evaluation*** component that assessed changes in outcomes that capture access and quality of care, patient experience, and health status. The primary data source was Medicaid enrollment and claims/encounter records extracted from OHA's Medicaid Management Information System.
3. An ***integration of results from the formative and summative evaluation components*** that assessed the relationship between the level of transformation activities and outcomes. Based on data collected in the formative evaluation, we stratified CCOs by their stage of transformation activities ranging from early to advanced and then analyzed the relationship between the stage of activities and outcomes.

Mathematica launched the formative evaluation in mid-December 2013 with in-person key informant interviews. Most of the data collection for the formative evaluation concluded by June 2014. At the same time the formative evaluation was concluding its data collection activities, Mathematica received the first round of enrollment and claims files from OHA for the summative evaluation. We received the last set of claims records for 2014 in mid-October 2014 and finalized the summative evaluation results at the end of November 2014.[4] As a result, this midpoint evaluation covers the first 21 months of the demonstration waiver, and the results reflect the initial phase of the demonstration. Given the common lags in the administrative data, the summative evaluation only assesses outcomes through the first quarter of calendar year 2014 and provides limited information about program outcomes after Oregon started its 2014 Medicaid expansion.

D. Roadmap of the report

In Chapters II and III, respectively, we present the findings from the formative and summative evaluations. In Chapter IV, we present the overall conclusions that integrate the key points from both the formative and summative evaluations. For interested readers, Appendix A, as mentioned above, presents all the quality measures that OHA tracks for the CCO incentive payment program and as part of other quality monitoring initiatives. Appendix B provides detail about the data and methodological approaches used for the formative evaluation while Appendix C provides brief profiles of each CCO. Appendix D summarizes the three CCO case studies we conducted and Appendix E presents the CCO Transformation Assessment Tool, which is discussed in Chapter II. Appendix F spells out the data and methodological approaches used for the summative evaluation.

[4] Although, Mathematica also received on January 12, 2015 another file of enrollment records to update the information on people only in fee-for-service and to provide accurate overall counts of enrollment.

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II. FORMATIVE EVALUATION

A. Overview of the formative evaluation

The overall focus of the formative evaluation was to gain an understanding of the extent of transformation in Oregon's Medicaid program; both how the OHA supported transformation of the Medicaid delivery system and the extent to which CCOs have implemented changes to the Medicaid delivery and payment system. OHA is supporting implementation of changes to the Medicaid delivery system through various policies, contractual agreements, and regulations and the agency is providing guidance and technical assistance through the Transformation Center. The Transformation Center supports CCOs, and the adoption of the coordinated care model through technical assistance and learning collaboratives; deploying innovator agents; and convening clinicians, community stakeholders and others interested in reform. Other offices in the OHA develop clinical standards and supports, support HIT and health information exchange (HIE) development, and provide data and analysis. Oregon's State Innovation Model grant is a major source of funding for the Transformation Center.

The CCOs represent a major innovation and are the central focus of Medicaid delivery system transformation in Oregon. OHA must implement and promote certain changes as defined in the demonstration waiver agreement.[5] In turn, the CCOs have similar requirements specified in their contracts with OHA. The CCOs are also sources of innovations in the Medicaid delivery systems as they support providers to adopt reforms in the way they provide care to Medicaid members enrolled in the CCOs.

We designed the formative evaluation to answer the following questions, as approved in the special term and conditions of the waiver demonstration extension:

1. To what extent has OHA effectively taken action to support transformation?
2. To what extent have CCOs—in aggregate and individually—taken action to transform care delivery and payments?
3. To the extent that some CCOs have not taken actions for transformation, what has prevented them from doing so?
4. To the extent that some CCOs have been successful in taking action, what have been the keys to their success?
5. To what extent are CCO members experiencing improved care coordination, with emphasis on patient-centered primary care homes (PCPCHs)?
6. To what extent have OHA and CCOs implemented payment methods that focus on value, not volume?

[5] See Special Terms and Conditions (STCs) for Oregon Health Plan (OHP) Medicaid and State Children's Health Insurance Program Section 1115 Medicaid Demonstration extension at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/or/Health-Plan/or-health-plan2-stc-07052012-06302017-correction-062013.pdf.

7. To what extent have CCOs integrated physical, behavioral, and oral health services? Other services?
8. To what extent are best practices being tested and disseminated?

We present the formative evaluation results in three sections: (1) OHA actions to support transformation, (2) CCO actions to implement eight transformation elements, and (3) CCO self-assessments of their progress on their transformation activities. For each set of findings, we describe the barriers and facilitators to transformation identified by OHA and by the CCOs.

We conducted the formative evaluation using several qualitative methods: (1) abstraction of key information on implementation activities from existing documents, (2) structured interviews with key informants from state agencies and the CCOs, (3) administration and analysis of the CCO Transformation Assessment Tool (CTAT), and (4) site visits to a sample of CCOs to assess their implementation status and organizational capacity. Appendix B describes the methods used in the formative evaluation component including the types of documents reviewed and the types of number of key informant interviews conducted.[6]

B. OHA actions to support transformation

The OHA is responsible for implementing policies and processes to support transformation in several areas as agreed upon in the Section 1115 demonstration waiver. As mentioned in Chapter I, OHA's transformation work was guided by six levers of transformation to promote state-wide Medicaid delivery system reform and the state's primary avenue of transformation has been through the establishment of CCOs.

Progress on the six levers of Medicaid delivery system transformation. Table II.1 provides a summary of OHA progress on the six levers of Medicaid delivery system transformation. The information in the table derives from a variety of sources, including documentary evidence and key informant interviews with OHA and CCO staff. Unless otherwise noted, the information is through June 2014.

Overall, OHA has progressed on all six levers and has successfully established a strong foundation for ongoing transformation of the Medicaid delivery system going forward. OHA has made significant progress in defining the structure for CCOs and defining their contractual conditions, their global budgets, and incentive and performance metrics. In addition, most key informants cited the establishment of the Transformation Center and its technical assistance resources as a key factor in Oregon's effort to develop an approach to testing, accelerating, and spreading effective innovations and best practices. OHA has also made significant progress on spreading PCPCHs as a major driver of improved integration and coordination of care and to improve patients' experience of care. In addition OHA has made progress on spreading the use of HIT, including spreading the use of electronic health records (EHRs) in support of better coordination of care across the system. However, further work is required to spread the use of EHRs to small PCPCHs and to rural areas and to provide access to HIEs. More progress is also

[6] Key informant telephone interviews were conducted with 16 OHA leaders and managers. In addition, 3 to 7 individuals from each of 15 CCOs participated in the CCO telephone interviews.

needed on implementing reforms that are particularly important in helping providers meet the unique needs of their Medicaid patient populations. These levers of Medicaid delivery system transformation include promoting the use of traditional health workers (THWs)[7] by defining training and certification requirements and creating a registry of THWs, and defining and establishing a payment mechanism for flexible services. Oregon is one of the first states to attempt to standardize these approaches to improving care for Medicaid beneficiaries and thus their progress on this issue will help to inform future efforts of other states. As OHA promoted Medicaid delivery system transformation among CCOs it found that it needs to do more to integrate division functions (such as provider credentialing and contracting functions) across the agency to further eliminate a legacy of silos for Medicaid physical health, mental health, and community health.

Table II.1. Summary of OHA actions to support Medicaid delivery system transformation

Lever of transformation	Goals[a]	Status of implementation	Remarks
Lever 1: Improve care coordination at all points of care with an emphasis on PCPCHs			
Patient-centered primary care homes (PCPCHs)	- Certify 500 practices as PCPCHs - Enroll 100% of members in PCPCHs	- 507 certified PCPCHs[b] - 80% of members enrolled in a PCPCH[b]	- Significant regional variation in adoption of PCPCHs - OHA on-site verification of PCPCHs found that 25% of sampled clinics did not meet some of the standards to which they had attested
Traditional health workers (THWs)	- Develop a registry of THWs - Approve training programs for THWs - Certify 300 THWs by December 2015	- Registry of THWs launched - 25 approved training programs and 229 trained THWs[b]	- Certification program for THWs has been defined; 45 applications received as of April 2014[b]
Lever 2: Implement alternative payment methodologies to focus on value and pay for improved outcomes			
Alternative payment methodologies	- Implement global budget for CCOs - Create financial incentive pool (quality pool with withhold)	- CCOs operate using global budget from OHP - CCOs received payments from quality pool in June 2014 based on performance metrics	
Transparent quality metrics and reporting	- Implement performance measures, benchmarks, and public reporting - Develop incentive payments tied to outcomes	- OHA regularly reports a large number of performance metrics - CCOs received payments from quality pool in June 2014 based on performance metrics	

[7] Traditional health workers are defined as community health workers, peer support and peer wellness specialists, personal health navigators, and doulas. See http://www.oregon.gov/oha/oei/Pages/traditional-health-worker-commission.aspx

Table II.1 (continued)

Lever of transformation	Goals[a]	Status of implementation	Remarks
Lever 3: Integrate physical, behavioral, and oral health care structurally and in the model of care			
Coordinated Care Organizations (CCOs)	- Replace managed care entities (MCEs) that had fragmented responsibility for physical, behavioral, and oral health with CCOs that have sole responsibility for physical health, mental health, addiction (by November 2012), and oral health services (by July 2014) - Set contractual requirements for integration, community health assessments, quality improvement plans, and other elements	- OHA executed 14 CCO contracts by November 2012 and added an additional CCO in 2013 for a total of 15; In January 2014 the number grew to 16 when Pacific Source CCO divided into two separate entities (Pacific Source Columbia Gorge and Pacific Source Central) - All CCO contracts include all contractual requirements specified in the state goals	
Health Information Technology (HIT)	- Facilitate CCO use of HIT to link services and core providers across continuum and promote EHR adoption and meaningful use	- 58% of CCO providers have adopted EHRs[b] - Concept for statewide plan approved	- Challenges related to resources and diversity in the EHRs and health information exchange approaches used by providers - Rural communities and small practices face unique infrastructure challenges
Lever 4: Increase efficiency through administrative simplification and a more effective model of care			
CCO contracts	- Simplify service delivery to Medicaid population through consolidation of MCEs	- All CCOs achieved integrated physical and mental health and addiction services contracts as of March 2013 and have started to integrate oral health services in 2014	- CCOs have not consistently consolidated management functions among partner organizations - OHA working on simplifying internal functions and intra- and inter- agency silos related to contracts, regulations, and provider requirements

Table II.1 (continued)

Lever of transformation	Goals[a]	Status of implementation	Remarks
Lever 5: Use flexible services to improve care delivery or enrollee health			
Flexible services	- Provide CCOs the option of covering flexible services that improve an enrollee's health but do not substitute for State Plan services (these services may address the social needs of members)	- Preliminary definition and reporting of use of flexible services established	- OHA reviewing CCO flexible services policies and considering providing technical assistance to the CCOs
Lever 6: Test, accelerate, and spread effective innovations and best practices			
Transformation Center	- Support implementation of transformation plans, provide rapid cycle feedback, assist with community advisory councils	- Established the Transformation Center with funding from Oregon's State Innovations Model (SIM) grant	
Learning Collaboratives	- Develop learning collaboratives that support CCOs to improve quality and access while managing costs	- Learning collaboratives established	- CCO medical directors and quality improvement officers view the collaboratives as highly effective
Innovator Agents	- Assign innovator agents to each CCO and establish their responsibility for linking the needs of OHA, communities, and CCOs and for implementing innovations	- Every CCO has an innovator agent and CCOs generally rate them as effective	- CCOs report the innovator agent is the most common mechanism they use to identify resources or solutions to barriers

[a] Special Terms and Conditions (STIs) for Oregon Health Plan (OHP) Medicaid and State Children's Health Insurance Program Section 1115 Medicaid Demonstration extension at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/or/Health-Plan/or-health-plan2-stc-07052012-06302017-correction-062013.pdf

[b] Oregon Health Authority. Oregon Health Plan Section 1115 Quarterly Report. 1/1/2014 – 3/31/2014. Demonstration Year (DY): 12 (7/1/2013 – 6/30/2014), Demonstration Quarter (DQ): 3/2014, Federal Fiscal Quarter (FQ): 2/2014

CCO = Coordinated Care Organization; EHR = electronic health record; OHA = Oregon Health Authority; OHP = Oregon Health Plan

Both the OHA and CCO respondents cited the strong public support of the governor, the partnership with CMS, and the commitment among the leadership in the state agencies as facilitators of reform and for maintaining a stable process. All interviewees remarked on the enormous amount of effort that the state made to support transformation and on the significant progress and accomplishments.

"It's not only the leadership of the governor and the flexibility in the waiver, I would also say the leadership in the agency is key to the success achieved so far." – CCO executive

Establishment of the CCOs. OHA's major approach to Medicaid delivery system transformation focuses on the CCOs. Transformation occurs as the Medicaid delivery system shifts the delivery of care from MCEs, which were individually responsible for providing physical health, behavioral health, or oral health services, to CCOs that integrate the delivery of these services into one entity. OHA accomplished this transformation by phasing out contracts with MCEs including fully capitated health plans (FCHPs), physician care organizations (PCOs), mental health organizations (MHOs), and dental care organizations (DCOs) and executing contracts with CCOs in waves beginning in August 2012 and ending in November 2012. By 2013 Oregon had contracts with 15 CCOs (Table II.2). In January 2014, the number of CCOs increased to 16 when PacificSource Community Solutions divided into two separate CCOs, PacificSource Community Solutions Columbia Gorge and PacificSource Community Solutions – Central Oregon.[8] Appendix C provides a profile of each CCO including information about the predecessor organizations, size, and geography. The three case studies conducted for the formative evaluation provided richer detail and summaries are presented in Appendix D.

Table II.2. Size of CCO membership through March 2014

CCO	Total CCO members[a]	Percentage of total CCO enrollment
Total	**828,548**	**100.0**
AllCare Health Plan	45,044	5.4
Cascade Health Alliance	11,364	1.4
Columbia Pacific CCO	25,617	3.1
Eastern Oregon CCO	42,292	5.1
FamilyCare CCO	99,402	12.0
Health Share of Oregon	215,674	26.0
InterCommunity Health Network	51,594	6.2
Jackson Care Connect	28,219	3.4
PacificSource Community Solutions – Columbia Gorge	11,213	1.4
PacificSource Community Solutions – Central Oregon	47,378	5.7
PrimaryHealth of Josephine County	9,992	1.2
Trillium Community Health Plan	82,869	10.0
Umpqua Health Alliance, DCIPA	23,996	2.9
Western Oregon Advanced Health	19,540	2.4
Willamette Valley Community Health	91,095	11.0
Yamhill County Care	23,259	2.8

Source: Oregon Health Authority Office of Health Analytics April 15, 2014 enrollment data http://www.oregon.gov/oha/healthplan/DataReportsDocs/April%202014%20Coordinated%20Care%20Service%20Delivery%20by%20County.pdf

CCO = Coordinated Care Organization; OHA = Oregon Health Authority

[8] In this report we refer to PacificSource Community Solutions as the CCO prior to the division into two CCOs. When we have separate data on PacificSource Community Solutions-Central Oregon and PacificSource Community Solutions-Columbia Gorge we refer to the two different CCOs specifically.

OHA administrators and CCO staff reported several overall challenges to implementing the new delivery system structure, including OHA's administrative structure and the fast pace of transformation.

- **Administrative structure at OHA.** Representatives from the OHA and CCOs identified structural and administrative elements within OHA that made the initial transition to CCOs and the integration of care challenging. As in many states, OHA's internal structure when transformation began consisted of separate divisions for different categories of services. For example, most physical health services and providers had been under the direct administration of Medicaid, but mental health and public health services and providers were under the administration of their respective divisions. Each division had its own set of policies and requirements for functions such as managed care contracting and oversight and provider credentialing. As the transition to CCOs began, OHA initially maintained its internal structure of separate divisions. In 2013, the policy, quality assurance, and operational staff from Medicaid and the Addictions & Mental Health division began to integrate within Medicaid. OHA established a CCO contracting team and a CCO support team, with a dedicated account representative to assist each CCO and its innovator agent with issues related to Medicaid policy and operations. Also in 2013, research analysts from the Medicaid and Addictions & Mental Health divisions were consolidated within the new Office of Health Analytics. OHA staff often cited state or federal regulations as reasons for not being able to allow CCOs the full flexibility they needed to move forward with reforms and as getting in the way of innovation. OHA began further reorganizing in 2014 to address other specific administrative issues. At the time of data collection, innovator agents were working with Tiger Teams, which are teams of OHA staff formed to address key internal areas within the agency including rate setting, rules promulgation, and contracts.
- **Pace and sequence of transformation**. The fast-paced schedule for implementing reforms was cited as another challenge by both OHA staff and the CCOs. Oregon's approach to transformation meant that both OHA staff, including the Transformation Center, and the CCOs felt overwhelmed at times and several noted that everyone lacked time to evaluate what was working and what efforts required mid-course corrections. From the CCO perspective, the scope of transformation meant that they had to set priorities and make decisions about what transformational elements they would pursue and when they would pursue them. Because CCOs were not given guidance on how to sequence their transformation activities, they at times felt overwhelmed with the volume of issues they needed to address and the lack of time and did not have as much flexibility as they desired to pursue their own priorities.

"We were so focused on implementation [we] don't have time to use the Transformation Center as a resource. They approach every issue with the same sense of urgency." – CCO medical director

"State has told us what Plan A is, not options. You don't get to choose what you are going to focus on that may be best for your community." – CCO executive

Supports for the transformation process. OHA developed two primary approaches to supporting the transformation process: the Transformation Center and innovator agents. The Transformation Center supports CCOs by providing technical assistance, collaborative learning opportunities, peer-to-peer learning, and rapid-cycle feedback. The center is responsible for

managing and supporting the innovator agents in their roles as the single points of contact between the OHA and the CCOs, facilitating learning collaboratives, and disseminating best practices among CCOs.[9]

Generally, the CCOs reported that the Transformation Center staff were very well qualified and responsive to the CCOs' needs. CCOs reported that the Transformation Center provided useful technical assistance and fostered collaboration between OHA and the CCOs and among the CCOs themselves. They also noted that the learning collaboratives, statewide conferences, and an online blog were successful methods of advancing transformation. Additionally, CCOs reported that the learning collaborative sessions for the CCO medical directors and the CCO quality improvement teams were very useful because the CCOs set the agendas. For example, the sessions helped the CCOs share approaches to working toward the benchmarks identified for each of the 17 quality incentive measures, such as introducing the use of THWs to work with members who made frequent visits to the ED, using THWs to educate members about primary care or to make sure they had access to care, and to identify barriers members may have had to using the CCOs. CCOs also shared approaches to decreasing ED visits for oral health problems such as engaging oral health providers in ED visit reviews and collaborating with oral health providers on how to increase access to oral health care.

One concern about the Transformation Center was the lack of attention to the diversity of the communities being served and the lack of discussion about whether solutions to specific transformation challenges were generalizable. Several CCOs noted the lack of authority of the Transformation Center staff to make decisions, contributing to delays in resolving problems and contributing to the sense among some CCOs that the center was another state bureaucracy.

In accordance with Oregon's Medicaid waiver agreement, each CCO is assigned an innovator agent, who serves as a single point of contact between the CCO and OHA. The eight innovator agents (each serves two CCOs) are OHA employees and have diverse backgrounds including as former employees of state human services agencies, nurses, and former health plan employees.

Most of the CCOs described the innovator agents as important contributors to their transformation efforts. CCOs acknowledged that, at first, they were distrustful of the innovator agents as employees of OHA but this distrust abated very quickly. CCOs expressed increasing confidence in the innovator agents and frequently used them as their first method for solving problems, researching relevant transformation topics, and identifying resources. However, they would like the innovator agents to have greater experience with innovations in health care delivery and in working on innovations.

C. CCO actions to implement the eight elements of Medicaid delivery system transformation

While OHA used the six levers of Medicaid delivery system transformation to guide its work to redesign the delivery of care in its Medicaid program, the CCOs were guided by eight elements of Medicaid transformation as specified by OHA. OHA required each CCO to submit a

[9] The staff of the Transformation Center are employees of OHA and include practitioners who are familiar with the challenges facing providers serving the Medicaid population.

transformation plan that includes its strategy for addressing each of the elements described in Figure I.2. OHA provided the CCOs with written guidance about the important components of each element and assistance from OHA and the innovator agents helped the CCOs translate the written guidance into approaches to implementing their transformation plans. The OHA provided guidance and feedback to CCOs on the specific areas their transformation plan should address; examples of approaches, and required the CCOs to identify outcomes related to each element and how they would be measured. CCOs provide progress reports that OHA uses to monitor CCOs' development. The following summarizes what we learned about CCO progress on these eight elements of transformation and key challenges they faced transforming the Medicaid delivery system.

1. Integrating physical, behavioral, and oral health care

Integrating physical, behavioral, and oral health care is a priority for OHA and the CCOs. Through the CCO contracts, OHA requires CCOs to contract with or have formal relationships with mental health, addiction services, alcohol treatment, and dental care providers and to monitor access to these services for their members while at the same time providing comprehensive preventative and physical health care.[10] Some of the elements of integration include case planning, care coordination and case management, and supports that address comprehensive transitional care and intensive care coordination for members with behavioral health conditions with an emphasis on services for people with serious persistent mental illness. The CCOs are also required to engage with county mental health authorities, which provide services that may not have been covered by Medicaid but fall under the purview of the state mental health agency.

OHA developed five state performance and CCO incentive measures that relate specifically to behavioral health integration and OHA established benchmarks for four of the measures. The measures are (1) follow-up after hospitalization for mental health diagnoses, (2) physical and mental health assessments for children in Department of Human Services (DHS) custody, (3) follow-up after prescribing medication for attention deficit hyperactivity disorder (ADHD), (4) depression screening and follow-up, and (5) implementing screening, brief intervention, and referral to treatment (SBIRT) services to identify members with potential alcohol and other substance use problems.

All CCOs met the requirements for contracting with appropriate behavioral health providers or partnering with one of the former MHOs. To help CCOs develop clinical processes that integrate physical and behavioral health care, staff from the Transformation Center, Division of Medical Assistance Programs (DMAP), Health Analytics, and Chief Medical Officer collaboratively established learning collaboratives for CCO medical directors and quality officers. These collaboratives have focused on strategies to improve performance on the incentive payment measures including those related to behavioral health. In addition, 12 CCOs are using Transformation Fund grants[11] to finance their integration activities or projects, with

[10] CCOs were not required to integrate oral health services until mid 2014. Oral health quality metrics will be included in OHA's overall measurement strategy by the third year of the demonstration.

[11] The Transformation Center offers Transformation Fund Grant Awards to support CCO innovation and their efforts to transform the Medicaid delivery system. See .http://transformationcenter.org/transformation-funds/

efforts ranging from funding mental health and addiction counselors to co-locating physical and behavioral health services. Table II.3 provides examples of CCO innovations in integrated care.

Table II.3. CCO innovations in integrated care

Integration topic	Examples of CCO innovations
Embed mental health and addiction counselors	Mental health and addiction counselors are available in a large obstetric practice and doulas are assessing high risk behaviors such as alcohol and other drug use, domestic violence, and depression
	Partnerships between PCPCHs and community mental health clinics to add behaviorists to PCPCHs
	Reverse integration of primary care providers in community mental health sites
	Mental health and addiction counselors are available at a local YMCA where diabetics go for support on changing behaviors related to diabetes
	Funded mental health counselors in elementary schools
Expanded access	Mobile mental health clinic visits primary care practices
Team based care	Multi-disciplinary team of PCP, care managers, dieticians, and behavioral health providers to identify and work with high utilizers including those with behavioral health problems

Source: CCO reports of innovations from CTAT and CCO interviews.

CCO = Coordinated Care Organization; CTAT = CCO Transformation Assessment Tool; PCP = primary care provider; PCPCHs = patient-centered primary care homes

Oregon's statewide Medicaid PIP for 2013 was on primary care and behavioral health integration. The state's External Quality Review Organization facilitated the PIP and provided guidance to CCOs to help them meet goals for providing evidence-based chronic disease care to individuals with severe and persistent mental illness (SPMI). The guidance included facilitation and learning regarding the rapid-cycle plan, do, study, act (PDSA) improvement model. One feature of this work was the development of monthly reports for CCOs that identify their members with SPMI. In addition, the focus of one learning collaborative funded through the Centers for Medicare & Medicaid Services Adult Quality Medicaid grant is on integration of physical health in behavioral health settings. Twelve providers were selected in early 2014 to work toward becoming behavioral health homes.

CCOs reported a range of challenges to integrating physical and behavioral health services, from state-level structural issues to community context issues to reporting and tracking outcomes to monitor the results of their work.

- CCOs reported that integrating physical and behavior health care services has been challenging in part because regulations regarding documentation for services, provider certifications, and operational restrictions related to seeing patients for both behavioral health and physical health diagnoses on the same day were duplicative and time consuming.
- Historically contracts for "beds" in the mental health residential system were executed statewide, but the CCO model of delivery requires local control which makes the full integration of residential treatment services in the CCO model extremely difficult. Some CCOs are implementing changes that make access to open beds difficult for members

outside of their CCO. Other CCOs provide more open access to beds. Accounting for the cost of the service given the global budget or the subcapitated mental health budget was identified as a barrier by the CCOs.

- The rural CCOs raised concerns about their ability to offer services in communities with small populations. Many rural communities do not have the resources to support people who require specialized behavioral health services and CCOs serving rural communities believed the capitation rate did not account for this issue. The legislature appropriated additional money for these services in 2013, but the funds were distributed to CCOs through a request for proposal (RFP) process rather than on a need basis.
- CCOs reported that they need more data to better plan and assess integration. The CCOs have found it challenging to get data on members diagnosed with SPMI, which they need to conduct outreach and ensure their physical health needs are being met. In response to this need, CCOs now receive lists of members with SPMI. CCOs also want more data to understand the costs of implementing integration and introducing and/or improving the range of services required by the SPMI population to meet the expectations reflected in the transformation plan.
- The CCOs also raised concerns relating to several quality metrics that could help to assess the effect of the CCOs' progress on integration of services. Specific concerns about the metrics focused on the measure for children in the custody of DHS and the SBIRT metric for screening members for risky use of alcohol or other drugs. CCO staff remarked that the information they receive on children in the custody of the state's DHS is either outdated or inaccurate, complicating the calculation of the performance metric on whether children are receiving physical and behavioral assessments because the true denominator is not known. CCOs reported that OHA implemented the SBIRT metric without adequately validating the measure protocol. The delay in receiving the measurement protocol and the complexity of the protocol was frustrating for the CCOs. In addition, the decision to use SBIRT as a performance metric, required testing and evaluation of its potential effectiveness. One provider noted during a site visit that the literature supports the use of SBIRT to screen for risky alcohol use but does not support the use of SBIRT to screen for risky drug use. Furthermore, the practice noted that they did not want to set up a separate practice flow process to screen only Medicaid patients so they decided to use the protocol for all patients and encountered significant resistance from patients.

The CCOs also identified the need to further refine the global budget and to recognize that a global budget does not lead to integration without significant work on reforming the system that exists and that is (or was) supported by a different payment strategy.

"The global budget does allow flexibility but there are a lot of entrenched systems that need to change and they can't change overnight. The distribution of the money is changing and this meets with resistance from the "losers". The global budget does not lead to integration of services. It takes a lot of work to decide what care should be delivered where and when and then we need to figure out how the money should shift." – CCO executive

2. Developing patient-centered primary care homes

OHA began recognizing primary care practices as PCPCHs before implementation of the Section 1115 Medicaid demonstration. However, the expansion of PCPCHs is a key feature of transformation and one strategy designed to reduce costs and improve care by engaging patients in care early, focusing on prevention and wellness, and managing chronic conditions. OHA requires health care clinics to meet specific criteria that demonstrate their commitment to providing high quality, patient-centered care. While similar to the National Committee on Quality Assurance's (NCQA) standards for patient-centered medical homes, OHA created an alternative to the NCQA process, to decrease the administrative and financial burden on primary care practices. OHA emphasizes that any health care practice that provides comprehensive primary care and meets the required standards can become a recognized PCPCH including physical health providers, behavioral health care providers with integrated primary care services, solo practitioners, group practices, community mental health centers with integrated primary care services, rural health clinics, federally qualified health centers, and school-based health centers.

Practices complete a self-assessment tool for OHA and then attest to meeting the PCPCH requirements.[12] OHA provides staff to help practices through the self-assessment process and to educate them about the documentation they must provide. Practices gain recognition at three different tiers representing increasing compliance with PCPCH features. Clinics must pass 10 criteria to be recognized as a primary care home at any level including at the lowest tier.

Oregon is using several approaches to develop and spread the PCPCH model. The Patient-Centered Primary Care Institute (PCPCI),[13] a public-private partnership that includes OHA, the Oregon Health Care Quality Corporation, and the Northwest Health Foundation, provides technical assistance to approximately 25 primary care practices annually. The PCPCI operates the Technical Assistance Expert Learning Network, which provides technical assistance through practice coaches, program managers and data/quality improvement professionals, as well as administrative and clinical professionals. The PCPCI is also providing technical assistance on behavioral health integration. The PCPCI generally supports PCPCH development with webinars, on-line tools and other resources.

Strengthening payment for PCPCHs is another approach to Oregon's development of the PCPCH model. The OHA and the Oregon Health Leadership Council (OHLC) jointly convened payers in Oregon to develop common approaches to payment reform and the participants

[12] See OHA Patient-Centered Primary Care Home Program at http://www.oregon.gov/oha/pcpch/Pages/index.aspx.

[13] http://www.pcpci.org/.

developed a strategy to recognize PCPCHs with enhanced payments specifically to strengthen the primary care base. These payments increase as the PCPCH moves up to higher tiers of the PCPCH model. Several CCOs are using Transformation Grant Awards to support the development of PCPCHs. All these efforts have resulted in important growth in the PCPCH model. As of March 2014, 80 percent of CCO members were enrolled in a PCPCH, an increase of 53 percent since 2011 (Table II.4).[14] Nearly 35 percent of recognized PCPCH clinics are located in rural communities and 40 percent are independently owned and unaffiliated with larger health systems. Enrollment in Tier 3 PCPCHs, the most advanced form of the PCPCH model, ranges from 4 percent to 94 percent across CCOs.

Table II.4. Growth of CCO members in PCPCHs

	Percentage of members in PCPCHs	
CCO	2011	2013[a]
AllCare Health Plan	40	59
Cascade Health Alliance	56	65
Columbia Pacific CCO	47	76
Eastern Oregon CCO	4	63
FamilyCare CCO	16	74
Health Share of Oregon	50	81
InterCommunity Health Network	86	88
Jackson Care Connect	45	42
PacificSource Community Solutions	73	91
PrimaryHealth of Josephine County	95	96
Trillium Community Health Plan	80	85
Umpqua Health Alliance, DCIPA	18	74
Western Oregon Advanced Health	46	69
Willamette Valley Community Health	67	90
Yamhill County Care	39	76

Source: Oregon Health Authority Office of Health Analytics. CCO Incentive Measures 2013 Final Report. June 2014
CCO = Coordinated Care Organization, PCPCH = patient-centered primary care home.

CCOs have introduced several innovations in their promotion of PCPCHs and in increasing member access to PCPCH delivery systems. These are described in Table II. 5.

[14] Oregon Health Authority. Oregon Health Plan Section 1115 Quarterly Report. 1/1/2014 – 3/31/2014. Demonstration Year (DY): 12 (7/1/2013 – 6/30/2014), Demonstration Quarter (DQ): 3/2014, Federal Fiscal Quarter (FQ): 2/2014.

Table II.5. Examples of CCO innovations in implementing PCPCHs

Innovation
Assisting an obstetrical practice to become a Tier 3 PCPCH as a pilot project
Helping a community mental health center to become a mental health PCPCH at Tier 3 as a pilot project
Embedding life coaches, tobacco cessation coordinators, ED navigators, doulas, and community health workers in a PCPCH to promote more prevention activities and to meet the needs of specific populations
Providing additional funding to PCPCHs to ensure progress with primary care providers is not reversed when the ACA rate increase ends
Engaging newly enrolled members within 2 weeks of assignment to a PCPCH by a nurse care coordinator; educating new members about the medical home concept, conducting a brief risk assessment, and beginning appropriate screenings for members

Source: CCO reports on CTAT, CCO interviews

ACA = Affordable Care Act; CCO = Coordinated Care Organization; CTAT = CCO Transformation Assessment Tool; ED = emergency department; PCPCH = patient-center primary care home

Although OHA has successfully supported the growth of PCPCHs, there have been challenges. For example, during OHA's first round of onsite verification of PCPCHs, it found that about 25 percent of sampled clinics did not have documentation to support standards to which they had attested. To help these and other PCPCHs, OHA has contracted with five community-based clinical consultants to work with clinics on their improvement goals and other issues for up to six months after the on-side visit. Nevertheless, CCO staff report that small practices and practices in rural areas often do not have the resources to implement PCPCHs. CCOs that serve rural areas noted that the availability of PCPCHs in their areas was significantly lower than in other areas and that providers from small practices have less flexibility to participate in technical assistance activities. CCOs would like to see more technical assistance strategies that meet the needs of rural and small practice providers.

3. Using alternative payment methodologies that align payment with health outcomes

The Medicaid demonstration includes two alternative payment methodologies at the CCO level: (1) global budgets and (2) incentive pool payments. Both methodologies have been implemented and CCOs are adjusting to the new payment arrangements. As of March 2014, key informants from the CCOs reported that they had just started to develop alternative payment methodologies for their providers and that this was an area in which they needed to conduct more work.

Global budget. The global budget represents the total cost of care for services for which the CCOs are responsible and held accountable for managing either through financial risk contracts or performance incentives tied to specific outcomes. The global budget consists of two parts: a capitated per member per month (PMPM) payment to CCOs and a separate PMPM payment for services not included under the capitation rate. The services included in the initial global budget (covering the period through December 2012) included physical health, mental health, and addiction services. OHA phased in adjustments to the global budget to fund other services, such as alcohol and drug residential services, transportation, and targeted case management. By July 2013, the budget for alcohol and drug residential and detox services were integrated into the global budget. Dental services were integrated as of July 2014. Because of particularly challenging issues around rate setting, there has been a delay in integrating some services into the global budget, such as non-emergency transportation, specialized addiction services for youth and pregnant women, and case management for special populations. Full integration of mental health residential – rehabilitative services planned for January 2014 was also delayed.

"…The global budget has fundamentally changed the way things play out … Number one, there's less of the kind of cost shifting that you see at the local level… Organizations will make decisions about whether someone goes into residential care or not, if that residential care is paid for outside their system… it makes that decision a much different decision than if you're paying for it out of your global budget, then you may look to more efficient, less expensive, high-quality, community-based services rather than putting people in facilities, which is the kind of change we wanted to drive." – OHA staff

"There is also a problem with payment for flexible services. These services come out of the administrative budget. If you want these services to become a part of the solution to improving health outcomes they can't be paid for out of the administrative budget. The problem is there are not CPT codes for the services and OHP seems to be more focused on collecting encounter data, penalizing CCOs that don't exactly comply with reporting requirements. To move forward with alternative payment methodologies we need to move away from collecting encounter data." - CCO executive

Several CCOs found enough flexibility in the global budget so that they were able to support initiatives that would not have been supported in a fee-for-service structure. For example, the global budget allowed some CCOs to develop more member-oriented approaches to delivering services such as community-based support for people with disabilities and mental illness. Other CCOs found that they could invest in preventive strategies and engage members in preventive care using community health workers. However CCOs cited the lack of guidance on the definition of flexible services and including the cost of flexible services in the administrative budget as a significant barrier to innovation.

Development of the global budgets and merging payment for physical and behavioral health services has been challenging. Merging two systems with different rate setting practices and different provider challenges has been difficult and some key informants from OHA and the

CCOs believe that this issue has delayed the total integration of physical health and behavioral health services. There was significant concern that the historical rates for some mental health services were established in ways that were so different from the CCO global budget process that providers would be at risk of failing if the payments were not adequately developed. For example, community mental health programs deliver programs using multiple sources of funds. Historically, they have not been required to track and report clients, services, outcomes to the extent required by CCOs and as is necessary for CCOs to manage their global budgets. Innovator agents are leading staff teams (Tiger Teams) working on integrating adult mental health residential services into the global budget, rate setting, rules promulgation, and aligning contracts.

"I've seen partnerships … exactly the kinds of things that we hoped we would start to see where the CCO …actually funding community health workers embedded in the local public health department to work with pregnant women, to work with them to stop smoking…that they [CCOs] can see the business case…for their global budget to pay for those community health workers."
- OHA staff

CCO development of alternative payment methodologies for providers. CCOs have been able to begin to implement alternative payments for their providers. Many of the initiatives focus on supporting the PCPCH model. One CCO is developing a payment composed of baseline funding for primary care, a primary care innovation seed fund, a shared savings program, support for advanced primary care, and an integrated primary care global budget. Beginning in late 2012, another CCO developed a process for paying PCPs for the quality of care. This alternative payment method has three elements: access (for example as determined by whether providers have open panels and the OHP member census), utilization (high rates of primary care use and relatively low rates of ED visits) and quality based incentive measures. The CCO board approved the program in 2013 and the CCO is developing parallel methodologies to focus on mental health, alcohol and drug use, public health and dental providers.

At the time of the key informant interviews, many CCOs believed that providers were not ready to accept risk contracts and to manage alternative payments. They identified lack of familiarity with data analytics, and dashboards, the inability of small practices to take on risk due to small financial margins, and the inability to transform a practice based on a single payer's payment reform as important barriers. CCOs also note the lack of infrastructure among providers to manage risk-based contracts and to collect the necessary data to monitor spending and track outcomes. CCOs also noted the lack of budget validation data to inform alternative payment methods to providers other than PCPs because some providers (transportation vendors for example) have never been asked for this type of data for rate development processes. Despite this perception, the CCOs were developing strategies to phase in risk contracts with their providers by having the CCO take on more of the risk initially while holding providers harmless. In addition, they were investing in staff and software to improve their data analytics to better support providers and to monitor and track the effect of innovations on costs and quality of care. CCOs are using Transformation Grant Awards to support some of their initiatives. We anticipate that CCOs will be focusing more on the development of alternative payment methodologies for their providers in the next year.

Incentive pool payments. The Oregon Health Authority established a quality pool as part of Oregon's Section 1115 demonstration to reward CCOs for the quality of care provided to

Medicaid members. Each CCO had a portion of the quality pool which they were eligible for, based on the number of members served. All CCOs could earn 100 percent of their quality pool if they met all of the following three criteria: (1) met the benchmark or improvement target on 12 of 16 measures, and (2) met the benchmark or improvement target for the electronic health record adoption measure (could be one of the 12 measures met for the first criteria), and (3) had at least 60 percent of their membership enrolled in a PCPCH. The 2013 quality pool was 2 percent of aggregate payments made to all CCOs for calendar year 2013 and paid through March 31, 2014, which amounted to $47 million. OHA increased the withhold for the quality pool to 3 percent of aggregate payments for 2014. In June 2014 all CCOs received a quality pool payment.

Of the 15 CCOs eligible, 11 received 100 percent of the payment for which they were eligible (potential payment was based on the number of members served), 3 received at least 80 percent, and 1 received at least 70 percent. OHA also established a challenge pool, which included funds remaining after the quality pool funds were distributed. The challenge pool for 2013 was $2.4 million. CCOs earned a challenge pool payment if they met the benchmark or improvement target for four quality measures relating to providing SBIRT, diabetes control, and depression screening and follow-up, and enrolling members in PCPCHs. Three CCOs met two challenge pool measures, nine CCOs met three challenge pool measures, and three CCOs met all four.

4. Implementing community health assessments and improvement plans

All CCOs have implemented community health assessments and developed community health improvement plans. Based on the available evidence, it appears that the Community Advisory Councils (CACs) played active roles in the planning process and represent community interests to the CCO boards. The CCOs have also partnered with local health departments, hospitals, and businesses. To accomplish these activities, CCOs reported that they relied heavily on the services of the Transformation Center, which provided valuable assistance to the CCOs and their CACs. The Transformation Center facilitated the initiation of and continuing use of a Learning Collaborative for the CAC members. CCOs did not submit their community health improvement plans (CHIPs) until July 2014 and these documents were not reviewed for this evaluation.

CCOs have also invested in community health initiatives to improve population health. Some CCOs are partnering with their local public health authorities to place community health workers in the agencies to link medical care with public health prevention strategies on issues such as tobacco use and diabetes management. One CCO is funding core functions of a county health department that does not have enough tax revenue to employ the necessary staff. Most of the CCOs have provided resources to support their affiliated CACs.

One key to success has been responsiveness to communities' needs. One community representative emphasized this change in approach during a site visit. He noted that the approach to informing members their request for services had changed, before the plan would simply informing someone about a denial and now the plan conducts outreach to gather more information. The CCOs are also viewed as important health advocates in their communities. "They don't seem like insurance companies" one CAC member noted.

