DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-01-16
Baltimore, Maryland 21244-1850

State Demonstrations Group

April 21, 2017

Lori Coyner, MA
State Medicaid Director Oregon Health Authority
421 SW Oak Street, Suite 875
Portland, OR 97204

Dear Ms. Coyner:

The Centers for Medicare & Medicaid Services is approving Attachment J Hospital Metrics and Incentive Payment Protocol to the Special Terms and Conditions (STCs) for Oregon' section 1115(a) demonstration (21-W-00013/10 and 11-W-00160/10) that were updated in accordance with special terms and condition (STC) 57.

This approval does not alter any of the requirements specified in the STCs of the demonstration. A copy of updated Attachment J, which will expire on June 30, 2018, is enclosed.

If you have any questions, please contact your project officer, Ms. Linda Macdonald. Ms. Macdonald can be reached at (410) 786-3872, or by email at Linda.Macdonald@cms.hhs.gov.

We look forward to continuing to work with you and your staff.

Sincerely,

/s/

Kim Howell
Director
Division of State Demonstration and Waivers

Enclosure: Attachment J

cc: Mr. David Meacham, Associate Regional Administrator, Region X

Attachment J: Hospital Metrics and Incentive Payment Protocol
Updated January 12, 2017
Attachment J will expire June 30, 2018

Introduction

Oregon's Hospital Measurement Strategy (STC 62) outlines how the Oregon Health Authority (OHA) will make payments to participating Diagnosis-Related Group (DRG) hospitals for implementing and reporting on health system reform initiatives within a four year program. The metrics are integral to the effort to monitor and correct pathways towards improvements in the quality of care and access to care for Medicaid beneficiaries under health system transformation efforts. The work in this area forms Oregon's Hospital Transformation Performance Program (HTPP).

Hospital Performance Metrics Advisory Committee

In 2013, Oregon House Bill 2216, Section 1, established the nine-member Hospital Performance Metrics Advisory Committee, appointed by the Director of OHA. The Committee is comprised of four hospital representatives, three health outcomes measurement experts, and two representatives of Coordinated Care Organizations (CCOs). The Committee was charged with using a public process to identify three to five performance standards (incentive measures and targets) for DRG hospitals that are designed to advance health system transformation, reduce hospital costs, and improve patient safety.

Incentive Measures

The Oregon Hospital Performance Metrics Advisory Committee has identified hospital-specific metrics, which will be used to assess the HTPP payments through June 30, 2018 from a share of Oregon's hospital assessment revenue. See Appendix A: Hospital Quality Pool Structure for a detailed description of the hospital quality pool design and funding algorithm. Building on work completed by the Metrics and Scoring Committee, the Hospital Performance Metrics Advisory Committee considered several core principles when selecting these measures. Among other principles, any selected measures should:

- Meet standard scientific criteria for reliability and face validity;
- Help drive system change;
- Be aligned with health system transformation underway by CCOs;
- Align with evidence-based or promising practices;
- Be nationally validated, a required reporting element in other health care quality initiatives, or align with national or other benchmarks for performance; and
- Be able to accomplish change in the measure within four years.

The hospital quality measures are captured in two overarching focus areas, hospital-focused and hospital-CCO coordination-focused. There are six domains, comprised of 11 measures. Table 1 below shows the incentive measures selected by the Hospital Performance Metrics Advisory Committee and agreed by OHA and CMS. All measures but follow-up after hospitalization for mental illness relate to patients from all payer-types; follow-up after hospitalization for mental illness, however, relates only to Medicaid patients enrolled in a CCO. Specifications, benchmarks, and improvement targets for the incentive measures can be found in Appendix B. A more detailed rationale for each of these incentive measures can be found in Appendix C.

Table 1: Agreed Domains and Measures

Focus Area	Domains	Measures
Hospital focus	1. Readmissions	1. Hospital-Wide All-Cause Readmission
	2. Medication Safety	2. Hypoglycemia in inpatients receiving insulin 3. Excessive anticoagulation with Warfarin 4. Adverse Drug Events due to opioids
	3. Patient Experience	5. HCAHPS, Staff always explained medicines (NQF 0166) 6. HCAHPS, Staff gave patient discharge information (NQF 0166)
	4. Healthcare-Associated Infections	7. CLABSI in all tracked units (adapted from NQF 0139) 8. CAUTI in all tracked units (adapted from NQF 0754)
Hospital-CCO collaboration focus	5. Sharing ED visit information	9. Hospitals share ED visit information with primary care providers and other hospitals to reduce unnecessary ED visits
	6. Behavioral Health	10. Follow-up after hospitalization for mental illness (adapted from NQF 0576) 11. Screening for alcohol and drug misuse, brief intervention, and referral to treatment (SBIRT) in the Emergency Department

