2018 California Medical Price and Quality Transparency Initiative

How We Rate Hospitals & Doctor Groups
Payment Estimates

Consumer Reports
University of California, San Francisco

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1. Overview

The ratings for 2018 California Medical Price and Quality Transparency Initiative for publication on http://www.CAHealthcareCompare.org include measures of Patient Outcomes (such as avoiding infections, readmissions, and complications in surgical patients), Patient Experience (including communication about hospital discharge, communication about drug information and other measures), and Hospital and Doctor Group Practices (appropriate use of imaging for back pain, overutilization of cesareans and episiotomies, etc.). Several of these measures are then combined to create our overall scores for the conditions: Childbirth, Hip and Knee replacements, Chronic Obstructive Pulmonary Disease, Heart Attack, Heart Failure, Cancer screenings, Pediatric care and Diabetes care. This document describes how these individual and overall ratings were created.

The source data comes from the Centers for Medicare and Medicaid Services (CMS), California Maternal Quality Care Collaborative (CMQCC) through the California Hospitals Assessment and Reporting Taskforce, the California Department of Public Health (CDPH), the Integrated Healthcare Association (IHA), and the California Office of Statewide Health Planning and Development (OSHPD). Our research entails an in-depth evaluation of the quality and objectivity of each of these sources. If the data meet our quality standards, we then turn it into usable information that is accessible and meaningful to consumers. Details about each measure are shown in the table beginning on the following page. We used the data most recently available at the time of this publication.

With each set of measures, partner organizations — the California Department of Insurance (CDI), Consumer Reports (CR), University of California, San Francisco (UCSF), University of California, Davis (UCD), and HonestHealth, as well as external expert and stakeholder reviewers, gave feedback on measure and ratings methods. That feedback is incorporated in the methods described herein.

Our ratings use a 1-to-5 scale for hospital ratings and 1-to-4 scale for doctor group ratings. For the components of the individual and overall ratings, our method varied to remain consistent with existing efforts and availability of industry targets like Healthy People 2020. The technical details for each rating are described in the sections of this report that follow.

These quality ratings were paired with price data at the level of the California health insurance geographic rating regions to give users information on both price and quality when choosing healthcare providers. The cost information displayed on this site reflects the patient payments, insurance payments, and overall payments made to providers and facilities based on individual services or a bundle of services provided from Truven Health MarketScan® Research Databases (Truven Health Analytics Inc, Ann Arbor, Michigan) claims data. The method used to generate the payment estimates varied by the claim type and grouping of claims and will be described in detail later in this document.

Summary of Hospital & Doctor Group Ratings Domains

Provider Type	Topic	Measures	Source	Dates
Hospitals	Childbirth	Overall Childbirth rating		
		Cesarean rates (NTSV)	CMQCC	January 2016 - December 2016
		Episiotomy	CMQCC	January 2016 - December 2016
		Breastfeeding	CDPH	January 2016 - December 2016
		Vaginal Birth after Cesarean (VBAC)	CMQCC	Not Rated at this time
		Cesarean surgical site infection	CDPH	January 2016 - December 2016
	Hip/Knee Replacements	Overall Hip/Knee rating		
		Hip/Knee readmissions	CMS	July 2013 - June 2016
		Hip/Knee complications	CMS	April 2015 - March 2016
		Hip surgical site infections	CDPH	January 2016 - December 2016
		Knee surgical site infections	CDPH	January 2016 - December 2016
	Chronic Obstructive Pulmonary Disease (COPD)	Overall COPD rating		
		COPD mortality	CMS	July 2013 - June 2016
		COPD readmissions	CMS	July 2013 - June 2016
	Coronary Artery Bypass Graft (CABG)	CABG mortality	CMS	July 2013 - June 2016
		CABG readmissions	CMS	July 2013 - June 2016
		CABG stroke	OSHPD	January 2013 - December 2014
		CABG SSI	CDPH	January 2016 - December 2016
	Heart Attack	Overall Heart Attack rating		
		Heart Attack readmissions	CMS	July 2013 - June 2016
		Heart Attack mortality	CMS	July 2013 - June 2016
	Heart Failure	Overall Heart Failure rating		