The OHA is supporting population improvement at the community level using funds from the SIM grant for community based partnerships. In December 2013 OHA's Public Health Division provided funds to four partnerships involving CCOs and local health departments that address universal developmental screening for children, preconception care and pregnancy intent, reduction in tobacco use, and opiate use.

5. Employing electronic health records (EHRs) and HIT

In 2013, OHA conducted listening sessions and convened a Health Information Technology (HIT) Task Force. The goal was to reset Oregon's strategic plan for health information technology and to identify the critical infrastructure needed to support a transformed health care system with new expectations for care coordination, accountability, and new models of paying for performance. The resulting Business Plan Framework charts a path for statewide efforts over the next several years, identifying the state's role to (1) convene, inform, and assist stakeholders; (2) set standards for state programs and users of state HIT services for interoperability and privacy and security; and (3) provide state-level HIT services to connect local technology investments and fill gaps so that all providers can participate. The plan includes: creating a statewide provider directory and patient index; hospital notifications to providers, health plans, CCOs, and health systems to facilitate transitions of care; electronic connectivity of all members of the care team; reliable, actionable information created from aggregated clinical quality data to support quality reporting and quality improvement efforts; and enhancing population management, targeting of care coordination resources, and developing new methodologies to pay for outcomes. The plan also calls for technical assistance to Medicaid providers.

OHA launched CareAccord as one foundational component for a statewide HIE. Oregon's HIT Task Force set a goal of statewide Direct secure messaging to support a foundational level of health information exchange across Oregon. CareAccord is Oregon's statewide health information exchange, providing Direct secure messaging to a broad range of users who lack access to Direct secure messaging through their EHRs or face barriers to adopting Direct secure messaging. CareAccord serves Medicaid programs, behavioral health and long term care providers, coordinated care organizations, and other care team members. In July 2014, CareAccord began distributing a monthly statewide flat file directory of Direct secure messaging addresses. The directory shares Direct secure messaging addresses among Oregon organizations using DirectTrust accredited health information services providers for Direct secure messaging. In addition to supporting electronic exchange of health information and the goal of statewide Direct secure messaging, the directory enables hospitals and providers to meet the transitions of care measure for Meaningful Use.

CCOs have made progress in this area, but more work is needed (Table III.6). To encourage the CCOs' efforts to spread effective EHRs and HIT solutions to their provider networks, OHA included the percent of providers who have adopted EHRs among the incentive performance metrics. OHA also requires the CCOs to report their plans for electronically reporting three quality measures. Thirteen CCOs are using their Transformation Fund grants to bolster HIT, including expanding the meaningful use of EHR and implementing telemedicine and other innovative uses of HIT.

Table II.6. Status of electronic health records and health information exchanges at the CCO level

CCO	Percentage of providers with EHRs[a]	Access to any HIE?
AllCare Health Plan	72	Yes
Cascade Health Alliance	65	Yes
Columbia Pacific CCO	66	Yes
Eastern Oregon CCO	46	No
FamilyCare CCO	70	Yes
Health Share of Oregon	59	Yes
InterCommunity Health Network	60	No
Jackson Care Connect	61	Yes
PacificSource Community Solutions	58	Yes
PrimaryHealth of Josephine County	73	Yes
Trillium Community Health Plan	49	Yes
Umpqua Health Alliance, DCIPA	77	Yes
Western Oregon Advanced Health	64	Yes
Willamette Valley Community Health	68	No
Yamhill County Care	54	Yes

Source: Oregon Health Authority Office of Health Analytics. CCO Incentive Measures 2013 Final Report. June 2014; CCO technology plans

[a] All CCOs started with a baseline EHR adoption rate of at least 21 percent.

CCO = Coordinated Care Organization; EHR = electronic health record; HIE = health information exchange

Up until mid-2014, an important challenge to the widespread employment of EHRs and HIT had been the funding for the statewide HIT plan. At the time of data collection for this report, funding for the statewide HIT plan had not been finalized, although funding had been available for state staff, consultants to work on HIT planning and Oregon's HIE system known as CareAccord. Several key informants reported that this lack of funding at the state level created uncertainties for the CCOs trying to finalize development and implementation of local HIEs. In addition, some CCOs believed at the time of the interviews that the lack of funding, specifically federal funding, to support the adoption of EHRs among behavioral and other non-physical health care providers was a barrier to achieving integrated care.[15] Subsequent to data collection for the midpoint evaluation, the state allocated $3 million in state general funds from the Transformation Fund to draw down federal funds for the state HIT plan and the state was able to finalized a state HIE plan in May 2014. With federal approval, Oregon is using its federal

[15] Physical health providers are eligible for EHR/meaningful user incentive payments and state personnel believe these payments have supported the adoption of EHR among these types of providers. However, behavioral health and other non-physical health providers are largely not eligible for these incentives and this lack of support at the federal level is believed to be a barrier to the adoption of EHRs among behavioral health and other providers. The state has not proposed to fill this gap, although the Addictions and Mental Health division has funded a free behavioral health EHR that has not been widely adopted by behavioral health providers (known as the Oregon Web Infrastructure for Treatment Services).

matching funds to implement a provider directory, a clinical metrics registry, and an emergency department information exchange utility. In addition, these funds are being used to provide technical assistance to providers.

6. Developing initiatives that address members' cultural, health literacy, and linguistic needs, enhance provider networks and administrative staff to meet culturally diverse community needs, and establish quality improvement plans to eliminate racial, ethnic, and language disparities (Transformation Elements 6, 7, 8)

Relative to the other elements of transformation, most CCOs have placed less emphasis on their development of initiatives to address members' cultural needs and disparities. While the transformation elements related to addressing members' unique cultural needs, increasing the diversity of staff and providers and their cultural competence, and eliminating health disparities are distinct objectives the barriers to addressing them overlap. In particular the definition of vulnerable or at-risk populations, access to data, and lack of resources and expertise were commonly cited barriers.

"So part of our idea was that if we truly want to integrate health, we also have to integrate this workforce of people who are trusted community members, who have lived life experience as the peer-delivered service model describes, or who are from those communities, who speak the language and have similar or the same backgrounds as people who they're working with… but that also have their own specialties, so that they still are able to hone in on what they do best based on their mental health or behavioral health work, or their physical health work, or potentially even their dental health work, if we ever have dental community health workers." – OHA staff

Definition of vulnerable populations. CCOs serve diverse communities that have different at-risk populations. Some CCOs have small populations from racial and ethnic minority groups which makes it difficult to identify community members to serve on CACs and to participate in efforts to improve care. The small numbers also make it difficult to identify true differences in health status or health care experiences. Several CCOs identified the culture of poverty as the most important cultural issue they face both in terms of identifying appropriate interventions to engage people and in the need for staff and provider education. Many CCOs are focusing on educating their staff and PCPs about how to better engage people with mental illness.

Access to data on members. CCOs universally cited the lack of data as a barrier to addressing these transformation elements during their interviews in April and May 2014. CCOs desire more reliable individual level data on members' race, ethnicity, and language preference. The information is not consistently transferred to CCOs from the application process. CCOs also noted the lack of data on the quality metrics stratified by race, ethnicity and language as delaying their ability to identify disparities and to know what populations are most at risk. Finally, consistent with their focus on community, several CCOs noted the lack of population level data (in contrast to CCO member data) as a barrier to understanding the context of their member data and where to focus their efforts to improve population health.

Lack of resources and expertise. CCOs found that there is a general attitude among staff and providers that there is less urgency to address the issues related to culture, diversity, and disparities. However, the CCOs noted that lack of expertise among the CCO staff and providers to address these issues contributes to placing less emphasis on these transformation elements.

The lack of diverse providers in their communities contributes to the challenge of creating an environment that reflects the diversity of the population the CCOs serve.

In spite of the challenges CCOs have identified important approaches and innovations to address members' cultural needs, diversity and cultural competence, and health care disparities. Many CCOs noted that the OHA Office of Equity and Inclusion provides valuable technical assistance and training on health equity, diversity, and inclusion. They offer conferences, webinars, leadership training, and consultants through a registry of qualified trainers.

Addressing members' cultural needs. Many CCOs are using their CACs to identify approaches to serving members with diverse cultural, linguistic, or health literacy needs. The CACs serve as advisors, providing important input on surveys to assess member needs, review educational materials, and as a resource to engage communities in focus groups and other data gathering processes. One CCO set up regional health equity task forces to provide opportunities for communities of color to inform CCO strategies. Several CCOs have developed health literacy workgroups and offer training on using plain language and the "teach back" method to improve communication with patients. CCOs are surveying members about their language preferences. Several CCOs have contracts with community based organizations with specific population expertise to have them outreach to and educate new members from different racial and ethnic minority populations.

Staff diversity and cultural competence. CCOs envision the use of THWs as a major intervention to bridge the gap between the CCOs and communities. THWs include community health workers, personal health navigators, peer support specialists, peer wellness specialists, and doulas. The Medicaid demonstration envisions that THWs would facilitate care coordination by supporting adherence to treatment and care plans, coordinating care and supporting system navigation and transitions, promoting chronic disease self-management, and fostering community-based prevention. The THWs also focus on culturally sensitive and linguistically appropriate approaches for addressing disparity issues. OHA and CCOs both acknowledge that more work is needed to determine the best approach to paying for THWs. CCOs expressed the desire to cover the cost of THWs in their rates.

CCOs are using a variety of methods to address cultural competency training. One CCO collects patient narratives and uses Cognitive Edge SenseMaker to distill the major take-aways and will use the results to inform policies and trainings. Another CCO has identified an expert to provide poverty training for their staff, advisory councils, and other members of the community including education, judiciary, and social service professionals. Another CCO is focused on mental health literacy training.

Eliminating health and health care disparities. CCOs use several methods to identify where to focus efforts to eliminate disparities. Most CCOs cite the CHA as a source to identify where disparities in access to care or health status exist. Other CCOs plan to use the available data on some of the quality metrics, stratified by race, ethnicity, and language that OHA has recently started to provide to inform their quality improvement initiatives. Several CCOs are investing in data analytic tools to create their own reports on access and outcomes stratified by race, ethnicity, and language.

D. CCO self-assessment of progress on their transformation activities

To assess how far CCOs have progressed on their transformation activities, we developed and administered the CCO Transformation Assessment Tool (CTAT). We designed the CTAT to capture the CCOs' perception of how far they had progressed on the eight elements of transformation as specified by OHA. Table II.7 lists the eight elements and the complete CTAT is presented in Appendix E.

Table II.7. Elements of the CCO transformation assessment tool (CTAT)

	Element of Medicaid delivery system transformation at the CCO level
1.	Integration of physical, mental health and addiction, and oral health services
2.	Development of patient-centered primary care homes
3.	Use of alternative payment methodologies that align payment with health outcomes
4.	Implementation of community health assessments and improvement plans
5.	Employment of electronic health records and health information technology
6.	Development of initiatives that address members' cultural, health literacy, and linguistic needs
7.	Enhancement of provider networks and administrative staff to meet culturally diverse community needs
8.	Establishment of quality improvement plans to eliminate racial, ethnic, and language disparities

CCO = Coordinated Care Organization

Development of the CTAT. We wanted the CTAT to reflect how OHA defined Medicaid transformation at the CCO level. To develop the tool we followed the detailed guidance OHA provided about each of the eight elements of Medicaid transformation and that CCOs addressed in their transformation plans. [16] CCOs structured their transformation activities to conform to OHA guidance and the CTAT was designed to capture CCO perceptions of their progress on these specific activities. OHA reviewed and provided feedback on an early version of the CTAT and we reviewed the format, wording, and proposed assessment scale with an innovator agent employed by the Transformation Center. Innovator agents have major responsibility for communicating expectations to the CCOs and addressing barriers with OHA. We again revised the tool based on the innovator agent feedback.

Period of activities covered by the CTAT data. We administered the CTAT to the CCOs in April and May 2014, roughly 21 months after the demonstration started. As a result, the CTAT does not capture CCO progress after March of 2014. Because of the timing of the data gathering work, the evidence collected reflects the period before PacificSource split into two separate CCOs and therefore we had CTATs from 15 CCOs.

Administration of the CTAT. After the two levels of reviews, we sent the CTAT by email to the Chief Executive Officer (CEO) of each CCO with guidance on the type of staff who may have the best perspective for each element. This information is included in Appendix E with the CTAT. In most instances 3 to 7 CCO staff members were involved in completing different sections of the CTAT depending on their expertise. A single individual completed the CTAT for two CCOs. After the completed CTATs were returned to Mathematica, we reviewed and

[16] OHA Transformation Elements Guidance Document for CCOs

assessed the responses based on information available in documents available to the evaluation. After this assessment, we sent the completed CTAT to the innovator agent assigned to each CCO and conducted telephone interviews with the innovator agents to ascertain their level of agreement with the progress that the CCOs reported. We then conducted interviews with representatives from each CCO to discuss their responses, to better understand their perceptions of their progress on the eight elements, and to discuss responses that did not conform with documentary evidence or the innovator agent review.[17] If we determined that a CCO's response needed to change to better reflect their progress, we contacted the CCO to discuss the change. Thus, the CTAT data reflect CCOs' self-assessment of their progress on their transformation activities. Although we validated the information using documentary evidence and the knowledge of the innovator agencies, it is possible that an external assessment of their progress would produce different results.

Rating scale used to capture the stage of CCO transformation activities. CCOs rated the level of their transformation activities on an extensive list of subcomponents that made up each of the required eight elements of transformation (the CTAT instrument and all the sub-elements are presented in Appendix E). The CCOs rated their progress on each sub-element using a five-point scale, where 0 indicated no progress and 4 indicated final implementation in at least one site with plans for bringing the activity to scale (Table II.8). We did not provide scores for full network wide implementation of any transformation activity which means the CTAT, as designed for this mid-point evaluation, only captures initial activities relating to design, testing, and the first steps toward full implementation. We asked each CCO to assess its progress on each sub-element as of March 2014.

Table II.8. Scale CCOs used to score the stage of their transformation activities

Score	Stage of transformation activities
0	**No activity** - CCO has not started any activity related to this element.
1	**Exploring / Planning** - CCO is conducting activities related to assessment of the issue and possible approaches, including background research, data collection, gap analysis, identification of innovative programs, and/or stakeholder assessment.
2	**Designing** - CCO is designing a specific approach to implementing the transformation element. Design activities include, but are not limited to, developing the program definition, defining procedures and processes, developing staff training strategies, designing evaluation or assessment strategies, and identifying desired outcomes.
3	**Implementing / Revising** - CCO implemented the element or activity in at least one setting. Implementation activities include, but are not limited to, implementing processes and activities, training staff, establishing a process evaluation and, if appropriate, data collection and review. Revising the program or initiative based on the feedback or results from the initial implementation also counts as implementation.
4	**Finaliing initiative and planning to bring to scale** - Using information and data from the implementation phase, CCO has finalized the initiative and CCO is identifying options for bringing the initiative to scale or has already scaled the initiative across the CCO.

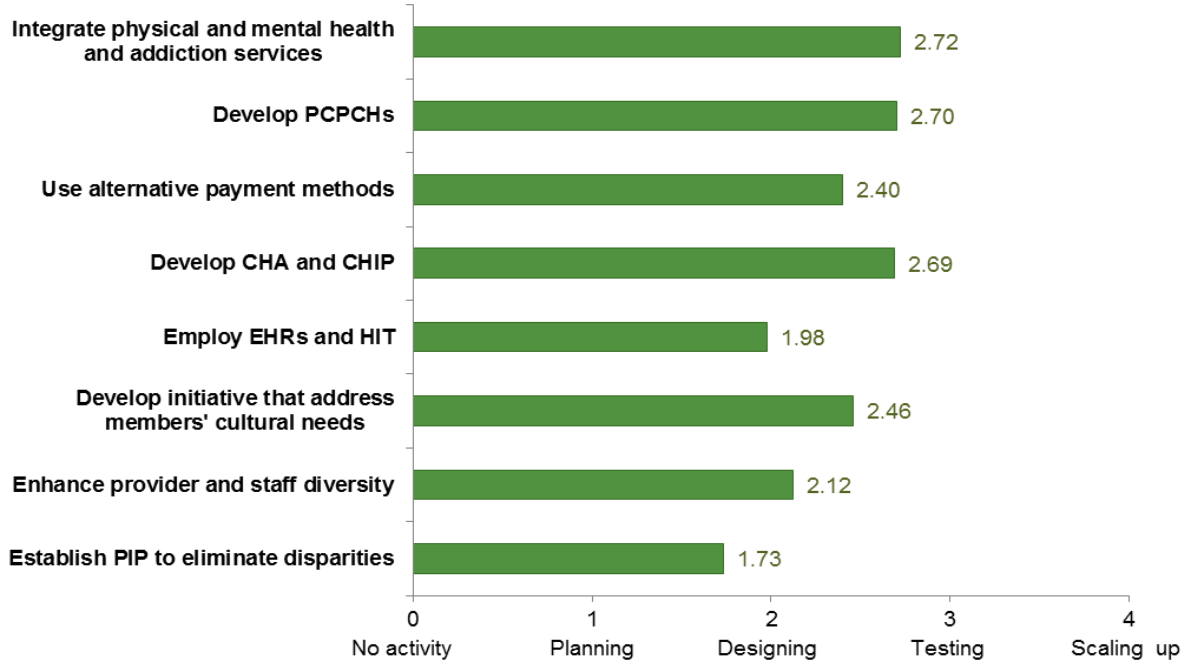
CCO = Coordinated Care Organization

[17] Anywhere from one to seven CCO staff members participated in these interviews.

Analytical approach. We analyzed the CCOs' assessment of their transformation two different ways. To identify the areas of most progress, we first derived the mean rating for each of the eight elements by calculating the average score across the sub-elements that made up each category of transformation. The element that had the highest mean rating was considered the area where CCOs had made the most progress in their transformation activities. Then, to identify the CCOs that had made the most progress with their Medicaid delivery system transformation activities, we calculated total scores for each element and overall. We then used the total scores for each element to rank CCOs from those that had made the most progress on the transformation activities relative to those who were in earlier stages of their transformation activities. We then used the rankings on each element to create an overall ranking for each CCO.

Results - areas where CCO transformation activities are in their most advanced and earliest stages. Figure II.1 presents the mean scores for each of the eight elements of Medicaid transformation. CCOs rated themselves as having made the most progress integrating physical and mental health and addiction services and expanding PCPCHs, with mean scores of 2.72 and 2.70 respectively. These scores indicate that on average, CCOs were somewhere between designing and implementing their activities in these categories in at least one setting. Conversely, the CCOs reported making less progress and being in earlier stages of their activities relating to developing performance improvement plans to eliminate health disparities and implementing HIT initiatives, with mean scores of 1.73 and 1.98 respectively. For these two elements, the average CCO was somewhere between exploring and designing the activities as of March 2014.

Figure II.1. Results of CCOs' assessment of the stage of their transformation activities



Source: Mathematica analysis of CTAT results

CCO = Coordinated Care Organization; CHA = community health assessment; CHIP = community health implementation project; CTAT = CCO Transformation Assessment Tool; EHRs = electronic health records; HIT = health information technology; PCPCHs = patient-centered primary care homes; PIP = performance improvement plans.

When we assessed the sub-elements that comprise each of the eight elements of Medicaid delivery system transformation at the CCO level, we determined that at the sub-element level, CCOs reported the most progress completing the community health assessments (average CCO score of 3.73) under element four, implementation of community health assessment and improvement plans (Table II.9). Conversely, CCOs reported the least progress on their activities relating to the use of telehealth and mobile health devices (average CCO score of 0.67) under element five, employment of EHRs and HIT. The information in Table II.9 describes the sub-elements within each of the eight elements of transformation where CCOs report making the most and least progress on Medicaid delivery system transformation activities.

Table II.9. Highest and lowest scored components within each transformation element

Transformation element		Highest Scored component		Lowest scored component	
	Description	Mean score	Description	Mean score	Description	Mean score
1-	Integration of physical, mental health, and addiction services	2.72	Implementing mental health assessments for children in Department of Human Services custody	3.09	Providing physical health care to SPMI population residing in residential settings	2.09
					Sharing patients' health information among physical health, mental health, and addiction services providers	2.09
2-	Development of PCPCHs	2.70	Increasing the number of CCO members who are enrolled in PCPCHs	3.47	Linking clinical care with traditional health workers	2.33
			Increasing the number of PCPCHs accessible to CCO members	3.40		
3-	Use of alternative payment methodologies that align payment with health outcomes	2.40	Not applicable [a]		Not applicable	
4-	Implementation of community health assessment and improvement plans	2.67	Completing community health assessments	3.73	Aligning CCO resources and health improvement efforts with the community health improvement plans	2.00
5-	Employment of electronic health records (EHRs) and health information technology	1.98	Increasing adoption of certified EHRs for primary care providers and hospitals	3.00	Using HIT such as telehealth and mobile health devices for in-home monitoring to serve patients' needs	0.67
6-	Development of initiatives that address members' cultural, health literacy, and linguistic needs	2.46	Offering materials and services in languages other than English	3.27	Using standard tools to assess the language proficiency of bilingual staff	1.27

Table 11.9 (continued)

Transformation element		Highest Scored component		Lowest scored component	
	Description	Mean score	Description	Mean score	Description	Mean score
7-	Enhancements to provider networks and administrative staff to meet culturally diverse community needs	2.12	Ensuring access to cultural competency education and training for CCO staff	2.60	Evaluating the quality and effectiveness of cultural competency education and training	1.67
8-	Establishment of quality improvement plans to eliminate racial, ethnic, and language disparities	1.88	Developing specific quality improvement plans to eliminate racial, ethnic, and language disparities	1.87	Implementing quality improvement plans to eliminate racial, ethnic, and language disparities	1.67

Source: Mathematica analysis of CTATs

[a] The third element on using alternative payment methodologies only had one sub-element, which means the overall average score is also the highest and lowest scores.

CCO = Coordinated Care Organization, CTAT = CCO Transformation Assessment Tool; HIT = health information technology; PCPCH = patient-centered primary care home; SPMI = severe and persistent mental illness

Results – identifying CCOs in the most advanced stages of their transformation activities. In our second analysis of the CTAT data, we assessed the overall progress on Medicaid delivery system transformation activities for each CCO. We then ranked the CCOs from those who report their transformation activities are in the most advanced stages to those who report they are in earlier stages of their Medicaid delivery system transformation activities.

To assess individual CCO progress on their transformation activities, we first determined a score for each of the eight elements of transformation by summing up the scores for each sub-element within the element. We then calculated an overall score by summing up the score for each of the eight elements of transformation at the CCO level. Table II.10 reports the number of sub-elements that made up each element of transformation and the range of possible scores within an element and overall. To illustrate our approach, the integration of physical and mental health and addiction services had the most sub-elements at 14 and given that the maximum score for a sub-element was 4, the overall score for this element could have a maximum value of 56 (14 x 4). The alternative payment methodologies and performance improvement plans for eliminating disparities had the fewest sub-elements and the lowest possible total score.

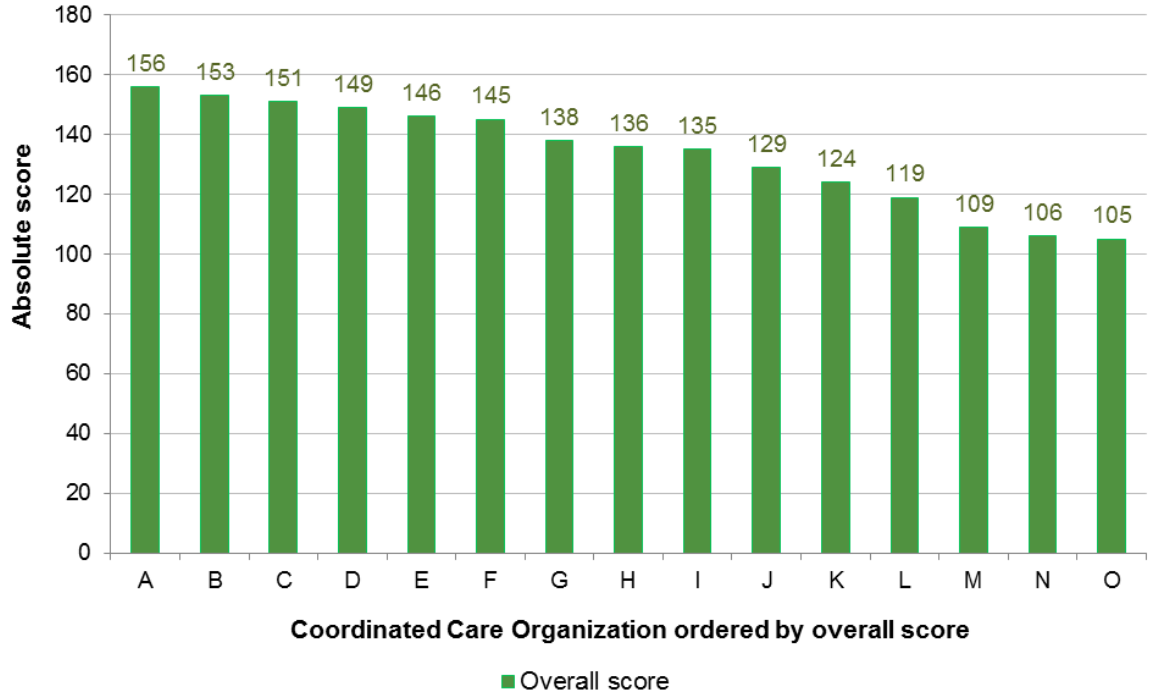
Table II.10. CTAT possible scores overall and by element

Transformation element	Number of subcomponents	Range of possible scores
Total possible score	--	0–220
1 - Integration of physical, mental health, and addiction services	14	0–56
2 - Development of PCPCHs	11	0–44
3 - Use of alternative payment methodologies that align payment with health outcomes	1	0–4
4 - Implementation of community health assessments and improvement plans	3	0–12
5 - Employment of EHRs and HIT	11	0–44
6 - Development of initiatives that address members' cultural, health literacy, and linguistic needs	7	0–28
7 - Enhancements to provider networks and administrative staff to meet culturally diverse community needs	6	0–24
8 - Establishment of quality improvement plans to eliminate racial, ethnic, and language disparities	2	0–8

CTAT = CCO Transformation Assessment Tool; EHRs = electronic health records; HIT = health information technology; PCPCHS = patient-centered primary care homes

The individual CCO transformation scores are displayed in Figure II.2 where the CCOs are ordered by their overall total score from highest to lowest score. Total CTAT scores ranged from 156 to 105, a difference of almost 50 percent between the CCO that had made the most progress as of March 2014 and the CCO that was at the earliest stage of its activities. In percentage terms, these scores range from 71 to 48 percent of the total points possible. These scores mean that most CCOs have made good progress through the design and testing phases of their transformation activities.

Figure II.2. Total CTAT scores by CCO



Source: Mathematica analysis of CTAT data.

Note: Only 15 CCOs were included in this analysis because PacificSource completed only one CTAT.

CCO = Coordinated Care Organization; CTAT = CCO Transformation Assessment Tool

The aggregate total scores gives equal weight to each sub-element which means that the total scores are weighted toward the elements of transformation that had the most sub-elements and components. The number of sub-elements reflects where CCOs received more detailed guidance from OHA. Thus, the total overall scores are useful for assessing the variation in the CTAT data across CCOs, but is not a particularly useful metric for analysis purposes.

To rank CCOs by their progress on the elements of transformation, we wanted an approach that gave equal weights to the eight elements. We developed a three-step process where we (1) first ranked each CCO on each sub-element separately, (2) then summed across the rankings, and (3) then ranked the CCOs based on the summed rankings. Based on the distribution of the sum of rankings, we identified three notable gaps in the rankings. Using these gaps, we identified three tiers of CCOs where the first tier is the group of CCOs that are considered to have made the most progress on their transformation activities based on their CTAT data and the third tier is the group of CCOs that are considered to be in earlier stages of their activities.

The data in Table II.11 report the final ranking of each CCO. The top tier of CCOs include those CCOs that have progressed on the most elements. These three CCOs ranked highly (ranking 1, 2, or 3) on most of the eight elements. This means that to be considered in a more advanced stage of transformation activities, the CCO needed to have engaged in a broad set of activities across most of the eight elements of Medicaid delivery system transformation. For the CCOs in the earliest stages of their transformation activities, they were in an early stage in most, but not necessarily all, of the eight elements.

Table II.11. CCO rankings

CCO ranking on stage of transformation activities	Total CTAT score	Sum of rankings [a]	Ranking within each element of transformation [a]							
			1	2	3	4	5	6	7	8
1	149	19	2	4	2	2	1	5	2	1
2	153	24	3	3	2	1	2	6	5	2
3	156	27	5	1	2	4	3	3	8	1
4	146	36	8	2	1	3	3	4	10	5
4	145	36	7	5	3	4	7	2	4	4
4	138	36	3	6	2	5	5	7	6	2
5	135	37	4	7	2	6	5	2	9	2
6	151	38	1	9	2	9	5	3	7	2
7	129	42	5	3	4	8	5	8	7	2
8	136	44	6	4	1	7	5	6	12	3
9	109	45	11	8	5	10	5	2	1	3
10	124	46	5	5	3	13	8	6	3	3
11	105	56	10	10	4	11	6	3	9	3
12	119	57	12	11	3	12	4	1	11	3
13	106	58	9	5	3	14	7	8	8	4

Source: Mathematica analysis of CTAT scores. 1 = CCO with most progress on transformation activities

Note: Only 15 CCOs were included in this analysis because PacificSource completed only one CTAT.
CCO = Coordinated Care Organization; CTAT = CCO Transformation Assessment Tool

We used the information in the CCO profiles (Appendix C) to assess qualitatively the differences between the three CCOs that reported the most progress on their transformation activities and the three that were in earlier stages. All six of the CCOs in these two groups started in 2012. Several plans are physician owned and they all served Medicaid populations before the introduction of CCOs. We do not see any clear pattern regarding priority areas, although most established increasing enrollment in PCPCHs as a key area for improvement. Each group had at least one CCO where the majority of members were in a PCPCH in 2011, before the introduction of CCOs, and at least one CCO in both groups experienced a large increase of at least 22 percentage points in PCPCH enrollment between 2011 and 2013. CCOs in both groups were a mix of organizations that did and did not participate in HIE and at least one CCO in each group reported that less than 60 percent of providers had adopted EHRs. Only two factors appear to define important differences between the two groups of CCOs, the profit status of the legal entity and the increase in enrollment that occurred in early 2014. All the legal entities among the CCOs that had made the most progress on their transformation activities are for-profit entities whereas the CCOs in the earliest stages are non-profit entities.[18] As a group, the CCOs that reported the most progress on their activities experienced a 52 percent increase in their Medicaid enrollment in 2014 compared to a 78 percent increase experienced by the CCOs in the earliest stages. Given the timing of the administration of the CTAT, in April and May of 2014, it is possible that the three CCOs in the earliest stages of their transformation activities were more

[18] For context, 10 of the 16 CCOs are for-profit entities and 6 are non-profit.

focused on managing their membership growth relative to the group in the most advanced stages of their transformation activities.

We also developed the CTAT to explore the relationship between outcomes and the level of transformation at the CCO level. If outcomes changed significantly after the introduction of CCOs, we would be more confident in attributing these changes to the demonstration if outcomes were also associated with the CCOs' progress with their transformation activities. This assessment included comparison of outcomes between the three CCOs that have made the most progress with their transformation activities and the three CCOs in the earliest stages of their activities to determine whether outcomes vary systematically between these two groups of CCOs and whether any changes in outcomes that occurred after the introduction of CCOs can be attributed to CCO transformation activities. We report on these and other analyses of outcomes in the next chapter.

E. Formative evaluation concluding remarks

OHA and the CCOs have made clear progress transforming Oregon's Medicaid delivery and payment systems, but more work remains. OHA has largely accomplished its immediate objectives of establishing the CCOs and their global budgets and incentive payments, a large set of quality metrics, and the infrastructure to support the transformation activities of CCOs. Nevertheless, the state still needs to address issues around its own structure to minimize barriers created by the organization of relevant programs and divisions. In addition, OHA had outstanding issues relating to certification of THWs and defining flexible supports at the time this report was written.

Although the CCOs are in various stages of transformation, in general, they have more work ahead to continue to integrate services, including oral health services; to increase access to PCPCHs in rural communities, and to make more progress with alternative payment methodologies for their providers, the implementation of HIT, and addressing members' cultural and literacy needs and health disparities.

In the following, we summarize the findings of the formative evaluation by answering each question posed at the beginning of this chapter.

1. **To what extent has OHA effectively taken action to support transformation?** In summary, there is clear evidence that OHA actions have been effective in supporting transformation of the Medicaid delivery system. OHA has been effective in managing multiple strategies to provide technical assistance to CCOs and their provider networks, drive change through the development of a quality reporting system, and support progress on redesigning the Medicaid payment system. In spite of a strain on resources, OHA has made good progress on increasing the number of PCPCHs and Medicaid members enrolled in PCPCHs, promoting the use of EHRs, and establishing transparent reporting on quality metrics. They have also made significant progress on increasing supports that will enable providers to improve care for unique Medicaid populations. OHA could help the CCOs more by providing them with a big picture strategy and overall plan that demonstrates how the various transformation activities fit together and logical sequence for these activities. They could also increase CCO awareness of what interventions have been successful by introducing more transparent quality improvement strategies and documenting the results of

the interventions to improve the delivery system and/or improve provider and member experiences.

2. **To what extent have CCOs—in aggregate and individually—taken action to transform care delivery and payments?** CCOs are providing strong leadership to transform care. With the guidance from OHA they have taken on complex task of transforming the Medicaid delivery system and breaking down silos. They have provided thoughtful leadership in their approach to translating contracts and plans to strategies to meet the needs of their members and their providers. CCOs have redesigned their organizations to focus on the goals of the Oregon Coordinated Care Model and on implementing tangible reforms to promote transformation. They have strengthened the foundation of primary care in the Medicaid delivery system and increased the number of members cared for by PCPCHs. Although the CCO global budget is fully operational, OHA needs to continue to work on bringing the finances from disparate systems together and avoid ongoing payment silos. CCOs need more support and continued attention to develop alternative payment methods for their providers. In spite of these challenges the global budget has given CCOs more flexibility to allocate resources to community based care and on prevention.

3. **To the extent that some CCOs have not taken actions for transformation, what has prevented them from doing so?** The major barriers cited by the CCOs are the lack of strategic planning and guidance, the burden of implementing many complex initiatives simultaneously without adequate resources, the need for more granular data on members and on the costs of comprehensive care, and the lack of focused attention on the unique needs of rural communities. Although CCOs have encountered barriers they have also been creative about responding to the barriers and engaging OHA in discussions about solutions. The CCOs have not made equal progress on each element of transformation but they have at least initiated activity on all the major elements.

4. **To the extent that some CCOs have been successful in taking action, what have been the keys to their success?** CCOs cite OHA support as an important key to success, especially the technical assistance provided by the Transformation Center and the liaison role provided by the innovator agents. The diverse CCO board representation, including providers from primary care, behavioral health, hospitals, and in some cases oral health, represented a significant change from how MCE governance had operated in the past. The partnership with providers is one of the keys to success. Several CCOs also noted that they had historically strong relationships or built new relationships in the communities that they are serving. These relationships were important for building trust and helping them move forward with their transformation activities. The CACs represent a major improvement in engaging Medicaid beneficiaries and community members. Their involvement informed CCO efforts to transform the Medicaid delivery system.

5. **To what extent are CCO members experiencing improved care coordination, with emphasis on PCPCHs?** The collective effect of the CCOs is demonstrated in the overall progress they have made in increasing PCPCHs, increasing member enrollment in PCPCHs, and in testing approaches to providing integrated physical health and mental health care. OHA's role in certifying PCPCHs has been vital to the ability of CCOs to enroll their members in PCPCHs. The analysis of the CTAT data demonstrates that CCOs have made the most progress on developing PCPCHs relative to the other eight areas of transformation. CCOs and their providers are using more team based care to address members' issues and

the teams are more diverse than historically defined, with increasing representation from THWs.

6. **To what extent have OHA and CCOs implemented payment methods that focus on value, not volume?** Although OHA has successfully implemented global budgets and incentive payments for all the CCOs, the CCOs are at the early stages of implementing alternative payment methods for their providers. To move forward, CCOs report that they require infrastructure supports including systems that move away from encounter data as the basis for payment and more information on their members and the costs of their care. Strategies for using alternative payment methods for small practices are a particular area of concern for CCOs. Finally, provider engagement, education, and participation in policy are necessary.

7. **To what extent have CCOs integrated physical, behavioral, and oral health services? Other services?** CCOs are making progress on the integration of services and the CTAT scores this is an area where CCOs have made more progress relative to other areas of transformation. All CCOs have established relationships with mental health providers. However, they are still learning about the systems that care for the population with severe and persistent mental illness and need to develop a better understanding of those systems and how to better integrate the services with physical health.

8. **To what extent are best practices being tested and disseminated?** CCOs describe the opportunity to learn from OHA and from each other about innovations and best practices as a valuable aspect of their activities. They noted the key role played by the Transformation Center and the innovator agents in the learning process and dissemination of knowledge. They would like more opportunities to establish feedback loops and time to formally test changes to learn more about what specific strategies are effective, to learn where course corrections are necessary, and to know whether they are achieving the desired outcomes.

III. SUMMATIVE EVALUATION

A. Overview

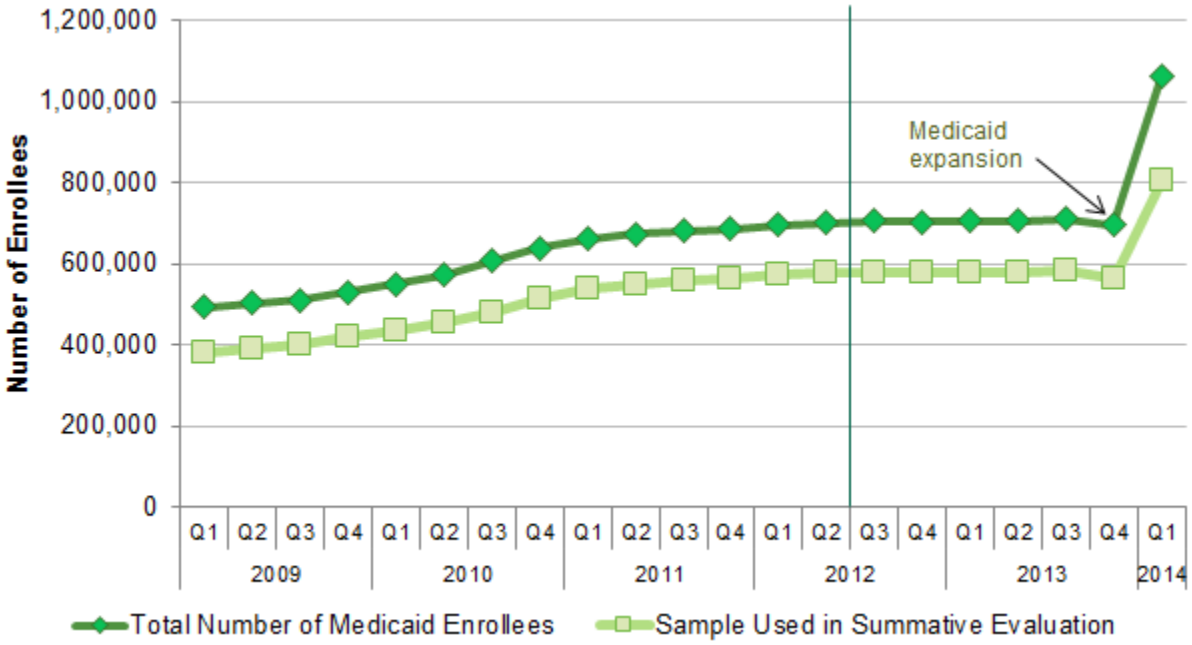
The summative component of this midpoint evaluation was designed to assess the extent to which a selected set of outcome measures changed after Oregon began to implement the CCO model for its Medicaid program in 2012. In this chapter, the term outcome is used generically to refer to all the measures considered in this study which include process and utilization measures. In addition to determining whether outcomes changed after the CCOs were established, this summative evaluation sought to assess whether any detected changes could be attributed to CCO transformation activities. Given the timing of the midpoint evaluation, the analyses of outcomes focus on the first 21 months of a 60-month demonstration. Therefore, the findings are considered preliminary and reflect the first phase of the demonstration—a period in which OHA and the CCOs focused on establishing foundational aspects of their transformation plans. The results below may change as the demonstration matures and the CCOs bring their transformation activities to scale.