Benchmarks and Improvement Targets

The Hospital Performance Metrics Advisory Committee worked with OHA and CMS to develop a set of hospital-appropriate benchmarks and improvement targets for which the state can measure progress towards the state's health system transformation goals. In year one, hospitals received payment for submitting baseline data to OHA (pay for reporting). In years two through four, hospitals will only receive payment for submitting data to OHA *and* achieving the established benchmarks or improvement targets. In years two through four, hospitals that do not meet the benchmark for a given measure will be assessed against their improvement from their prior year's performance ("improvement target"). If hospitals meet either the benchmark or their improvement target on a given measure, they will be awarded the quality pool funds associated

with that measure[1]. As HTPP is meant to foster continuous improvement across all measures for all hospitals, all benchmarks in year two will be evaluated against year one baseline data and amended as appropriate to ensure continuous improvement. All benchmarks in year three will be evaluated against year two data. All benchmarks in year four will be evaluated against year three data. Details on the hospital measures, benchmarks, and improvement targets can be found in Appendix B.

[1] OHA will use the methodology established for the CCO improvement targets in calculating the hospital improvement targets. These improvement targets are based on the Minnesota Department of Health's Quality Incentive Payment System (hereafter referenced as the "MN method"). This method requires at least a 10 percent reduction in the gap between the baseline and the benchmark to be eligible for incentive payments. Detailed specifications on the improvement target calculations used can be found here: http://www.oregon.gov/oha/analytics/Pages/CCO-Baseline-Data.aspx.

Appendix A: HTTP Quality Pool Structure

Hospital Quality Pool Funding

The total funding allocated for the Hospital Transformation Performance Program quality pool for years one and two will be equivalent to the federal match of state dollars generated by one percent of the Hospital Provider Tax Program, limited to a maximum of $150,000,000 per year or the maximum allowed under the 2% test. As required by House Bill 2395 (Oregon Laws 2015), the total funding allocated for years three and four quality pool will be equivalent to the federal match of state dollars generated by 0.5 percent of the Hospital Provider Tax Program, limited to a maximum of $150,000,000 per year or the maximum allowed under the 2% test. The total quality pool funding available to be earned through achievement of the performance metrics may therefore vary based upon the amount available from the Hospital Provider Tax Program. All funds will be distributed each year; there will be no carryover.

Hospital Quality Pool Timing

HTPP funds will be distributed four times, with four measurement years. The first three years will span the federal fiscal year. The fourth year will span calendar year 2017.

The first measurement period is October 1, 2013 – September 30, 2014, which is the federal fiscal year 2014. For this period, hospitals will receive payment based on baseline data submission of all measures for that period. Year one data must be submitted to OHA by February 28, 2015, and OHA will issue the first payment by April 30, 2015.

The second measurement year will cover the period October 1, 2014 – September 30, 2015. Hospitals will submit data to OHA by March 31, 2016, and OHA will issue the second payment by June 30, 2016. Year two payment will be contingent upon performance across the hospital quality measures.

The third measurement year will cover the period October 1, 2015 – September 30, 2016. Hospitals will submit data to OHA by March 31, 2017, and OHA will issue the third payment by June 30, 2017. Year three payment will be contingent upon performance across the hospital quality measures.

The fourth measurement year will cover the period January 1, 2017 – December 31, 2017. Hospitals will submit data to OHA by March 31, 2018, and OHA will issue the fourth payment by June 30, 2018. Year four payment will be contingent upon performance across the hospital quality measures.

Ensuring Continuous Improvement

OHA is committed to continuous improvement. OHA and the Hospital Performance Metrics Advisory Committee reviews hospital performance in relation to the established benchmarks to ensure that improvement targets and benchmarks are set to a standard that ensures continuous quality improvement. The hospital committee was reconvened to recommend benchmarks for the

fourth year of the program (see Appendix B below for the agreed-upon benchmarks for the program).

Hospital benchmarks are reviewed each year to ensure that hospital performance is appropriately stretched in order to receive any performance payment. Additionally, hospital measures which overlap with CCO measures will be aligned with any changes that occur in the CCO measure specifications.

While the years two, three and four benchmarks may be amended as needed to ensure quality improvement, the measure set itself will not be amended within the four years of the HTPP.