		Heart Failure readmissions	CMS	July 2013 - June 2016
		Heart Failure mortality	CMS	July 2013 - June 2016
	Hospital Deficiencies	Deficiencies	CMS	September 2014 - September 2017
	Patient Experience	HCAHPS Star Rating Performance	CMS	April 2016 – March 2017
Doctor Groups	Low Back Pain	Avoiding overuse of imaging	IHA	January 2016 - December 2016
	Cancer Screening	Overall Cancer Screening	IHA	January 2016 - December 2016
		Colon cancer screening	IHA	January 2016 - December 2016
		Cervical cancer screening	IHA	January 2016 - December 2016
		Breast cancer screening	IHA	January 2016 - December 2016
	Diabetes	Overall Diabetes rating	IHA	January 2016 - December 2016
		Kidney functioning	IHA	January 2016 - December 2016
		Blood pressure controlled	IHA	January 2016 - December 2016
		Blood sugar screening	IHA	January 2016 - December 2016
		Blood sugar kept under control	IHA	January 2016 - December 2016
	Pediatric Care	Overall Pediatric Care	IHA	January 2016 - December 2016
		Treating Children with Upper Respiratory Infections	IHA	January 2016 - December 2016
		Treating Children with Throat Infections	IHA	January 2016 - December 2016
		Immunizations for Children	IHA	January 2016 - December 2016
		Immunizations for Early Teens	IHA	January 2016 - December 2016
		HPV Vaccine for Male Adolescents	IHA	January 2016 - December 2016
		HPV Vaccine for Female Adolescents	IHA	January 2016 - December 2016

2. Quality Ratings

2.1 Hospitals

General Approach to Hospital Ratings

Our ratings use a 1-to-5 scale for hospitals. A target rate of performance was identified (such as Healthy People 2020) to be used as a benchmark. In the event that a target could not be identified, hospital performance was placed into quintiles (for example: top 10th percentile assigned a rating of , 90th-70th percentile assigned a rating of , 70th-40th percentile assigned a rating of , 40th-10th percentile assigned a rating of , and the bottom 10th percentile assigned a rating of). Some of these ratings for individual measures were then combined into composite ratings. For certain measures, if too many hospitals did not have enough data then that measure was excluded from the composite.

To create the composite ratings, we first put the individual measures on a common scale. This "converted score" scale ranges from 0.5 to 5.5. Converting our ratings to this scale enables us to combine and compare different quality components on a common scale. The technical details for expressing each measure on a converted score (CS) scale and for creating the composite are described in the applicable sections below.

2.1.1 Childbirth

Our ratings for Childbirth include data from CMQCC based on OSHPD Patient Discharge and Vital Records data and CDPH data from the Maternal, Child and Adolescent Health and Newborn Screening Program.

Descriptions of these ratings are included in the table below:

Measure	Description	Source	Dates
Overall Childbirth rating	This is a combination of Cesarean rates, episiotomy rates, and breastfeeding rates.	N/A	Varied, see below
Cesarean rates (NTSV)	The percentage of first-time moms who had a C-section at this hospital. It does not include women who had a prior C-section or who had multiple babies in that delivery, delivered pre-term, had a delivery where the baby was in an abnormal position (for example, feet first or face up), or a delivery where the baby died.	CMQCC**	January 2016 - December 2016
Episiotomy rates	The percentage of women who had an episiotomy (excluding shoulder dystocia) - a surgical cut used to enlarge the vaginal opening.	CMQCC**	January 2016 - December 2016

Breastfeeding rates	The percent of newborns exclusively fed breast milk during the newborn's entire hospitalization minus exclusions	CDPH	January 2016 - December 2016
***Vaginal Birth after Cesarean (VBAC)**	The percentage women who had a previous C-section and delivered vaginally in a subsequent delivery.	CMQCC**	Not Rated at this time
***Cesarean surgical site infection**	This measure compares the incidence of infections contracted by patients following a C-section at the hospital with national benchmarks published by the Centers for Disease Control and Prevention (CDC).	CDPH	January 2016 - December 2016

*Not included in calculation of Overall Childbirth rating
**Based on Statewide OSHPD Patient Discharge and Vital Records data

Ratings for individual measures are created as described in the following table:

Measure	**Performance Better <<<------>>> Worse**				
	⏫	🔼	⏺	🔽	⏬
Cesarean rates (NTSV)	≤ 18.4%	Target 2: ≤ 23.9%	≤27.0%	≤33.3%	>33.3%
Episiotomy rates	Target: ≤ 5%	1st Quartile Below Target	2nd Quartile Below Target	3rd Quartile Below Target	4th Quartile Below Target
Breastfeeding rates	Target: > 85.8%	1st Quartile Below Target	2nd Quartile Below Target	3rd Quartile Below Target	4th Quartile Below Target
Vaginal Birth after Cesarean (VBAC)	Note Rated at this time				
Cesarean surgical site infection (see description below)	SIR = 0	0 < SIR ≤ 0.5	0.5 < SIR ≤ 1.0	1.0 < SIR ≤ 1.5	1.5 ≤ SIR

Cesarean Surgical Site Infection

For Cesarean Surgical site infections (as well as hip and knee surgical site infections) we use the Standardized Infection Ratio (SIR), a measure developed by the CDC and modeled after the standardized mortality ratio (or standardized incidence ratio), a common measure in epidemiology. The basis of the SIR is the number of observed infections at any one hospital, divided by the number of infections that would be predicted (sometimes called 'expected') for that hospital (based on aggregate data from CDC). A Standardized Infection Ratio of 1.0 means that the hospital reported the same number of infections as would be predicted from national baseline data. A SIR of more than 1.0

reflects more infections than predicted, and SIR less than 1.0 implies fewer infections than predicted.