B. Data and methods

Study population. OHA provided 63 months of Medicaid enrollment and claims records for the period January 1, 2009, through March 31, 2014. This time period supports a 42-month pre-demonstration period which allows the estimation of robust time trends before the CCOs were established, even for measures that require a year look-back period. The records covered everyone ever enrolled in Medicaid during the period, but we applied several exclusions to the data. We first excluded anyone in fee-for-service or not enrolled in a MCE (before July 2012) or CCO (July 2012 and later) that covered physical health care services.[19] Because we were not able to obtain Medicare enrollment and claims records for the present analysis, we also excluded all enrollees age 65 and older as well as everyone dually enrolled in Medicare and Medicaid. In addition, we excluded enrollees who were eligible only for a restricted set of benefits, primarily emergency services, because their care would not be influenced in the same way as that of enrollees eligible for a more complete array of health care benefits. These exclusions resulted in the elimination of 18 to 24 percent of Medicaid enrollees (approximately 111,000 to nearly 258,000 enrollees) depending on the quarter (Figure III.1). Medicaid enrollment remained stable after the Section 1115 demonstration began until the state's Medicaid expansion took effect on January 1, 2014, extending coverage for low-income adults.

[19] This exclusion means that Medicaid beneficiaries only enrolled in a dental care plan or mental health care plan were excluded as well as those receiving all their services as fee-for-service.

Figure III.1. Count of the Medicaid population and study sample by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA enrollment records from January 1, 2009, through March 31, 2014.

Notes: The enrollment records were extracted from Oregon's Medicaid management information system and submitted to Mathematica on three separate occasions, May 22, 2014, July 8, 2014, and January 12, 2015. The count is based on the number of unique identification numbers in each quarter, but excludes small groups of beneficiaries dually eligible for Medicare and Medicaid, beneficiaries with missing eligibility program codes, and reinstated transplant beneficiaries who are eligible only for prescription medications. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

OHA = Oregon Health Authority

Outcome measures. Mathematica and OHA worked collaboratively to select a set of measures for the summative evaluation that lent themselves to construction with the encounter claims records that CCOs (and MCEs before July 2012) submit to the Medicaid program. The majority of selected measures are included in either the CCOs incentive measure set or the state performance measure set that OHA uses to assess enrollee outcomes at the CCO level. Several of the selected measures are part of the measures that form the basis of incentive payments that CCOs may receive above their global budget amounts. OHA uses other measures for general monitoring of the CCOs. In addition, Mathematica included a small number of measures that are not part of OHA's established measure sets but are frequently used in program evaluations (labeled as general measures in Table III.1). In many instances, the other general measures provide context about trends in outcomes and health care initiatives that may be affecting outcomes but are not directly related to Oregon's demonstration, such as wider hospital quality improvement initiatives. In Table III.1, we list the measures included in the summative evaluation.

Table III.1. Outcome measures used in the summative evaluation

Measure	Incentive measure set	State performance measure set	General measure
Improving primary care for all populations			
Developmental screening by 36 months	√		
At least six well-child visits in the first 15 months of life		√	
Child and adolescent preventive care visit (age 12 months through 19 years)			
Adolescent wellness visit (age 12 through 21 years)		√	
Adult preventive care visit (age 18 through 64 years)			√
Cervical cancer screening (age 21 through 64 years)		√	
Ensuring appropriate care in appropriate places			
Total ED and ambulatory care visits		√	
Total ED visits	√		
Total ambulatory care visits		√	
Improving behavioral and physical health coordination			
Total ED and ambulatory care visits for mental health/psychiatric care			√
Total ED visits for mental health/psychiatric care			√
Total ambulatory care visits for mental health/psychiatric care			√
Follow-up within seven days after hospitalization for mental illness (age 6 through 64 years)	√		
Reducing preventable hospitalizations			
Total number of inpatient admissions			√
PQI acute care composite measure			√
PQI chronic care composite measure			√
PQI 01: Diabetes short-term complication admission rate (age 18 through 64 years)		√	
PQI 05: Chronic obstructive pulmonary disease or asthma admission rate (age 40 through 64 years)		√	
PQI 08: Congestive heart failure admission rate (age 18 through 64 years)		√	
PQI 15: Adult asthma admission rate (age 18 through 30 years)		√	
Addressing discrete health issues (diabetes care)			
Comprehensive diabetes care: LDL-C screening (age 18 through 64 years)		√	
Diabetes: Hemoglobin A1c testing (age 18 through 64 years)		√	

ED = emergency department; LDL-C = low-density lipoprotein cholesterol; PQI = prevention quality indicator

Comparability between OHA estimated outcome measures and those used in the summative evaluation. Whenever possible, we followed the specifications that OHA uses to construct the outcome measures. However, for several reasons, the estimated rates presented

below may differ from what OHA has published in quarterly and annual progress reports. It is important to note that OHA measures outcomes and changes in outcomes at the CCO level, whereas the evaluation assessed outcomes first at the state level. The different approaches mean that controls for continuous enrollment also differed. OHA controls for continuous enrollment at the CCO level and the evaluation controlled for continuous enrollment at the state level. Whether this difference explains discrepancies between the data reported by OHA and the information in this report depends on how common it is for beneficiaries to switch CCOs during the year.

In addition, to differences in approach, Mathematica did not receive denied claims records and outcome estimates presented in this report will differ from OHA estimates for those measures, such as the developmental screening measure, that incorporate denied claims.[20] OHA estimates outcomes for the full population of Medicaid members enrolled in CCOs, whereas our estimates pertain only to enrollees under age 65. This restriction will be most important for adult measures and for those measures relating to chronic and disabling conditions such as diabetes, chronic obstructive pulmonary conditions, and mental illness. Whenever possible, we assessed outcomes at the quarterly level to ensure the timely identification of changes in outcomes. However, some measures, including the well-child visits in the first 15 months of life and cervical cancer screening measures, had to be measured annually. Lastly, OHA typically uses calendar year 2011 as the baseline for comparison to post-demonstration outcomes. In contrast, we present the trend in measures from the first quarter of calendar year 2009 through the first quarter of calendar year 2014.[21]

Methodological approach to estimating demonstration outcomes. For each measure, we followed a two-step process. We first assessed the trend in each outcome measure descriptively by using unadjusted data. Then, we conducted multivariate analyses that controlled for the basic demographics of the population (age, gender, and race/ethnicity), the basis of eligibility, and the enrollee's county of residence. The enrollee's county of residence helps control for enrollee income or education to the extent that people with similar levels of income tend to live in similar areas. County indicators may also capture some supply-side factors such as availability of providers and hospital resources. The estimated models also controlled for time trends and they included the four stages of CCO transformation activities developed by the formative evaluation and based on the CCOs' overall CTAT ranking.[22] The analysis focused on assessing the difference between the three CCOs in the most advanced stages of their transformation activities relative to the three CCOs in the earliest stages of their activities. Appendix F provides details about the data and our methodological approach.

[20] Other measures that incorporate denied claims in the specifications included: developmental screen by 36 months, at least six well-child visits in the 15 months of life, child and adolescent preventive care visit (age 12 months through 19 years), adolescent wellness visit (age 12 through 21 years), follow-up within seven days after hospitalization for mental illness (age 6 through 64 years), and cervical cancer screening (age 21 through 64 years).

[21] When the outcome is measured on an annual basis, we present the annual trend from calendar year 2009 through calendar year 2013.

[22] Because the CCOs serve specific regions within Oregon, the inclusion of both county and CCO indicators confounds the estimates of county and CCO fixed effects. While we tested these types of models, the estimated presented in this report controlled for the county of residence and the level of transformation of the enrollee's CCO.

A note about statistical significance. In large samples such as those available for the summative evaluation, it is possible to detect small differences as statistically significant. We therefore used stringent criteria for statistical significance and a critical alpha level of $\alpha = 0.99$. In other words, we required each test statistic to have a small probability that we mistakenly detected a difference when a difference did not actually exist (sometimes referred to as a false positive result or a type I error). A statistically significant difference does not indicate the policy or clinical relevance of the difference detected. Therefore, when we identified a statistically significant difference and the significance level was not sensitive to changes in the model specifications, we assessed the magnitude of the difference by using the adjusted values that control for demographic characteristics and other observable factors.

Cross-walking former MCEs to current CCOs. Our analysis focused in part on determining whether the level of CCO transformation was associated with statistically significant changes in the outcome measures after the demonstration began. Assigning people to each CCO was a straightforward process for the post-demonstration period because the enrollment record identified each enrollee's CCO for each month of enrollment. For the pre-demonstration period, we developed an approach to linking the former MCEs to the CCOs.[23] In most instances, the approach was straightforward because most former MCEs transitioned to a CCO. When the process was not straightforward, we relied on county of residence and the CCO that currently serves that county.[24] Because we excluded Medicaid beneficiaries in the fee-for-service system, beneficiaries in fee-for-service during the pre-demonstration were also excluded from the analysis.

C. Results

We adopted a multifaceted approach to assessing the demonstration's effects. We examined overall state-level trends in outcomes and whether they changed after the demonstration began. We also assessed the relationship between post-demonstration outcomes and the CCO's stage of its transformation activities and race/ethnicity disparities. We first present the state-level results that capture the combined effects of the transformation activities of both OHA and the CCOs. We grouped the state-level results by topic so that measures reflecting similar types of health services are reported together. We begin with the primary care measures and then progress to measures that capture the receipt of appropriate care in appropriate settings, integration of physical and mental health care, preventable hospitalizations, and diabetes care. Next, we present results relating to the association between the stage of CCO transformation activities and post-demonstration changes in outcomes and then discuss any detected changes in race/ethnicity disparities.

[23] Because we did not have the exact algorithm that OHA used for assigning enrollees to CCOs during 2011, our approach most likely does not exactly match OHA's approach. However, for the majority of enrollees, the assignment for the pre-period was straight forward because they were enrolled in MCEs that eventually transifioned to a CCO.

[24] For a small number of beneficiaries in the pre-demonstration period who were not in a pre-demonstration MCE that transitioned to a CCO and lived in counties served by multiple CCOs, we could not with confidence assign them to a CCO during the pre-demonstration period and we elected to exclude them from the analysis.

1. Improving primary care for all populations

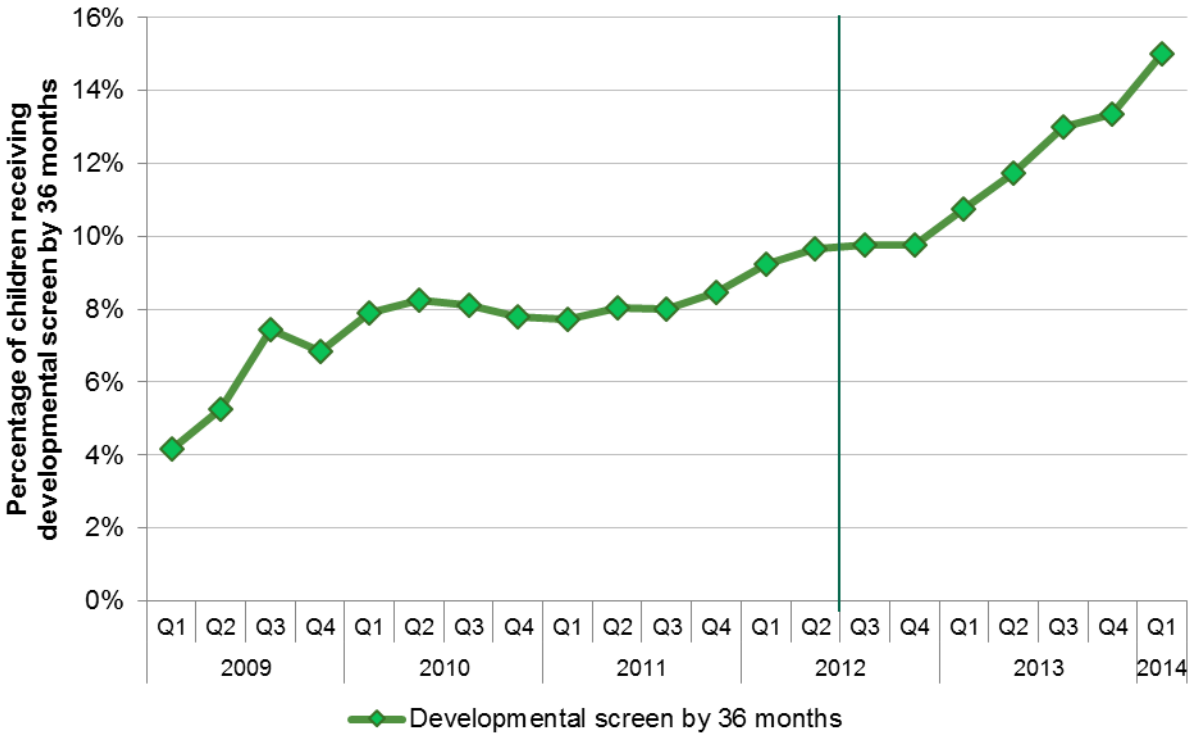
We did not detect a change in the rate of developmental screening by 36 months after the introduction of CCOs in 2012.

Building a broad and deep network of PCPCHs is a primary objective of Oregon's health delivery system transformation and part of the Medicaid demonstration's effort to improve the primary care system and enrollees' access to primary care services. We assessed six primary care measures that capture the life span of non-elderly members, including developmental screening and well-child visits for infants and toddlers, well-child visits for children of all ages, adolescent wellness visits, adult preventive care visits, and cervical cancer screening for women. OHA uses all of these measures, except the adult preventive care visit measure, to track the performance of the CCOs. The developmental screening and adolescent wellness care measures were part of the CCO incentive payment program for 2013.

Infants and toddlers. As the data in Figure III.2 indicate, developmental screening by 36 months of age was increasing slowly before the CCOs were introduced in 2012 and continued to increase after they became operational.[25] The multivariate analysis suggests that the upward trend slowed slightly after the demonstration began, but the result is sensitive to the inclusion of calendar year 2009 in the estimated model, a period when the measure displayed unusual growth.

[25] OHA reports the receipt of developmental screening annually, and its data indicate that developmental screening increased from 20.9 percent in 2011 to 33.1 percent in 2013. When we convert the quarterly measures to annual measures, we estimate that developmental screening increased from 22.9 percent of infants and toddlers in 2011 to 35.2 percent in 2013.

Figure III.2. Developmental screening by 36 months, by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

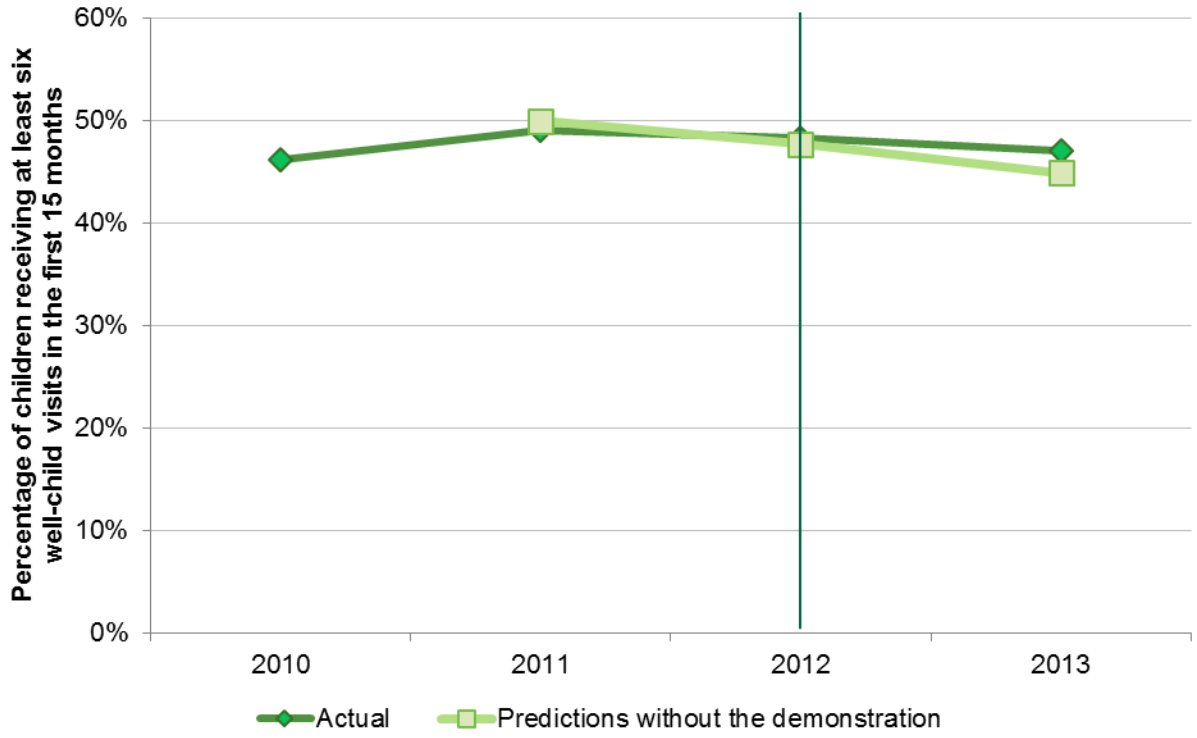
Note: Reported rates are actual rates unadjusted for demographics or other factors. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

OHA = Oregon Health Authority

We found that the introduction of CCOs in 2012 was associated with a positive effect on well-care visits within the first 15 months of life and that the decline in visits would have been larger if the CCOs had not been introduced.

The percentage of children receiving at least six well-child visits within the first 15 months of life declined slightly after the introduction of CCOs (Figure III.3). OHA also reports a decline in this measure from 68.3 percent in 2011 to 60.9 percent in 2013. We assume that the differences between what we report in Figure III.3 and what OHA reports is due in part to our inability to include denied claims in our measure. However, the multivariate analyses that control for demographic characteristics and other factors suggest that the introduction of CCOs had a positive effect on this measure and the decline would have been slightly larger if the demonstration had not occurred. To illustrate the magnitude of the effect, we present in Figure III.3 both the actual data, unadjusted for changing demographics and other factors that may influence the receipt of well-child visits, and adjusted data that control for these factors. The adjusted data are based on predictions from the multivariate regression model we estimated where the pre-demonstration trend in the outcome is assumed to continue in the post-demonstration period.

Figure III.3. Actual and adjusted percentage of children with at least six well-child visits within the first 15 months of life, by year, 2009 through 2013



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through December 31, 2013.

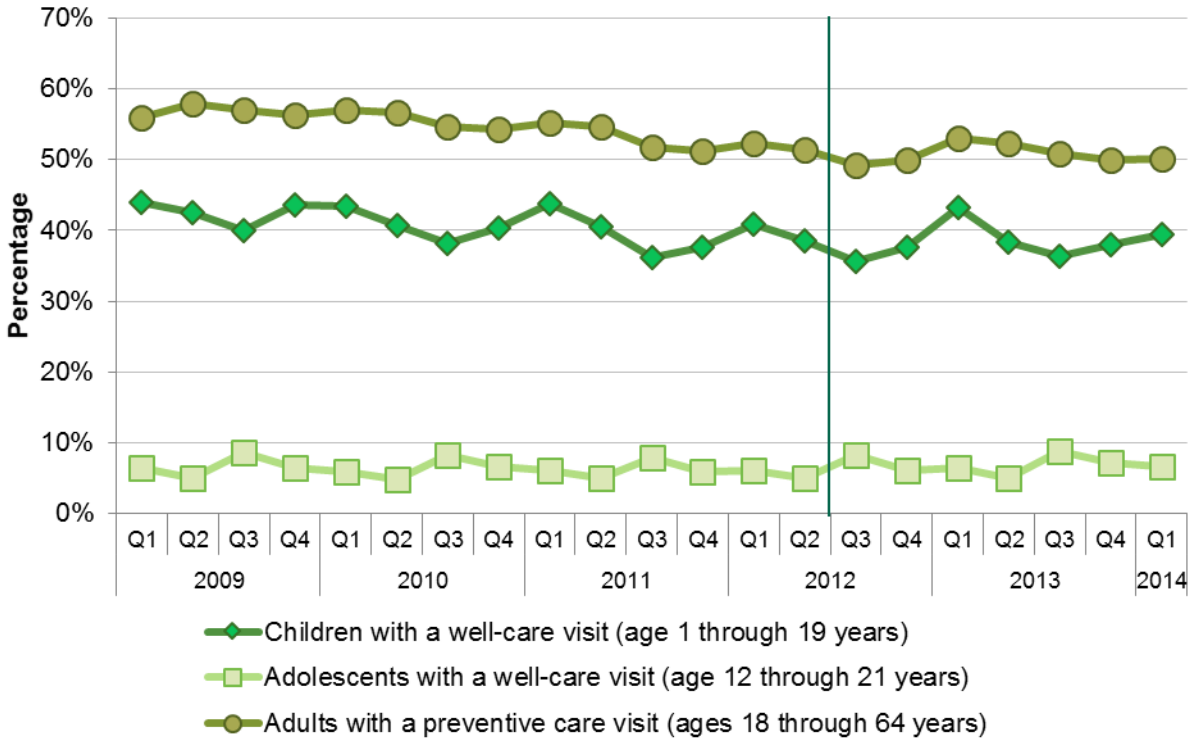
Note: The adjusted data were based on predications from a multivariate model that controlled for demographic characteristics, county of residence, time trend, and the overall level of transformation of CCOs. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

CCO = Coordinated Care Organization; OHA = Oregon Health Authority

Preventive care across the life span. Rates of preventive care were relatively stable during the five-year period, although utilization seemed to be declining somewhat for both children and adults (Figure III.4). Nevertheless, the rates do not appear to exhibit a noticeable change after the introduction of CCOs, and the multivariate analyses do not indicate that changes in the outcome measures were associated with the demonstration. We note that our measures of child well care and adolescent wellness visits differ from what OHA reports. OHA reports receipt of annual wellness care for children and adolescents, whereas we measured these outcomes at the quarterly level to improve our ability to detect changes when they occur. When we estimate annual visits, we find that 85.4 percent of children had a well-child visit in 2011 and that 85.5 percent had a well-child visit in 2012, whereas OHA reported 88.5 percent for 2011 and 87.0 percent for 2013. For adolescents, we estimate that 25.2 percent had a wellness visit in 2011 and 27.5 percent a wellness visit in 2013, whereas OHA reported 27.1 for 2011 and 29.2 for 2013. We assume that the discrepancies between our estimates and those reported by OHA are due in part to our inability to include denied claims, which is part of the specifications for these measures.

We did not detect a change in quarterly rates of preventive care receipt after the introduction of CCOs in 2012.

Figure III.4. Percentage of enrollees with a preventive or well-care visit, by age group and quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

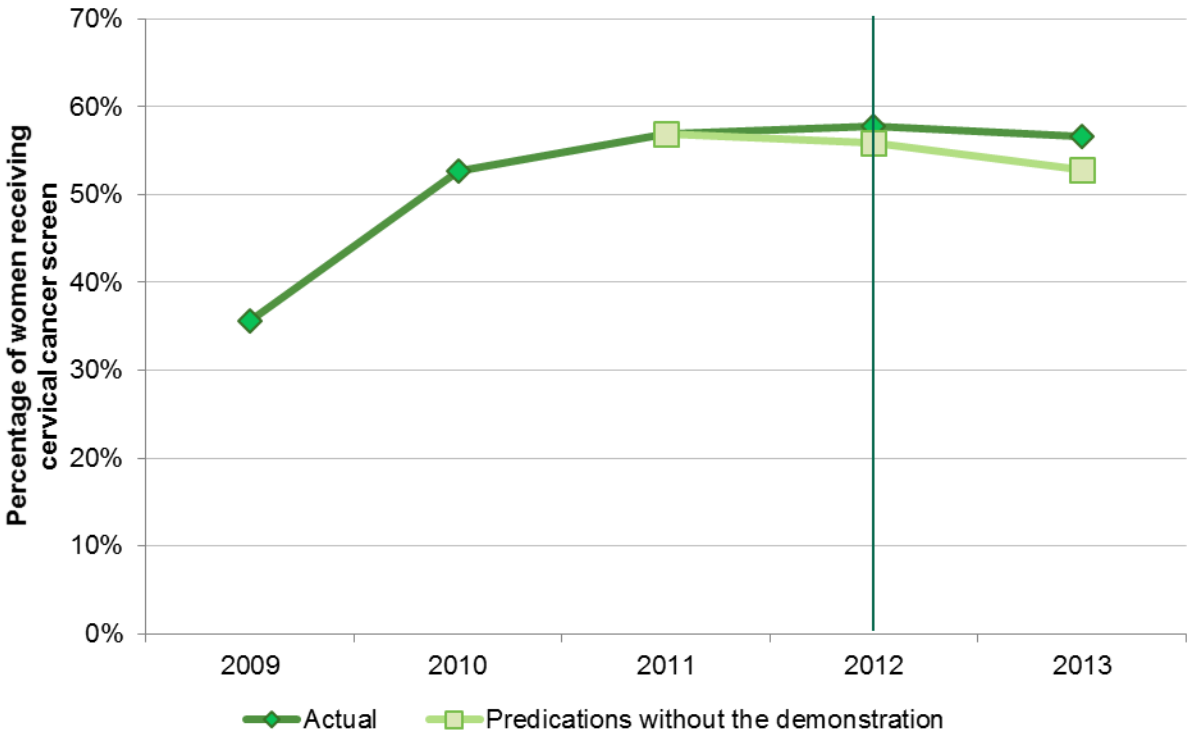
Note: Reported rates are actual rates unadjusted for demographics or other factors. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

OHA = Oregon Health Authority

Cervical cancer screening. Cervical cancer screening among women ages 21 to 64 appears to have held steady at about 57 percent after the introduction of CCOs (Figure III.5).[26] When adjusted for demographic characteristics and other factors, the multivariate analyses indicate that cervical cancer screening rates may have declined slightly in 2013 if the CCOs had not been introduced, pointing to a small but positive association with implementation of the demonstration. Again, any discrepancies between what is reported below and what is reported by OHA may in part be due to not including denied claims when estimating outcomes.

We found that the introduction of CCOs in 2012 was associated with a small positive increase in the annual rate of cervical cancer screening and these screenings would have declined slightly if the demonstration had not occurred.

Figure III.5. Actual and adjusted percentages of women who received a cervical cancer screening, by year, 2009 through 2013



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through December 31, 2013.

Note: The adjusted percentages were based on predications from a multivariate model that controlled for demographic characteristics, county of residence, time trend, and the overall level of transformation of CCOs. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

CCO = Coordinated Care Organization; OHA = Oregon Health Authority

[26] OHA estimates for this measure (which also include women dually eligible for Medicare and Medicaid) indicate that cervical cancer screening rates declined slightly from 56.1 percent in 2011 to 53.3 percent in 2013. Our estimates of cervical cancer screening rates may differ slightly from OHA reports because we were unable to include denied claims in our estimates, which are part of the specifications for this measure.

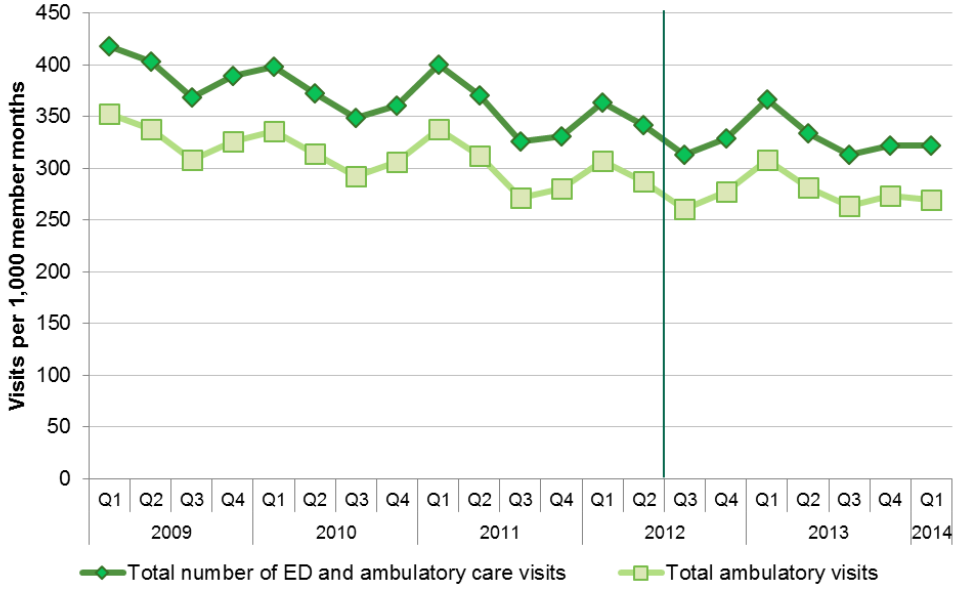
2. Ensuring appropriate care in appropriate settings

As part of Oregon's transformation, OHA seeks to ensure that people receive care in the most appropriate setting when they need it. To assess the appropriateness of care settings, we analyzed the utilization of ambulatory and emergency department (ED) visits, both combined and as separate measures. OHA also tracks these measures, and the ED visit rate was part of the measure set for incentive payments to CCOs in 2013.

We did not detect a change in quarterly rates of ambulatory care or ED visits, either separately or combined, after CCOs were introduced in 2012.

The combined measure of ambulatory and ED visits shows a steady decline since 2009 (Figure III.6). In 2009, these visits were averaging about 395 visits per 1,000 member months each quarter and by 2013 they had declined to about 333 visits per 1,000 member months each quarter. Ambulatory care visits make up the majority of the visits captured in the combined measure, but ED visits also declined during this period, falling from an average of about 64 visits per 1,000 member months each quarter during 2009 to about 52 visits each quarter during 2013 (Figure III.7).[27] When we assessed utilization in a multivariate context, we found that the introduction of CCOs was not associated with a change in the number of ambulatory care and ED visits, both combined and separately. Our estimated rate of ambulatory care visits is lower than what OHA reports and we assume that the discrepancy, in part, is due to our exclusion of older adults and other beneficiaries dually eligible for Medicaid and Medicare.

Figure III.6. ED and ambulatory care visit rates, by quarter, January 2009 through March 2014



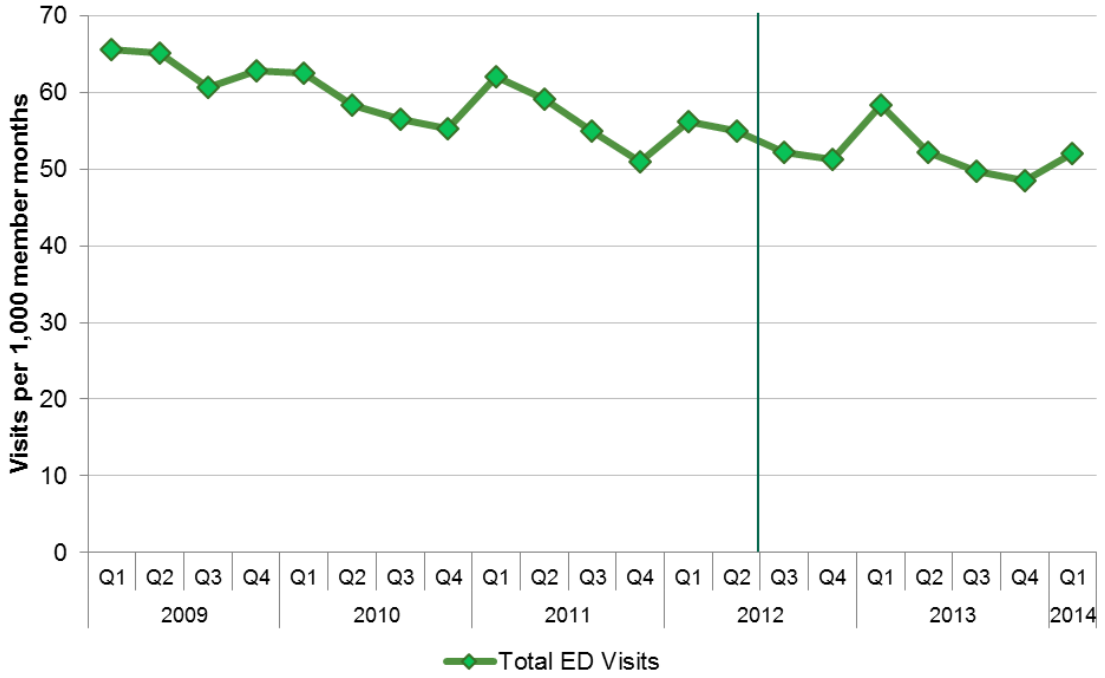
Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

Note: Reported rates are actual rates unadjusted for demographics or other factors. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

ED = emergency department; OHA = Oregon Health Authority

[27] OHA also reports declines in both measures, from 364.2 ambulatory care visits per 1,000 member months in 2011 to 323.5 visits in 2013 and from 61.0 ED visits per 1,000 member months in 2011 to 50.5 visits in 2013.

Figure III.7. ED visit rates, by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

Note: Reported rates are actual rates unadjusted for demographics or other factors. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

ED = emergency department; OHA = Oregon Health Authority

3. Improving behavioral and physical health coordination

An important feature of the demonstration is the global budget received by the CCOs for behavioral and physical health services. The budget was designed in part to create incentives for the CCOs to integrate service categories. To assess whether the early phase of the demonstration is associated with changes in outcomes for enrollees with mental illness, we assessed ED and ambulatory visits for mental illness, both combined and separately; we also assessed whether enrollees received follow-up care within seven days of an inpatient stay for treatment of mental illness.

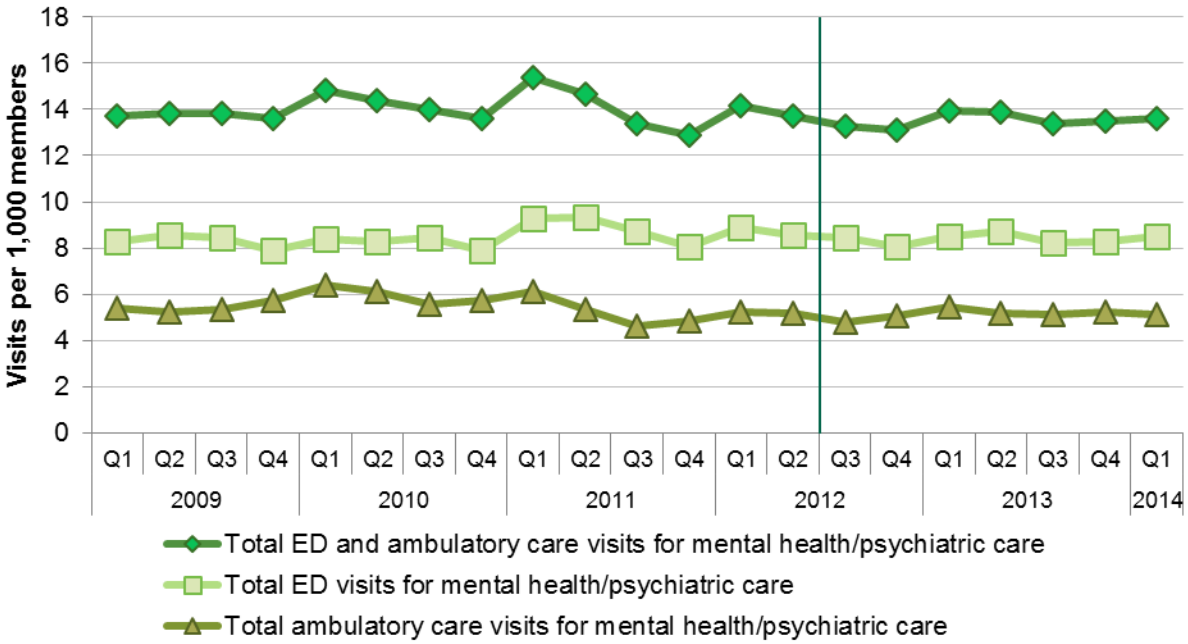
ED and ambulatory care visits for mental health care. The data in Figure III.8 suggest that, before the demonstration began, rates of ED and ambulatory care visits, individually and overall, were volatile over the calendar year, suggesting important seasonality patterns.[28] However, the volatility appears to have resolved somewhat, and utilization became more uniform on a quarterly basis as of 2012. Nevertheless, we observed no obvious trend in the unadjusted measures, and the multivariate analyses that control for the pre-demonstration

We did not detect a change in quarterly rates of ED and ambulatory care visits for mental illness, either separately or combined, after the introduction of CCOs in 2012.

[28] Oregon has not used benefit limits for mental health services.

trend suggest that the ED and ambulatory care visit rates for mental health care did not change significantly after the CCOs were introduced.

Figure III.8. ED and ambulatory care visits for mental health care per 1,000 members, by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

Notes: Reported rates are actual rates unadjusted for demographics or other factors. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

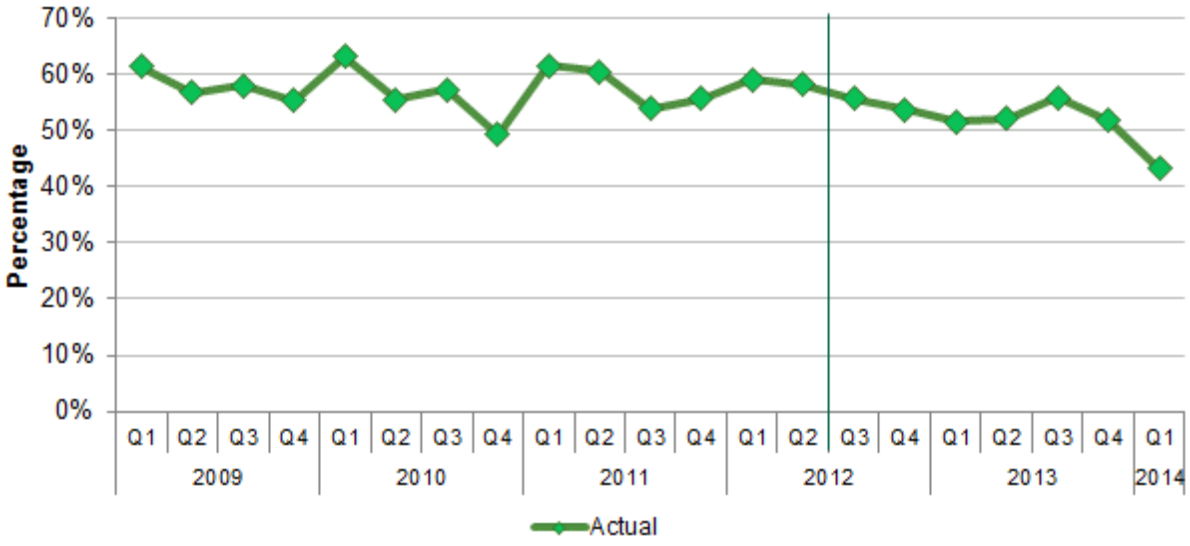
ED = emergency department; OHA = Oregon Health Authority

Follow-up care after hospitalization for mental illness. The data in Figure III.9 suggest that the percentage of enrollees receiving follow-up care within seven days of a hospitalization for mental illness became somewhat less variable on a quarterly basis and declined slightly after the CCOs were introduced. However, the decline was not found to be statistically significant suggesting that the rate of follow-up care did not change after the introduction of the CCOs in 2012.

The data in Figure III.9 do not match OHA estimates for calendar years 2011 and 2013, which showed that the percentage of enrollees receiving follow-up care after a hospitalization for mental illness increased from 65.2 percent in 2011 to 67.6 percent in 2013. We can identify at least three factors that may contribute to the differences between what is reported here and what OHA reports. First, the different approaches to controlling for continuous enrollment may partly explain the differences. In addition, to controlling for continuous enrollment at the program level rather than at the CCO level as OHA does, Mathematica also required that the person be enrolled in Medicaid all three months of a specific quarter, whereas OHA only required 30 consecuitive days of enrollment after discharge from inpatient care. This difference means that the estimates presented in this report do not include people who transition from an acute hospitalization for a

mental health condition to the state hospital for longer term treatment.[29] Second, our inability to include denied claims, which are part of the specifications for this measure, may also explain part of the discrepancy. Third, our exclusion of enrollees dually eligible for Medicaid and Medicare may have contributed to the lower rate and the decline as well. People who become eligible for Medicare on the basis of disability have high rates of mental illness, and it is possible that our analysis excluded enrollees with the most severe forms of mental illness. If so, then our estimates reflect the experiences of people with milder forms of mental illness. In addition, during the early phases of the demonstration the CCOs, with support from the Transformation Center, have been focused on identifying and reaching out to members who are high service utilizers. If these high utilizers are disproportionately dually eligible for Medicare and Medicaid, then the results of that additional outreach may not be reflected in our estimates. More research that would include disaggregating results by dual eligibility status is required to investigate such a possibility. [30, 31]

Figure III.9. Percentage of enrollees who received follow-up care within seven days of a hospitalization for mental illness, by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

Notes: Included enrollees age 6 through 64. The adjusted percentages were based on predications based on a multivariate model that controlled for demographic characteristics, county of residence, time trend, and the overall level of transformation of CCOs. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

CCO = Coordinated Care Organization; OHA = Oregon Health Authority

[29] The state hospital is considered an Institution for Mental Diseases or IMD and by law, Medicaid programs cannot pay for care when adults between 18 and 65 years of age are admitted to an IMD. States typically disenroll Medicaid non-elderly adults enrollees when they enter IMDs.

[30] OHA has conducted some sensitivity analyses and believes that the exclusion of beneficiaries dually eligible for Medicare and Medicaid does not explain the discrepancy between the estimates reported in this chapter and those reported by OHA.