Allocation Methodology

OHA has set a floor such that each hospital will be eligible to earn $500,000 in each year of the program, contingent upon maximal performance, defined as achieving credit for at least 75% of the measures (9 of 11). This strategy ensures that hospitals have sufficient motivations for making necessary investments in quality improvement. As with the funding available for HTPP as a whole, the availability of floor funds is subject to the amount allowed under the 2% test. The funds remaining after allocation of the possible $500,000 per hospital floor will be allocated to each domain based upon weighting agreed with CMS (detailed further below). After this, the amount each hospital achieving a measure will actually receive will be weighted according to its Medicaid volumes, as below:

- Fifty percent will be based upon each hospital's total Medicaid discharges. In the first three years of the program this was for the 12 months ending September 2012 as a percent of all DRG hospital for that 12 month period; in the fourth year of the program this will be for calendar year 2015 as a percent of all DRG hospitals for that 12 month period.
- Fifty percent will be based upon each hospital's total Medicaid patient days. In the first three years of the program this was for the 12 months ending September 2012 as a percent of all DRG hospitals for that 12 month time period; in the fourth year of the program this will be for calendar year 2015 as a percent of all DRG hospitals for that 12 month period.

The discharge data are from the Hospital Inpatient Discharge Data hospitals are required to submit to OHA. This weighted distribution will be held constant for the three years that the hospital quality pool is in effect. Holding the weighted distribution constant avoids penalizing hospitals that reduce Medicaid discharges and/or inpatient days proportionally better than other hospitals, which would decrease their share of total Medicaid discharges and inpatient days. However, there were significant changes to the distribution of Medicaid patients seen at hospitals across the state after 2014. Therefore, discharge data from 2015 will be used in weighting payments in the fourth year of the program

The amount available for each hospital to earn will vary based upon the final total hospital quality pool availability, changes in the number of DRG hospitals in the HTPP program, and how each hospital performs against the quality metrics. Hospitals will only receive quality pool

payments for providing baseline data (in year one), or attaining benchmarks or improvement targets in years two, three and four.

This allocation methodology has been chosen as it is felt it is the most equitable in terms of hospital effort, performance, and size in terms of use by Medicaid members. OHA bases this on its experience with the CCO incentive metric pool. The inclusion of the improvement targets (in addition to the benchmarks) for the CCO incentive pool allowed CCOs which engaged in quality improvement activities to successfully achieve the measures and receive incentive payments. In the first performance year, all CCOs saw improvement on at least some measures, and 11 of 15 CCOs earned 100% of their quality pool. Furthermore, at least half of the CCOs met either the benchmark or the improvement target on most of the CCO incentive measures. OHA expects a similar experience with hospital performance and quality pool distribution.

Quality Pool Distribution

The quality pool distribution method occurs in two phases, for both the hospital focused and the hospital-CCO collaboration focused domains. Phase 1 involves determining whether a hospital is eligible for the $500,000 floor (earned by achieving at least 75% of the measures [9 of 11]). Phase 2 involves allocating the remaining funds to hospitals based upon performance against each measure.

In cases in which a hospital does not have the relevant ward (e.g., hospitals without psychiatric wards for the follow-up after hospitalization for mental illness measure), OHA will utilize an attribution methodology in which the CCO rate will be applied to relevant hospitals during the pay-for-performance years two, three, and four. In cases in which a hospital does not have a relevant ward (e.g., hospitals which do not have emergency departments), and there is not a CCO rate that can be applied through attribution methodologies, the hospital will not be held accountable for that measure. The hospital will still have to meet 75 percent of the measures for which they are eligible (e.g., 7 of 9) to earn all of their available incentive funds.

Phase 1: Floor Allocation

The first step in distributing the hospital quality pool funds involves determining the number of instances in which a hospital has achieved a measure. In year one, achieving the measure is defined as submitting baseline data that meets OHA approval, and in years two, three and four it means achieving the improvement target or benchmark. Hospitals achieving at least 75% of the measures [9 of 11] will be allocated a $500,000 floor. Phase I allocation is pass/fail; hospitals will not receive partial credit. Hospitals must achieve at least 75% of the measures (9 of 11) to be allocated the floor payment. This will impact the amount remaining in the pool for Phase II allocation. Table 1 illustrates how Phase 1 works:

Table 1: Example of Phase 1 Floor Allocation

Total HTPP available funds – one year	$133 million
Available funds – floor for 27 hospitals (assuming all achieve at least 75% of the measures) ($500,000 * 27)	$13.5 million
Remaining to earn in Phase 2 allocation (payment per measure achieved) (Total – floor)	$119.5 million

Phase 2: Allocation per Measure Achieved

The portion of Phase 2 quality pool funds that a hospital receives is based on the number of measures on which it reports baseline data (in year one), or the number of measures on which it achieves an absolute benchmark or demonstrates improvement over its own baseline or performance in the previous year ("improvement target") in years two through four. The benchmarks are the same for all hospitals[2], regardless of geographic region and patient mix (see Appendix B for measures and benchmarks).