[31] In addition, although we received the last round of claims data in July 2014, our data suggest we may have had an incomplete claims history for the last quarter of 2013 and the first quarter of 2014.

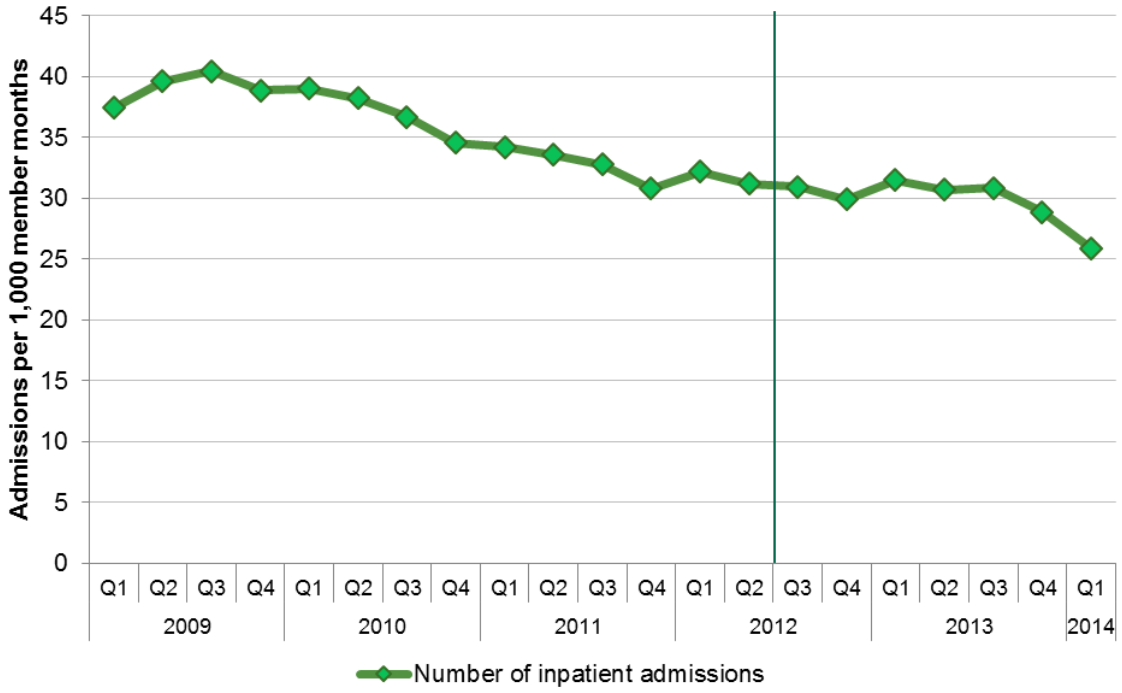
4. Reducing preventable hospitalizations

To understand more fully the context in which rates of preventable hospitalizations may be changing, we first present information on the overall rate of inpatient admissions and two composite measures of potentially preventable hospitalizations developed by the Agency for Healthcare Research and Quality (AHRQ)—one for chronic conditions and the other for acute conditions. We then present the results for the four condition-specific prevention quality indicator (PQI) measures that OHA tracks at the CCO level.

We did not detect a change in quarterly inpatient admission rates after the introduction of CCOs in 2012.

Inpatient admissions. In Figure III.10, we illustrate the rate of decline of inpatient admissions among Medicaid enrollees well before the introduction of CCOs. The rate did not change immediately after introduction of CCOs in 2012. In multivariate analyses that controlled for the pre-demonstration trend and general characteristics of the population (age, gender, race/ethnicity, county of residence), the demonstration was not associated with any type of change in the overall downward trend in inpatient admissions. The decline seen in the last two quarters of data was not enough to change the overall trend in the post-demonstration period and may reflect an incomplete claims history for those quarters, although the last claims file we received was extracted in July 2014.

Figure III.10. Inpatient admissions per 1,000 member months, by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

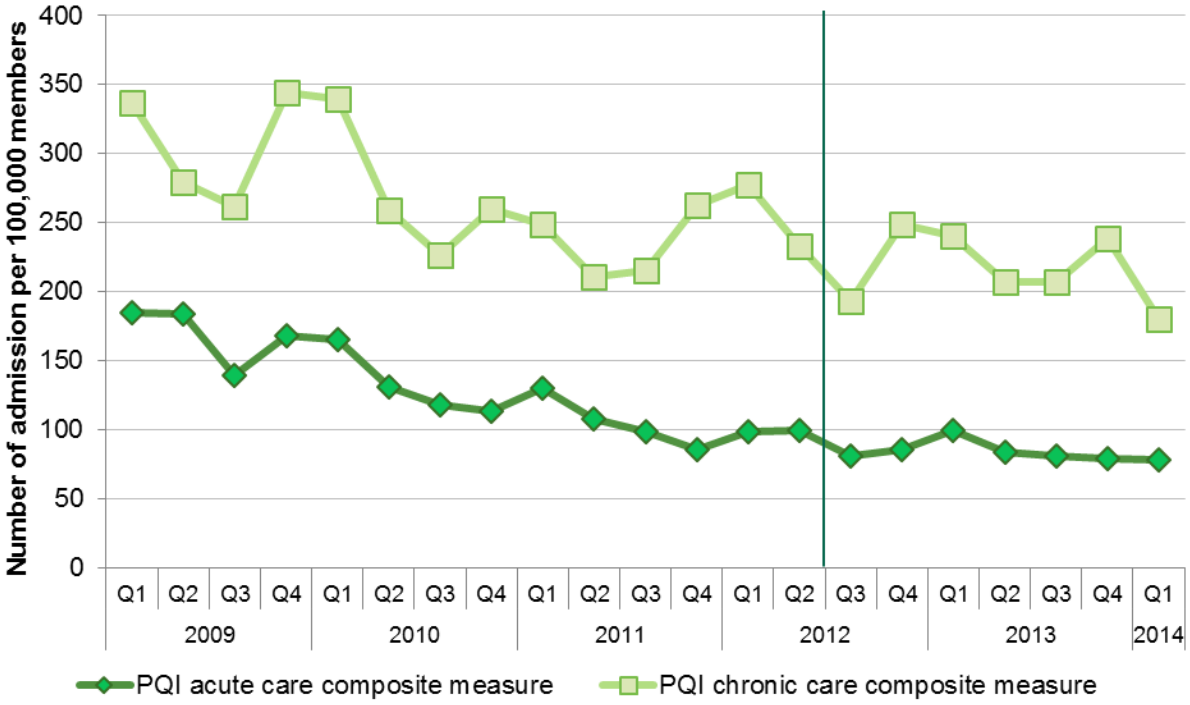
Notes: Reported rates are actual rates unadjusted for demographics or other factors. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

OHA = Oregon Health Authority

Composite Prevention Quality Indicators. Given that inpatient admissions had been exhibiting a downward trend since 2009, we were not surprised to find that the composite PQIs for chronic and acute care conditions were also on a general downward trajectory during the same period (Figure III.11) and that the demonstration was not associated with any change in the trend in the multivariate analysis.

We did not detect a change in quarterly rates of composite PQIs for chronic and acute conditions after the introduction of CCOs in 2012.

Figure III.11. Prevention quality indicator rates for chronic and acute care prevention quality indicators, by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

Notes: Reported rates are actual rates unadjusted for demographics or other factors. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

OHA = Oregon Health Authority; PQI = prevention quality indicator

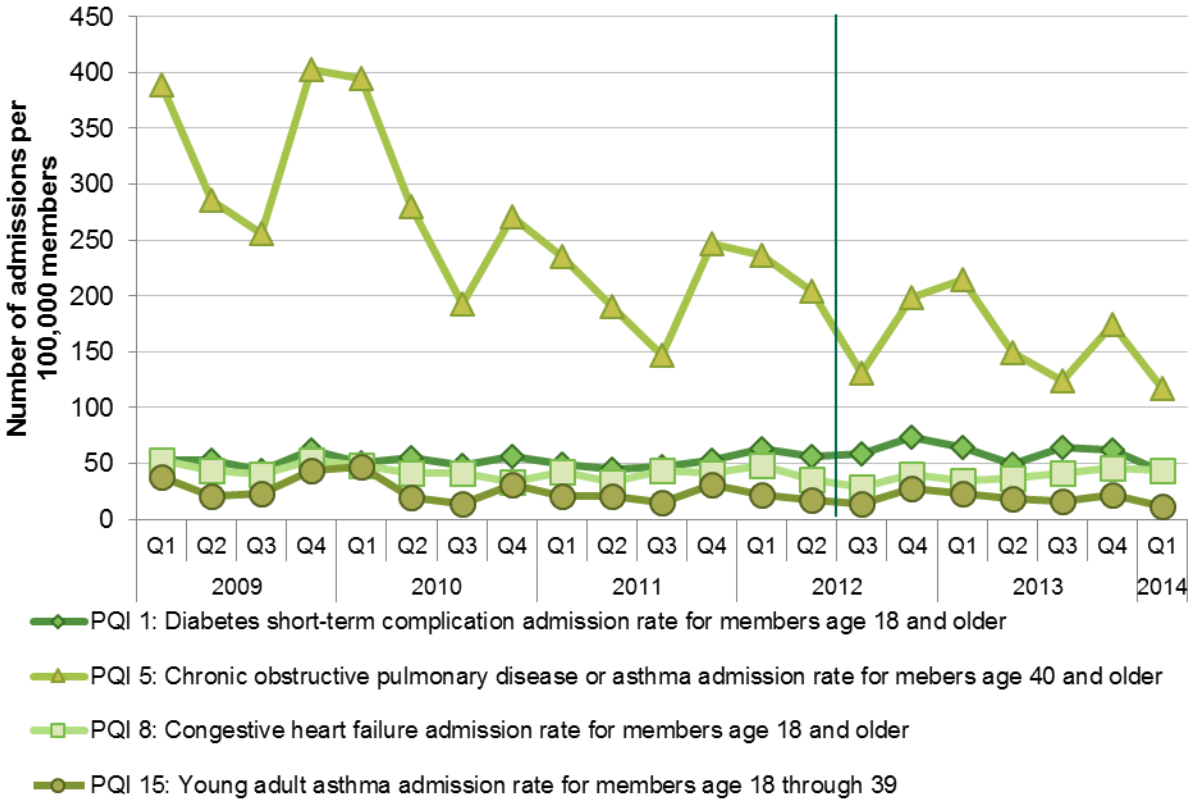
Condition-specific prevention quality indicators. OHA tracks the performance of the CCOs on four condition-specific PQIs. In Figure III.12, we illustrate how the rate of PQI 5 (admissions for chronic obstructive pulmonary disease or asthma) exhibited a seasonal pattern and was generally heading downward while the rates for the other three PQIs were relatively flat during the five-year period. The rates reported here are lower than what OHA reports. For example, OHA reports that rates for PQI 1 increased from 192.9 per 100,000 member years in 2011 to 211.5 in 2013. Conversely, OHA reports

We did not detect a change in quarterly rates of four PQIs for diabetes, COPD or asthma, congestive heart failure, or asthma among young adults after the introduction of CCOs in 2012.

a decline in PQI 5 from 454.6 per 100,000 member years in 2011 to 308.1 in 2013. The multivariate analyses also suggest that the trend in the four PQIs did not change immediately after the introduction of CCOs.

The discrepancy between the PQI rates reported here and those reported by OHA most likely arises from slightly different methodologies. Mathematica required beneficiaries to be enrolled for the full quarter, wherease OHA did not require continuous enrollment for the PQI measures. This means that our sample of beneficiaries is a more restricted group than what OHA uses for its estimates. In addition, Mathematica's exclusion of older adults and those dually eligible for Medicare and Medicaid may contribute to the differences. OHA has done some testing and believes that the exclusion of those dually eligible most likely contributes to the discrepancy for PQI 5 admissions for chronic obstructive pulmonary disease or asthma) and PQI 8 (admissions for congestive heart failure), but not the other two.

Figure III.12. Admission rates for selected condition-specific prevention quality indicators, by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

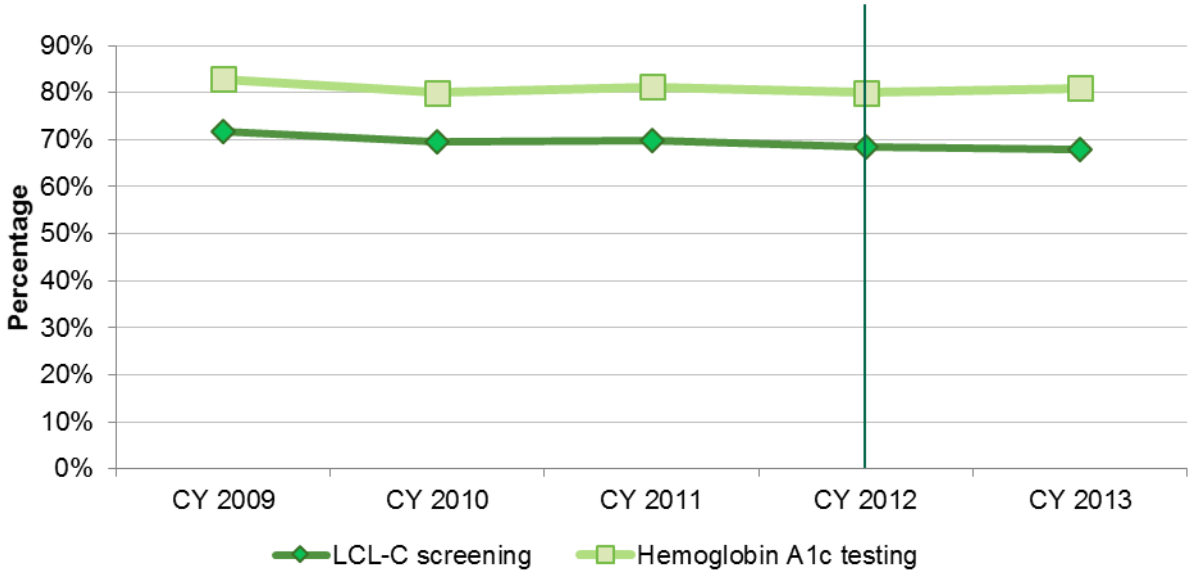
Note: Reported rates are actual rates unadjusted for demographics or other factors. PQI 1 represents diabetes short-term complication admission rate for members age 18 and older, PQI 5 represents chronic obstructive pulmonary disease or asthma admission rate for members age 40 and older, PQI 8 represents congestive heart failure admission rate for members age 18 and older, and PQI 15 represents young adult asthma admission rate for members age 18 through 39. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

OHA = Oregon Health Authority; PQI=prevention quality indicator

5. Addressing discrete health issues (diabetes care)

The last category of outcomes measured chronic condition care for adults with diabetes. The low-density lipoprotein cholesterol (LDL-C) screening and hemoglobin (Hb) A1c testing are commonly provided as part of comprehensive care for people with diabetes. The LDL-C screen helps diabetics monitor their cholesterol levels and potentially avoid complications related to heart disease and stroke, whereas the HbA1c test helps diabetics monitor their blood sugar levels. As the data in Figure III.13 indicate, LDL-C screens and Hb-Alc tests are common among non-elderly adults with diabetes in Oregon's Medicaid program; however, they show a modest decline since 2009. OHA tracks the measures and reports that both have increased slightly—LDL-C screening rates from 67.2 percent in 2011 to 70.1 percent in 2013 and HbA1c testing from 78.5 percent in 2011 to 79.3 percent in 2013. We assume that the discrepancy between the data in Figure III.13 and OHA's reports results primarily from our exclusion of enrollees dually eligible for Medicare and Medicaid. The multivariate analyses indicate that the demonstration was not associated with any type of change in these rates.

Figure III.13. Percentage of adults with diabetes who received LDL-C screening and HbA1c testing, by year, 2009 through 2013



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through December 31, 2013.

Note: Includes all adults age 18 through 64. Reported rates are actual rates unadjusted for demographics or other factors. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

CY = calendar year; LDL = low-density lipoprotein cholesterol; Hb = Hemoglobin; OHA = Oregon Health Authority

6. Association between stage of CCO transformation activities and changes in post-demonstration outcomes

We did not detect a change in annual rates of LDL-C screening and HbA1c tests among adults with diabetes after the introduction of CCOs in 2012.

Given that the evaluation is assessing the earliest stages of the CCO model and that most OHA and CCO activities have focused on laying the foundation needed for change, it is not surprising that the descriptive and

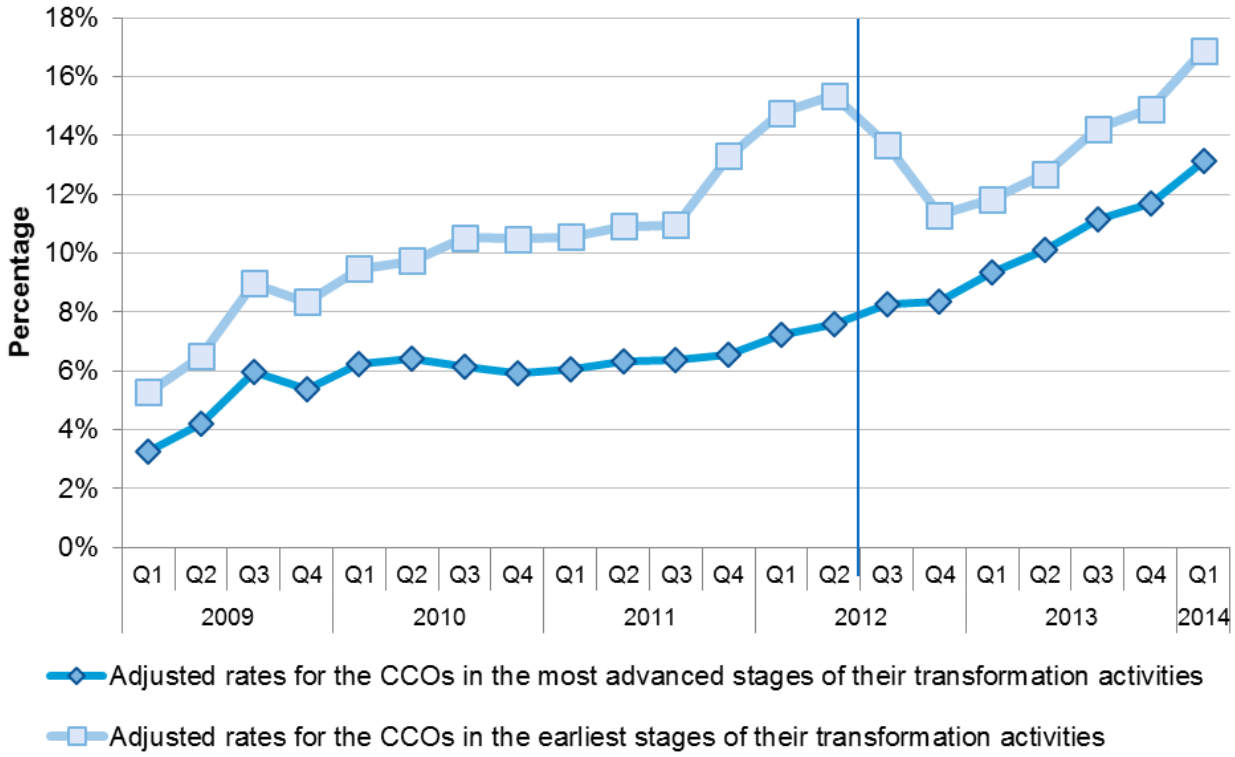
multivariate analyses presented above did not detect many changes in outcomes after the introduction of CCOs. We detected a positive association for well-child visits by 15 months of age and for cervical cancer screening for women and a negative association for follow-up within seven days of a hospitalization for mental illness. However, these state-level results mask some important variations among the CCOs that were detected by the multivariate analyses. The CCO-level variations appeared in the analyses of several primary care measures, ED and ambulatory care visits, and inpatient admissions.

We found that after the introduction of CCOs in 2012, developmental screening rates were statistically significantly higher among the three CCOs in the earliest stages of their transformation activities relative to the three CCOs in the most advanced stages of their activities.

Improving primary care for all populations. The multivariate analyses point to an association between developmental screens and the stage of CCO transformation activities. The data in Figure III.14 indicate that, throughout the period covered by the analyses, developmental screening rates were higher among the three CCOs in the earliest stages of their transformation activities compared to the three CCOs at the most advanced stages. In addition, in the period leading up to the implementation of the Section 1115 demonstration, it appears that screening rates accelerated among members of the predecessor MCEs of the three CCOs in the earliest stages of their transformation activities. After the demonstration began, screening rates among the CCOs in the earliest stages of transformation activities remained about 3 percentage points above rates of the most-transformed CCOs.

Drawing any firm conclusions is difficult. The analysis is detecting an important difference between the two types of CCOs that may not necessarily be related to the CCOs' level of transformation activities. For example, the CCOs in the earliest stages of their transformation activities may have forged local community partnerships or initiated outreach programs that support developmental screening, even though the same CCOs may not be as far along in other aspects of their transformation plans. In addition, we know from information gathered by the formative evaluation that CCOs varied in what they chose to focus on during this initial period. Most CCOs could not advance their activities for all eight elements of transformation and they had to pick and choose which elements received more resources over other elements. The results warrant further research to develop a better understanding of the differences captured by the analysis.

Figure III.14. Developmental screening by 36 months, by stage of CCO transformation activities and by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

Notes: The adjusted rates are based on predications from a multivariate model that controlled for demographic characteristics, county of residence, time trend, and the overall level of transformation of CCOs. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

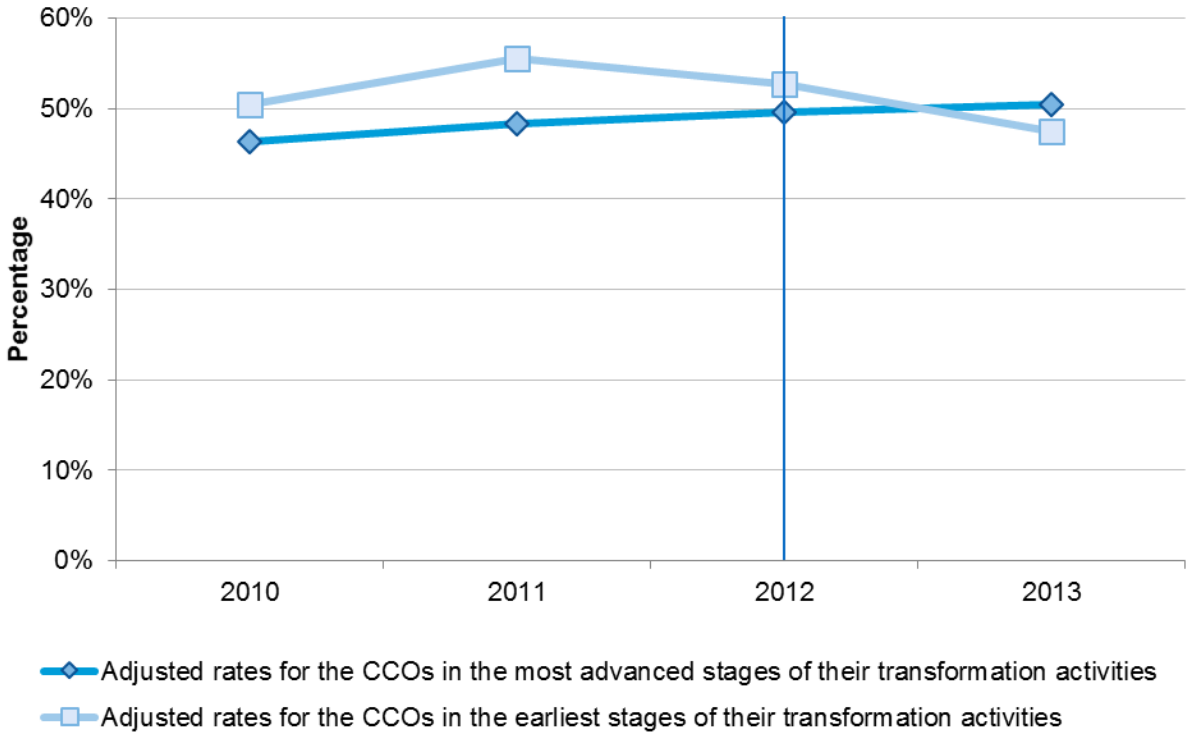
CCO = Coordinated Care Organization; OHA = Oregon Health Authority

As noted, the demonstration is associated with an improvement in well-child visits during the first 15 months of life—a measure also associated with the stage of the CCOs' transformation activities. We found that well-child visits declined among the three CCOs in the earliest stages of their transformation activities and increased slightly among the three CCOs in the most advanced stages of their activities. As the data in Figure III.15 indicate after adjustments for demographics and other factors, rates of well-child visits were initially higher for the CCOs in the earliest stages relative to the CCOs in the most advanced stages, but the pattern shifted after the demonstration began. In 2013, the receipt of at least six well-child visits by 15 months was 3 percentage points lower among the CCOs in the earliest stages of their transformation activities relative to the CCOs in the most advanced stages. Even though the results warrant further study and possible follow-up with the CCOs before arriving at any firm

We found that after the introduction of CCOs in 2012, well-child visits within the first 15 months of life were statistically significantly higher among the three CCOs in the most advanced stages of their transformation activities relative to the three CCOs in the earliest stages of their activities.

conclusions, they suggest that the CCOs in the earliest stages may have focused more activities that affect other performance measures compared to the CCOs in the most advanced stages. At a minimum, a longer time frame for the post-demonstration period would help determine whether the initial trend holds as the demonstration matures.

Figure III.15. Percentage of children with at least six well-child visits within the first 15 months of life, by stage of CCO transformation activities and by year, 2010 through 2013



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through December 31, 2013.

Notes: The adjusted rates are based on predications from a multivariate model that controlled for demographic characteristics, county of residence, time trend, and the overall level of transformation of CCOs. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

CCO = Coordinated Care Organization; OHA = Oregon Health Authority

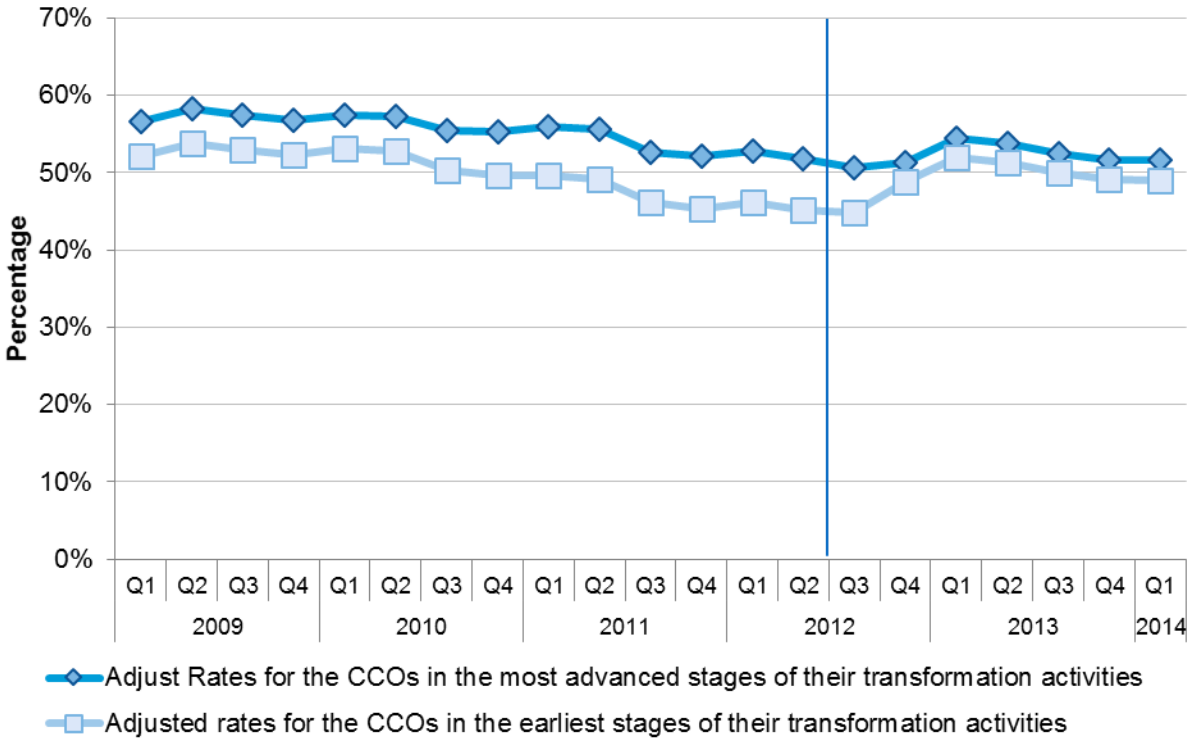
In the multivariate analyses, we also found that the CCO's stage of transformation activities was associated with changes in adolescent wellness care and adult preventive care visits after the introduction of CCOs. Among adolescents, those at the three CCOs in the earliest stages of their transformation activities were consistently more likely to have experienced a wellness visit relative to those at the CCOs in the most advanced stages of their activities. In addition, the differential grew slightly after the demonstration began. However, the differential is small, one percentage point or less, and we observed considerable volatility in the quarterly measure, with much higher rates of adolescent wellness visits in the third quarter of the year, which is when school physicals typically take place. Future analyses of annual measures of adolescent wellness care are needed to confirm the robustness of the results.

Among adults, receipt of a preventive care visit was more common among members of the three CCOs most advanced on their transformation activities compared to members of the three CCOs in the earliest stages of their activities (Figure III.16). However, the differential based on adjusted measures that control for demographic characteristics and other factors narrowed after the demonstration began and ranged between 2 and 6 percentage points depending on the quarter. This means that adults in the early stage CCOs were catching up to those in advance stage CCOs.

We found that after the introduction of CCOs in 2012, the adult preventive care visit rate among the three CCOs in the earliest stages of their transformation activities began to catch up with the visit rate at the three CCOs in the most advanced stages of their activities.

As for the other measures, the results are difficult to interpret, and we cannot rule out the possibility that we detected a change related to other factors, such as a special initiative within the CCOs in the earliest stages to promote adult preventive care visits.

Figure III.16. Percentage of adults with a preventive care visit, by stage of CCO transformation activities and quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

Notes: The adjusted rates are based on predications from a multivariate model that controlled for demographic characteristics, county of residence, time trend, and the overall level of transformation of CCOs. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

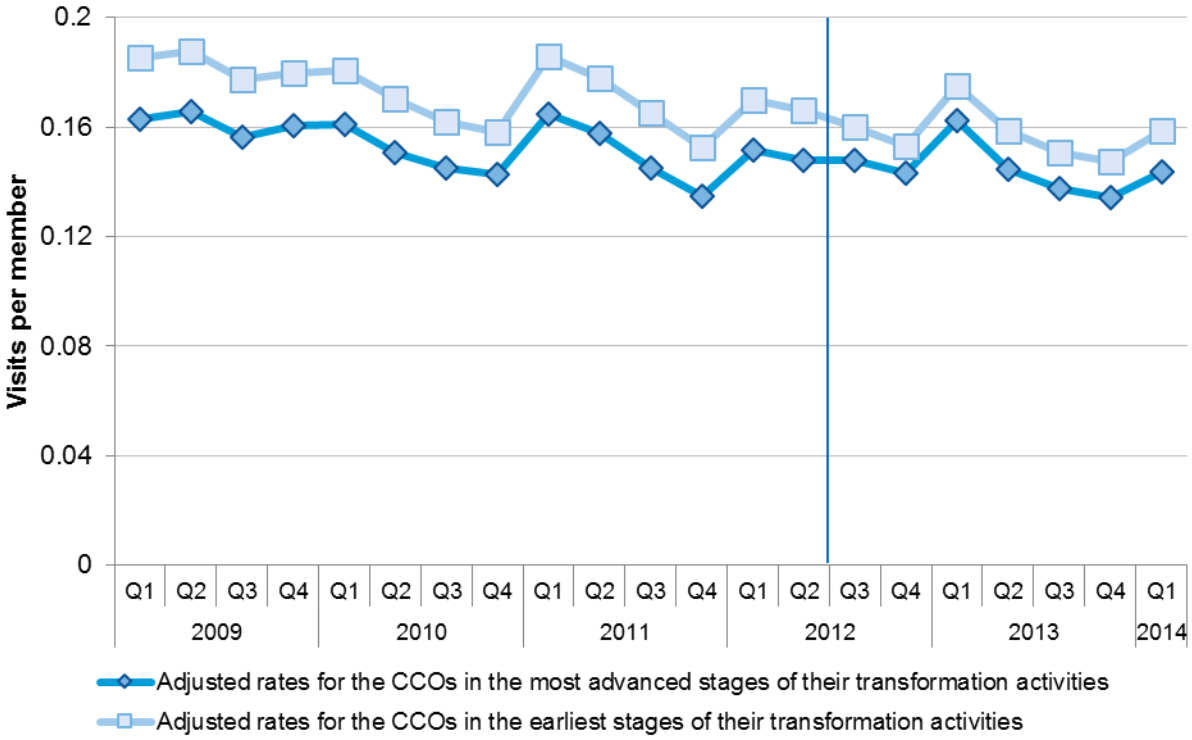
CCO = Coordinated Care Organization; OHA = Oregon Health Authority

Ensuring appropriate care in appropriate places. When we assessed ED and ambulatory visits in a multivariate context, we found that the stage of CCO transformation activities was associated with changes in the post-demonstration trend for all three measures. After the introduction of CCOs, relative to members of the three CCOs most advanced in their transformation activities, members of the three CCOs in the earliest stages of activities experienced a decline in ED visits and an increase in ambulatory care visits. As a result, the rates of ED and ambulatory visits began to converge as the ED and ambulatory visit rates for members of the CCOs in the earliest stages caught up with the rate of members of the CCOs in the most advanced stages. Figure III.17 presents the data for ED visits, a similar pattern is observed for ambulatory care visits. For example, before the CCOs were introduced, for every one ED visit among members of the advanced-stage CCOs, members of the early-stage CCO had 1.13 ED visits after the data are adjusted for differences in demographic characteristics, the time trend, and other factors. After the introduction of CCOs, the ratio declined to 1.09 ED visits among members of the early-stage CCOs for every one visit among those in the advanced-stage CCOs.

We found that after the introduction of CCOs in 2012, the rate of ED visits declined and ambulatory care visits increased among members of the three CCOs in the earliest stages of their transformation activities relative to those at the three CCOs in the most advanced stages of their activities. In summary, the visit rates at the early-stage CCOs converged to the visit rates at the advance-stage CCOs.

The decline in ED visits may not be surprising given that ED visits are part of the incentive payment program for CCOs. Moreover, OHA reports that all CCOs experienced a decline in both ED and ambulatory visits between 2011 and 2013. However, interpreting the decline in the differential between the early- and advanced-stage CCOs is challenging because the multivariate models did not control for changes in health status that could have occurred over the same period and that could explain these trends. Nevertheless, the results indicate that utilization rates of ED and ambulatory care were becoming more uniform across the two groups of CCOs after the demonstration began. In addition, the relatively larger declines in ED visits among members of the early-stage CCOs may be indicative of an important response to the incentive payments.

Figure III.17. ED visit rates, by stage of CCO transformation activities and by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

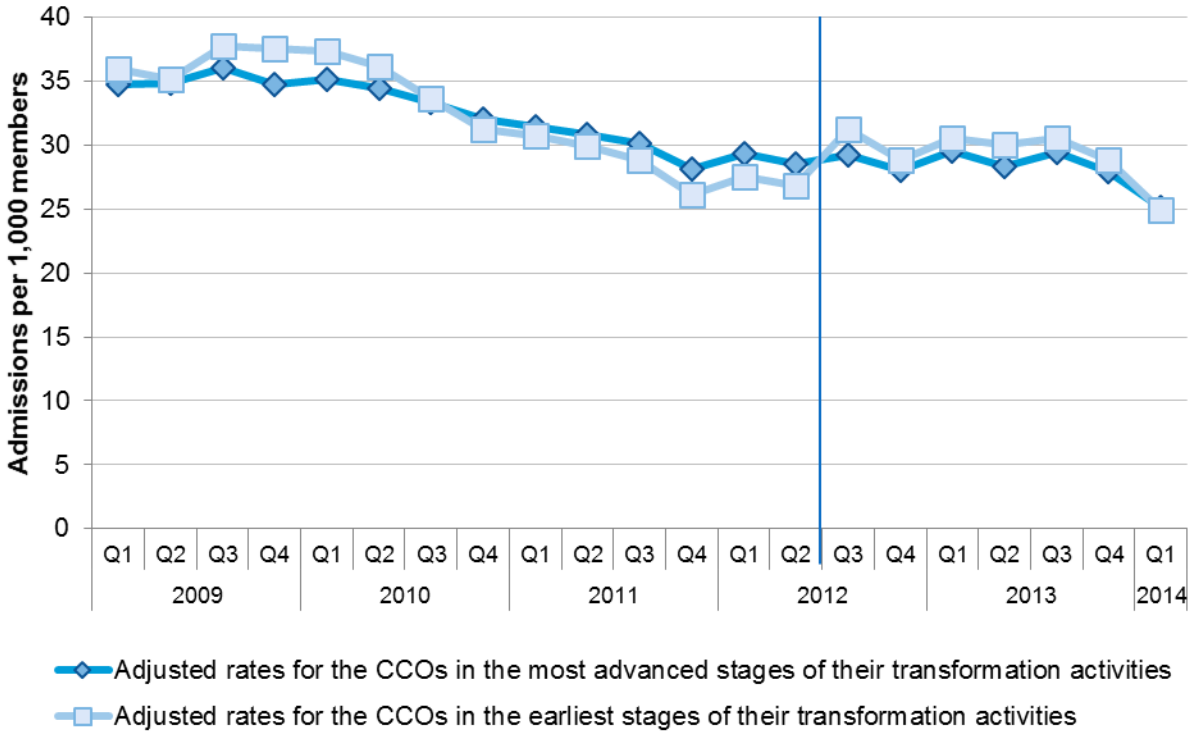
Notes: The ratios were based on predicted means for each group of CCOs that adjusted for basic demographics, the time trend, and other factors. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

CCO = Coordinated Care Organization; ED = emergency department; OHA = Oregon Health Authority

Inpatient admissions. Our multivariate analyses suggest that the stage of CCO transformation activities is associated with post-demonstration changes in inpatient admissions. Enrollees in the three CCOs in the most advanced stages of their transformation activities experienced a statistically significant decline in inpatient admissions after the introduction of the CCO model relative to those in the three CCOs in the earliest stages of their activities, but the difference in inpatient admission rates between the two types of CCOs was small (frequently less than a 7 percent difference after the demonstration) (Figure III.18).

We found that after the introduction of CCOs in 2012, inpatient admissions declined among members of the three CCOs in the most advanced stages of their transformation activities relative to those at the three CCOs in the earliest stages of their activities.

Figure III.18. Inpatient admissions per 1,000 member months, by stage of CCO transformation activities and by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

Notes: The adjusted rates are based on predications from a multivariate model that controlled for demographic characteristics, county of residence, time trend, and the overall level of transformation of CCOs. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

CCO = Coordinated Care Organization; OHA = Oregon Health Authority

7. Changes in disparities after the introduction of CCOs

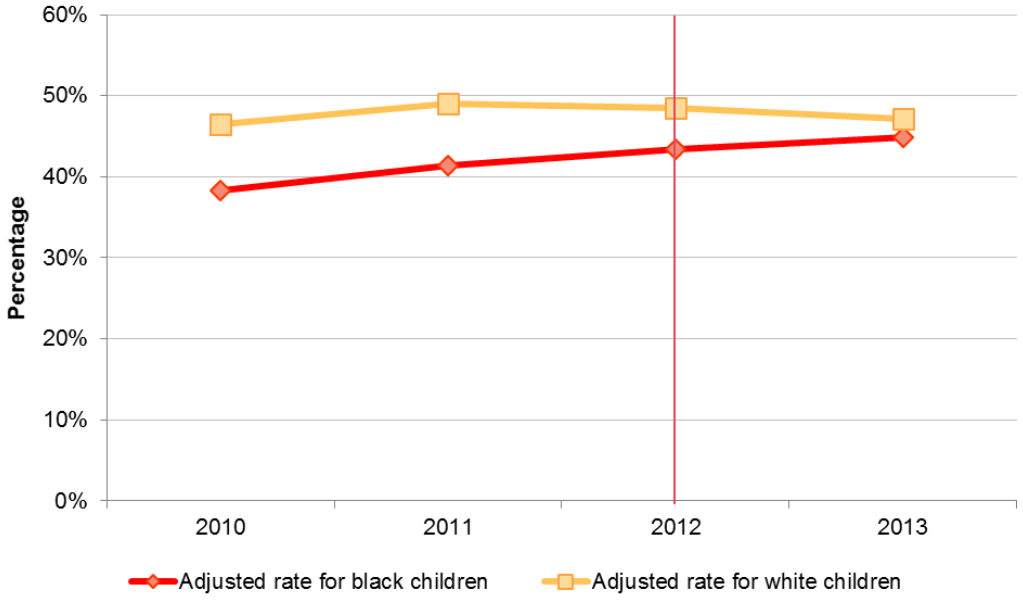
As part of the multivariate analyses, we also assessed whether race/ethnicity disparities changed at the state level after the introduction of CCOs. To identify the race/ethnicity of each person in the analyses, we used the race/ethnicity information available in the enrollment records we received. Race/ethnicity information in administrative data frequently contains errors, partly because the information is presented as mutually exclusive groups and we are not able to identify people with multiracial/multiethnic backgrounds. One data element identified the enrollee's race and a second data element identified whether the enrollee was Hispanic. As a result, the analyses presented below should be interpreted with caution and we recommend further research focused specifically on this topic before firm conclusions are drawn.

In the multivariate analyses we detected changes in disparities associated with the demonstration in several primary care measures, ED visits for mental health care, and the PQI measures. Below we only present statistically significant changes in disparities between a given minority and the non-minority white group. We do not present data for all race/ethnicity groups because the number of race/ethnicity groups makes graphic presentations difficult to read.

Improving primary care for all populations. An assessment of race/ethnicity differences in the receipt of well-child visits for infants indicates that, while the measure increased slightly for black minority children, it declined for white children (Figure III.19). [32] After controlling for demographic characteristics and other factors, the difference between black and white children was about 2 percentage points in 2013, down from 8 percentage points in 2010. The narrowing of the gap was attributable in part to a decline in the rate for white children.

After the introduction of CCOs in 2012, the black-white difference in the percentage of children with at least six well-child visits converged because the percentage for black children increased while the percentage for white children declined.

Figure III.19. Percentage of children with at least six well-child visits within the first 15 months of life, by race/ethnicity and by year, 2010 through 2013



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through December 31, 2013.

Note: The adjusted rates are based on predications from a multivariate model that controlled for demographic characteristics, county of residence, time trend, and the overall level of transformation of CCOs. The vertical bar marks the introduction of the 1115 demonstration program.

CCO = Coordinated Care Organization; OHA = Oregon Health Authority

Across the three age-based, preventive care visit measures, the multivariate analyses indicate that receipt of preventive care improved among Asian enrollees compared to white enrollees. Asian children were less likely to receive a well-child visit relative to white children, but the

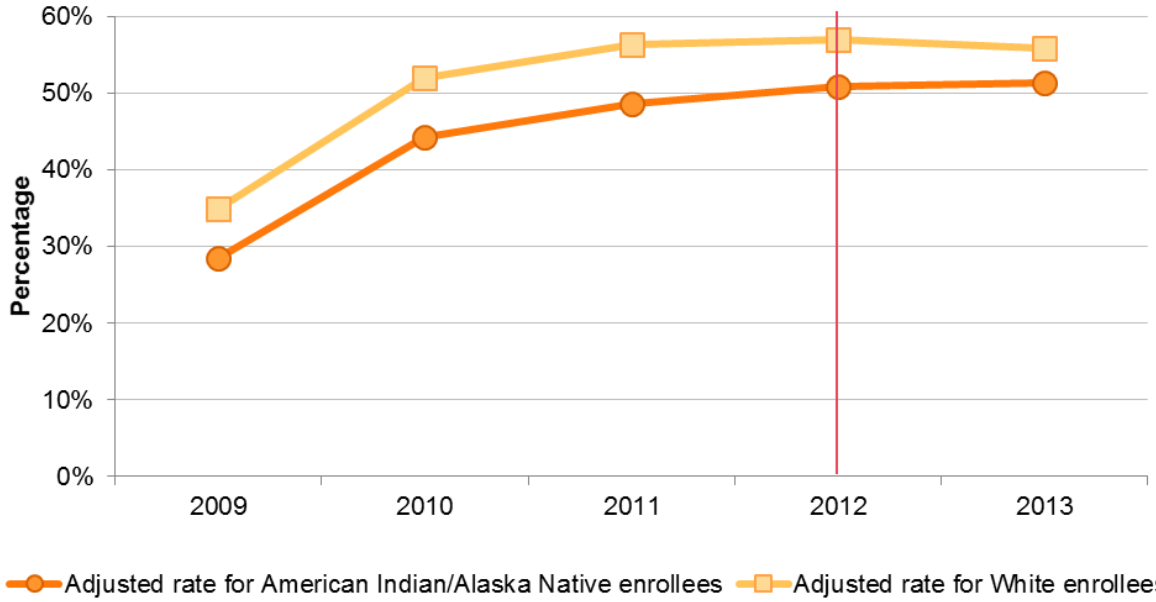
[32] In the multivariate models, static indicators captured the different race/ethnicity groups. Modeling approaches capable of capturing how time trends vary by race/ethnicity include the specification of independent time trends by race/ethnicity or a separate estimation model for each race or ethnic group. Future research could explore these alternative approaches to determine the robustness of race/ethnicity differences and whether the overall trend for any particular race/ethnic group changed after the demonstration began.

difference between the two groups narrowed slightly after the introduction of CCOs, from a 6 to 7 percentage point difference before the demonstration to a 5 percentage point difference after the demonstration. In contrast, Asian adolescents were consistently more likely to have a wellness visit relative to white adolescents; before the demonstration, the difference was one percentage point, and after the introduction of CCOs, it was a 2 or 3 percentage point difference depending on the quarter. Rates were increasing for both groups of adolescents and increased more rapidly among Asian youth. Asian adults were less likely to have a preventive care visit compared to white adults throughout the five years, and the difference narrowed slightly after the CCOs were introduced. Before the CCOs, the differential in the receipt of preventive care was about 9 to 10 percentage points, but it narrowed slightly to 7 to 8 percentage points after the introduction of CCOs.

The multivariate analyses also detected an improvement in cervical cancer screening rates for American Indian/Alaska Native (AI/AN) women relative to white women. AI/AN women consistently had lower cervical cancer screening rates compared to white women during the five-year period of interest, but the difference became less pronounced after the demonstration began, primarily because of increases in the rate for AI/AN women (Figure III.20). Before the demonstration, the difference between the two groups ranged from 7 to 8 percentage points but then dropped to 6 percentage points in 2012 and 5 percentage points in 2013.

After the introduction of CCOs in 2012, cervical cancer screening rates for American Indian/Alaska Native women improved relative to white women.

Figure III.20. Percentage of AI/AN and white women receiving a cervical cancer screening, by race/ethnicity and by year, 2009 through 2013



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through December 31, 2013.

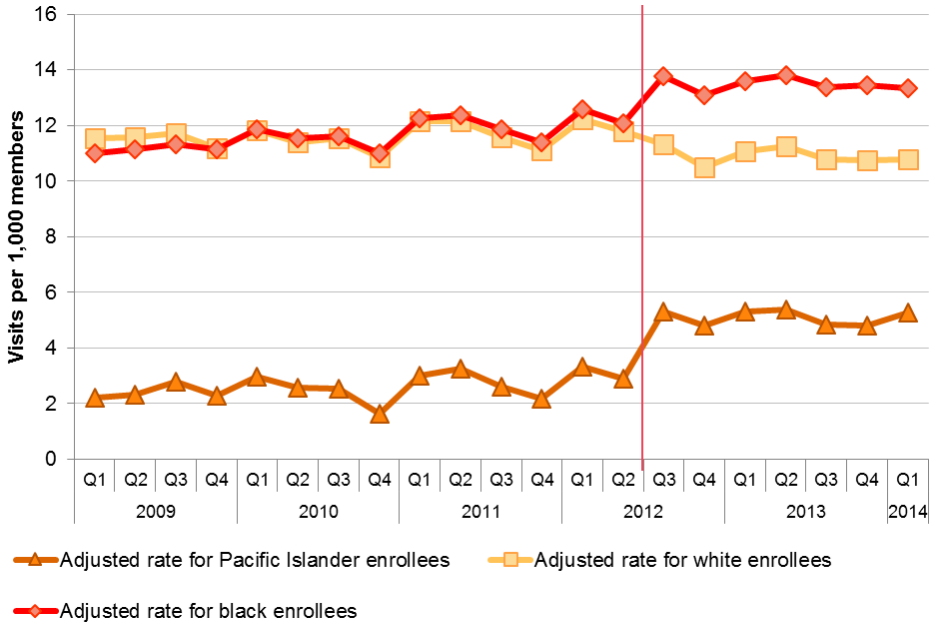
Note: The adjusted rates are based on predications from a multivariate model that controlled for demographic characteristics, county of residence, time trend, and the overall level of transformation of CCOs. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

AI/AN = American Indian/Alaska Native; CCO = Coordinated Care Organization; OHA = Oregon Health Authority

Improving behavioral and physical health coordination. The multivariate analyses of ED visits for mental health suggest that, after the introduction of CCOs, enrollees who were black or Pacific Islanders had a statistically significant increase relative to white enrollees in the rate of ED visits for mental health care.[33] In Figure III.21, we illustrate that, when ED visits for mental health conditions are adjusted for demographic characteristics and other factors, the rate of ED visits for mental health increased in the two minority groups after the CCOs were introduced while visits for white enrollees declined slightly. However, it is not clear that a change in ED visit rates represents a change in access to mental health services. Given that the multivariate analysis did not directly control for differences in health status or an array of other factors that may explain the changes, we cannot say conclusively that the changes by race/ethnicity are attributable to the introduction of CCOs. In addition, with the adjusted rates for Pacific Islanders considerably lower than for black or white enrollees, it is possible that different factors were influencing the changes for these two subgroups of enrollees.

After the introduction of CCOs in 2012, both Pacific Islanders and black enrollees experienced an increase in ED visits for mental health conditions relative to white enrollees who experienced a small decline.

Figure III.21. ED visits for mental health care per 1,000 members, by race/ethnicity and by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

Notes: The adjusted rates are based on predications from a multivariate model that controlled for demographic characteristics, county of residence, time trend, and the overall level of transformation of CCOs. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

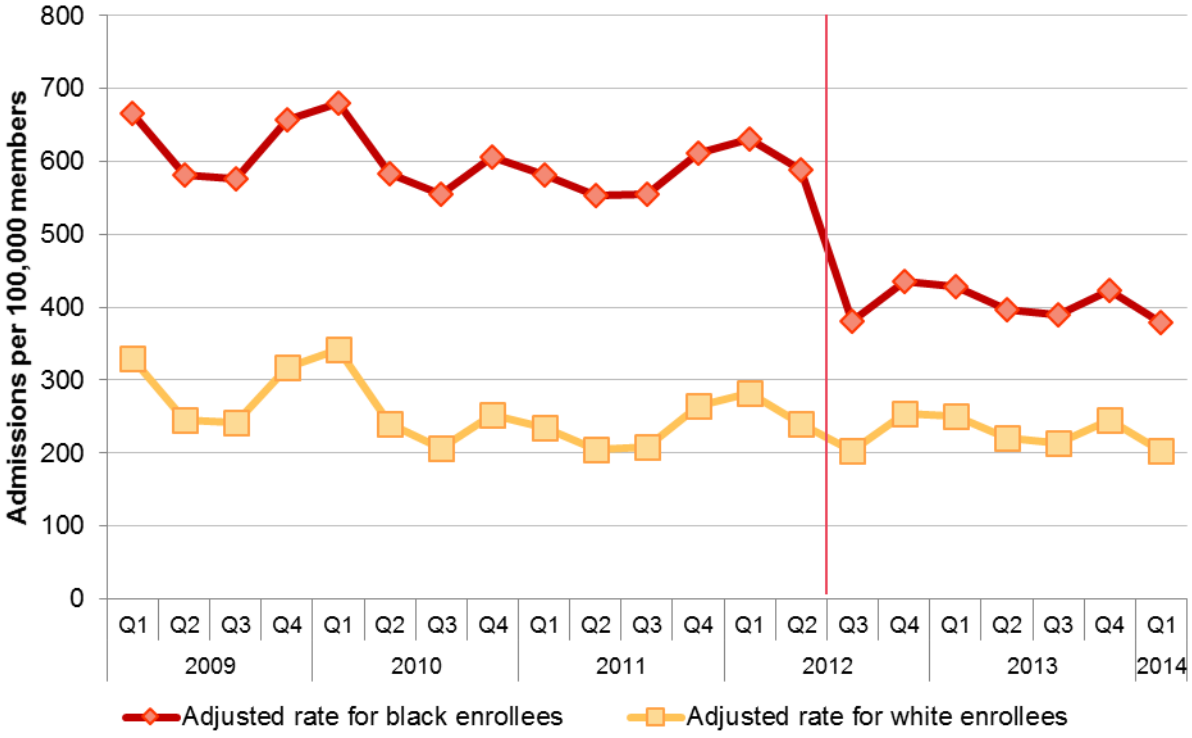
CCO = Coordinated Care Organization; ED = emergency department; OHA = Oregon Health Authority

[33] In many states, Pacific Islanders are a small population. This analysis included between 1,022 and 2,940 Pacific Islanders depending on the quarter.

Reducing preventable hospitalizations. The multivariate analyses of the composite PQI for chronic conditions suggest that, although black enrollees continued to experience higher rates of potentially preventable admissions for chronic conditions compared to white enrollees, the differential between the two groups narrowed after the demonstration began. In Figure III.22, we show that, in the years leading up to the implementation of the Section 1115 demonstration, black enrollees routinely had 2 to 2.7 potentially preventable inpatient admissions for chronic conditions for every one admission for white enrollees. The ratio then declined to under 2 after the CCOs began operations. The change in the differential was primarily attributable to a decline in preventable admission for chronic conditions among black enrollees.

After the introduction of CCOs in 2012, black enrollees experienced a decline in potentially preventable hospital admissions for chronic conditions relative to white enrollees.

Figure III.22. Chronic care prevention quality indicator rates by race/ethnicity and by year, by quarter, January 2009 through March 2014



Source: Mathematica analysis of OHA encounter claims records from January 1, 2009, through March 31, 2014.

Notes: The ratio was based on predicted means for each race/ethnicity group that adjusted for basic demographics, county of residence, CCO, time trend, and the CCO's level of transform. The vertical bar marks the introduction of Oregon's CCO program for the Medicaid population.

CCO = Coordinated Care Organization; OHA = Oregon Health Authority

For the four separate PQI measures analyzed, we detected some race/ethnicity differences, but the results are difficult to interpret because of the volatility in the quarterly measures within some of the smaller groups. After the CCOs were introduced in 2012, Asian and Hispanic

enrollees—relative to white enrollees—experienced an increase in potentially preventable admissions for chronic obstructive pulmonary disease or asthma. Before the CCOs began operations, Asian and Hispanic enrollees had on average 0.12 and 0.22 potentially preventable inpatient admissions, respectively, for chronic obstructive pulmonary disease and asthma for every one such visit for white enrollees, and the rates climbed to 0.26 and 0.39 after the CCOs began operations.

D. Summative evaluation concluding remarks

The lack of widespread state-level associations between outcome measures and the introduction of CCOs may reflect the early stages of activities being pursued by OHA and the CCOs (Table III.2). It may be unreasonable to expect the transformation activities of OHA and the CCOs to influence outcomes significantly within the first 21 months. It is also possible that the outcome measures selected for the summative evaluation may not have been sensitive enough to the transformation activities and that other measures not included in the analysis are subject to the effects of the demonstration, such as enrollment in PCPCHs. Conversely, the results do not suggest widespread negative results as a consequence of introducing the CCO model. We detected improvements in well-child visits by 15 months of age and cervical cancer screening for women after the demonstration began. Of these two outcome measures, the percentage of children with at least six well-child visits by 15 months was also associated with the CCO's stage of transformation activities. The three CCOs in the most advanced stages of their transformation activities experienced a small improvement in the rate of well-child visits, despite the overall decline at the state level and among the three CCOs in the earliest stages of their transformation activities. This last result suggests that the positive trend at the state level may be associated with transformation activities as opposed to other initiatives.

Table III.2. Summary of summative evaluation results by outcome measure

Measure	Changed after the introduction of CCOs	Associated with the stage of CCO transformation activities	Race/Ethnicity differences changed after the introduction of CCOs
Improving primary care for all populations			
Developmental screening by 36 months	--	√	--
At least six well-child visits in the first 15 months of life	√+	√	√Blacks
Child and adolescent preventive care visit (age 12 months through 19 years)	--	--	√Asians
Adolescent well-care visit (age 12 through 21 years)	--	√	√Asians
Adult preventive care visit (age 18 through 64 years)	--	√	√Asians
Cervical cancer screening (age 21 through 64 years)	√+	--	√AI/AN
Ensuring appropriate care in appropriate places			
Total ED and ambulatory care visits	--	√	--
Total ED visits	--	√	--
Total ambulatory care visits	--	√	--
Improving behavioral and physical health coordination			
Total ED and ambulatory care visits for mental health/psychiatric care	--	--	--

Table III.2 (continued)

Measure	Changed after the introduction of CCOs	Associated with the stage of CCO transformation activities	Race/Ethnicity differences changed after the introduction of CCOs
Total ED visits for mental health/psychiatric care	--	--	√Blacks and Pacific Islanders
Total ambulatory care visits for mental health/psychiatric care	--	--	--
Follow-up within seven days after hospitalization for mental illness (age 6 through 64 years)	--	--	--
Reducing preventable hospitalizations			
Total number of inpatient admissions	--	√	--
PQI acute care composite measure	--	--	√Blacks
PQI chronic care composite measure	--	--	--
PQI 01: Diabetes short-term complication admission rate (age 18 through 64 years)	--	--	--
PQI 05: Chronic obstructive pulmonary disease or asthma admission rate (age 40 through 64 years)	--	--	--
PQI 08: Congestive heart failure admission rate (age 18 through 64 years)	--	--	--
PQI 15: Adult asthma admission rate (age 18 through 30 years)	--	--	--
Addressing discrete health issues (diabetes care)			
Comprehensive diabetes care: LDL-C screening (age 18 through 64 years)	--	--	--
Diabetes: Hemoglobin A1c testing (age 18 through 64 years)	--	--	--

√ = A statistically significant association. √+ = A positive association with the introduction of CCOs. √- = A negative association with the introduction of CCOs; -- = no statistically significant association was found.

CCO = Coordinated Care Organization; ED = emergency department; LDL-C = low-density lipoprotein cholesterol; PQI = prevention quality indicator

Our results relating to the CCO's stage of transformation activities and race/ethnicity suggest that, even though state-level demonstration effects may not have been detected, some effects may be occurring within specific subgroups of enrollees. We found that inpatient admissions declined among members of the three CCOs in the most advanced stages of their transformation activities relative to those at the three CCOs in the earliest stages of their activities. Conversely, the measures for ambulatory and ED visits and adolescent and adult preventive care indicate that the introduction of CCOs was associated with improved rates among enrollees in the three CCOs in the earliest stages of their transformation activities relative to those in the three CCOs in the most advanced stages of their activities. Although these last results are not consistent with the theory that the CCOs in the most advance stages of activities would see the greatest improvements in outcomes, they suggest that either we are not capturing the full range of transformation activities or our multivariate analyses are not adequately controlling for baseline differences among CCOs. It is also possible that the CCOs in the earliest stages of activities were promoting improvements in these particular measures (such as through

outreach initiatives directed to their members) that are not directly related to their transformation activities or reflect where these particular CCOs focused their transformation work.

The race/ethnicity results also indicate that the introduction of CCOs may be associated with improved parity in some outcome measures for some subgroups, such as improvements in potentially preventable hospital admissions for chronic conditions among black enrollees, wellness care for Asian enrollees, and cervical cancer screening for AI/AN women. Even though we did not observe widespread improvement during the immediately after the CCOs were introduced to the Medicaid program, we also did not detect growing disparities.

IV. DISCUSSION

OHA and the CCOs have been working hard to transform Oregon's Medicaid delivery system. Most of this work, particularly at the CCO level, has been focused on laying foundational elements and building basic infrastructure. Since the demonstration began in 2012, OHA has accomplished much of what it set out to do, particularly in the areas of (1) contracting with CCOs and establishing their global budgets that cover physical and mental health and addiction services, (2) establishing and tracking a set of quality metrics, and (3) creating the Transformation Center and launching its work to accelerate and spread effective innovations and best practices. The CCOs have also covered a lot of ground during the first 21 months of the demonstration, particularly in the areas of developing PCPCHs and integrating physical and mental health and addiction services.

This work has not been without its challenges, especially in managing the fast pace and addressing OHA's legacy of state-level silos for Medicaid, mental health, and public health services that create barriers to care coordination and improved efficiency. The fast start up of a wide range of changes meant that CCOs were at times unsure about how to prioritize competing demands and where to focus their resources most effectively. The quick pace of this initial period also meant that different CCOs focused on different aspects of the transformation process and the transformation process has been highly variable across the CCOs. This is not an unexpected result given that OHA did not set priorities within the eight elements of Medicaid transformation and allowed CCOs flexibility regarding where they focused their activities.

Despite the progress made, more work remains for both OHA and the CCOs before Oregon has a fully redesigned Medicaid payment and delivery system. OHA is reassessing its structure and continues to work on developing a certification process for THWs and effective approaches that promote the use of flexible services. Among the CCOs, the CTAT results also clearly indicated that, as of March 2014 when the CTAT was administered, the CCOs were still only in the design and early pilot testing stages for many of their transformation activities. For example, the CCOs as a group were still in early design and pilot testing phases for the implementation of HIT, the use of alternative payment methods, and the development of improvement plans for eliminating disparities.

Given that Oregon's transformation is in its initial stages, it is not surprising that the summative evaluation did not find widespread improvements in outcomes after the demonstration started. It is likely that more time is needed and CCOs need to scale up more of their transformation activities before outcomes begin to respond to the changes being made. For example, CCOs may not be able to achieve full integration of physical, mental, and addiction services and improve care coordination until they have improved the exchange of information among providers and one strategy would be to make more progress on HIT improvements. However, it is important to note that the summative evaluation was somewhat incomplete because it was not able to include beneficiaries dually eligible for Medicare and Medicaid, which may have affected some of the results particularly those pertaining to the integration of physical and behavioral health care, preventable hospitalizations, and management of chronic conditions.

A. Caveats and limitations of the Oregon midpoint evaluation

Every evaluation has its limitations and this one was no exception. We developed, administered, and analyzed the CTAT to assess transformation progress among the CCOs. The development of the CTAT was an innovation and the tool needs further testing and refinement. Some elements of the CTAT need more specificity. For example, the alternative payment methods for CCOs had only one element and this section could be expanded to include more sub-elements to differentiate progress in this area among the CCOs. In addition, all the elements of the CCOs could be expanded to include more information about where the CCOs are on the scale up of their activities. The CTAT scores for this midpoint evaluation were primarily designed to capture where CCOs were on the planning and design of their initiatives for each element. If the CTAT is used for future evaluations, it should be updated to capture more information on the continuum of CCOs' effort to bring their transformation activities to scale. It is possible that the tool needs to include more elements. OHA never assumed that the eight elements of Medicaid transformation would fully cover, and therefore explain, all effects associated with the introduction of CCOs.

The multivariate analyses of some outcome measures revealed that, at times, the CCOs that are in the earliest stages of their transformation activities outperformed the CCOs that have made more progress. The evaluation lacked the resources to follow up with the CCOs directly and assess what might be driving these results, but we know from documentary information that the three CCOs in the earliest stages are non-profit entities and some of their priority areas have been focused on improving access to preventive and wellness care among some populations, such as adolescents. Future monitoring and evaluation efforts could continue to explore the CCO-level results from the summative evaluation to better understand the performance of the CTAT in the multivariate analyses and potentially identify elements missing from the CTAT and the estimated models.

The summative evaluation was also affected by an inability to control for all the factors that may influence the selected outcomes and that may be associated with the demonstration and CCO transformation activities. Examples include the lack of controls for supply side factors and other community characteristics such as the availability of school-based initiatives that may influence outcomes. It is possible that these omitted factors biased the results, but the direction and magnitude of these biases are unknown. Future evaluations of Oregon's demonstration could attempt to include additional information through primary data collection efforts, the inclusion of county-level information available in existing secondary databases, or more controls for CCO characteristics.

B. Implications for future evaluation and monitoring of Oregon's Medicaid transformation efforts

The analyses presented in this midpoint evaluation represent a starting point for the assessment of Oregon's Medicaid Section 1115 demonstration waiver. A longer post-demonstration period is needed to assess the robustness of these early results and whether they become more pronounced as the demonstration matures and OHA and the CCOs continue with their transformation activities. In addition, a longer post-demonstration period is necessary to detect changes in mid- and long-term outcomes.

More analyses of the CTAT results would be useful to better assess whether specific elements of transformation are associated with changes in outcomes, a key step to understanding which aspects of transformation are important to improving outcomes. It is also possible that the real power of the CTAT lays in a repeated administration of the instrument and assessing the focus and levels of transformation activity over time.

The midpoint summative evaluation revealed that while state-level outcome measures may change slowly, the aggregated state-level information may mask changes occurring within specific groups of CCOs or enrollees. Future analyses might explore specific topic areas in greater depth. For example, a key feature of Oregon's demonstration is its approach to the integration of physical health, mental health, and oral health and the CTAT revealed that CCOs were making good progress on this aspect of the demonstration. Although the midpoint summative evaluation did not find many demonstration effects for measures of integration based on the current metrics, future evaluations could explore using additional measures of integration or develop a focused study that assesses a wide range of outcomes for enrollees with mental illness. A study of enrollees who use disproportionate amounts of services may also be useful to understanding how the transformation is affecting them and their use of primary, acute, and chronic care services.

Lastly, the variations across different subgroups suggest that future analyses should more fully explore the differential effects of the demonstration, particularly for subgroups defined by race/ethnicity. Given that this midpoint evaluation detected some important changes relating to disparities, estimating separate models for subgroups defined by race/ethnicity is warranted to better understand the demonstration's effects on reducing disparities in the health care experiences among Oregonians.

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APPENDIX A

OREGON MEASURE SETS

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Table A.1. CCO Incentive payment measure set for first two years

	Incentive payment measures
1.	Alcohol and drug misuse, screening, brief intervention, and referral for treatment (SBIRT) [a]
2.	Follow-up after hospitalization for mental illness [a, b]
3.	Screening for clinical depression and follow-up plan [a, b]
4.	Mental and physical health assessment within 60 days for children in DHS custody [a, c]
5.	Follow-up care for children prescribed ADHD medication [b]
6.	Prenatal and postpartum care: timeliness of prenatal care [b]
7.	Elective delivery [b]
8.	Ambulatory care: outpatient and emergency department utilization [a, d]
9.	Colorectal cancer screening [d]
10.	Patient-centered primary care home (PCPCH) enrollment [c]
11.	Developmental screening in the first 36 months of life [a, b]
12.	Adolescent well child visits [a, d]
13.	Controlling high blood pressure [a, b]
14.	Diabetes: HbA1c poor control [b]
15.	Access to care (CAHPS survey composites for adults and children) [a] a. In the last 6 months, when you/your child needed care right away, how often did you/your child get care as soon as you thought you/he or she needed? b. In the last 6 months, not counting the times you/your child needed care right away, how often did you get an appointment for health care at a doctor's office or clinic as soon as you thought you/your child needed?
16.	Health plan satisfaction (CAHPS survey composites for adults and children) 1. In the last 6 months, how often did your/your child's health plan's customer service give you the information or help you needed? 2. In the last 6 months, how often did your/your child's health plan's customer service staff treat you with courtesy and respect?
17.	Electronic health record adoption (composite – 3 meaningful use questions)

Source: Oregon Health Authority, Oregon Measurement Strategy, January 2013.

[a] Measure appears in more than one measure set.

[b] Based on National Quality Forum measure specifications.

[c] Based on state measure specifications.

[d] Based on HEDIS measure specifications.

ADHD = Attention Deficit Hyperactivity Disorder; CAHPS = Consumer Assessment of Healthcare Provider and Systems; DHS = Department of Human Services; HbA1c = Hemoglobin A1c; HEDIS = Healthcare Effectiveness Data and Information Set; PCPCH = patient-centered primary care home; SBIRT = screening, brief intervention, referral to treatment

Table A.2. 1115 Demonstration core performance measures

	Performance measure
1.	Getting needed care and getting care quickly [a, b]
2.	Member health status, adults [b]
3.	Rate of tobacco use among CCO enrollees [b, c]
4.	Rate of obesity among CCO enrollees [d]
5.	Ambulatory care: outpatient and emergency department utilization [a, e]
6.	Potentially avoidable emergency department visits [f]
7.	Ambulatory-care sensitive hospital admissions [g, h]
8.	Medication reconciliation post-discharge [h]
9.	All-cause readmissions [h]
10.	Alcohol and drug misuse, screening, brief intervention, and referral for treatment (SBIRT) [a]
11.	Initiation and engagement in alcohol and drug treatment [a, h]
12.	Mental health assessment for children in DHS custody [a, d]
13.	Follow-up after hospitalization for mental illness [a, h]
14.	Effective contraceptive use among women who do not desire pregnancy [c]
15.	Low birth weight [h, l]
16.	Developmental screening by 36 months [a, h]
17.	Screening for clinical depression and follow-up plan [a, h]

Source: Oregon Health Authority, Oregon Measurement Strategy, January 2013.

[a] Measure appears in more than one measure set.

[b] CAHPS data

[c] Medicaid data from the Behavioral Risk Factor Surveillance System

[d] Based on state measure specifications.

[e] Based on HEDIS measure specifications.

[f] Based on approach used by Medi-Cal.

[g] Prevention quality indicators 1 and 14 developed by the Agency for Healthcare Quality and Research.

[h] Based on National Quality Forum measure specifications.

[l] Prevention quality indicator 9 developed by the Agency for Healthcare Quality and Research.

CAHPS = Consumer Assessment of Healthcare Providers and Systems; CCO = Coordinated Care Organization; DHS = Department of Human Services; HEDIS = Healthcare Effectiveness Data and Information Set; SBIRT = screening, brief intervention, referral to treatment

Table A.3. Adult core measures reported to the Centers for Medicare & Medicaid Services (CMS)

	Adult core measure
1.	Flu shots for adults ages 50-64 [a]
2.	Adult BMI assessment
3.	Breast cancer screening [a]
4.	Cervical cancer screening [a]
5.	Medical assistance with smoking and tobacco use cessation [a]
6.	Screening for clinical depression and follow-up plan [a, b]
7.	All-cause readmission
8.	PQI 01: diabetes, short-term complications admission rate [a]
9.	PQI 05: chronic obstructive pulmonary disease (COPD) admission rate [a]
10.	PQI 08: congestive heart failure admission rate [a]
11.	PQI 15: adult asthma admission rate [a]
12.	Chlamydia screening in women age 21-24 [a]
13.	Follow-up after hospitalization for mental illness [a, b]
14.	Elective delivery [a]
15.	Antenatal steroids [a]
16.	Annual HIV/AIDS medical visit [a]
17.	Controlling high blood pressure [a, b]
18.	Comprehensive diabetes care: LDL-C screening [a]
19.	Comprehensive diabetes care: hemoglobin A1c testing [a, b]
20.	Antidepressant medication management [a]
21.	Adherence to antipsychotics for individual with schizophrenia
22.	Annual monitoring for patients on persistent medications [a]
23.	CAHPS health plan survey v4.0 – adult questionnaire with CAHPS health plan survey
24.	Care transition – transition record transmitted to health care professional [a, b]
25.	Initiation and engagement of alcohol and other drug dependence treatment [a, b]
26.	Prenatal and postpartum care: postpartum care rate [a]

Source: Oregon Health Authority, Oregon Measurement Strategy, January 2013.

[a] Based on National Quality Forum measure specifications.

[b] Measure appears in more than one measure set.

BMI = body mass index; CAHPS = Consumer Assessment of Healthcare Providers and Systems; HbA1c = Hemoglobin A1c; HIV/AIDS = human immunodeficiency virus infectipn and acquired immune deficiency; LDL = low-density lipoprotein; PQI = prevention quality indicators

Table A.4. CHIPRA Measures reported to the Centers for Medicare & Medicaid Services (CMS)

	CHIPRA measure
1.	Prenatal and postpartum care: timeliness of prenatal care [a, b]
2.	Frequency of ongoing prenatal care [b]
3.	Percentage of live births weighing less than 2,500 grams (e.g., low birth weight) [b]
4.	Cesarean rate for nulliparous singleton vertex [b]
5.	Childhood immunization status [b]
6.	Immunization for adolescents [b]
7.	Weight assessment and counseling for nutrition and physical activity for children/adolescents: BMI assessment for children/adolescents
8.	Developmental screening in the first three years of life [a, b]

Source: Oregon Health Authority, Oregon Measurement Strategy, January 2013.

[a] Measure appears in more than one measure set.

[b] Based on National Quality Forum measure specifications.

BMI = body mass index

APPENDIX B

FORMATIVE EVALUATION METHODS

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This appendix summarizes the methods used to conduct the formative evaluation of the Oregon Medicaid Section 1115 demonstration, including (1) document review, (2) key informant interviews, and (3) site visits.

A. Document review

We reviewed the documents listed in Table B.1. The most in-depth information was found in the Oregon Health Plan (OHP) Section 1115 Quarterly Reports to the Centers for Medicare & Medicaid Services (CMS) (beginning with the first quarter 2012 and ending with second quarter 2014), CCO applications, CCO transformation plans and progress reports, and OHA health system transformation quarterly reports. We used the additional documents listed in Table B.1 to supplement information from the primary documents or to clarify specific points. In addition to reviewing the documents and abstracting information to assess the status of implementation, we also abstracted information about facilitators and challenges to transformation.

We reviewed all documents for relevance to the evaluation questions and used Atlas.ti to catalog and analyze information from the reports according to categories relevant to OHA actions to implement transformation. The topic areas included (1) improving care coordination; (2) implementing alternative payment methodologies; (3) integrating physical, mental health and addiction, and oral health services; (4) increasing efficiency; (5) using flexible supports; and (6) testing, accelerating, and spreading effective innovations and best practices. For each topic, we tracked the status of implementation, barriers to implementation and how the barriers were addressed, and facilitators of implementation.

Two Mathematica team members coded the documents using a set of pre-defined codes developed by the evaluation team. To ensure consistency in the coding, the team reviewed the code list and definitions and independently coded one document of each type. The team then reviewed the codes and refined them where necessary to ensure the results addressed the relevant research question. Once the documents were coded, we queried the database for output relevant to the evaluation questions and transformation requirements. In addition to assessing the status of implementation of the requirements of the Section 1115 demonstration, we abstracted information to track CCO innovations, accomplishments, and facilitators and challenges to transformation. We also abstracted quantitative information about each CCO (such as the number of PCPCHs) to an Excel spreadsheet.

Table B.1. Documents reviewed for the formative evaluation

Document
Primary documents
Oregon Health Plan Section 1115 Quarterly Reports (October 2012 through March 2014)
CCO applications
CCO Transformation Plans and progress reports
CCO transformation grant reports
Oregon's Health System Transformation quarterly reports

Table B.1 (continued)

Document
Additional documents
Innovator agent reports
PCPCH survey results
PCPCH site visit report
CCO year one technology plans
CCO model contract

CCO = Coordinated Care Organization, PCPCH = patient-centered primary care home

We catalogued findings related to specific topic areas and sorted them by actions taken by OHA and/or by the CCOs. We developed an initial set of themes such as care coordination and PCPCHs; alternative payment methodologies; integrating physical, behavioral, and oral health care; use of flexible services and traditional health workers (THWs); health information technology (HIT); community health; disparities and health equity; and innovation and best practices. We identified specific transformation-related activities performed by a range of responsible parties and assessed whether transformation was implemented as planned.

We used the information from the document reviews to inform the structure and content of the key informant interview questions and the site visit protocol and to identify areas that required further clarification.

B. Key informant interviews

We conducted in-person interviews in December 2013 and structured telephone interviews in March 2014 with key informants involved with the OHA. We interviewed a range of state staff responsible for various aspects of transformation, including the OHA director, the transformation center manager, the learning collaborative manager, and the director of the Office of Equity and Inclusion. (See Table B.2 for a list of key informants interviewed). We developed an interview guide with a common set of questions for all key informants and additional questions specific to the role of the key informant. We recorded the interviews, transcribed the recordings, and entered the transcripts into Atlas.ti. We coded and analyzed the transcripts as described in the document review section.

Table B.2. State employees interviewed (December 2013 and March 2014)

Organization and name	Title
Oregon Health Authority	
Tina Edlund	Acting Director
Jeanene Smith	Chief Medical Officer
Sean Kolmer	Acting Chief of Policies and Programs
Gretchen Morley	Director of Health Analytics
Lori Coyner	Accountability and Quality Director
Susan Otter	Director of Health Information Technology
Nicole Merrithew	Director Patient-Centered Medical Home Program

Table B.2 (continued)

Organization and name	Title
Office of Equity and Inclusion	
Tricia Tillman	Director
Carol Cheney	Equity, Policy and Community Engagement Manager
Addictions and Mental Health	
Pam Martin	Director
Medicaid	
Judy Mohr-Petersen	Director
Rhonda Busek	Deputy Medicaid Director
Janna Starr	Medicaid Operations and Policy Analyst
Transformation Center	
Cathy Kaufmann	Director
Chris DeMars	Director of Health Systems Innovation
Ron Stock	Director of Clinical Innovation

To gain an understanding of how CCOs view OHA's role in supporting transformation, we also conducted structured interviews by telephone with representatives from each CCO. Depending on the CCO, these interviews involved anywhere from one to seven CCO staff members per CCOs across 15 CCOs. We recorded the interviews and used the recordings to produce detailed notes that were then analyzed by two evaluation team members to identify common themes related to OHA's support of transformation. We also explored the CCO's view of their progress on transformation and barriers or challenges to implementation.

C. Site visits

To obtain a more nuanced perspective on the CCOs' transformation activities, we conducted site visits to three CCOs: one from the group of CCOs that was in the earliest stages of their transformation activities as suggested by the CTAT data, one from the middle group of CCOs, and one from the three CCOs that had made the most progress on their transformation activities according to their CTAT scores. When selecting the CCOs for the site visits, we considered a range of characteristics including size, geographic location, and length of time as a CCO. During the site visits, we interviewed individuals who represented the breadth of the members of the governance board, including managed care plan administrators, providers, and community representatives chosen by the CCOs. We asked the CCOs to identify one or two provider sites we could visit. Two of the three CCOs chosen for the site visits were able to identify providers willing to participate in the site visits.

The site visit team included two members from Mathematica. We used a standardized protocol to interview board members and CCO administrators, community representatives, and providers. We customized the protocols to include questions specific to CCO board members, CCO administrators, CCO providers, and members of the CAC. We recorded the interviews during the site visits and used the recordings to create detailed notes summarizing the discussions. We developed case studies for each CCO visited which appear in Appendix D.