Hospital performance on these measures is treated on a pass/fail basis and all measures are independent from one another. In year one, if data are submitted and accepted by OHA for a particular measure, the hospital receives all credit for that measure, regardless of submission of data for the other measures. In years two through four, if the benchmark is met or the improvement target reached for a specific measure, the hospital receives all of the credit available for that measure, regardless of performance on other measures.

Once OHA has determined each hospital's level of performance against the measure targets and reporting requirements, then OHA will calculate the amount of the Phase 2 incentive funds each hospital will receive. The number of measures achieved by hospitals will impact the 'base amount' that each measure is worth after the Phase 1 floor allocation. In Phase 2 the base amounts are computed after any floor allocations are subtracted from the quality pool. The proportions in Table 2, below, will be applied to the remaining hospital quality pool funds. The proportions may shift if all measures are not achieved by at least one hospital. The base amount for each measure will then be allocated to the hospitals achieving that measure based upon the proportion of Medicaid discharges and patient days at each hospital that achieved the target, 50% based on discharges and 50% based on patient days.

[2] An exception to this is the HCAHPS patient discharge measure. Shriner's Hospital for Children is unable to field an HCAHPS survey. Instead, it uses the Press Ganey Inpatient Pediatric Survey. Shriner's performance on staff providing discharge information is therefore assessed against a similar question included in the Press Ganey Inpatient Pediatric Survey, and a separate benchmark has been established for Shriners.

Table 2: Share of Available Funds by Measure by Year after Floor Payment Allocation

Domains	Measures	Share of Available Funds by Year*			
		YR 1	YR 2	YR 3	YR 4
Readmissions	1. Hospital-Wide All-Cause Readmission	18.75%	18.75%	18.75%	18.75%
Medication Safety	2. Hypoglycemia in inpatients receiving insulin	6.25%	6.25%	6.25%	6.25%
	3. Excessive anticoagulation with Warfarin	6.25%	6.25%	6.25%	6.25%
	4. Adverse Drug Events due to opioids	6.25%	6.25%	6.25%	6.25%
Patient Experience	5. HCAHPS, Staff always explained medicines (NQF 0166)	9.38%	9.38%	9.38%	9.38%
	6. HCAHPS, Staff gave patient discharge information (NQF 0166)	9.38%	9.38%	9.38%	9.38%
Healthcare-Associated Infections	7. CLABSI in all tracked units (modified NQF 0139)	9.38%	9.38%	9.38%	9.38%
	8. CAUTI in all tracked units (modified NQF 0754)	9.38%	9.38%	9.38%	9.38%
Sharing ED visit information	9. Hospitals share ED visit information with primary care providers and other hospitals to reduce unnecessary ED visits	12.50%	12.50%	12.50%	12.50%
Behavioral Health	10. Follow-up after hospitalization for mental illness (modified NQF 0576)	6.25%	6.25%	6.25%	6.25%
	11. Screening for alcohol and drug misuse, brief intervention, and referral to treatment (SBIRT) in the Emergency Department	6.25%	6.25%	6.25%	6.25%

*Note this is share of funds available after allocation of the floor

Table 3, below, is an example of how the hospital quality pool distribution for the Readmissions domain would work in a scenario where there are only three hospitals, with total available HTTP funds the maximum $150,000,000, and the assumption that two of the three hospitals achieved at least 75% (9 of 11) of the measures (meaning these hospitals are allocated the floor payment of $500,000). This example operates in the same manner for years one through four: In year one, 'achieving the measure' is defined as providing baseline data that is approved by OHA. After

year one, ‘achieving the measure’ is defined as meeting either the benchmark or improvement target based on the previous year data.

Table 3: Example of Hospital Quality Pool Distribution for Readmissions Domain

Total HTTP Funds Available (one year)	$150,000,000
Number of Hospitals Achieving at least 75% of measures (eligible for floor allocation)	2
Phase 1 Amount (floor allocation - 500,000*2)	$1,000,000
Funds Remaining for Phase 2 Allocation (total - floor)	$149,000,000
Readmissions	
Share of Available Funds	18.75%
Base Amount - total available to earn for measure (share of funds*funds for Phase 2 allocation)	$27,937,500

Phase 2 Allocation per Hospital Achieving Domain (Readmissions Example)

Hosp	Achieve Measure?	Discharges		Days		Adjustment Factor (% discharges*0.5) + (% days*0.5)		Amount Earned for Measure (Total Available for Measure * Adjustment Factor)	
		#	%	#	%				
A	Y	5,000	33.3%	2,000	20.0%	(33.3%*0.5) + (20.0%*0.5) =	0.27	$27,937,500 * 0.27 =	**$7,450,000**
B	Y	5,000	33.3%	1,000	10.0%	(33.3%*0.5) + (10.0%*0.5) =	0.22	$27,937,500 * 0.22 =	**$6,053,125**
C	Y	5,000	33.3%	7,000	70.0%	(33.3%*0.5) + (70.0%*0.5) =	0.52	$27,937,500 * 0.52 =	**$14,434,375**
Totals		**15,000**	**100.0%**	**10,000**	**100.0%**		**1.00**		**$27,937,500**

Data Collection

As detailed in Appendix B, OHA and its partner, the Oregon Association of Hospitals and Health Systems (OAHHS), share responsibility for collecting data on all measures selected. OHA and OAHHS will ensure the accuracy and validity of the data, with review by an independent third party.

Data Reporting

OHA is committed to transparency in health system transformation efforts. All measures will be reported on the OHA website on an at least annual basis, and will be available at the hospital level. This will allow OHA to work with hospital partners to track overall progress, and identify and address any areas needing additional attention.

Monitoring hospital performance ties in with the overall evaluation and ongoing quality improvement efforts for the waiver. Moreover, this work has a direct impact on OHA's overarching health system transformation goals of better health, better care, and lower costs for all Oregonians.

Appendix B: Oregon Hospital Transformation Performance Program Measures Matrix

Note that in year one (October 1, 2013 – September 30, 2014), hospitals will receive payment for submitting baseline data that meets OHA approval. In year two (October 1, 2014 – September 30, 2015), hospitals will receive payment for submitting data to OHA and achieving the benchmark or improvement target. In year three (October 1, 2015 – September 30, 2016), hospitals will receive payment for submitting data to OHA and achieving the benchmark or improvement target. In year four (January 1, 2017 – December 31, 2017), hospitals will receive payment for submitting data to OHA and achieving the benchmark or improvement target. Here, however, all measures but follow-up after hospitalization for mental illness relate to patients from all payer-types; follow-up after hospitalization for mental illness relates only to Medicaid patients enrolled in a CCO. All benchmarks in year two will be evaluated against year one baseline data and amended as appropriate to ensure they foster continuous improvement. All benchmarks in year three will be evaluated against year two data and amended as appropriate to ensure they foster continuous improvement. OHA will update the benchmarks and improvement targets for years two and three with CMS approval by May 31, 2016. All benchmarks in year four will be evaluated against year three data and amended as appropriate to ensure they foster continuous improvement. The benchmarks and improvement targets for year four were updated with CMS approval by January 12, 2017.

Hospital Measures	**Waiver Measure Set**			**Target Calculations**		**Targets**				**Data Source**
	Aligned with CCO Incentive Set	**CCO State Quality**	**Hospital Specific (Not CCO)**	**Numerator**	**Denominator**	**Improvement from Baseline Target[3]**	**Year 2 Benchmark**	**Year 3 Benchmark**	**Year 4 Benchmark**	
Alcohol and drug misuse, screening, brief intervention, and referral for treatment (SBIRT) in the ED	√			Measure set broken down as follows: **1. Alcohol and Other Drug Use Screening in the ED**- Patients in ED age 12+ screened for alcohol and other substance use using an age-appropriate,	Measure set broken down as follows: **1. Alcohol and Substance Use Screening** - ED patients age 12+.	1. (a) Brief Screen: MN method with a 3 percentage point floor 1. (b) Full Screen: MN method with a 3 percentage point floor	1.(a) Brief Screen: 67.8% (75th percentile from HTPP baseline for brief screens) 1.(b) Full Screen: 12.0% (alignment with CCO	1. (a) Brief Screen: 90th percentile from HTPP year 2 rate for brief screens. 1. (b). Full Screen: 90th percentile from HTPP year 2 rate	1. (a) Brief Screen: 83.5% (.90th percentile from HTPP year 2 rate for brief screens) 1. (b). Full Screen: 71.3% (90th percentile from HTPP year 2 rate)	OAHHS will collect and report to OHA

[3] For year 2, improvement targets were calculated from baseline year; in year 3, improvement targets are calculated based on year 2 performance unless otherwise noted.