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APPENDIX C

CCO PROFILES

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Table C.1. AllCare Health Plan

Characteristic	Description
Date CCO started serving Medicaid population	August 1, 2012
Form of legal entity	Corporation
Legal partners/owners	Mid Rogue Independent Physicians Association
Historical organizations	Predecessor organization, Mid Rogue IPA, was fully capitated health plan
Governing Board	19 member board appointed by Mid Rogue IPA – 10 physicians (shareholders of Mid Rogue IPA); 3 Community Advisory Council members; 5 clinicians with at least 1 representative of hospitals, mental health, addictions and alcohol, and dental; 1 at large community member
Counties served	Curry, Josephine, Jackson, part of Douglas
Medicaid enrollment	28,125 (April 2013) 45,044 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	• By July 2014 increase by 10 percent over baseline for the number of members in service area who have a diagnosis of severe and persistent mental illness (SPMI) conditions and a diagnosis of diabetes who had HbA1c test and LDL-C screen
Transformation element 2 - Implement and develop PCPCHs	• By July 2014 60 percent of members in Jackson, Josephine and Curry counties are assigned to a PCPCH and have made at least one PCPCH visit; a 5 percent reduction in ED utilization over baseline
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	• By July 2014 increase the rate of PCP visits per 1,000 by 8 percent and share resulting ED cost savings with PCP or PCPCH
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	• Submit completed CHIP by July 2014.
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	• By July 2014 attain a 10 percent increase of eligible Greenway EHR users sharing data across care settings as measured by the number of data exchange transactions per participating provider, compared to baseline
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	• Through targeted member materials and outreach utilizing the community health worker, skilled and focused on members, attain an improvement of 20 percent over baseline in the number of members 6 to18 years of age who have received an annual well-child check-up from a PCPCH or PCP

Table C.1 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	• Attain improvement of 15 percent over the baseline percentage rate of cultural diversity program completion by PCPs, PCPCHs, or obstetricians
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	• Identify pregnant members that use any substance that can have an adverse impact on fetus or newborn baby and enhance referral process to appropriate community treatment program(s) for substance abuse issues
Transformation grant priorities	Innovative payment methodologies and delivery models will support integrating physical health, mental health, dental health, and addiction recovery into non-hospital-based systems and into lower cost, preventive settings; these health care services are further enhanced through the support of community services and public health; the focus is on high risk, high cost patients through care management and use of social and community services; the desired outcomes are reduced spending on hospital based services and improved patient satisfaction
PIP Focus[a]	• Improve perinatal and maternal health by increasing referrals to treatment programs for women who test positive for drugs • Increase use of PCPCHs for members age 50 years or older who are disabled and dually eligible for Medicaid and Medicare • Increase the use of advanced directives or Physician Orders for Life Sustaining Treatment (POLST) • Increase primary care visits among SPMI
Technology plan priorities	• Planned utilization of Jefferson HIE (JHIE) or OCHIN for reporting data on the three clinical CCO Incentive Measures in Year One • Stakeholder in Jefferson HIE (JHIE) • Upgrade of case management software to better support expanding activities in care coordination, disease management, and behavioral health integration • Expansion of the Greenway EHR hosted by MidRogue eHealth Services (MReHS) to Mental Health and Public Health entities • MReHS assistance to all Greenway providers in successful participation in the EHR Incentive Program • MReHS assistance to 19 rural providers to implement EHRs • Exploration of mobile health and telemedicine
HIE	Yes, Jefferson Health Information Exchange
Percentage of members in PCPCHs	40% (2011) 59% (2013)
EHR adoption	72% (2013)
Percentage of 2013 Quality Pool earned	70%

Table C.1 (continued)

Sources: CCO application, CCO financial reports, CCO Transformation Plan Amendment, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a] in addition to integrating primary care and behavioral health

CCO = Coordinated Care Organization; CHIP = community health improvement plan; ED = emergency department; EHR = electronic health records; HgA1c = Hemoglobin A1c; HIE = Health information exchange; IPA = Independent Physician Association; LDL = low-density lipoprotein cholesterol; OHA = Oregon Health Authority; PIP = performance improvement plan; PCP = primary care provider; PCPCHs = patient-centered primary care homes; POLST = Physician Orders for Life Sustaining Treatment; SPMI = severe and persistent mental illness

Table C.2. Cascade Health Alliance

Characteristic	Description
Date CCO started serving Medicaid population	September 2013
Form of legal entity	LLC
Legal Partners / Owners	Cascade Comprehensive Care
Historical organizations	Cascade Comprehensive Care (CCC) was a fully capitated health plan and created the subsidiary Cascade Health Alliance
Governing Board	3 PCP shareholders, 3 specialist physician shareholders, 3 appointed by shareholders to represent Sky Lakes Medical Center, 1 MD or NP PCP, 1 behavioral health provider, 1 CAC member, 2 at large community members
Counties served	Klamath (Partial)
Medicaid enrollment	10,793 (April 2013) 11,364 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	• A 10 percent increase in the number of members with SPMI diagnosis and diabetes that receive HbA1c and LDL-C testing from the December 2012 baseline: HbA1c = 72.73 percent and LDL-C = 72.73 percent • Members referred for ICM services will have an integrated treatment plan for coordinated care; Have a 50 percent increase in integrated treatment plans • SBIRT screenings increase from 0 to 15 percent as identified by procedure codes as listed on the SBIRT metric specifications • Mobile crisis team that is operationally available to the community, PCPCH/PCP clinics and ED facilities; CHA will increase response from this team from 0 to 25 percent of services provided outside of the ED setting
Transformation element 2 - Implement and develop PCPCHs	• Increase the percentage of members assigned to a PCP in a PCPCH • Increase the percentage of reimbursement available through the alternative payment methodology (per the Transformation Plan) to facilitate completion and maintenance of the PCPCH system
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	January - March 2014 • Determine degree of CCO compliance (“meeting at least 12.6 Metrics including EHR), and correcting any anomalous data affecting this compliance rate April - June 2014 • Develop reporting system to allocate the percentage of compliance with each incentive metric on a PCPCH or facility basis July 2014 • Disburse metric pool funds based on the developed APM, tracking for future comparison the relative contribution of the various PCPCHs/facilities to the overall success of the metric program
Transformation element 4 – Prepare a strategy for developing contractor’s community health assessment and adopt an annual community health improvement plan	• Launch of “Healthy Klamath” website, completed in early 2013 • The CAC is being reconvened and members are being selected; first meeting will occur by Feb., 2014 • Quarterly meetings with all partners and stakeholders in developing the Community Health Improvement Plan • CHIP completed and approved by CAC September 1, 2015

Table C.2 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	• Increase the number of contracted providers enrolled and active with JHIE by 10 percent as compared to "go live" date, within 1 year • Increase the number of contracted providers enrolled and active with JHIE by 20 percent as compared to "go live" date, within 2 years • 100 percent of contracted providers (enrolled and active with JHIE) who are connected with the Care Coordination program and at Stage 3 meaningful use, as JHIE progresses to this level
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	• Surveys sent, reviewed and reported to the CAC and internal committee's/Board of findings July 2014 • Member materials available on website in Spanish and by audio • Cultural competency policies and training materials available on CHA's website and disseminated to all providers by December of 2014 • Development of a community wide intervention set as part of the SLWC program to address obesity, diabetes and other chronic health issues by overcoming barriers in culture, language and economic disparity by July, 2014 • At least 1-2 Spanish-speaking CHWs hired and in service by Fall, 2014
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	• Collect a baseline survey in 2014 to measure training program participation • Training program developed and training begins July 2014 • December 30, 2015: 80 percent of providers have received training on cultural competence from CHA policy and the OE&I webinars that correlate with policies for cultural diversity
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	• Policies and procedures that address traditional healthcare workers and their role in the CCO to address health disparities; CHA will have up to five traditional healthcare workers by July 2015 who have met OHA requirements • Develop interventions that address the disparities identified • Reduce the number of ED visits by members of the identified at-risk sub-populations by 20 percent by December 31, 2015 • Increase the number of PCP and early prenatal visits by 20 percent in the at-risk sub-populations by 20 percent by December 31, 2015
Transformation grant priorities	• Health information exchange (HIE) system • Youth crisis respite and residential program • Traditional health care worker connected to non-emergent medical transportation to identify high utilizers of ED care and to assist them • Mobile crisis team to replace emergency crisis response model • Electronic health record to improve care coordination

Table C.2 (continued)

Characteristic	Description
PIP focus[a]	• Promote a single evidence based guideline (global initiative for chronic obstructive lung disease, GOLD) ○ Promote a community standard of care using GOLD ○ Reduce emergency department visits, hospital admissions and readmissions related to COPD ○ Promote respiratory health through better prevention, education, detection, and treatment efforts • Promote receipt of prenatal care in the first 12 weeks or within 42 days of assignment to the plan for 90 to 100 Percentage of all identified pregnant members • Integrate mental health, dental, and substance use disorder in a coordinated location.
Technology plan priorities	• Evaluating ability to utilize Jefferson HIE (JHIE), OCHIN, or applications within Care Coordination software for reporting data on the three clinical CCO Incentive Measures in Year One • Stakeholder in Jefferson HIE • Planned implementation of Care Coordination software that can interface with EHRs in use by key practices
HIE	Yes, Jefferson Health Information Exchange
Percentage of members in PCPCHs	56% (2011) 65% (2013)
EHR adoption	65%
Percentage of 2013 Quality Pool earned	100%

Sources: CCO application, CCO financial reports, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a] in addition to integrating primary care and behavioral health

CAC = community advisory council; CCC = Cascade Comprehensive Care; CCO = Coordinated Care Organization; CHA = Cascade Health Alliance; CHIP = community health improvement plan; CMS = Centers for Medicare & Medicaid Services; COPD = Chronic obstructive lung disease; ED = emergency department; EHR = electronic health records; GOLD = Global initiative for chronic obstructive lung disease; HIE = Health information exchange; LLC = limited liability company; MD = medical doctor; NP = nurse practitioner; OCHIN = Oregon Community Health Information Network; OHA = Oregon Health Authority; PCP = primary care physician; PIP = performance improvement plan; PCPCHs = patient-centered primary care homes

Table C.3. Columbia Pacific CCO

Characteristic	Description
Date CCO started serving Medicaid population	August 2012
Form of legal entity	LLC wholly owned by Care Oregon (not for profit, 501(c)(3))
Legal Partners / Owners	Joint venture of Care Oregon and Greater Oregon Behavioral Health, Inc. (GOBHI)
Historical organizations	Columbia one of 3 wholly owned LLCs CCOs of CareOregon (parent company); 24 primary care practices (most FQHCs or RHCs); 4 critical access hospitals
Governing Board	1 Care Oregon, 1 GOBHI, 1 FQHC, hospital, county government, mental health , CAC, county commissioner, public health
Counties served	Columbia, Clatsop, Tillamook, parts of Douglas
Medicaid enrollment	14,812 (April 2013) 25,617 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	As of July 2014 • Co-locate behaviorists working with addictions treatment and primary care providers (PCP) in at least three major clinics in the service area with a focus on the members with severe and persistent mental illness (SPMI) having one or more co-morbid conditions in addition to a mental health diagnosis • Develop an alternative pain management model for piloting in at least one clinic in the service area • Initiate partnerships with social services and school-based providers to provide addictions screening and intervention for adolescents
Transformation element 2 - Implement and develop PCPCHs	• By July 2014 ensure that a PCPCH Learning Collaborative is formed, training is completed, and practice coaches deployed • By July 2014 develop and deploy standardized utilization and medical cost reports to at least four PCPCH clinics for identification and intervention with high-risk patients
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	• By July 2014 integrate capitation payments for mental health and addictions treatment with all relevant providers • By July 2014 select at least one primary care clinic for an alternative payment methodology
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	• By July 2014 complete comprehensive CHIP for service area, including identified strategies to reduce health disparities based on community-identified priorities
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	By July 2014 • Complete inventory of participating provider capabilities related to meaningful use, adoption of CareAccord, Care Everywhere, or other HIE technology between physical and mental health providers • Define baseline percentage of primary care clinics sharing any portion of the medical record with other providers

Table C.3 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	By July 2014 • Develop a community-specific definition of, and standards for, cultural competence • Create a cultural competence policy and registry of vital documents for meeting cultural competence standards • Define appropriate benchmarks for community specific improvements throughout service area
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	By July 2014 • Identify a group of high frequency users of the ED, acute, and other high cost services that could be diverted to PCPs through non-traditional workers or other outreach strategies • Complete a written plan to improve delivery of culturally competent care by participating providers • Identify clinic-specific opportunities and pilots using navigators, peer support, community care teams or other non-traditional health workers
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	• Complete a written quality improvement plan by May 30, 2014
Transformation grant priorities	• Provide CCO-wide opiate-prescribing and alternative pain management program, 10 detox beds, crisis respite and safe holding capacity • Focus on the PCPCH model, the projects will enhance population management, integration, and local access to service for both primary care and behavioral health clinics • Provide wrap-around services and programs that support and enhance other efforts, including clinical capacity building
PIP Focus[a]	• Develop community guidelines for best practices for opioid prescribing • Increase the use of a standardized screening tool to identify developmental delays in children • Increase timeliness of prenatal care and behavioral health screening in prenatal period
Technology plan priorities	• Planned utilization of OCHIN for reporting data on the three clinical CCO Incentive Measures in Year One • Survey of clinics to determine provider use and capabilities of vendor specific HIE functionality in order to inform HIE strategy • Development of claims based data warehouse for Incentive Measure management • Implementation of telemedicine for specialty areas, including exploration of Project Echo
HIE	Yes, CareEverywhere via Epic
Percentage of members in PCPCHs	47% (2011) 76% (2014)
EHR adoption	66%
Percentage of 2013 Quality Pool earned	100%

Table C.3 (continued)

Sources: CCO application, CCO financial reports, CCO Transformation plan amendment OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a] in addition to integrating primary care and behavioral health

CAC = community advisory council; CCO = Coordinated Care Organization; CPCCO = Columbia Pacific Coordinated Care Organization; GOBHI = Greater Oregon Behavioral Health, Inc.; EHR = electronic health records; FQHC = federally qualified health center; HIE = Health information exchange; LLC = limited liability company; OCHIN = Oregon Community Health Information Network; OHA = Oregon Health Authority; PIP = performance improvement plan; PCPCHs = patient-centered primary care homes; RHC = rural health clinic

Table C.4. Eastern Oregon CCO

Characteristic	Description
Date CCO started serving Medicaid population	August 1, 2012
Form of legal entity	LLC comprised of ODS Community Health (business) and GOBHI (not for profit) own 48 percent; 6 hospitals and clinics own 42 percent; ODS physical health lines now called MODA
Legal Partners / Owners	ODS, GOHBI
Historical organizations	Both organizations are MCEs that had contracts prior to CCO; ODS was a FCHP; ODS is a DCO
Governing Board	GOHBI and ODS representatives, provider representatives, and 1 representative from each of 12 CACs representing the 12 counties
Counties served	Umatilla, Malheur, Union, Baker, Morrow, Harney, Lake, Grant, Wallowa, Sherman, Wheeler, Gilliam
Medicaid enrollment	30,142 (April 2013) 42,292 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	By July 2014 • Develop criteria for triggering intensive case management for members and referrals for members identified as high risk and needing collaborative mental health, physical health and addictions care coordination and intensive case management • Early Assessment and Support Alliance, assertive community treatment, and supported employment and associated wrap around programs available to all members in all 12 counties • Contract between medical clinics and community mental health program clinics for specific mental health services in at least three counties as voluntary early adopters • 1:1 ratio of case rate based contracts with social and medical detox providers • Contract with three existing residential addictions providers per the jointly defined payment model established in February 2013 • Complete pilot contracts with at least three communities as optional early adopters for outpatient behavioral health and addictions integration
Transformation element 2 - Implement and develop PCPCHs	By July 2014 • At least 25 percent of members will be assigned to a certified PCPCH at any tier level • Seek agreement with and implement alternative payment methodologies in at least three certified PCPCHs • Identify and seek approval of PCPCH certified providers on technical assistance tools that will assist them in meeting quality outcomes • Identify and seek approval of PCPCH certified providers on how contractor can assist with member engagement

Table C.4 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	By July 2014 • Identify and seek approval from participating providers on alternative payment methodologies to be piloted with providers, certified PCPCH clinics, and hospitals • Begin piloting alternative payment methodologies via contract amendments, in compliance with OHA reimbursement requirements and Oregon Association of Hospitals and Health Systems (OAHHS) recommendations for payment of Type A and Type B hospitals • Implement a capitation payment system with a least one primary care clinic • Implement a capitation payment system with at least one Type A hospital • Implement an actuarial-based process for cost-based payments that is not solely financially based • Develop with the help of OHA and OAHHS, a sound rationale for continuation of cost-based payment (or equivalent financial support) for hospitals, provider based clinics, federally qualified health clinics, and rural health clinics utilizing variables such as demographics, geography, and financial factors • Develop with the help of its hospitals and OAHHS a rural hospital, value-based dashboard (with performance metrics) that will be used to award shared savings to hospitals • Support with the help of its hospitals and community CAC, a community-based health care delivery model that sustains access to local services and repurposes current infrastructure and staff as needed
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	• 100 percent of counties will have or be participating in an established local CAC and Rural-CAC with persistent, regular meeting times, as determined by the committee members • 100 percent of CACs will have a complete community needs assessment analysis and proposed CHIP • Submit CHIP to OHA by 6/30/2014 • 100 percent of CACs will have implemented CHIP in their respective county and begin tracking outcomes
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	By July 2014 • Establish the HIE steering committee by mid-2013 • HIE strategy and plan will be determined in 2013 • Provide members access to health information through an online member customized portal
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	By July 2014 • Develop and adopt policy, and revise 10 percent of consumer materials • Complete 70 percent of county and/or regional demographics reports • Develop training; 10 percent of leadership and staff successfully complete training • Assess interpreter certification options and compile report; determine next steps
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	By July 2014 • Survey 100 percent of clinics • Develop and pilot training in three clinics

Table C.4 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	By July 2014 • Develop data collection methods and use existing methods to confirm demographic data has been collected on 30 percent of members • Establish and operationalize standards for data collection and sharing and for the Oregon Medicaid population • Complete training and development in three clinics ○ Data collection process using the health assessment is established, staff is trained and data is systematically captured in the operating system (confirmed by audit process) ○ Audit demonstrates that race, ethnic, linguistic, disability, health literacy barriers identified in the health assessment are addressed • Specific quality indicators to measure member engagement, access to care, use of services and cost of care are defined, baselines identified and benchmarks for 7/1/2015 established
Transformation grant priorities	Fund community projects that contribute to better health outcomes
PIP Focus[a]	• Address behavioral and emotional issues in children ages 0 to 6 years • Increase early childhood developmental screening • Increase engagement in prenatal care and improve care for women with mental health and substance abuse disorders
Technology plan priorities	• Plans to collect data directly from clinics for reporting on three clinical CCO Incentive Measures in Year One • Implementation of grant program that will allow communities and providers to request transformation funds, including projects related to health information technology • Adoption of a regional HIE/HIT solution, including technical assistance to providers using HIE technology to maximize use of HIT software and to clinics without EHRs to help implement HIT • Researching capabilities including secure messaging, connectivity, and interoperability tools and processes
HIE	None
Percentage of members in PCPCHs	4% (baseline) 63% (June 2014)
EHR adoption	46%
Percentage of 2013 Quality Pool earned	80%

Sources: CCO application, CCO financial reports, Transformation Plan Amendment, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a] in addition to integrating primary care and behavioral health

CCO = Coordinated Care Organization; CQM = clinical quality measures; DCO = Dental Care Organization; EHR = electronic health records; EHR/EMR = electronic health record/electronic medical record; EOCCO = Eastern Oregon Coordinated Care Organization; FCHP = fully capitated health plan; GOBHI = Greater Oregon Behavioral Health, Inc.; HIE = Health information exchange; LLC = limited liability company; MCO = managed care organization; OHA = Oregon Health Authority; PIP = performance improvement plan; PCPCHs = patient-centered primary care homes

Table C.5. FamilyCare CCO

Characteristic	Description
Date CCO started serving Medicaid population	August 1, 2012
Form of legal entity	Non-profit, tax exempt 501(c)(4)
Legal Partners / Owners	FamilyCare
Historical organizations	FamilyCare Health Plan was previously a Medicaid plan with integrated behavioral health; also had contracts with Addictions and Mental Health Division
Governing Board	At least 2 PCMDs, 1 MH or substance abuse provider, community representatives, hospital representatives (not specified)
Counties served	Clackamas, Multnomah, Washington, parts of Marion
Medicaid enrollment	50,420 (April 2013) 99,402 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	• By July 2014, collaborate with dental services providers to determine appropriate risk analysis protocols and establish data collection process • By July 2014, collaborate with dental services providers to establish appropriate care management process • By December 2013, offer SBIRT training to all contracted PCPs
Transformation element 2 - Implement and develop PCPCHs	• By October 2013, identify barriers to clinics achieving Tier 3 status • By July 2014 implement payment model to contracted PCPs to encourage PCPCH status
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	• By July 2014, develop a policy to consistently apply alternative payment methodology to various participating providers • By October 2013, review and assess participating provider contracts to determine if alternative payment methodology is appropriate for that provider type • By December 2013, survey participating providers to determine level of interest in accepting alternative payment methodology
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	• By September 2013, work with community partners to gather data • By October 2013, review and assess data to develop a Community Health Assessment (CHA), present CHA to Community Advisory Council (CAC), draft CHIP for CAC review • By December 2013 CAC adopts CHIP
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	• By December 2013, using a survey, assess current participating provider use of electronic health records • By December 2013 identify barriers to participating provider use of electronic health records and health information exchange (HIE) • By July 2014 work with OHA to develop a statewide Health IT solution
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	• By December 2013, assess Medicaid portion of website to determine compliance with ADA requirements • By July 2014 conduct member survey and review cha to identify potential gaps in language or culturally-specific delivery of materials

Table C.5 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	By December 2013, • Collect member data on preferred language via survey • Collect participating provider data on languages spoken • Work with OHA to identify barriers to providing race and ethnicity data on member enrollment files
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	• By December 2013, member survey identifies potential areas of disparity, based on race or ethnicity and linguistic needs • By July 2014, CHA will identify potential areas of disparity, based on race or ethnicity and linguistic needs
Transformation grant priorities	• Provide direct, hands-on and technological approach to care using the Integrated Patient/Provider Organized Delivery System (IPPODS) model. (Teams of care professionals will help manage groups of providers based on region, specialty, or patient population (such as diabetes as a specific condition, or particular geographic area). FamilyCare will establish a "hub" of professionals focused on member services, such as care management or referrals and authorizations, who will communicate with the teams in real time to coordinate care and connect members and providers to a wide range of services and professionals.) • Provide technical assistance to small practice groups with technology investments and systems necessary to achieve PCPCH recognition status; enhance HIT for this purpose • Hire a nutritionist to work with providers to share best practices for nutrition improvements through counseling and training, and to oversee a rotating panel of OSU graduate students interns on nutrition within clinicians' practices • Community education
PIP Focus[a]	• Improve colorectal cancer screening • Improve rates of preventive well-child visits in adolescent population • Increase number of PCPCHs
Technology plan priorities	• Evaluating ability to utilize OCHIN for reporting data on the three clinical CCO Incentive Measures in Year One • Development of four new capabilities: 1. Health information exchange with providers 2. Establish and improve clinical quality measurement capabilities using both claims and clinical data sources 3. Advanced data analytics 4. Establish new capacity to share care management activities with providers and others
HIE	Yes for 39% of providers
Percentage of members in PCPCHs	16% 2011 74% 2013
EHR adoption	70% June 2014
Percentage of 2013 Quality Pool earned	100%

Table C.5 (continued)

Sources: CCO application, CCO financial reports, Transformation Plan Amendment, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a] in addition to integrating primary care and behavioral health

CCO = Coordinated Care Organization; EHR = electronic health records; HIE = Health information exchange; IPPODS = Integrated Patient/Provider Organized Delivery System; MH = mental health; OCHIN = Oregon Community Health Information Network; OHA = Oregon Health Authority; OSU = Oregon State University; PIP = performance improvement plan; PCPCHs = patient-centered primary care homes

Table C.6. Health Share of Oregon

Characteristic	Description
Date CCO started serving Medicaid population	August 1, 2012 as Tri-County Medicaid Collaborative renamed Health Share in September 1, 2012
Form of legal entity	501(c)(3)
Legal Partners / Owners	Health Share
Historical organizations	Contracts with 7 risk accepting entities: CareOregon, Providence Health Assurance, Tuality Health Alliance (fully capitated health plans), Kaiser Foundation Health Plan of the Northwest (physician care organization), Clackamas County Health Department, Multnomah County Health Department, Washington County Department of Health and Human Services (mental health organizations)
Governing Board	Representatives of Adventist Health, CareOregon, Central City Concern, Clackamas County, Kaiser Foundation Health Plan of the Northwest, Legacy Health, Multnomah County, Oregon Health & Science University, Providence Health & Services, Tuality Healthcare, Washington County, 1 primary care and 1 specialty physician in active practice, 1 nurse or NP in active practice in primary care, 1 BH provider, 1 addiction services provider, 2 community at large members, CAC chair, 1 dental care provider in active practice
Counties served	Clackamas, Multnomah, Washington
Medicaid enrollment	153,777 (April 2013) 215,674 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	• By July 2014, attain a 10 percent decrease in the hospitalization rate for members; baseline and method of calculation to be determined and mutually agreed upon by CCO and OHA
Transformation element 2 - Implement and develop PCPCHs	• By July 2014, ensure that 75 percent of members receive care in a Tier 3 PCPCH
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	By July 2014 • Establish and define an alternative payment methodology policy that standardizes and aligns provider payment models across all CCO risk accepting entities (three entities for mental health care and four for physical health • Establish a budgeted medical loss ratio for all RAEs • Distribute a portion of any surplus from the global budget after all settlement processes have taken place to providers that comprise the RAE network • Ensure that any distribution to providers of any surplus from the global budget available after all settlement processes have taken place is based on alternative payment methodologies aimed at improving quality and reducing costs aligned with the OHA CCO quality incentive metrics

Table C.6 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	• By January 2014, present first CHIP draft to CAC • By July 1, 2014 report to OHA on progress accomplishing CHIP strategies
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	By July 2014, • Collaborate with Oregon Health Information Technology Exchange Council (O-HITEC) and OCHIN to encourage greater adoption of certified EHRs and active participation within EHR meaningful use stage 2 among participating providers • Collaborate with CCO delivery systems that have implemented Epic's EHR to standardize their configurations of Care Everywhere and optimize its use. • Encourage providers to use secure provider-provider and provider-patient messaging as such capabilities are seamlessly available within their respective EHRs • In collaboration with OHA and Oregon's Health Information and Technology Oversight Council (OHITOC), other CCOs, and their partners, consider leveraging a third party Health Information Exchange (HIE) Gateway to facilitate the seamless exchange of personal health information between dissimilar EHRs; at its discretion • Implement or leverage an EHR acceptable to OHA and OHITOC, the other CCOs, and their partners
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	• By July 2014 Cultural Competence Work Group Contractor conducts cultural competence needs assessment, agrees on uniform performance standards for functions associated with providing culturally competent member-centered care and ensures that affiliate organizations have developed plans to address areas of poor performance
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	• To be determined and mutually agreed upon by CCO and OHA
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	• Identify top chronic condition within each race, ethnicity, and language category and identify baseline utilization and prevalence rates for each condition • Develop and submit quality improvement plan to OHA

Table C.6 (continued)

Characteristic	Description
Transformation grant priorities	1.Strengthening Primary Care Capacity – Advanced primary care practice model; expand primary care capacity through telementoring (like ECHO) to offer specialized care and co-manage Medicaid patients with complex health care needs 2.Enhancing Community Health Integration – Expand healthy homes asthma program, participate in Future Generations collaborative to improve Native communities health; chronic disease self-management in supported housing environments; implement CHIP 3.Engage members through patient centered process for assigning members to PCPCHs and to outreach to hard to reach members 4.Improve community care coordination through information sharing 5.Invest in technology to support priorities - Data aggregation, analysis, and reporting solution enabling population risk management, population health management, and the coordination of care within and across health care settings
PIP Focus[a]	• Decrease readmissions among adults (≥19 years) by 5 percent • Increase developmental and socio-emotional screening for children ages 0 to 3 years • Implement high intensity community based teams and programs to address complex needs of high acuity patients
Technology plan priorities	• Planned utilization of OCHIN for reporting data on the three clinical CCO incentive measures in year one • Leveraging of EHR vendor-provided functionality, enterprise HIEs, for HIE strategy • Key technologies include centralized data aggregation, analysis and reporting solution for risk management, population health and care coordination, and a web-based care coordination platform for capturing and sharing information, including a care plan for high utilizers • Implementation of mobile health and telemedicine, including Project Echo
HIE	Spearheaded by Health Share, provider organizations who have implemented Epic EHR collaborated to configure Epic CareEverywhere in a consistent manner to enable optimal health information exchange (HIE). In addition, most of the hospital-based delivery systems contracted with Health Share have implemented private enterprise health information exchanges (HIEs) such as Certify, Medicity, and Cerner while some rely upon interface engines such as Mirth, Cloverleaf, and eGate to exchange health information between internal and external systems. Some providers utilize the Direct Project protocol to exchange secure messages with other providers as well as patients and all who intend to attest for and attain Meaningful Use of EHR incentive payments likewise plan to utilize the Direct Project protocol to exchange secure messages with other providers and patients. Health Share will convene planning sessions with providers intent on attaining Meaningful Use of EHR incentive payments to coordinate efforts on the Meaningful Use stage 2 criteria.
Percentage of members in PCPCHs	50% (2011) 81% (2013)
EHR adoption	59% (2013)
Percentage of 2013 Quality Pool earned	100%

Sources: CCO application, CCO financial reports, Transformation Plan amendment, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

Table C.6 (continued)

[a] in addition to integrating primary care and behavioral health

BH = behavioral health; CAC = community advisory council; CHIP = community health improvement plan; CCO = Coordinated Care Organization; EHR = electronic health records; HIE = Health information exchange; HIT/HIE = Health information technology/health information exchange; NP = nurse practitioner; OHA = Oregon Health Authority; PIP = performance improvement plan; PCPCHs = patient-centered primary care homes

Table C.7. InterCommunity Health Network

Characteristic	Description
Date CCO started serving Medicaid population	August 1, 2012
Form of legal entity	501(c)(4)
Legal Partners / Owners	InterCommunity Health Plans
Historical organizations	Samaritan Health Plans; Samaritan Health Services; InterCommunity Health Plans (FCHP); Accountable BH Alliance (MHO); Benton County public health, mental health, and addictions services; Lincoln county public health, mental health, and addictions services; Mid Valley Behavioral Care Network (MHO); Oregon Cascades West Council of Governments; Capitol Dental Care, The Corvallis Clinic; Quality Care Associates; Samaritan Mental Health, FQHCs in Benton, Lincoln, and Linn counties
Governing Board	Benton, Lincoln, and Linn County Commissioners; Samaritan Health Services MH executive; SHS CEO; SHS CEO in Linn county, 2 SHS board members as community representatives; SHS legal counsel; 2 community MDs;, 4 community members; 1 CAC representative
Counties served	Linn, Benton, Lincoln
Medicaid enrollment	33,677 (April 2013) 51,594 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	By July 2014 • Evaluate member needs for mental health and chemical dependency services for Hospital to Home Care Transition Pilot • Ensure that policy, procedures, data systems and coordination are operational for all aspects of Hospital to Home Care Transition Pilot • Ensure that 40 percent of eligible members participate in pilot and that 75 percent of those members do not experience a readmission to hospital for the same diagnosis within 30 days
Transformation element 2 - Implement and develop PCPCHs	By July 2014 • Develop data reports identifying members who have utilized the ED more than six times in the prior year or for non-emergency purposes • Integrate mental health, addictions, and primary care pilot o Establish a baseline for the time from when the member with a need for behavioral or mental health services or with severe and persistent mental illness is identified to the time of actual implementation of services o Develop mechanism to record and report monthly on pilot progress
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	• By July 2014 implement the bundled payment software and begin bundling payment to a small set of Samaritan Health Services specialist participating providers
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	By July 1, 2014 • Use information gathered from community participants to determine the strategic issues that must be addressed consistent with CCO vision • Specify goals, objectives, strategies, budget and leadership for the strategic issues identified • Describe the scope of the activities, services and responsibilities that CCO considers upon implementation of the shared health assessment and improvement plan

Table C.7 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	By July 2014 • Participate in OHA's process to assess the next phase of statewide Health Information Exchange (HIE) development (including assessing the scope, financing, and governance of statewide HIE services) • Develop roadmap for implement Health Information Technology (HIT) • Give access to case management staff to evaluate and educate participating providers • Pilot Epic Care Link usage between CCO and a select participating provider panel
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	By July 2014, Mental Wellness Literacy Campaign Pilot • Offer online learning and resources center on how to take action to improve wellness of people with mental health problems • Community education campaign in culturally and linguistically appropriate ways • Contractor targets an education campaign for community and faith-based organization, and local schools
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	• Contractor develops a process for delivery and documentation of training on health equity, health literacy, cultural competence, cross-cultural communication, working with non-traditional health care workers in clinical teams, diversity, and cultivating a diverse workforce • Develop a process for delivery and documentation of training • Ensure that staff and participating providers have received trainings focused on topics identified in this benchmark
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	• By July 2014, gather member ethnicity data either from state data or by contacting members
Transformation grant priorities	Establish a regional health information data solution. A single data repository will aggregate data from multiple providers and health care systems. It will be used to assess current capacity, engage community partners, and perform system inventory. In the future, this system will provide a foundation for developing a shared information model, creating standards and supports mechanisms, tracking metrics data and reporting. The Regional Health Information Exchange will be developed by IHN in collaboration with several organizations and stakeholders. Participating organizations must accept a data use agreement and have the capacity to effectively store and manage electronic health care data in order to guarantee the highest level of security prior to exchanging sensitive health information. Over the course of the project timeline, IHN will design data sharing agreements, select vendors, establish infrastructure and supports, test scripts, integrate member and provider information, test the systems, provide outreach, and conduct training.
PIP Focus[a]	• Reduce readmissions • Identify members with cardiovascular risk factors • Increase use of early prenatal care and identify and refer women with special needs

Table C.7 (continued)

Characteristic	Description
Technology plan priorities	• Plans to collect data directly from clinics for reporting on three clinical CCO incentive measures in year one • Development of a Regional Health Information Collaborative with the objectives of managing costs, supporting core elements of information sharing that are essential to coordinate care and quality, and increasing opportunities for collaboration across the healthcare spectrum • Implementation of vendor specific HIE functionality to support case managers and providers • Strategic transition to adopt Epic enterprise-wide within Samaritan Health Services
HIE	None
Percentage of members in PCPCHs	86% (2011) 88% (2013)
EHR adoption	60% (2013)
Percentage of 2013 Quality Pool earned	80%

Sources: CCO application, CCO financial reports, Transformation Plan Amendment, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a] in addition to integrating primary care and behavioral health

CAC = community advisory council; CEO = chief executive officer; CCO = Coordinated Care Organization; EHR = electronic health records; FCHP = fully capitated health plan; FQHCs = federally qualified health center; HIE = Health information exchange; IHN = InterCommunity Health Network; MH = mental health; MHO = mental health organization; OHA = Oregon Health Authority; PIP = performance improvement plan; PCPCHs = patient-centered primary care homes; SHS = Samaritan Health Services

Table C.8. Jackson Care Connect

Characteristic	Description
Date CCO started serving Medicaid population	September 1, 2012
Form of legal entity	LLC wholly owned by Care Oregon (not for profit, 501(c)(3))
Legal Partners / Owners	CareOregon
Historical organizations	CareOregon (FCHP)
Governing Board	Representatives from CareOregon (Medicaid MCO), Asante Health System (hospitals, physicians, other), Providence Health & Services, PrimeCare (physician group), Jefferson BH (MHO), Jackson County MH, Addictions Recovery Center, Community Health Center (FQHC), On Track (chemical dependency treatment center), La Clinica del Valle (FQHC), CAC member, local physician, community members
Counties served	Jackson
Medicaid enrollment	19,734 (April 2013) 28,219 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	High utilizer initiative – By July 2014 • Implement sustainable funding mechanism for interdisciplinary community care teams that are tied to behavioral health, primary care, hospital, and oral service providers • Support existing interdisciplinary community care team and expand to include at least 2 more clinics or high-utilizer stakeholder groups • Commonly agreed-upon definition of high utilizers adopted and utilized by interdisciplinary community care team • Baseline data showing utilization patterns and associated costs is established, maintained, and shared across community care team members; data show SPMI population and allows for targeted interventions • Jackson County Mental Health assists in development of guidelines for community outreach workers and community care team members to work effectively and safely with SPMI population • Hospital discharges for members with mental health diagnosis are coordinated with outpatient service providers and include care plans • CCO facilitates development of memoranda of understanding (MOU) between physical health, mental health, and addictions service providers to manage timely and appropriate transitions of care Opioid prescribing – By July 2014 • Facilitate implementation of community opioid prescribing guidelines • Capture baseline data for current prescribing and utilization patterns of pain and psychotropic medications • Encourage use of Prescription Drug Monitoring Program by local prescribers • Complete analysis of an alternative pain management model for piloting in at least one clinic in the service area • Create and implement peer to peer education and dialogue aimed at changing prescribing patterns of opioids • Include a report card or other reporting mechanism that allows prescribers to view and compare data on prescribing patterns • Provide for co-location of behaviorists and addictions providers in at least one major clinic

Table C.8 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 1 (continued)	• Initiate partnerships with social services and school-based providers to provide addictions screening and intervention for adolescents • Includes oral health service providers in opioid prescribing workgroups Coordinate activities with existing Opioid Prescribing Group achieved through Clinical Advisory Panel
Transformation element 2 - Implement and develop PCPCHs	By July 2014 • Corroborate that existing PCPCH clinics are maintaining or improving current Tier standing • Create primary care administrators group to develop PCPCH locally, with unique strategies developed for small, private practices • Develop strategies and incentives for small, private clinics developed in partnership with administrators group, clinical advisory panel, and CCO staff • Strengthens relationship across primary care, specialty, and emergency providers • Develops and implement training on PCPCH practice guidelines in at least 2 new clinics
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	By July 2014 • Develop baseline knowledge of health outcomes across mental, physical, and oral health to utilize in alternative payment methodologies • Identify alternative payment methodologies that are locally appropriate, and align payment with health outcomes among providers • Explore opportunities and strategies for developing risk sharing pools and multi-payer alternative payments • Select at least 1 alternative payment methodology for implementation
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	By July 1, 2014 • Actively engage CAC in the Community Assessment and Improvement Plan process • Complete CHA through guidance of CAC and adopted by CCO Board of Directors • Complete and approve CHIP by 7/1/14; CHIP includes strategies to reduce health disparities based on community-identified priorities • Ensure that CHA and CHIP findings guide 2014 strategic priorities and annual CCO board retreat • Ensure that CHIP is tightly integrated with the work related to member engagement, cultural competency of providers, quality improvement plan to eliminate disparities, and high utilizer strategies
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	By July 2014, • Complete assessment of providers' deployment of meaningful use and existing needs, conducted in partnership with Jefferson HIE • Include mental health and addictions service providers in all appropriate health information planning efforts • Contribute to analysis of regional HIE scope of work and business plan being conducted by Jefferson HIE • Ensure adoption of CCO plan to increase communication of health records and patient information across participating providers • Implement closed loop referral process in partnership with Jefferson HIE • Conduct ongoing coordination and engagement with state HIE development

Table C.8 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	By July 2014, • Ensure that CAC Practice Administrator's Group, CAP and Board of Directors are actively engaged in improving delivery of culturally competent care. CAC specifically reflects demographics of members and is a central component of process for review and/or design of materials • Conduct a county-wide assessment in coordination with CAC and Practice Administrators'' Group to inform creation of a cultural competency plan that includes: a. Selection and utilization of a cultural competency assessment tool that is appropriate for Jackson County b. Assessment of existing CCO communications with revisions made as necessary; appropriate communication materials are shared widely with providers c. Identification of populations in service area, their cultural needs, and specific disparities; include in CHA • Identify tools for effective member communication in collaboration with CAC and CAP • Collect community level baseline data regarding health disparities in year 1, as identified in CHA; Identify data gaps • Conduct education on "unconscious bias" for CCO Board of Directors, CAC, CAP and offers education to provider network • Develop quality improvement plan with cultural competency action steps, and include specific strategies for improving outreach, communications and member engagement based on a member definition of cultural competence
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	• Conduct environmental analysis to identify baseline status of culturally competent care delivered by participating providers • Identify strategies to reduce stigma and improve cultural competency among PCPs caring for patients with behavioral health problems and/or SPMI • Research and develop a cross training program for PCPs on behavioral health issues, with a special focus on culturally competent care for members with mental health and/or addictions disorders • Conduct education on "unconscious bias" provided to Board of Directors, CAC, CAP and offer to provider network • Provide targeted training to providers engaged in working with "high utilizers" • Include specific strategies for cultural trainings, health literacy, and workforce development in quality improvement plan
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	By July 2014 • Share understanding of local health disparities developed and adopted by CCO. CHA and cultural competency assessment informs understanding • Identify quality standards that are locally appropriate and specifically address health outcomes, quality of care, workforce, language access, and reduction of health disparities • Ensure that at least four metrics are identified, calculated, and incorporated into the quality improvement plan that link health disparities to health outcomes • Execute a plan to address selected quality improvement areas

Table C.8 (continued)

Characteristic	Description
Transformation grant priorities	1. Invest in health information technology (HIT) improvements to increase data sharing between organizations already using electronic health records and better integrate behavioral health service organizations and social support services into the system. They will also connect to the surrounding region, in partnership with other CCOs and hospitals, through participation in the Jefferson Health Information Exchange. 2. Support Patient-Centered Primary Care Homes (PCPCHs) in capacity building and other support for current PCPCHs and for small clinics interested in becoming PCPCHs. Establishing a local learning collaborative will offer peer support, cross-learning, and exposure to different clinical care models to help bolster the PCPCH system. It can also be tailored to local community needs. In partnership with others, they will develop a sustainable PCPCH payment model to support recognized clinics in maintaining their team-based, multi-disciplinary, integrated care delivery model. 3. Improve care coordination, specifically integration of behavioral and physical health, and coordinated care for high utilizers. In partnership with others, JCC will develop a system integration model and will support participating organizations with small stipends for their time and dedication.
PIP Focus[a]	• Decrease unnecessary opioid prescribing and misuse to achieve a decrease in ED visits, decrease deaths associated with opioids, and integrate mental health, physical health, addictions treatment • Care teams to improve outcomes for super utilizers • Improve timeliness of prenatal care and behavioral health screening
Technology plan priorities	• Planned utilization of OCHIN for reporting data on the three clinical CCO incentive measures in year one • Survey of clinics to determine provider use and capabilities of vendor specific HIE functionality in order to inform HIE strategy • Stakeholder in development of Jefferson HIE • Development of HIT capacity for the two primary addictions service clinics in Jackson County • Development of social service software system to support information sharing among Community Based Organizations (CBOs) and the CCO
HIE	Working with Jefferson HIE
Percentage of members in PCPCHs	45% (2011) 42% (2013)
EHR adoption	61% (2013)
Percentage of 2013 Quality Pool earned	70%