Hospital Measures	Waiver Measure Set			Target Calculations		Targets				Data Source
	Aligned with CCO Incentive Set	CCO State Quality	Hospital Specific (Not CCO)	Numerator	Denominator	Improvement from Baseline Target[3]	Year 2 Benchmark	Year 3 Benchmark	Year 4 Benchmark	
				validated instrument. **2. Alcohol and Other Drug Use Brief Intervention Provided** – ED patients age 12+ who received a brief intervention.	**2. Alcohol and Other Drug Use Brief Intervention Provided** – ED patients age 12+ who screen positive for unhealthy alcohol or drug use.	2. N/A - reporting only (no target)	full screen benchmark) 2. N/A – reporting only (no benchmark)	2. N/A – reporting only (no benchmark)	2. N/A – reporting only (no benchmark)	
Follow-up after hospitalization for mental illness (modified NQF 0576)	√			Discharges for Medicaid members enrolled in a CCO age 6 years of age and above at hospital of interest who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter or partial hospitalization within 7 days of discharges.	Discharges from acute inpatient settings (including acute care psychiatric facilities) for members age 6 years of age and above at hospital of interest who were hospitalized for treatment of selected mental health disorders.	MN method with 3 percentage point floor (alignment with CCO improvement target; will change with any updates to CCO target)	National Medicaid 90th percentile (alignment with CCO benchmark; 70.0%)	90th percentile from HTPP year 2 performance	80.2% (90th percentile from HTPP year 2 performance)	OHA MMIS – OHA will calculate rates for this measure through encounters/claims
Hospital-Wide All-Cause Readmissions		√		Number of readmissions, defined as an inpatient admission to any acute care facility which occurs within 30 days of the discharge date	Admissions to acute care facilities for patients of all ages.	MN method with a 3% floor	8.0% (state 90th percentile for DRG hospitals)	90th percentile of Year 2 HTPP performance	8.0% (90th percentile of Year 1 HTPP performance)	OAHHS will calculate and report to OHA

Hospital Measures	Waiver Measure Set			Target Calculations		Targets				Data Source
	Aligned with CCO Incentive Set	CCO State Quality	Hospital Specific (Not CCO)	Numerator	Denominator	Improvement from Baseline Target[3]	Year 2 Benchmark	Year 3 Benchmark	Year 4 Benchmark	
				of an eligible index admission.						
Hypoglycemia in inpatients receiving insulin (American Society of Health Systems Pharmacist Safe Use of Insulin measure)			√	All patients with hypoglycemia (blood glucose of 50mg per dl or less)	All patients receiving insulin during the tracked time period	MN method with 1 percentage point floor	7% or below	5% or below	3.0% or below	OAHHS will collect and report to OHA
Excessive anticoagulation with Warfarin (Institute for Safe Medication Practices measure)			√	Number of patients experiencing excessive anticoagulation (INR > 6)	All inpatients receiving warfarin anticoagulation therapy during tracked period	Years 1-3: MN method with 1 percentage point floor Year 4: N/A (no improvement target)	5% or below	3% or below	2.0% or below	OAHHS will collect and report to OHA
Adverse Drug Events due to opioids (Institute for Safe Medication Practices measure)			√	Number of patients treated with opioids who also received naloxone	Number of patients who received an opioid agent during tracked period	Years 1-3: MN method with 1 percentage point floor Year 4: N/A (no improvement target)	5% or below	3% or below	2.0% or below	OAHHS will collect and report to OHA
HCAHPS, Staff always explained medicines (NQF 0166)			√	Number of clients reporting 'top box' responses for this measure domain.	Number of clients with number of valid responses >=2 for same domain	MN method with 2 percentage point floor	72.0% (National 90th percentile, April 2014)	73.0% (National 90th percentile, 2015)	73.0% (National 90th percentile, April / May 2016)	OAHHS will collect and report to OHA
HCAHPS, Staff gave patient discharge information (NQF 0166)			√	Clients answering 'Y' to Q19 and Q20	Number of clients with number of valid responses >=2 for same domain	MN method with 2 percentage point floor *Shriners : MN method with 2*	90.0% (National 90th percentile, April 2014) *Shriners: 90th percentile,*	91.0% (National 90th percentile, 2015) *Shriners: 90th percentile,*	91.0% (National 90th percentile, April/May 2016) *Shriners: 90th percentile, all*	OAHHS will collect and report to OHA