Sources: CCO application, CCO financial reports, Transformation Plan Amendment, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a] in addition to integrating primary care and behavioral health

BH = behavioral health; CCO = Coordinated Care Organization; ED = emergency department; EHR = electronic health records; FCHP = fully capitated health plan; FQHC = federally qualified health center; HIE = Health information exchange; JJC = Jackson Care Connect; LLC = limited liability company; MCO = managed care organization; MHO = mental health organization; OHA = Oregon Health Authority; PIP = performance improvement plan; PCPCHs = patient-centered primary care homes

Table C.9. PacificSource Community Solutions

Characteristic	Description
Date CCO started serving Medicaid population	August 1, 2012[a]
Form of legal entity	Corporation, owned subsidiary of PacificSource Community Health Plans (not-for-profit independent company of PacificSource holding company)
Legal Partners / Owners	PacificSource, reorganization in 2013
Historical organizations	PacificSource Community Solutions as FCHP/MCO and MHO Affiliates: Deschutes, Jefferson, Crook and Klamath counties; St. Charles Health system; Blue Mountain Hospital; Central Oregon IPA; Mosaic Medical
Governing Board	Central Oregon Health Council is governance structure (2011 legislation formalized COHC to oversee the regional health assessment and implement a HIP for the region) County commissioner of Jefferson, Crook, Deschutes counties; president of Central Oregon IPA, CEO St. Charles Health System; COO PSCS; consumer from Jefferson County, consumer from Deschutes County and representatives from BH, oral health, specialist, and FQHC providers
Counties served	Deschutes, Crook, Jefferson, Klamath (partial), Hood River, Wasco
Medicaid enrollment	38,092 (April 2013) Pacific Source Central 47,378 (April 2014) Pacific Source Gorge 11,213 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	Central Oregon • Ensure that the Central Oregon Health Council approves the integrated care work team project plan by the end of 2nd quarter of 2013 • Establish ongoing review of cost, quality, and experience outcomes being achieved by integrated care sites Columbia Gorge • Ensure Columbia Gorge Health Council (CGHC) identifies and establishes a charter for the work team members by the end of the 2nd quarter 2013 • Ensure CGHC reviews and approves work team project plan by the end of the 3rd quarter of 2013 • Ensure at least 4 integrated co-location sites in the Columbia Gorge service area are available to the members by end of June 2014
Transformation element 2 - Implement and develop PCPCHs	Central Oregon • Ensure that the assessment of community PCPCH certification opportunities in partnership with Central Oregon Health Council is complete • Increase the number of members assigned to a PCPCH clinic in places as endorsed by Central Oregon Health Council Columbia Gorge • Ensure the assessment of community PCPCH certification opportunities in partnership with Columbia Gorge Health Council stakeholders is complete • Increase the number of members assigned to a PCPCH clinic in place as endorsed by Columbia Gorge Health Councils

Table C.9 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	By July 2014 • Ensure alternative payment methodology (APM) work groups are established to develop recommendations on payment methodologies; APM work group recommendations endorsed by Central Oregon and Columbia Gorge Health Councils
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	Central Oregon • Standardize CHA and CHIP updates considering the community partner agencies' community health assessment and plan needs Columbia Gorge • Establish process for CHA and CHIP using MAPP tool; complete first CHA and CHIP combined for Wasco and Hood River counties
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	Central Oregon • Form a neutral Central Oregon HIE governance entity by the 3rd quarter of 2013, with participation from the region's largest providers • Formalize a business plan and financing plan for a comprehensive community HIE strategy by end of 2013 • By July 2014, all providers participating in regional HIE governance will have interfaced their electronic health records to the HIE platform Columbia Gorge • Assess current capabilities and builds consensus among the Columbia Gorge stakeholders on a vision for HIE infrastructure, milestones and benchmarks • Create and implement elements of a community HIE development plan with specific goals for each HIE functional element
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	By July 2014, • Complete written self-assessment to identify at least two areas to improve member communications with particular focus on Hispanic/Latino and Indian/Alaska Native (AI/AN) populations • Outline system requirements necessary to implement recommended changes
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	• Engage all appropriate and essential partners throughout CCO to organize a committee to review, define and set community adopted standards to be established and approved by Central Oregon and Columbia Gorge Health Councils
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	• Complete written self-assessment of system data gaps; contractor ensures that at least 2 operational or system changes to improve granular data collection, reporting and analysis related to language, race and ethnicity are completed • Adopt quality Improvement plan focused on eliminating racial, ethnic and linguistic disparities

Table C.9 (continued)

Characteristic	Description
Transformation grant priorities	• Maternal and child health initiative - that leverages public health and primary care partnership to enhance access to targeted services for high-risk OHP maternity members • Pediatric complex care coordination initiative that embeds a nurse care coordinator in the three largest pediatric practices • Development of a community-wide strategy for high-risk pediatric populations through the existing Program for the Evaluation of Development and Learning • Two coordination initiatives - Community-wide care coordination strategy for adult patients with complex health care needs (Bridges Health) and Integration of behavioral health into primary care and primary care into behavioral health settings (the latter for members with severe and persistent mental illness) • Increased capacity for behavioral health in primary care, including expansion into pediatric, neonatal intensive care and internal medicine settings including involvement in a bi-state alternative payment study (SHAPE in Colorado) • Community-wide effort to standardize transitions in care between regional emergency departments and long term care facilities • Trial alternative payment methodologies involving global risk agreements in acute mental health and with a targeted Medicaid population within one large clinic system
PIP Focus[a]	• Assure members with chronic pain receive care in right place and chronic pain management is integrated into primary care • Improve billing so claims capture date of first prenatal visit and postpartum visit to identify whether there are gaps in care vs. administrative gaps • Improve preventive care to members with SPMI
Technology plan priorities	PacificSource Central • Planned utilization of OCHIN for reporting data on the three clinical CCO Incentive Measures in Year One, evaluation of ability to report via the Central Oregon HIE • Development of Regional HIE - primary focus in 2014 is to add additional key practices to the Central Oregon HIE (CO HIE) and to expand the use of electronic exchange of Secure Messages, Continuity of Care Documents (CCDs), Lab Results, and Pathology Results PcacificSource Gorge • Planned utilization of OCHIN for reporting data on the three clinical CCO Incentive Measures in Year One, evaluation of ability to report via the HIE • Stakeholder in development of Regional HIE, Gorge Health Connect (GHC)
HIE	In 2011, the Central Oregon HIE (COHIE) was formed as a collaborative effort among several of the region's largest health care providers in 2011. By December 2013 COHIE was incorporated as a 501 (c) (3)
Percentage of members in PCPCHs	74% (2011) 91% (2013)
EHR adoption	58% (2013)
Percentage of 2013 Quality Pool earned	100%

Table C.9 (continued)

Sources: CCO application, CCO financial reports, Transformation Plan Amendment, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a]PacificSource became two CCOs after the evaluation was underway. When information was available for both CCOs, we provided it.

[b] In addition to integrating primary care and behavioral health

CCO = Coordinated Care Organization; CEO = chief executive officer; COHIE = Central Oregon HIE; COO = chief operating officer; EHR = electronic health records; FCHP/MCO = fully capitated health plan/ managed care organization; FQHC = federally qualified health center; HIE = Health information exchange; MHO = mental health organization; OCHIN = Oregon Community Health Improvement Network; OHA = Oregon Health Authority; OHP = Oregon Health Plan; PIP = performance improvement plan; PCPCHs = patient-centered primary care homes; PSCS = PacificSource Community Solutions

Table C.10. PrimaryHealth of Josephine County

Characteristic	Description
Date CCO started serving Medicaid population	September 1, 2012
Form of legal entity	LLC, wholly owned subsidiary of CareOregon (501(c)(3) which sold its membership interest in Primary Health to OHMS in January 2014
Legal Partners / Owners	CareOregon
Historical organizations	CareOregon
Governing Board	CareOregon (FCHP), Oregon Health Management Services (FCHP), Jefferson Behavioral Health (MHO), Options (county mental health provider), Three Rivers Community Hospital, Siskiyou Community Health Center, Choices Counseling Center (chemical dependency treatment provider), 1 primary care MD or NP, 2 community members, 1 CAC member
Behavioral Health Contract	Jefferson Behavioral Health
Counties served	Josephine, contiguous parts of Douglas and Jackson
Medicaid enrollment	6,107 (2013) 9,992 (2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	Reduce unnecessary utilization and improve health outcomes for super utilizers through the implementation of community outreach workers By July 2014 • Identify super utilizers though encounter data analysis • Establish baseline of healthcare utilization by super utilizers • Hire community outreach workers to assist small caseloads of identified super utilizers with effective navigation of the health care system and improved personal health and wellness; community health workers will focus on assisting members to obtain the right care in the right place at the right time • Integrate community outreach workers with the health care team, including existing PCPCHs with a focus on the PCPCH currently under construction within the adult mental health facility; community outreach workers will also work collaboratively with agencies such as Choices Counseling Center (CD) and Options for Southern Oregon (CMHP), and dental providers. Integration will include a plan for effective communication with each part of the care team • Ensure community outreach workers will assist members with setting and evaluating incremental health improvement goals • Strive for initial reduction in total plan costs from baseline measurement by July 1, 2014 along with improvement in health plan utilization patterns
Transformation element 2 - Implement and develop PCPCHs	• Assist in infrastructure building, support, and education to expand the PCPCH model to alternate care sites which will target maternity care and community mental health settings • Continue PCPCH focused learning collaborative in Josephine County to enhance and build upon the skills of existing and prospective PCPCHs • Develop and distribute a dashboard of metrics that are mutually agreed upon as important indicators of population health • Continue to support the expansion of PCPCH to new traditional and/or non-traditional clinic sites (i.e. PCPCH in specialty clinic sites)

Table C.10 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	By July 2014 • Implement an incentive based payment model with at least one PCPCH clinic in the network of participating providers
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	• By July 2014, CHIP is completed and approved, and includes identified strategies to reduce health disparities based on identified priorities
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	By July 2014 • Complete assessment of PCPs' deployment of meaningful use and existing needs • Complete analysis of regional Health Information Exchange (HIE) and complete plan for increasing communication of health records and member information across PCPs • Determine percent of PCP clinics that are able to share a portion of the health record securely in real time
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	By July 2014 • Conduct baseline cultural competency assessment of member communication tools and current methods of engagement • Create a cultural competency action plan with the help of the CAC to include at a minimum: o Identification of CCO "vital documents" o Identification of documents or standard operating procedures that may need revision or development based on the CAC's cultural competency assessment, such as a cultural competency policy • Create a document registry • Complete cultural competency assessment in coordination with its CAC
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	• Ensure that environmental cultural competency assessment identifies baseline status of culturally competent care delivered by participating providers • Identify strategies to reduce stigma and improve cultural competency among PCPs and ancillary providers caring for members with behavioral health conditions and/or SPMI • Research and develop a cross training program for PCPs, ancillary providers and community outreach workers on behavioral health issues, with a special focus on communications, member engagement, and culturally competent care for members with mental health and/or addictions disorders • Research potential grant funding to support educational program • Create a cultural competence policy which specifically addresses cultural trainings, health literacy, and workforce development
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	By July 1, 2014 • Develop specific goals and implement a strategy for improvement on two disparate metrics • Provide OHA with an update including the goals and improvement strategy

Table C.10 (continued)

Characteristic	Description
Transformation grant priorities	• Sponsor an Enhanced Care Delivery System Pilot at the Grants Pass Clinic, a multi-specialty clinic which houses 56 percent of PrimaryHealth's primary care assignments. • Work with Women's Health Center of Southern Oregon to develop a maternal medical home, where pregnant women can receive care that extends beyond the traditional obstetrical care model • Support the development and effectiveness of PCPCHs through alternate payment methodologies; pay for performance bonuses; and the provision of additional staff positions; and foster the success of PCPCHs to help PrimaryHealth improve outcomes for all of its members • Increase capacity for quality and outcome reporting by enhancing health information technology (HIT) systems through better software and additional staff • PrimaryHealth will solidify its connectivity to the regional Jefferson Health Information Exchange (HIE) • Support necessary education to train personnel on the innovative care concepts and tools used in care transformation • Employ individuals charged with monitoring, participating in, and facilitating transformational efforts
PIP Focus[a]	• Train Options medical support staff on strategies for assisting clients with mental health conditions and chronic disease • Use CHWs to outreach to super utilizers to connect to case management, social supports • Improve entry into prenatal care and screening for depression and substance abuse
Technology plan priorities	• Planned utilization of OCHIN for reporting data on the three clinical CCO Incentive Measures in Year One, evaluation of ability to report via Architrave 2.1 • Stakeholder in development of JHIE • Adoption of software for CCO incentive measure management and population management • Identification of need for more robust case management software that would better facilitate the CCO's transformative initiatives, documentation and tracking outcomes and will embark on an analysis to identify a solution
HIE	Yes, Jefferson Health Information Exchange
Percentage of members in PCPCHs	94% (2011) 96 % (2013)
EHR adoption	73%
Percentage of 2013 Quality Pool earned	100%

Sources: CCO application, CCO financial reports, Transformation Plan Amendment, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a] in addition to integrating primary care and behavioral health

CAC = community advisory council; CCO = Coordinated Care Organization; CHWs = community health worker; EHR = electronic health records; FCHP = fully capitated health plan; HIE = Health information exchange; HIT = health information technology; JHIE = Jefferson Health Information Exchange; LLC = limited liability company; MD = medical doctor; MHO = mental health organization; OHA = Oregon Health Authority; NP = nurse practitioner; PIP = performance improvement plan; PCPCHs = patient-centered primary care homes

Table C.11. Trillium Community Health Plan

Characteristic	Description
Date CCO started serving Medicaid population	August 1, 2012
Form of legal entity	Corporation, C Corp
Legal Partners / Owners	Agate Resources (physician owned) is the sole shareholder of subsidiary holding company Trillium Holdings which owns Lane Individual Practice Association (Lipa). Trillium Community Health Plan is owned by Trillium Holdings and Lipa.
Historical organizations	Trillium Community Health Plan, LaneCare (Lane county MHO), Lipa (MCO), McKenzie-Willamette Medical Center, Lane County Community Behavioral Health Consortium, PeaceHealth
Governing Board	Representatives of Agate Healthcare (3), LaneCare, Lane County public health officer, Lane County administrator, primary medical care (3), specialty medical care (2), hospitals (3), behavioral health providers (3), CAC (2), rural CAC (1), long term care (1)
Counties served	Lane
Medicaid enrollment	50,683 (April 2013) 82,869 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	By July 2014 • Develop and incorporate a depression screening protocol into all patient-centered primary care homes (PCPCH) and contracted behavioral health agencies • 80 percent of members served in PCPCHs will be screened by the providers with an appropriate follow up response commensurate with the level of depression identified
Transformation element 2 - Implement and develop PCPCHs	• By July 2014, 65 percent of plan PCP's will be practicing in a recognized PCPCH
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	By July 2014 • CCO will have a capitation arrangement with ER physicians • Establish methodology for providing bonus payments to PCP groups that reduce ER visits • Establish case rates for behavioral health providers
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	• In 2013 CCO Board of Directors, Lane County Public Health, and PeaceHealth/Sacred Heart Medical Centers will adopt a collaborative CHA/CHIP
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	By July 2014 • Establish a shared care plan system that links CCO, contracted PCPCHs and behavioral health providers

Table C.11 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	• By July 2014, complete assessment of CCO member materials and outreach efforts for language and literacy appropriateness, and implement any necessary improvement plans in order to achieve 90 percent of CCO communications and outreach materials are appropriate for members
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	• • By July 2014, complete assessment of contracted provider system to determine baseline level of provider diversity and cultural competency training standards
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	• By July 2014, complete analysis and identification of disparities related to ACA conditions and development of priority improvement plans
Transformation grant priorities	Trillium Coordinated Care Organization is using its transformation funds on a project called the Shared Care Plan. The plan will address problems of limited communication and fragmented patient information by linking individuals on a member's care coordination team virtually – including the member. This virtual link will allow teams to share information about the member and their care, even if the team is in different organizations or locations. The Shared Care Plan will help Trillium integrate and coordinate care for its 50,000 Medicaid members, ensuring higher quality health care and a better patient experience. The Shared Care Plan focuses on three main areas: care coordination and quality, patient activation, and health information exchange. It is a comprehensive coordinated care model tool that will allow Trillium to better manage the care of all its members, specifically those with a high need for patient-centered and preventive care coordination.
PIP Focus[a]	• Improve care coordination and transitions of care for acute cardiac patients admitted to hospital • With monthly tracking of claims Identify members at high risk for "29 ACA conditions" • Address higher than expected infant and maternal mortality rates in Lane county
Technology plan priorities	• Plans to collect data directly from clinics for reporting on three clinical CCO Incentive Measures in Year One • Implementation of a care management tool to: ○ Develop a Shared Care Plan that will link individuals on a member's care coordination team virtually – including the member – and will share information on the member's care with the entire team ○ Develop a portable HIE
HIE	Yes, CTC Gateway
Percentage of members in PCPCHs	80% (2011) 85% (2013)

Table C.11 (continued)

Characteristic	Description
EHR adoption	49%
Percentage of 2013 Quality Pool earned	100%

Sources: CCO application, CCO financial reports, Transformation Plan Amendment, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a] in addition to integrating primary care and behavioral health

CAC = community advisory council; CCO = Coordinated Care Organization; DHS = Department of Human Services; EHR = electronic health records; FCHP = fully capitated health plan; HIE = Health information exchange; Lipa = Lane Individual Practice Association; MHO = mental health organization; OHA = Oregon Health Authority; OHP = Oregon health plan; PIP = performance improvement plan; PCPCHs = patient-centered primary care homes

Table C.12. Umpqua Health Alliance, DCIPA

Characteristic	Description
Date CCO started serving Medicaid population	August 1, 2012
Form of legal entity	LLC, DCIPA
Legal Partners / Owners	DCIPA is a wholly owned subsidiary of Architrave Health, LLC
Historical organizations	Douglas County Individual Practice Association (DCIPA) (MCO/FCHP)
Governing Board	Representatives of Adapt (alcohol and drug treatment and primary care), Advantage Dental, ATRIO Health Plans (MA provider serving duals), Douglas County Mental Health, DCIPA, GOBHI, Mercy Medical Center, Umpqua CHC, Douglas County Board of Commissioners, CAC
Counties served	Most of Douglas County
Medicaid enrollment	16,611 (April 2013) 23,996 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	By July 2014 • Establish transformation workgroups and teams • Complete the recommendations for the integrated pilot model which focuses on strategies to improve coordination of services for members with SPMI • Complete written business plan describing the integrated system recommendations with a specific focused plan for members with SPMI and a plan for implementation
Transformation element 2 - Implement and develop PCPCHs	By July 2014 • Ensure that 20 percent of members are served in Tier 2 or 3 PCPCHs • Ensure that an additional 20 percent of members are served in Tier 1 PCPCHs
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	• By July 2014 ensure that 5percent of primary care provider (PCP) payments will be attributed to achieving scoring and metrics committee measures and goals
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	By July 2014 • Review CHA • Complete Community Health Improvement Plan (CHIP) • Develop initial CHA and CHIP action plans
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	By July 2014 • Ensure that 60 percent of members are assigned to providers that meet EHR meaningful use standards • Ensure that Douglas County Department of Health and Social Services has access to physical health records for 25 percent of members
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	By July 2014, • Identify barriers to member engagement • Review and prioritize member engagement methods in conjunction with the CAC • Complete literacy and linguistic needs assessment in coordination with CAC

Table C.12 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	• Select an appropriate culture of poverty curriculum • Create a training schedule for providers and CCO staff • Hold at least one culture of poverty training session by June, 2013
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	• Identify racial, ethnic and linguistic disparities in Douglas County • Assess access, quality of care, experience of care for members with disparities
Transformation grant priorities	An expanded care clinic to help address the needs of the CCO's high utilizers by providing high quality primary care services. The clinic will coordinate physical, mental and dental health services, along with addiction and nurse case management services. Expanding the number of patient-centered primary care homes, with a focus on smaller and more rural practices. Collecting population metrics. Using its patient-centered electronic health record system will help support data collection. Electronic health records will also create opportunities for providers to be prompted to perform services for the patients who need them. Co-location of addiction services. By co-locating physical health services and addiction services, problems can be addressed at the time that an addiction is noted. By co-locating these services, UHA will increase the number of patients who see addiction counselors. Wellness services. Using its community health improvement plan, they will develop wellness programs, such as improved nutrition and exercise. Non-Emergent Medical Transportation is new to UHA and expected to be part of its provided services in July 2014. UHA plans to meet with area vendors to plan how to best serve its members' transportation needs.
PIP Focus[a]	• Analyze emergency department utilization, to identify trends and patterns to develop interventions for future strategic planning, including but not limited to demographics, SPMI, mental health and addictions, dental health, chronic diseases, cultural, transportation, and social issues • Increase screening, brief intervention, and referral to treatment Gain a better understanding of the prevalence of pregnant women in Douglas County with addiction issues through as indicated • Provide support structure to help providers become PCPCHs
Technology plan priorities	• Plans to collect data directly from hosted EHR for reporting on three clinical CCO incentive measures in year one • Utilization of Architrave 2.1 for CCO incentive measure management other analytics capabilities • Identification of additional analytic needs: 1. Predictive modeling, to cone down the scope of work 2. Actionable data that can be addressed at an individual level at the time of case management 3. Accurate eligibility verification when analyzing data from clinical sources 4. Expansion and improvement decision trees that follow OHP guidelines
HIE	Umpqua One Chart (GE Centricity)

Table C.12 (continued)

Characteristic	Description
Percentage of members in PCPCHs	18% (2011) 74% (2013)
EHR adoption	77%
Percentage of 2013 Quality Pool earned	100%

Sources: CCO application, CCO financial reports, Transformation Plan Amendment, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a] in addition to integrating primary care and behavioral health

CAC = community advisory council; CCO = Coordinated Care Organization; DCIPA = Douglas County Individual Practice Association; EHR = electronic health records; FCHP = fully capitated health plan; GOHBI = Greater Oregon Behavioral Health, Inc.; HIE = Health information exchange; LLC = limited liability company; MCO = managed care organization; OHA = Oregon Health Authority; PIP = performance improvement plan; PCPCHs = patient-centered primary care homes; UHA = Umpqua Health Alliance

Table C.13. Western Oregon Advanced Health

Characteristic	Description
Date CCO started serving Medicaid population	August 1, 2012
Form of legal entity	Domestic corporation
Legal Partners / Owners	Southwestern Oregon IPA (MCO) dba Doctors of Oregon's Coast South (DOCS) owns WOAH (WOAH owns South Coast Technical Innovations, an electronic record imaging for medical services)
Historical organizations	ADAPT, Advantage Dental, Bandon Community Health Center, (rural health clinic) Bay Area Hospital, Bay Clinic, Coos County Mental Health, Coos County Public Health, Coquille Valley Hospital District (CAH), Curry General Hospital (CAH), Curry Health District, Curry Health Network, North Bend Medical Centers, ODHHS Seniors and Disabilities Program, PacificSource (MA plan), Powers Health District / Powers Health Clinic (closed but receiving TA)Waterfall Community Health Center, South Coast Hospice, South Coast Orthopedic Associates, Southern Coos Hospital and Health Center (CAH), Waterfall CHC (FQHC)
Governing Board	Minimum of 6 physicians 2 of whom must be primary care providers and 2 specialists, 2 hospital representatives, 1 community mental health representative, 1 county public health representative, 1 representative from contracted addiction treatment services, 1 representative from Advantage Dental, CAC chairperson, 2 community at large representatives
Behavioral Health Contract	Jefferson Behavioral Health
Dental care organization contract	Advantage Dental
Counties served	Northern Curry, Coos
Medicaid enrollment 4/14	11,922 (April 2013) 19,540 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	By July 2014 • Improve by 5 percent over baseline the members 18 to 75 years old who have SPMI and meet all NCQA comprehensive diabetes care for both HbA1c and LDL-C
Transformation element 2 - Implement and develop PCPCHs	• By July 2014 increase by 10 percent over baseline members who are enrolled in PCPCH
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	• By July 2014, develop and introduce Primary Care Provider (PCP) dashboards for selected indicators (e.g., patient retention), as the first step in a sequence of events that will ultimately link alternative payment methodologies with quality outcomes
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	• By March 2013, complete CHA and by August 2013, complete CHIP

Table C.13 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	• By July 2014, improve by 10 percent over baseline the proportion of providers adopting and using EHRs
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	• By July 2014, if disparities among groups are identified at baseline, the disparity will be decreased by half
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	• By July 2014, if disparities among groups are identified at baseline, the disparity will be decreased by half
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	By July 2014 • Improve by 5 percent over baseline developmental screening by age 36 months and reduce any disparities by half • Improve by 5 percent over baseline colorectal cancer screening for 50 to 75 year olds and reduce any disparities by half
Transformation grant priorities	• Develop a robust HIE • Expand data analytics capacity • Monitor patients with mental illness on medications to manage diabetes • Use contracted personnel to support transformation projects
PIP Focus[a]	• To reduce the number of re-hospitalizations of members who have CHF, Pneumonia and COPD; WOAH will work initially with Bay Area Hospital (BAH) and expand to Coquille Valley Hospital, Southern Coos Hospital, and Curry General • Decrease inappropriate opioid prescribing • Increase PCPCHs
Technology plan priorities	• Plans to collect data directly from clinics and utilize OCHIN for reporting on three clinical CCO incentive measures in year one • Development of an HIE, with an initial focus on claims data and incremental ingestion of clinical data, with the ability to: 1. Report the OHA quality measures 2. Serve as a quality metrics registry 3. Serve as an analytic tool to identify patients at high risk of avoidable costs 4. Provide a secure messaging program that can send care coordination information either electronically (for users of the system) or even by fax (for non-users of the system, such as nursing facilities or adult foster homes)

Table C.13 (continued)

Characteristic	Description
HIE	WOAH explored HIE solutions to bring to the community and has signed a contract with AT&T in partnership with Covisint and Milliman to provide a community health information exchange with the ability to report the OHA quality measures and serve as a quality metrics registry, an analytic tool to identify patients at high risk of avoidable costs, and a secure messaging program that can send care coordination information either electronically (for users of the system) or even by fax (for non-users of the system, such as nursing facilities or adult foster homes.)
Percentage of members in PCPCHs	46% (2011) 68% (2013)
EHR adoption	64% (June 2014 report)
Percentage of 2013 Quality Pool earned	100%

Sources: CCO application, CCO financial reports, Transformation Plan Amendment, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a] in addition to integrating primary care and behavioral health

CAC = community advisory council; CAH = critical access hospital; CCO = Coordinated Care Organization; COPD = chronic obstructive pulmonary disease; EHR = electronic health records; FQHC = federally qualified health center; HIE = Health information exchange; MCO = managed care organization; ODHHS = Oregon Deaf and Hard of Hearing Services; OHA = Oregon Health Authority; PIP = performance improvement plan; PCPCHs = patient-centered primary care homes; WOAH = Western Oregon Advanced Health

Table C.14. Willamette Valley Community Health

Characteristic	Description
Date CCO started serving Medicaid population	August 1, 2012
Form of legal entity	LLC
Legal Partners / Members	Members: ATRIO Health Plans, Capitol Dental Care, Mid-Valley Behavioral Care Network, Mid-Valley IPA (dba Willamette Valley Providers Health Authority) Northwest Human Services, Salem Clinic, Salem Health/Salem Hospital, Santiam Memorial Hospital, Silverton Health, West Valley Hospital, Yakima Valley Farm Workers Clinic Affiliates: Marion County, Polk County,
Historical organizations	MCO contracts with OHA: Willamette Valley Providers via subsidiary Marion Polk Community Health Plan, Capitol Dental Care, Mid-Valley Behavioral Care Network
Governing Board	Representatives from Mid Valley BH Care Network, Mid Valley IPA, Valley Providers Authority, Polk County, Salem Clinic, Samaritan Memorial Hospital, Silverton Health, Willamette Valley Hospital, Yakima Farm Workers Clinic
Counties served	Marion, parts of Polk
Medicaid enrollment	64,671 (April 2013) 91,095 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	By July 2014 • CCO meets OHA improvement target for implementing SBIRT • Establish baseline, plan and target for engage additional clinics for percent of members served in clinics with behaviorists • Report the following measures: ○ Proportion of billings for mental health vs. health and behavior codes ○ Number of service units per member per 3 months ○ Length of sessions ○ Primary Care Provider (PCP) satisfaction • Ensure screening for depression implemented by PCPCHs serving 80 percent of members
Transformation element 2 - Implement and develop PCPCHs	• By July 2014 ensure that 85 percent of members are enrolled in Tier 2 or Tier 3 PCPCH Clinics
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	• By July 2014 ensure that 15% of participating providers are participating in Program Oriented Payment (POP) program
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	• By July 2014, finalize CHIP

Table C.14 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	• By July 2014 ensure that 60 percent of participating providers have demonstrated compliance with meaningful use standards for electronic health records
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	• By July 2014, ensure that 85 percent of non-English speaking members receive CCO informational communications in their primary language
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	• Offer centralized cultural competence training to all participating providers on an annual basis
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	• Sort incentive measures by language and ethnicity and meet OHA improvement target
Transformation grant priorities	• Community health information sharing initiative: this initiative will make pertinent patient information available to community health providers and the plan will be scaled to include all patients in the community, not just Oregon Health Plan members • WVCH will improve patient outcomes through development of a patient-centered primary care home program • Ensure that children with complex medical conditions are receiving comprehensive care; almost 14 percent of children in their service area have special health care needs, and those children interact with multiple parts of the health care system; this project will develop a centralized care coordination system for children that crosses physical, mental and children's health services; children and families with the most complex needs will be assigned a Family Support Coordinator to help coordinate the child's care
PIP Focus[a]	• Engage members with more than 10 ED visits in the previous year with care teams including THWs • Improve identification of pregnant women and get them in early prenatal care; give staff and providers financial incentives for identifying women • Expand PCPCHs
Technology plan priorities	• Plans to collect data directly from clinics for reporting on three clinical CCO incentive measures in year one • Identified need for data aggregation and analytics, particularly for the purpose of population health management • Continual analysis of a model/infrastructure for Health Information Exchange

Table C.14 (continued)

Characteristic	Description
HIE	The community does not have its own Health Information Service Provider (HISP) or centralized Health Information Exchange (HIE) capability; a significant number of organizations have registered with CareAccord for Direct secure messaging
Percentage of members in PCPCHs	67% (2011) 90% (2013)
EHR adoption	68%
Percentage of 2013 Quality Pool earned	100%

Sources: CCO application, CCO financial reports, Transformation Plan Amendment, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a] in addition to integrating primary care and behavioral health

BH = behavioral health; CCO = Coordinated Care Organization; ED = emergency department; EHR = electronic health records; HIE = Health information exchange; LLC = limited liability company; OHA = Oregon Health Authority; PIP = performance improvement plan; PCPCHs = patient-centered primary care homes; THWs = traditional health workers; WVCH = Willamette Valley Community Health

Table C.15. Yamhill County Care

Characteristic	Description
Date CCO started serving Medicaid population	November 1, 2012
Form of legal entity	Non-profit (application for 501(c)(3) status pending at time of CCO application)
Legal Partners / Owners	CareOregon, Mid-Valley Behavioral Care Network
Governing Board	Representatives from: Willamette Medical Center, Providence Newberg Medical Center, Mid-Valley Behavioral Care Network, McMinnville Physicians Organization, Oral health, Virginia Garcia Memorial Health Center, Yamhill county commissioner, Physicians Medical Center, Providence Newberg Medical Group, Yamhill County Health and Human Services, local MD, behavioral health provider, CAC chair, community member
Counties served	Yamhill and adjoining zip codes
Medicaid enrollment	13,844 (April 2013) 23,259 (April 2014)
Transformation plan benchmarks	
Transformation element 1 - Integrate mental health and physical health care and addictions and dental health; area of transformation must specifically address the needs of individuals with severe and persistent mental illness	By July 2014 – SBIRT • Provide SBIRT training and incorporate into patient flow in all PCPCHs • Provide training and incorporate into patient flow in both emergency departments; determine how Emergency Department coding will be captured in the OHA measure; determine whether SBIRT in mental health can be captured in the OHA measure • Assess adequacy of addictions and drug treatment capacity to allow rapid access to treatment; expand capacity if needed • Use traditional health workers (THWs) and other outreach mechanisms to assist providers in successfully linking referred individuals with treatment By July 2014 – behaviorists in PCPCHs • Ensure that behaviorists are funded, hired, trained and employed by Willamette Valley Clinics, Chehalem Medical Clinic, Virginia Garcia and Physicians Medical Center, Providence Medical Group • Ensures that the number of PCPCH qualifying at Tier 3 have behaviorists included in their team • Report on measures to validate effective implementation of its service model: ○ proportion of encounters for mental health vs. health and behavior codes ○ number of service units per member per 3 months ○ average length of sessions ○ PCP satisfaction By July 2014 – depression screening Ensure inclusion of options for depression screening and follow-up in PCPCH collaborative; ensure availability of evidence-based treatment By July 2014 – improve patient activation measure (PAM) scores with peer wellness specialists (PWS) • Ensure that PWS positions are funded, hired, trained and employed by CCO subcontractor(s) or providers to support members with mental health and addiction challenges • Complete PAM training and ensure that coaching is underway • Evaluate project and determine target number of PWSs needed, funding mechanism, and number of members to be served

Table C.15 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 1 (continued)	By July 2014 – integration of primary care into mental health • Ensure that PCP services are funded, hired, trained and employed by subcontractor(s) or providers and fully integrated into mental health clinics • Ensure that service system integration is established through policies and procedures and integrated medical team • Establish integrated-coordinated electronic health care record, e-prescribing and information sharing practices and ensure these resources are functional • Ensure that reception-scheduling and billing practices are in place • Offer a continuum of preventive and health promotion services to members according to the severity of the condition/risk factors • Create integrated coordinated care teams for all members with Serious Mental Illness (SMI) involved in community support services, chemical dependency treatment, courts or enhanced outpatient services, or who are experiencing chronic pain, HIV and/or Hepatitis C; ensure PCP participation in weekly treatment team meetings for ACT/EASA/residential clients • Ensure that PCP participates in monthly psychiatry team meetings regarding coordination of care • Establish baseline and targets for health status and other PCPCH measures
Transformation element 2 - Implement and develop PCPCHs	By July 2014 • Establishes baseline for each PCP practice; determine percentage of their newly assigned members they see within 90 days • Report to providers monthly, members assigned, but without a visit
Transformation element 3 – Implement consistent alternative payment methodologies that align payment with health outcomes	By July 2014 • Pilot one to two methodologies with high volume providers that are related to defined outcomes • Study and refine targeted benchmarks • Adjust methodologies to meet targets
Transformation element 4 – Prepare a strategy for developing contractor's community health assessment and adopt an annual community health improvement plan	By July 2014 • Ensure that the CAC will utilize a modified Mobilizing for Action through Planning and Partnerships (MAPP) process for the CHA and development of an annual CHIP • Ensure that CHIP will be reviewed and adopted by the CCO Board
Transformation element 5 - Develop a plan for encouraging electronic health records (EHRs), health information exchange, and meaningful use	• By July 2014, ensure that initial engagement of at least 50 percent of participating providers identified by the Advisory Board Company (owner of Crimson Care) begins implementation of the Crimson Population Risk Management Tool

Table C.15 (continued)

Characteristic	Description
Transformation plan benchmarks (continued)	
Transformation element 6 – Assure communications, outreach, member engagement, and services are tailored to cultural, health literacy, and linguistic needs	By July 2014 • Collect and assess enrollment data to determine the cultural composition of members as well as literacy levels as a baseline measurement • CAC reviews enrollment data and assesses the preferred spoken and written languages of members, persons eligible for Medicaid or underserved populations • CAC researches best practices when determining a method to use for assessing the literacy levels of members with the possibility of engaging members in a focus-group or in-person interviews • CCO provides recommendations from that assessment to Board and CAP
Transformation element 7 – Assure that the culturally diverse needs of members are met (cultural competence training, provider composition reflects member diversity, non-traditional health care workers composition reflects member diversity)	By July 2014 • Apply the MAPP process for CHA; provide baseline population data to the CAP in order to determine the culturally diverse needs of the members • Provide annual cultural diversity training to CCO staff and participating providers • Document attempts to attract providers and THWs whose cultural composition reflects member diversity
Transformation element 8 - Develop a quality improvement plan focused on eliminating racial, ethnic and linguistic disparities in access, quality of care, experience of care, and outcomes	By July 2014 – QI to improve experience of care • Review survey results of first CAHPS, provide individual providers with survey results, and identify focus areas and set 2015 improvement goals By July 2014 – QI to address disparities in access • Determine a rate of preventive visits by age, sex, race, ethnicity, language and location (rural vs. large town). Compare to statewide data to determine statistically significant disparities. Share data in an actionable form with PCPs By July 2014 – QI to address disparities in the health outcomes of SPMI • Review quality measures such as pap smears, colon cancer screening, and mammography for whole group of SPMI and for subgroups within that population by race, ethnicity, language, and location (rural vs. town); and share data in an actionable form with PCPs By July 2014 – QI to address adult disparities • Determine the baseline rate of disparities for adult quality of care measures and using CCO specific data. Use data to inform benchmark for 2015. By July 2014 – QI to address pediatric disparities Determine the baseline rate of disparities for pediatric quality of care measures and using CCO specific data. Use data to inform

Table C.15 (continued)

Characteristic	Description
Transformation grant priorities	• Connect patients who frequent the emergency department with primary care services and other community resources • Ensure all providers are certified tier 3 patient-centered primary care homes. Additionally, they are developing maternal medical homes for all OB/Gyn providers • Expand the CCO's primary care provider teams, which are comprised of physicians, advanced practitioners and (non) traditional health care workers. The team assures that the full spectrum of a patient's care is coordinated and focused on prevention. The initiative will fund the start-up of a bilateral integration care model, which helps coordinate physical and behavioral health care by placing primary care physicians into mental health clinics and behavioral health specialists into physical health settings. Bilateral integration will foster timely patient-centered care in a single setting. • Develop a viable alternative payment model; improving and supporting local health information exchange tools; and to improve data coordination across the CCO
PIP Focus[a]	• Increase the use of a standardized screening tool for developmental screening in children ages birth to 36 months within pediatric and primary care practices; ensuring children are receiving comprehensive screening and appropriate referral from their primary care providers • Improve timeliness of prenatal care and assure early perinatal screening for depression and substance abuse • Increase PCPCHs that achieve Tier 3
Technology plan priorities	• Planned utilization of OCHIN for reporting data on the three clinical CCO incentive measures in year one • Adoption of a Health Information Exchange Platform (HIEP)
HIE	Yes
Percentage of members in PCPCHs	39% (baseline) 76% (June 2014)
EHR adoption	54%
Percentage of 2013 Quality Pool earned	100%

Sources: CCO application, CCO financial reports, Transformation Plan Amendment, OHA transformation grant summary, Oregon Health Authority Office of Health Analytics enrollment data, Oregon Health Authority Office of Health Analytics, CCO Incentive Measures 2013 Final Report.

[a] In addition to integrating primary care and behavioral health

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APPENDIX D

CCO CASE STUDIES

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CCO CASE STUDY A

Overview

With nearly 50,000 members, CCO A serves several rural counties. A majority of the CCO members are served by recently recognized PCPCHs and nearly 50 percent of providers have EHRs. Integration and care coordination and alternative payment methods are particular areas of focus of the CCO. CCO A is also working with OHA to examine the effect of delivery system transformation on safety net providers.

Board perspective

The CCO member organizations include a health plan, a mental health organization, several hospitals, an independent physician group, and a clinic for an underserved population. The board includes representatives from the health plan, the mental health organization, hospitals and providers, and community representatives from the counties served. The board member skills reflect a balance between the health plans that have expertise with billing, claims data, and data analytics and the providers who have the clinical experience to inform the transformation process on the ground. The CCO member organizations started working together before the CCO legislature was finalized and had a "mature relationship" prior to becoming a CCO. Providers represent a significant influence on the board. Members report a collaborative environment that supports their mission of working together for the benefit of the patients they serve.

The board sets most policy related to transformation, particularly policies that are relevant to the quality metrics. The providers develop the specific details of the implementation and operations of the transformation efforts. The board uses data as much as possible to identify specific problem areas. The board meetings are open to non-board members. Hospital CEOs, the county commissioners and others attend. The communication among different stakeholders has increased since the formation of the CCO.

CCO A's board is very interested in care coordination efforts and how to best support effective implementation at the local level. The board decided to use the transformation grant funds as a one-time financial infusion to support transformation initiatives at the local level through a request for proposals process. The board specifically asked for more collaboration among public health, behavioral health, oral health, hospital, and physician providers. The board is assessing the effect of the grant funded initiatives using a rapid cycle improvement process.

The board finds it challenging to limit transformation efforts to the Medicaid delivery system. Providers want more uniform policies across payers. The board has started discussions about expanding the model to commercial payers.

Provider perspectives

Providers report that they know how to transform care. They have focused on improving care coordination in the community with providers, and with mental, behavioral, and public health systems. There is increased communication between the public, behavioral, and dental health providers.

The physician providers identified high utilizers of the emergency departments as a problem that could be addressed with better care coordination. They brought in traditional health workers (THWs) to work within PCPCHs with the 30 highest utilizers of EDs. THWs helped to increase communication among providers and were available to follow-up and answer questions for the patients. ED visits have decreased by 12 percent in three communities.

In some communities there is significant progress in coordinating care that includes wrap around services for complicated patients with medical, substance abuse, and/or behavioral health issues. Providers have also noticed a significant decrease in hospital admissions due to adoption of the PCPCH; some practices' hospital admissions have decreased from one per day on average to one per week.

The hospitals in the region face a dilemma; as hospital admissions and ED visits have declined, their revenue has also declined. They have seen an impact on staffing needs and the smaller hospitals are concerned about the ability to provided 24 hour emergency department care. Hospitals, working with CCO A and OHA, developed a capitated payment for hospitals. They are testing the model in a few hospitals. Providers are committed to working with OHA to find a payment mechanism that ensures that communities have access to safety net providers and emphasize the importance of assessing how the Medicaid payment policies interact with other payers. Change is occurring very rapidly and there is a risk of unintended consequences. Providers want the CCO to monitor and assess change to avoid as many of the unintended consequences as possible.

Providers support the transition to integrated behavioral health and physical health, especially in primary care. Primary care and mental health providers are interacting more than before the transformation and provide more coordinated care. Care coordinators hold monthly meeting with clinics, hospitals, and mental health providers to discuss patients with high needs and agree on which staff to assign to the team caring for those individuals. Someone takes the lead on the patient and creates a care team for that person. Providers shared several barriers to on-site integration of physical and mental health services including onerous regulations related to provider qualifications and credentialing and regulations about who can bill for mental health services and the payment mechanisms. They also expressed concern about how the global budget is allocated; the CCO separates the mental health portion of the global budget and the mental health organization member of the CCO manages the budget so that the mental health payment is still siloed.

Persons with SPMI gained greater access to community services after the mental health organization partner provided a stipend to implement Assertive Community Treatment (ACT) services. The mental health organization did not continue with the stipend but the CCO is continuing the service by making cuts in other areas. There are more types of services for the SPMI and those services are better coordinated. Providers believe the CCO model is better for the SPMI population and that they have experienced better outcomes.

Providers expressed a need for a clear transition between fee for service payments and capitated payments. They also noted that the focus on population health requires different metrics to develop the PMPM payments and to assess health outcomes. In the future payment should be based on how well providers perform on those measures. They anticipate that

clinicians of the future will manage patients face to face, over the telephone, and with video consultations. Payment should also support the infrastructure necessary for the future models of care delivery.

Providers commented on the effect that having insurance will have in their community. They believe thousands of individuals who have not had access to care will not only receive the acute care they need but will also access care earlier and access care they did not know they needed. Physicians viewed this as an important part of prevention and of strategies to enable people to work and to prevent deeper poverty.

Community perspective

The community representatives view CCO A as being very knowledgeable about the cultural conditions and the needs of the region. Overall the community is pleased that they have had the opportunity to be involved. They appreciate the problem solving CCO A and its innovator agent have undertaken to address the geographic challenges the CAC representatives face. They would have liked OHA to place a stronger emphasis on the role of public health agencies in the design of the CCOs.

The CAC created a CHIP in collaboration with local communities. They identified early childhood prevention/health promotion, mental health, training community health workers, oral health, and aligning public health services with primary care for chronic disease management as the overall top priorities. They are very concerned about who has ultimate responsibility to pay for and manage the implementation of the CHIP. Participants are frustrated that they volunteered their time on creating the CHIP but do not have funds to implement it. There also appears to be a misunderstanding about funds for flexible services (such as an air conditioner for someone with asthma) as being the source of funding for the CHIP. The CAC representatives believe the CCO should have planned for the process and included how to fund implementation.

Health information technology is a challenge

Implementing an overall HIT plan for the community that CCO A serves has been a challenge due to the lack resources to build a system for an integrated delivery system. CCO A believes OHA should develop and fund the basic infrastructure to support a state-wide HIT plan but some believe a non-governmental organization should be responsible for such a large endeavor and are skeptical of OHA's ability to manage a large technology project. The state infrastructure should accommodate all stakeholders' ability to link into the system. The lack of a coordinated HIT plan is particularly frustrating for providers. CCO A deals with more than 20 different EHRs. Providers are frustrated by the inefficiencies from using the EHR under these circumstances. Providers know that their contracts depend on reporting data to inform performance metrics, but they cannot extract data from the EHRs.

The CCO envisions HIT as a tool to enhance care in hard to reach settings. One provider described a process where a local nurse could a smart phone app. to go into the community to collect information, upload the information to the cloud, and a doctor could review the information and communicate back with the local nurse or the patients using a virtual meeting platform. Technology should eliminate geographic access disparities while being patient-centered and culturally sensitive. The CCO and OHA need to find the balance between

embedding health care into homes and communities while maintaining access to health care facilities.

CCO self-assessment of progress

CCO A's self-assessment of its progress on transformation revealed the CCO made the most progress on the transformation elements related to (1) integrating physical health, mental health, and addictions and (2) increasing the cultural competence and diversity of its staff. CCO A reported less progress on transformation related to implementing HIT.

CCO CASE STUDY B

Overview

CCO B serves more than 80,000 beneficiaries in a county that includes urban and rural areas. More than 90 percent of the members receive care from recognized PCPCHs and more than 70 percent of providers use an EHR. CCO B is investing significant resources to support specific delivery system changes, to support health equity, and to increase support for prevention.

Board perspective

The CCO member organizations include an independent physician association, a health plan, hospitals, and the county mental health provider. The board includes an equal number of primary care and behavioral health provider representatives, specialty care providers, hospital representatives, the county administrator and public health officer, representatives of the physician owned parent company, and three community members. The board operates through a committee structure. The committees reviews specific issues and report their findings and recommendations to the full board for review and approval. Providers implement and manage delivery system changes. The CCO board faces a challenge in evaluating whether the changes are effective, identifying course corrections when necessary, knowing when to abandon ineffective interventions, and spreading and bringing to scale effective reforms or interventions.

The board members view the structure of the organization as promoting partnerships and collaboration and believe they have significant buy-in from the community due to their attention to effective communication and to outreach to stakeholders. The board members understand that the success of the CCO depends on the redesigned delivery system working for the entire community and therefore the outcomes are often defined from the community's perspective. Physicians play a significant role in decision making. The level of physician involvement distinguishes the CCO organization and governance structure from the historical managed care organizations.

The CCO has a data analyst on staff but the board would like to have more resources devoted to data analytics to support analysis of costs and to assess outcomes for reform initiatives but recognizes that this goal may be unrealistic. The board members suggest the most efficient approach to expanding data analytics is to establish a state-wide resource. The CCO would like access to more complete data on the populations in their geographic community including those covered by other payers.

Provider perspectives

The director of an independent pediatric practice notes that the practice population grew significantly due to an increase in children with Medicaid. The practice hired two additional pediatricians to accommodate the increase. The practice employs a full time staff person to support their EHR and to collect and analyze practice data.

The practice plans to add an imbedded behavioral health unit with a staff psychologist and a post-doctoral student. The practice will also employ a case manager who will connect families

with resources. The practice director is exploring the possibility of comparing families without case managers to families with case managers to evaluate school attendance, medical outcomes, and utilization of health care services. CCO B provided funds to support the initiative for one year.

The decision to develop the imbedded behavioral health unit came partly from a review of data that identified a significant number of children with behavioral health problems in the practice and the requirements to report certain behavioral health–related outcomes based on the incentive measures adopted by OHA. The practice realized they needed to see children with behavioral health problems more regularly to follow-up on medications and other issues. This caused a back log of children who could not be seen for acute problems. The behavioral health providers (BHPs) will provide regular follow-up for these children and free-up medical appointments. In addition the analysis revealed that there are children with chronic medical conditions such as asthma who require more regular visits. The practice will facilitate access to regular appointments for these children. The practice director hopes fewer children will require ED visits or admission to the hospital as a result of these practice enhancements and early results suggest they are already seeing an effect with fewer ED visits for asthma.

In a family medicine practice that is part of a large medical group, the practice director, a nurse manager and several of the staff physicians indicated that integrating behavioral health and physical health has made a significant difference for patients. The initial intervention was limited to having one BHP from a community-based multi-service provider in the practice a few hours per week and eventually increased to two BHPs in the practice 5 days a week. BHPs accept warm handoffs from the PCPs and support "treatment to target"[1] for appropriate patients, smoking cessation, yoga for chronic pain, and a diabetes groups. If a patient requires longer engagement than the four to six visits typical of the treatment to target approach, the primary care provider refers them to the behavioral health provider practice. Patient acceptance of the BHP in the integrated practice setting is very high. According to the PCPs, patients prefer to stay in the practice where they feel safe and are familiar with the providers.

PCPs expressed concern about the costs of practice redesign and moving to more integrated systems. Their upfront transformation costs are not covered. PCPs need more time to manage and see more complex patients while nurses or nursing assistants do the activities that do not require a doctor. The practice has invested in adding more support staff and training existing staff on new models. Their CAHPS survey results have improved significantly. The patients indicate they noticed the extra attention and time they have with the team. The PCPs believe they are making progress on team based-care, but ongoing progress requires a different reimbursement model.

The providers identified some areas of transformation where additional assessment is required. For example, implementing the SBIRT process required a significant effort with little return on investment in terms of clinical outcomes for beneficiaries. The practice hired a drug and alcohol counselor to see the expected flood of new patients that would come from

[1] "Treatment to target" requires identifying specific treatment goals and regular/proactive monitoring using validated clinical rating scales.

implementing SBIRT but found the counselor was not necessary due to the low volume of patients identified.

Community perspective

Community representatives viewed access to health insurance as the most important consequence of reform. They appreciate the effort CCO B is making to integrate behavioral health and physical health and to increase prevention efforts.

Community members described broad participation in CCO B's board, board committees, and the CAC. They described more than adequate opportunities to provide their input and feedback. They judged the CCO's willingness to support community involvement and to address community health problems as a distinguishing characteristic of CCO B.

They appreciated CCO B's efforts to engage members and to be responsive to member complaints as a significant change that they attributed to health reform. Community representatives said it would take time for the system to understand how to best serve the newly insured and that they will require education about how to use insurance. Finding PCPs, especially in rural areas, will be a big challenge.

The CAC members participated in the CHA and development of the CHIP as partners with representatives of CCO B, the health department, a hospital, and a not-profit community service organization. The major health issues identified from the CHA process were barriers to access to dental care and immunizations, smoking, obesity, substance abuse, depression, high rates of suicide, and racial and ethnic and geographic health disparities. The CHA process also revealed that medical providers were unaware of the level of poverty in the county and the effect of the "culture of poverty" on health, especially among elderly populations.

The CAC members' biggest challenge is getting community members to participate on the board and CAC committees. They also noted that the community members who do participate do not reflect the diversity of their community. The CAC representatives acknowledged that there are numerous initiatives underway and participation requires a significant time commitment.

CCO initiatives

CCO B has placed a significant emphasis on delivery system reforms that promote care coordination and transformation. The CCO tasked a primary care medical home committee with making formal recommendations for specific investments, activities, and products to support PCPCH development and to coordinate internal support for integration of care. The CCO created a new position to be lead primary care improvement in integrated care. The CCO determined that although PCPCH recognition is high among its providers, the PCPCHs did not reflect the level of care coordination or the patient care experiences they hoped to see with PCPCHs. The CCO hired a consultant to advance PCPCH implementation that reflects the principles embodied in the PCPCH model. The CCO has also consulted with outside experts on the payment model that would support the model.

Prior to the creation of CCO B mental health services had been delivered at the county level while the physician association was responsible for physical health. Integration of physical

health and behavioral health is a priority. CCO B has allocated a significant pool of funding to support integration in clinical practice settings and initiated several pilot projects in 2014 including integrating more supportive services into primary care and standardizing processes such as depression screening. The CCO is placing BHPs in primary care settings. They also have moved toward same day access for BH patients. Primary care providers (PCPs) and behavioral health providers (BHPs) meet regularly, independent of the CCO management, to discuss "nuts and bolts" issues about how to integrate. One of the models of integration they have agreed to explore is reverse integration where PCPs are co-located in behavioral health clinics. CCO B made an investment to support a reverse integration project that required renovating a building and engaging medical staff from a federally qualified health center to provide primary care. The model focuses on the SPMI population.

CCO B's chief financial officer is leading an effort to develop alternative payments for care coordination and integration. The CCO is analyzing cost data to develop payment methods to support PCPCHs and the integration of behavioral health support services. The new payment will consist of a PMPM rate to cover psychiatric consults, care coordination, and care management. The PMPM payment will also cover the time physical health and behavioral health providers spend coordinating care for members and services that improve outcomes due to care coordination but are not billable. Physical health and behavioral health providers were involved in the process to develop the payment. Their joint involvement led to an improved understanding about the challenges both providers face. The process also generated increased trust between managers. The CFO acknowledged that the CCO did not expect to recoup the upfront investments in integrated care for a couple of years but over time expects a return on investment due to savings from decreased emergency department visits and hospitalizations.

The CCO leadership indicated that more training and education of providers and team members providing care is necessary to improve implementation of integrated care. Co-located care coordinators for behavioral health and care coordinators for physical health came from two different systems. They require constant reinforcement of the need to work together. Unfortunately, leadership does not anticipate that the CCO can move to having care coordinators who manage both behavioral health and physical health services because the required staff competencies are quite different.

CCO B created a PMPM payment for prevention. The prevention set aside represents less than one percent of the total CCO budget and comes out of the physician set aside pool. Some of the funds cover new staff that work at the county health department and are responsible for prevention planning and organizing. The remainder of the funds supports implementation of evidence based prevention practices focused on primary prevention of obesity, tobacco cessation, and preventing behavioral health issues. The CAC provides input on the strategies and the CCO B finance unit reviews the budget for each initiative. The initiatives are also coordinated with the local non-profit hospitals' CHNA required by the IRS under the ACA. CCO B also provided a significant amount of funding to support a new FQHC.

CCO self-assessment of progress

CCO B's self-assessment of its progress on transformation revealed the CCO made the most progress on the transformation elements related to integration of physical health, mental health,

and addictions and on and implementing the CHA and CHIP. CCO B reported less progress on transformation to meet the cultural needs of its members but it scored higher than most of the other CCOs.

CCO CASE STUDY C

Overview

CCO C serves more than 50,000 members from several Oregon counties. Most of the members are served in PCPCHs and nearly 70 percent of providers use EHRs. The CCO has a strong foundation in the integration of physical and mental health. Designing and implementing innovative approaches to promoting prevention and coordinated care is a particular focus.

Board perspective

The CCO board includes CCO executives, the chair of the CAC, four primary care and other clinicians, mental health and oral health providers, and community representatives. From one board member's perspective the purpose of CCO C is to create healthy people with an emphasis on prevention and a holistic approach to care. The board engaged in team building after the CCO was established and found this effort helpful in creating an effective and collaborative working environment. The board provides the overall direction for the CEO of CCO C and establishes clear expectations and performance parameters for the CEO and staff. The CEO manages the operations and implements the board vision. The board describes a very collaborative relationship with the CEO because he listens to the community's concerns and is willing to embrace change. The board also recognizes the advocacy with OHA by the CEO. His advocacy s helped to identify problems that required action during the implementation of the transformation plan and emphasized the need for CCO flexibility in implementing certain aspects of transformation.

Clinical perspectives

Better coordination of mental health and physical health has been a significant focus and the CCO is integrating dental care. CCO C is developing strategies to increase access to oral health services to decrease ED visits for dental care. The CCO engaged a hygienist to help with coordination of oral health services.

The CCO is promoting increased care coordination and team based care as the major form of health care delivery. The teams have been reorganized to serve specific populations and to facilitate access to the unique services each population requires. This approach strives to decrease the barriers people have with accessing care and promote communication among the providers. In addition the teams have the opportunity to connect people to better integrated care and to less traditional health care workers.

Community perspective

CCO C reports a very active CAC. The CAC represents an opportunity for the "voice of the consumer to be heard." The CCO staff attend the CAC meetings and then communicate their observations and requests from the community to the board. The CAC members describe themselves as "tutors" for the CCOs and they educate the board about the needs of the community. The CAC has helped the CCO to engage with communities and to understand the service needs of populations, such as African American woman and Native Americans. The CAC has become more than just a requirement imposed by OHA. CAC advocates are working collaboratively with CCO leaders and staff to make changes.

The CAC played a major role in the CHA and CHIP. The CAC used the expertise of council members and designed their approach to conducting the CHA on an existing model developed by one of the hospitals that was complying the ACA requirement that non-profit hospitals conduct a community health needs assessment. The CAC assigned different groups of council members to review the needs of different populations. They also examined issues related to access such as how to best use CHWs. Although the CHA process identified several issues, the CAC decided to focus the CHIP on transitional age young adults and their needs. The CAC presented the CHIP to the CCO board. The CEO presented the plan to the CCO staff. The CCO plans to solicit ideas from the community about implementation and to issue an RFP to fund appropriate initiatives identified by the communities.

Community representatives offered that they have observed several changes since the CCO was formed. There has been improvement in customer service and specifically with people answering the phones. They have also observed an increase in bilingual and bicultural staff. Members also report that they have access to staff who are better able to explain how to access mental health services and to get information about how to deal with mental health problems. Consistent with CCO C's emphasis on prevention, community members reported receiving more information on alternative prevention strategies, health education, and exercise.

CCO initiatives

The CCO faces challenges in breaking down the walls between different disciplines to advance their integration model. The CCO reorganized into teams that include expertise in mental health, physical health, pharmacy, referrals and authorizations, and navigators. When a provider needs to call the CCO, she does not need to guess what department to contact; she calls an assigned team and all of the relevant staff are available to handle all the issues. The navigators, who are trained in customer service, handle approximately 70 to 75 percent of providers' needs.

CCO self-assessment of progress

CCO C's self-assessment of its progress on transformation revealed the most progress on the transformation elements on effective communication with members and on implementing the CHA and CHIP. The CCO reported it made the least progress on the transformation element on developing alternative payments for non-primary care providers and for developing a quality improvement plan to eliminate health care disparities.

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APPENDIX E

CCO TRANSFORMATION ASSESSMENT TOOL

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INSTRUCTIONS FOR COMPLETING THE CCO TRANSFORMATION ASSESSMENT TOOL

INTRODUCTION

Mathematica Policy Research is conducting the Midpoint Evaluation of Oregon's Section 1115 Medicaid Waiver Demonstration, which began in July 2012 and extends to June 2017. The midpoint evaluation will answer two primary questions: (1) To what extent has the Oregon Health Authority (OHA) effectively taken action to support transformation? and (2) To what extent have coordinated care organizations (CCOs)—in aggregate and individually—taken action to transform the delivery and payment systems?

As part of the evaluation, we are asking Coordinated Care Organizations (CCOs) to complete the CCO Transformation Assessment Tool (CTAT). We are also conducting interviews with state and CCO representatives, abstracting information from key documents, and conducting site visits to a sample of CCOs. All CCOs have submitted transformation plans that address eight elements of transformation. These elements form the foundation of the CTAT. We have included three additional elements to the CTAT to assess the status of physical and oral health integration, administrative simplification, and clinical care improvement efforts. The tool will assess how much progress your CCO has made on the elements in the transformation plans as of March 2014 and provide a way to track your progress on transformation for the rest of the waiver demonstration. We will use the information to determine whether implementation of the waiver program is associated with changes in clinical outcomes. You can find a summary of the evaluation design at http://www.oregon.gov/oha/OHPB/Pages/health-reform/cms-waiver.aspx by going to the "More information" box and clicking on "Overview of Waiver Midpoint Evaluation."

CCO EVALUATION ACTIVITIES AND DATES

We ask that your CCO plan to participate in the evaluation in the following ways and on the following schedule.

- **March 31 –** Mathematica sends CTAT to CCOs by email
- **No later than April 15 –** CCOs complete and return CTAT to Mathematica by email
- **April 16 to May 16** – Mathematica conducts phone interviews with CCOs to clarify information from the CTAT and to obtain additional information.

COMPLETING THE CTAT

Please assign responsibility for ensuring the CTAT is completed to one individual. More than one individual can participate in completing the appropriate section of the CTAT depending on their areas of expertise. The table below suggests the types of individuals who might be best able to complete each section.

CTAT Element	Suggested Expertise[a]
I. Integrating physical health, mental health, and addiction services	Managers and clinicians (such as CCO behavioral health director, medical directors, and behavioral health clinical leaders) familiar with the plan for integrating physical health, mental health, and addiction services
II. Developing patient-centered primary care homes (PCPCHs)	Managers and others responsible for contracting and engaging primary care clinicians, provider relations staff
III. Using alternative payment methodologies that align payment with health outcomes	Managers, representatives from business units, clinicians, and health information technology (HIT) staff, financing committees
IV. Completing community health assessments and improvement plans	Community health coordinator, Community Advisory Council (CAC) chair and/or CCO CAC liaison
V. Expanding the use of electronic health records (EHRs) and the health information exchange (HIE)	Health information officers; clinician liaisons to HIT, provider relations
VI. Addressing members' cultural, health literacy, and linguistic needs	Community health coordinator, training and education staff; manager of interpreter services or policies, member services staff, CAC chairperson
VII. Meeting culturally diverse community needs; diverse workforce	Network manager; human resources manager; diversity officer, provider services, community health coordinator, CAC chairperson

CTAT Element	Suggested Expertise[a]
VIII. Establishing quality improvement plans to eliminate racial, ethnic, and language disparities	Quality assurance and improvement staff, community health coordinator
IX. Integrating physical health and oral health	Managers and clinicians (such as medical directors and oral health clinicians) and dental contract manager familiar with the planning for integration of physical and oral health
X. Adopting clinical care improvement initiatives	Clinical Advisory Panels, medical director, quality assurance team, transformation fund manager
XI. Simplifying administrative functions	Chief Operating Officer; other managers

[a] Innovator agents may not participate in scoring the CTAT.

This table provides guidance only. You know which individuals are the most knowledgeable about specific areas of transformation. If you choose to identify more than one person to complete the CTAT the relevant individuals may choose to meet to review the CTAT and score the elements as a group or they can complete their respective sections independently. ***Please note that Innovator Agents may not participate in the CCO self-assessment.***

Scoring the CTAT

For each element on the CTAT, the individual or group responsible for scoring the element should enter a score ranging from 0 to 4 in the appropriate column that reflects the best description of the transformation status for that element as of March 2014. The cells in the tool are programmed so that you will only be able to enter a numerical score. Use the following explanation of the scale to guide your responses:

0	**No activity** - CCO has not started any activity related to this element.
1	**Exploring / Planning** - CCO is conducting activities related to assessment of the issue and possible approaches, including background research, data collection, gap analysis, identification of innovative programs, and/or stakeholder assessment.

2	**Designing** - CCO is designing a specific approach to implementing the transformation element. Design activities include, but are not limited to, developing the program definition, defining procedures and processes, developing staff training strategies, designing evaluation or assessment strategies, and identifying desired outcomes.
3	**Implementing / Revising** - CCO implemented the element or activity in at least one setting. Implementation activities include, but are not limited to, implementing processes and activities, training staff, establishing a process evaluation and, if appropriate, data collection and review. Revising the program or initiative based on the feedback or results from the initial implementation also counts as implementation.
4	**Final implementation and plan to bring to scale** - Using information and data from the implementation phase, CCO has finalized the initiative and CCO is identifying options for bringing the initiative to scale or has already scaled the initiative across the CCO.

If CCOs are at several stages of transformation for an element, the score should reflect the highest level of activity. For example, if a CCO is engaged in analysis and planning, but is also designing a reform or innovation, the CCO should score that element as a "2". At the end of each section, respondents may describe innovations or give examples of innovations related to the element. Please enter all your responses directly into the Excel file that you received in the email with these instructions.

Submitting the Completed CTAT

If more than one person completes the CTAT please combine all the responses into one document and send the completed CTAT electronically to Suzie Witmer at switmer@mathematica-mpr.com. Please remember to add your CCO name and the date of completion at the top of the CTAT.

If you have any questions about the CTAT process, please feel free to contact JudyAnn Bigby by email (jbigby@mathematica-mpr.com) or telephone (617) 583-1943.

COORDINATED CARE ORGANIZATION TRANSFORMATION ASSESSMENT TOOL (CTAT) PROGRESS ON TRANSFORMATION AS OF MARCH 2014

Name of CCO		**Transformation Status as of March 2014 (for each item, enter a score of 0 to 4 in one box in the appropriate column)**				
Date of completion						
Transformation Element		No Activity 0	Exploring / Planning 1	Designing 2	Implementing / Revising 3	Final Implementation and Plan to Bring to Scale 4
I. How would you describe your progress on implementing the following elements of physical health, mental health, and addiction services integration?						
a. Implementing screening, brief intervention, and referral to treatment (SBIRT)						
b. Implementing screening for depression and other mental conditions **and** having a follow-up plan for assessment, treatment, and services						
c. Implementing mental health assessments for children in Department of Human Services custody						
d. Implementing Early Assessment and Support Alliance services for teens and young adults						
e. Sharing patients' health information among physical health, mental health, and addiction services providers						
f. Training physical health, mental health, and addiction services providers on integrating services						
g. Working with local mental health authority to improve coordination and collaboration on nonmedical services and supports for the serious persistent mental illness (SPMI) population						
h. Providing physical health care to SPMI population in the community						
i. Providing physical health and care management in primary care settings for the SPMI population with chronic physical health conditions (chronic diseases)						
j. Providing physical health care to SPMI population residing in residential settings						
k. Connecting SPMI population members with social supports (such as housing and vocational services)						

Name of CCO		**Transformation Status as of March 2014 (for each item, enter a score of 0 to 4 in one box in the appropriate column)**				
Date of completion						
Transformation Element		No Activity 0	Exploring / Planning 1	Designing 2	Implementing / Revising 3	Final Implementation and Plan to Bring to Scale 4
l. Training network staff and providers on intensive care coordination (ICC) for populations transitioning across different care settings						
m. Identifying members transitioning across different care settings who need ICC						
n. Providing ICC that ensures continuous care coordination through care transitions (such as from a detoxification program to residential care)						
Describe one or more innovations your CCO has adopted related to implementing the integration of physical health, mental health, and addiction services. (optional)						
II. How would you describe your progress on implementing the following activities related to patient centered primary care homes (PCPCHs)?						
a. Increasing the number of PCPCHs accessible to your members						
b. Increasing the number of members who are enrolled in PCPCHs						
c. Providing members' clinical and utilization information to PCPCHs for panel management and care coordination						
d. Ensuring transmission of information to PCPCHS on member emergency department visits and hospital admissions and discharges						
e. Ensuring timely transmission of information to PCPCHs on the results of member specialty evaluations, labs, and tests						
f. Assuring communication between CCO-contracted entities (such as specialists and hospitals) and PCPCHs						
g. Advancing PCPCH and behavioral health integration						
h. Developing an adequate workforce to support PCPCH teams						

Name of CCO		**Transformation Status as of March 2014 (for each item, enter a score of 0 to 4 in one box in the appropriate column)**				
Date of completion						
Transformation Element		No Activity 0	Exploring / Planning 1	Designing 2	Implementing / Revising 3	Final Implementation and Plan to Bring to Scale 4
i. Linking PCPCHs to community resources						
j. Linking clinical care with traditional health worker (formerly called nontraditional health worker) efforts						
k. Implementing alternative payment methods for services/care provided by PCPCHs						
Describe one or more innovations your CCO has adopted to make the PCPCH model as effective as possible. (optional)						
III. How would you describe your progress on implementing new payment methods that align with outcomes and cost control for providers other than PCPCHs?						
Describe one or more alternatives to fee-for-service payment methods your CCO is exploring or has adopted.						
IV. How would you describe your progress on the Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP)?						
a. Completing the community health assessments						
b. Implementing community health improvement plans						
c. Aligning CCO resources and health improvement efforts with the CHIP						
Describe one or more innovations your CCO has adopted related to community health improvement. (optional)						

Name of CCO		**Transformation Status as of March 2014 (for each item, enter a score of 0 to 4 in one box in the appropriate column)**				
Date of completion						
Transformation Element		No Activity 0	Exploring / Planning 1	Designing 2	Implementing / Revising 3	Final Implementation and Plan to Bring to Scale 4
V. How would you describe your progress on implementing the following elements of health information technology (HIT)?						
a. Increasing adoption of **certified** electronic health records (EHRs) for primary care providers and hospitals						
b. Expanding **certified** EHRs to providers not typically eligible for EHR adoption incentives (such as behavioral health providers or skilled nursing facilities)						
c. Ensuring that your providers meet meaningful use standards						
d. Facilitating the electronic exchange of relevant clinical information (such as shared clinical documents, laboratory results, and other information for clinical purposes) among CCO network providers						
e. Sharing information with providers that have EHRs from a different EHR vendor than your CCO's and/or with providers that do not have EHRs						
f. Electronically accessing and analyzing clinical data from network providers for CCO decision making						
g. Electronically reporting provider clinical performance data to network providers for quality improvement purposes						
h. Tracking clinical outcomes for populations by race, ethnicity, and preferred language						
i. Providing members with access to personal health records						
j. Using information technology such as email and smart phone apps to engage members to participate in their health and health care						
k. Using HIT such as telehealth and mobile health devices for in-home monitoring to serve patients' needs						
Describe one or more innovations your CCO has adopted related to HIT. (optional)						

Name of CCO		**Transformation Status as of March 2014 (for each item, enter a score of 0 to 4 in one box in the appropriate column)**				
Date of completion						
Transformation Element		No Activity 0	Exploring / Planning 1	Designing 2	Implementing / Revising 3	Final Implementation and Plan to Bring to Scale 4
VI. How would you describe your progress on implementing the following elements of transformation to address members' cultural, health literacy, and linguistic needs?						
a. Assessing the communication and literacy needs of members						
b. Ensuring access to interpreters						
c. Using qualified or certified interpreters (as defined by the Office of Equity and Inclusion)						
d. Offering materials and services in languages other than English						
e. Providing translated key documents to members in languages that reflect their needs						
f. Using standard tools to assess the language proficiency of bilingual staff						
g. Implementing a clear language policy						
Describe one or more innovations your CCO has adopted related to members' cultural, health literacy, and linguistic needs. (optional)						
VII. How would you describe your progress on implementing the following elements of transformation regarding provider network and staff ability to meet culturally diverse community needs?						
a. Ensuring access to cultural competency education and training for CCO staff						
b. Ensuring access to cultural competency education and training for contracted clinical site staff						
c. Ensuring access to cultural competency education and training for contracted clinical site providers						

Name of CCO		**Transformation Status as of March 2014 (for each item, enter a score of 0 to 4 in one box in the appropriate column)**				
Date of completion						
Transformation Element		No Activity 0	Exploring / Planning 1	Designing 2	Implementing / Revising 3	Final Implementation and Plan to Bring to Scale 4
d. Tracking staff and provider compliance with standards for participating in cultural competence education and training						
e. Evaluating the quality and effectiveness of cultural competency education and training						
f. Ensuring network providers represent diverse racial, ethnic, and cultural backgrounds						
Describe one or more innovations your CCO has adopted related to provider and staff diversity and/or cultural competence training. (optional)						
VIII. How would you describe your progress on implementing your plan to eliminate racial, ethnic, and language disparities?						
a. Developing specific quality improvement plans to eliminate racial, ethnic, and language disparities						
b. Implementing the quality improvement plans to eliminate racial, ethnic, and language disparities						
Describe one or more innovations your CCO has adopted to eliminate racial, ethnic, and language disparities. (optional)						
IX. How would you describe your progress on integrating physical health and oral health?						
Describe one or more innovations your CCO has adopted related to integration of physical and oral health. (optional)						

Name of CCO		**Transformation Status as of March 2014 (for each item, enter a score of 0 to 4 in one box in the appropriate column)**				
Date of completion						
Transformation Element		No Activity 0	Exploring / Planning 1	Designing 2	Implementing / Revising 3	Final Implementation and Plan to Bring to Scale 4
X. How would you describe your clinical care improvement efforts in the following areas ?						
a. Encouraging the use of evidence-based clinical guidelines						
b. Encouraging the implementation of patient safety protocols						
c. Implementing and monitoring specific quality improvement initiatives						
Describe one or more innovations your CCO has adopted related to clinical care improvement. (optional)						
XI. How would you describe your progress on simplifying administrative tasks, streamlining processes, or reducing waste?						
Describe one or more innovations your CCO has adopted related to simplifying administrative tasks, streamlining processes, or reducing waste.						

Please use this section to provide the names, positions, and email addresses of individuals who scored each element or parts of each element

CTAT Element	**Name, Position, Email**
I. Implementing physical health, mental health, and addiction integration	
II. Implementing PCPCHs	
III. Implementing new payment methods that align with outcomes and cost control for all providers	
IV. Completing community health assessments and community health improvement plans	

Name of CCO		**Transformation Status as of March 2014 (for each item, enter a score of 0 to 4 in one box in the appropriate column)**				
Date of completion						
Transformation Element		No Activity 0	Exploring / Planning 1	Designing 2	Implementing / Revising 3	Final Implementation and Plan to Bring to Scale 4
V. Implementing HIT						
VI. Addressing members' cultural, health literacy, and linguistic needs						
VII. Meeting culturally diverse community needs; diverse workforce ability to meet culturally diverse community needs						
VIII. Implementing quality improvement plans to eliminate racial, ethnic, and language disparities						
IX. Integrating physical health and oral health						
X. Adopting clinical care improvement efforts						
XI. Simplifying administrative tasks, streamlining processes, or reducing waste						

APPENDIX F

SUMMATIVE EVALUATION DATA AND METHODS

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A. Data and construction of analytical files

The Oregon Health Authority (OHA) provided Mathematica with quarterly enrollment data and final action encounter data for services provided between January 2009 and March 2014 (calendar year [CY] 2009 Q1 through 2014 Q1) from the state's Medicaid Management Information System (MMIS). Enrollment information, extracted in May 2014, included the state's Medicaid eligibility coding, and enrollees' date of birth, gender, race/ethnicity, and county of residence, among other enrollment details. Encounter data, extracted in May and July 2014, included individual service records from managed care plans for inpatient and long-term care settings, professional claims, outpatient setting, and prescription drug and dental claims. Collaborating with the OHA, we conducted various tests to assess that the data we received were complete and met basic quality thresholds. Using service and enrollment dates, we created quarterly de-duplicated files merging enrollment for each member and service use data within each quarter to facilitate quarterly and yearly utilization trend analyses.

B. Sample

We restricted our analyses and the data to members entitled to the full scope of Medicaid benefits who were enrolled in managed care entities (MCEs) and subsequently in Coordinated Care Organizations (CCOs). We excluded members who were dually eligible for Medicare and Medicaid because we did not have access to Medicare administrative data and much of their preventive and routine follow-up care that we analyze would be provided under Medicare and not under the demonstration. We also excluded everyone age 65 and older and enrollees who were not eligible for the full range of Medicaid benefits. This last exclusion involved eliminating enrollees who were only eligible for emergency services. The sample sizes, overall and the range of observations across quarters or years, for each measure are reported in Table F.1.

C. Outcome measures

To assess whether individual- and state-level outcomes improved under the waiver, we constructed a subset of outcome measures agreed upon with Oregon (see Table F.1), consisting of CCO incentive measures, measures from the State Accountability Plan, and other measures to analyze utilization. The specifications for these measures were written using OHA's guidance to plans for measure reporting, which may also include modifications Oregon has made to HEDIS, Medicaid Core Set, and Preventive Quality Indicators (PQIs) published specifications.

Table F.1. Outcome measures used in the summative evaluation

Measure	Measure specification source	Number of total observations	Minimum and maximum number of observations by quarter or year
Improving primary care for all populations			
Developmental screening by 36 months	Core set of Children's Health Care Quality Measures, May 2013 [a]	497,156	17,570 to 27,755
Well-child visits in the first 15 months of life	HEDIS 2012, modified to include any provider [a]	197,117	31,962 to 47,816
Children (ages 12 months through 19 years) who had a visit with a primary care provider	HEDIS 2012 [a]	3,115,275	90,056 to 195,179
Adolescents (ages 12 through 21) who had a well-care visit	HEDIS 2013 [a]	1,222,097	34,563 to 78,731
Adults (ages 18 through 64) who had a preventive care visit	Derived using HEDIS definition of visits, includes any provider	2,079,437	57,896 to 138,665
Cervical cancer screening (women ages 21 to 64)	HEDIS 2012 [a]	1,145,585	142,497 to 301,702 (yearly)
Ensuring delivery of appropriate care in appropriate settings			
Total emergency department (ED) and ambulatory care visits	HEDIS 2013	7,027,430	211,412 to 515,618
Reducing preventable hospitalizations			
Number of inpatient admissions	Summed inpatient visits	7,027,430	211,412 to 515,618
PQI Acute Care Composite Measure	AHRQ specifications	3,011,746	84,069 to 281,126
PQI Chronic Care Composite Measure	AHRQ specifications	3,011,746	84,069 to 281,126
PQI 01: diabetes, short-term complications admission rate	AHRQ specifications	3,011,746	84,069 to 281,126
PQI 05: chronic obstructive pulmonary disease admission rate	AHRQ specifications	1,149,234	31,435 to 117,345
PQI 08: congestive heart failure admission rate	AHRQ specifications	3,011,746	84,069 to 281,126
PQI 15: adult asthma admission rate	AHRQ specifications	1,862,512	52,634 to 163,781

Table F.1 (continued)

Measure	Measure specification source	Number of total observations	Minimum and maximum number of observations by quarter or year
Improving behavioral and physical health coordination			
Total ED and ambulatory care visits for mental illness	HEDIS 2013	7,027,430	211,412 to 515,618
Follow-up within seven days of a hospitalization for mental illness	HEDIS 2013, modified to include additional codes [a, b]	10,618	345 to 682
Addressing discrete health issues (diabetes)			
Comprehensive diabetes care: LDL-C screening	HEDIS 2012	182,224	22,213 to 46,804 (yearly)
Diabetes: Hemoglobin A1c testing	HEDIS 2012	182,224	22,213 to 46,804 (yearly)

Note: OHA's guidance to plans was used for all specifications. The Measure Specification Column indicates which supplementary sources were used to derive measures, as advised by OHA.

[a] Specifications for these measures include denied claims. Mathematica did not receive denial claims in the claims records files and could not implement this aspect of the measure specifications.

[b] Following OHA's approach to modifying this measure, we also modified the measure to include the following additional codes: 90791, 90702, 90832 through 90838, 90846, and T1016. Oregon added more codes to this list after we had developed our measure specifications. We reran the data in March 2015 to include two additional codes that Oregon added to the specifications for this measure, H0006 and H2021. Rates were slightly higher, but the overall results did not change. This report presents the estimates with the additional codes.

AHRQ = Agency for Healthcare Research and Quality; HEDIS = Healthcare Effectiveness Data and Information Set; OHA = Oregon Health Authority; PQI =Prevention Quality Indicator

D. Regressions

Using the patient-level quarterly data constructed from the MMIS data provided by OHA, we ran a series of regression models to assess the effects of the demonstration. We used the following general model for each outcome:

$$Outcome_{it} = \beta_0 + \beta_1 Post_{it} + X\beta + \theta t + \beta Transformation_{it} + \beta(Post \times Transformation)_{it} + \beta(Post \times Race)_{it} + \beta(Post \times Age)_{it} + \beta(Post \times Gender)_{it} + \varepsilon_{it}$$

where *Outcome* is the given outcome for individual *i* at quarter or year *t*; *Post* is a dummy indicating whether the record is included in the pre- or post-demonstration period; *X* is a series of demographic characteristics, including age, race, gender, Medicaid eligibility category, and county of residence; and *Transformation* is a series of three dummies that signify the level of transformation of the individual's CCO. The exluded group is the CCOs at the earliest stages of transformation. The error term ε is clustered at the individual level.

For the continuous outcomes specified in Table F.1 (all of which were defined at the quarterly level), we ran ordinary least squares (OLS) regressions in SAS 9.4, using the

GENMOD procedure.[1] For binary outcomes (which were a mix of quarterly and annual measures), we ran logistic regressions using the SURVEYLOGISTIC procedure; if an outcome was defined at a quarterly level, we included time trend dummies for each quarter; if yearly, we included year dummies. In all models, each record was weighted by the number of months in which the enrollee was enrolled during the given quarter.

We also ran several variations of the general model to test the effects of each CCO/MCE by the stage of their transformation activities. We replaced the site-specific dummy variables with indicators based on the overall stage of transformation activities, categorized from "most advanced stage of activity" to "earliest stage of activity."

[1] We attempted to first use PROC SURVEYREG to run the OLS regressions; however, our computing capability was inadequate to allow the procedure to run. Both procedures allow for OLS models with clustered standard errors.

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