Hospital Measures	Waiver Measure Set			Target Calculations		Targets				Data Source
	Aligned with CCO Incentive Set	CCO State Quality	Hospital Specific (Not CCO)	Numerator	Denominator	Improvement from Baseline Target[3]	Year 2 Benchmark	Year 3 Benchmark	Year 4 Benchmark	
						percentage point floor[4]	*all PG Database Peer Group, 2/1/2014 – 7/31/2014 (92.7%)*	*all PG Database Peer Group TBD*	*PG Database Peer Group TBD*	
CLABSI in all tracked units (modified NQF 0139)			√	Total number of observed CLABSI in all tracked units (adult ICU, pediatric ICU, NICU, and adult, pediatric, medical, surgical, and medical/surgical wards)	Total number of central line days in all tracked units (adult ICU, pediatric ICU, NICU, and adult, pediatric, medical, surgical, and medical/surgical wards)	MN method with 3% floor	0.18 per 1000 device days (2010 NHSN Data Summary Report 50th percentile from Partnership for Patients Scoring Criteria for CMS, 2014)	N/A – improvement target only	The calculation will change to the SIR and the Year 4 benchmark will be an SIR of 0.50 or lower	Years 1-3: OAHHS will collect and report to OHA Year 4: Hospitals report to OHA Public Health Division via NHSN
CAUTI in all tracked units (modified NQF 0754)			√	Total number of observed healthcare-associated CAUTIs in all tracked units (adult ICU, pediatric ICU, NICU, and adult, pediatric, medical, surgical, and medical/surgical wards)	Total number of catheter days for all patients that have an indwelling urinary catheter in all tracked units (adult ICU, pediatric ICU, NICU, and adult, pediatric, medical, surgical, and medical/surgical wards)	MN method with 3% floor	1.02 per 1000 catheter days (50th percentile from HTPP baseline)	N/A – improvement target only	The calculation will change to the SIR and the Year 4 benchmark will be an SIR of 0.75 or lower	Years 1-3: OAHHS will collect and report to OHA Year 4: Hospitals report to OHA Public Health Division via NHSN
Hospitals share ED visit information with primary care providers			√	1. Number of outreach notifications to	1. Number of patients with five+	1. Years 1-3: MN method with 3	1. 78.6% (75th percentile	1. 90th percentile from HTPP	The calculation will change	Years 1-3: OAHHS will

[4] Shriner's Hospital for Children is unable to field an HCAHPS survey. Instead, it uses the Press Ganey Inpatient Pediatric Survey. Shriner's performance on staff providing discharge information is therefore assessed against a similar question included in the Press Ganey Inpatient Pediatric Survey, and a separate benchmark has therefore been established for Shriners. The Press Ganey survey does not have a question about staff explaining medications, so Shriner's is not eligible for the HCAHPS staff explaining medication measure in Years 1-4.

Hospital Measures	Waiver Measure Set			Target Calculations		Targets				Data Source
	Aligned with CCO Incentive Set	CCO State Quality	Hospital Specific (Not CCO)	Numerator	Denominator	Improvement from Baseline Target[3]	Year 2 Benchmark	Year 3 Benchmark	Year 4 Benchmark	
and other hospitals to reduce unnecessary ED visits				primary care providers for patients with 5+ ED visits in past 12 months 2. Number of care guidelines completed for patients with 5+ ED visits in past 12 months	ED visits in the past 12 months 2. Number of patients with five+ ED visits in the past 12 months	percentage point floor Year 4: MN method with a 2 percentage point floor 2. N/A – reporting only	from HTPP baseline) 2. N/A – reporting only	baseline TBD 2. N/A – reporting only	to the outcome-focused metric and the Year 4 benchmark will be 30.1% (90th percentile of Year 2 performance)	collect and report to OHA Year 4: OHA will collect data directly from the EDIE vendor

Appendix C: Rationale for Incentive Measures

Domain and Measures	Brief Description	Rationale for Domain/Measure
Readmissions – Hospital-wide All-Cause Readmission	This measure estimates the hospital-level, risk-standardized rate of all-cause readmission after admission for any eligible condition within 30 days of hospital discharge (RSRR) for patients of all ages.	Reducing readmissions has value as an indicator of quality. Unnecessary readmissions may reflect poor coordination of services and transitions of care at discharge or in the immediate post-discharge period. Reducing readmissions is a function of both hospitals and primary care; the measure will therefore incentivize more integrated care across the hospital outpatient continuum.
Medication safety – (a) Hypoglycemia in inpatients receiving insulin (b) Excessive anticoagulation with Warfarin (c) Adverse Drug Events due to opioids	This measure focuses on preventing harm from high alert medication, which increases the risk of injury to patients if the dosage is not correct. The medications focused on are insulin, Warfarin, and opioids.	Adverse drug events (ADEs) are defined as any injuries resulting from medication use, including physical harm, mental harm, or loss of function. ADEs comprise the largest single category of adverse events experienced by hospitalized patients, accounting for about 19 percent of all injuries. The occurrence of ADEs is associated with increased morbidity and mortality, prolonged hospitalizations, and higher costs of care. The Institute of Medicine (IOM) estimates that 1.5 million preventable ADE occur each year[5]. The occurrence of ADEs in hospitalized patients varies between 2 and 52 ADEs per 100 admissions. An estimated 15% to 59% of these ADEs are considered preventable[6].
Patient experience – (a) HCAHPS, Staff always explained medicines (NQF 0166) (b) HCAHPS, Staff gave patient discharge	This measure focuses on measuring patients' perspectives on hospital care. This is a composite measure that includes: 1. Communication about medicine 2. Discharge information	This is a national, standardized way of assessing patients' perspectives of hospital care. It is aligned with CMS public reporting, including the Hospital Value-based Purchasing Program. The measure creates an incentive for hospitals to improve quality of care and patient experience. It will support improvements in

[5] "How-to Guide: Prevent Harm from High-alert Medications." Cambridge, MA: Institute for Healthcare Improvement, 2012.
Web February 2013.
http://www.ihi.org/knowledge/Pages/Tools/HowtoGuidePreventHarmfromHighAlertMedications.aspx

[6] Cano FG, Rozenfeld S: Adverse drug events in hospitals: a systematic review**.** *Cad Saude Publica* 2009, **25** (Suppl 3)**:**S360-S372.

Domain and Measures	Brief Description	Rationale for Domain/Measure
information (NQF 0166)	The measure is the percent reporting positively in the above areas.	internal customer service and quality-related activities.
Healthcare Associated Infections (HAIs) – (a) CLABSI in all tracked units (modified NQF 0139) (b) CAUTI in all tracked units (modified NQF 0754)	These measures focus on reducing infections patients can contract while receiving medical treatment in a healthcare facility. They include: • Central-line associated bloodstream infection rate • Catheter-associated urinary tract infection rate	CDC's HAI prevalence survey[7]1 shows: –On any given day, about 1 in 25 hospital patients has at least one healthcare-associated infection. –Estimated 722,000 HAIs in U.S acute care hospitals in 2011 –About 75,000 hospital patients with HAIs died during their hospitalizations. –More than half of all HAIs occurred outside of the intensive care unit.
Hospitals share ED visit information with primary care providers and other hospitals to reduce unnecessary ED visits	Hospitals who have implemented the EDIE program in Oregon or other Health Information Exchange technology that allows hospitals to share ED visit information with primary care providers and other hospitals. The EDIE program allows clinicians to identify patients who visit EDs throughout the state more than five times in a 12 month period.	Coordination of care between systems such as outpatient services and hospitals is important for better management and care of patients, particularly for patients who are 'high utilizers' of the health care system. By promoting the use of EDIE or other technologies, hospitals can better inform primary care of patient visits to the ED. Additionally, hospitals and primary care providers can begin to identify patients who are regularly accessing the health care system through the ED and work to better meet their needs. One of the seven CCO focus areas is to reduce over-use of care by 'super utilizers'. One focus of implementing the EDIE system is to reduce unnecessary use of the ED.
Behavioral health - Follow-up after hospitalization for mental illness (modified NQF 0576)	Percentage of Medicaid members age 6+ and mental health diagnosis with a follow-up visit within 7 days after hospitalization.	Oregon's 2013 baseline for follow-up after hospitalization for mental illness is 67.6%, which is just under the 90th percentile nationally (68.0%, 2012 Medicaid benchmark). Research has found patient access to follow-up care within 7 days of discharge from hospitalization for mental illness to be a strong predictor of a reduction in hospital readmissions.[8] In addition to potential cost savings from reducing readmissions, focusing on the integration between physical and

[7] Magill SS, Edwards JR, Bamberg W, et al. Multistate Point-Prevalence Survey of Health Care–Associated Infections. *N Engl J Med* 2014;370:1198-208.

[8]Fortney J, Sullivan G, Williams K, Jackson C, Morton SC, Koegel P. Measuring Continuity of Care for Clients of Public Mental Health Systems. *Health Services Research*.2003; 38: 1157-1175.

Domain and Measures	Brief Description	Rationale for Domain/Measure
		behavioral health is a key component of Oregon's Health System Transformation. This measure will also help inform the statewide quality improvement focus area: integration of behavioral and physical health.
Behavioral health – Screening for alcohol and drug misuse, brief intervention, and referral for treatment in the ED (SBIRT)	Percentage of patients age 12+ with an ED visit in the measurement year screened for substance abuse and referred as necessary.	This measure will help inform the statewide quality improvement focus area: integration of behavioral and physical health. Research shows that the ED can be an effective place to screen and refer patients for substance use services: One study found that 26% of patients screened in the ED exceeded the low-risk limits set by the National Institute of Alcohol Abuse and Alcoholism[9].

[9] Academic ED SBIRT Research Collaborative. The Impact of Screening, brief intervention and referral for treatment (SBIRT) on Emergency Department patients' alcohol use. Annals of Emergency Medicine. 2007;50:699–710. http://www.bu.edu/bniart/files/2011/02/SBIRT-emergency-alcohol.pdf