Overall Childbirth Rating

The Overall Childbirth rating combines C-section rates, episiotomy rates, and breastfeeding rates together into a single rating. In order to calculate this, the three individual measures are first put on the same scale using CSs on a scale of 0.5 to 5.5 using piecewise linear transformation. The new CSs are then averaged. This score is used for the overall rating as described in the table below.

	Overall Childbirth Rating	Converted Score Range
Better ↕ Worse	⏫	5.5 ≥ CS ≥ 4.5
	🔼	4.5 > CS ≥ 3.5
	ℹ️	3.5 > CS ≥ 2.5
	🔽	2.5 > CS ≥ 1.5
	⏬	1.5 > CS ≥ 0.5

2.1.2 Hip/Knee Replacements

Measures used for calculating Hip/Knee Replacements ratings:

Measure	Description	Source	Dates
Overall Hip/Knee Replacement	This rating is a combination of hip/knee replacement readmissions and complications.	N/A	Varied, see below
Hip/Knee readmissions	30-day unplanned readmissions for hip/knee replacement in Medicare patients 65 and older. These data are risk adjusted for patient characteristics such as age and comorbidities.	CMS	July 2013 - June 2016
Hip/Knee complications	Likelihood that at least one of eight complications occurs in a Total Hip or Total knee replacement (Medicare patients 65 and older). These data are risk adjusted for patient characteristics such as age and comorbidities.	CMS	April 2015 - March 2016
***Hip surgical site infections (SSI)**	This measure compares the incidence of infections contracted by patients following a total hip replacement at the hospital with national benchmarks published by the CDC.	CDPH	January 2016 - December 2016
***Knee surgical site infections (SSI)**	This measure compares the incidence of infections contracted by patients following a total knee replacement at the hospital with national benchmarks published by the CDC.	CDPH	January 2016 - December 2016

*Not included in calculation of Overall Hip/Knee Replacement rating

Cut-offs used for calculating Hip/Knee Replacements ratings:

Measure	Performance Better <<<------>>> Worse				
					
Hip/Knee Readmission	Min-10th percentile	>10th to 30th percentile	>30th to 70th percentile	>70th to 90th percentile	>90th percentile
Hip/Knee Complication	Min-10th percentile	>10th to 30th percentile	>30th to 70th percentile	>70th to 90th percentile	>90th percentile
Hip SSI	SIR = 0	0 < SIR ≤ 0.5	0.5 < SIR ≤ 1.0	1.0 < SIR ≤ 1.5	1.5≤ SIR
Knee SSI	SIR = 0	0 < SIR ≤ 0.5	0.5 < SIR ≤ 1.0	1.0 < SIR ≤ 1.5	1.5≤ SIR

Hip/Knee Readmission and Complication Ratings

The reported readmission and complication rates were re-scaled on a CS scale, as described in the chart below. Cut points for the ratings are based on a combination of the data distribution and on input and review by experts in quality measurement and clinical medicine.

	Rating	Converted Score Range	Readmission/Complication Rate*
Better ↕ Worse	⏫	5.5 ≥ CS ≥ 4.5	Min-10th percentile
	🔼	4.5 > CS ≥ 3.5	>10th to 30th percentile
	➖	3.5 > CS ≥ 2.5	>30th to 70th percentile
	🔽	2.5 > CS ≥ 1.5	>70th to 90th percentile
	⏬	1.5 > CS ≥ 0.5	>90th percentile

*Percentiles are based on national rates

Overall Hip/Knee Replacement Rating

The Overall Hip/Knee rating combines Hip/Knee Replacement Readmission rating and Complication rating together into a single composite. In order to calculate this, the two individual measures are put on the same scale using CS, as described above, which are then averaged. This score is used to determine the overall rating as described in the table below.

	Overall Hip/Knee Replacement Rating	Converted Score Range
Better ↕ Worse	⏫	5.5 ≥ CS ≥ 4.5
	🔼	4.5 > CS ≥ 3.5
	➖	3.5 > CS ≥ 2.5
	🔽	2.5 > CS ≥ 1.5
	⏬	1.5 > CS ≥ 0.5

2.1.3 Chronic Obstructive Pulmonary Disease (COPD)

Measures used for calculating Chronic Obstructive Pulmonary Disease (COPD):

Measure	Description	Source	Dates
Overall COPD	This rating is a combination of COPD readmissions and mortality.	N/A	July 2013 - June 2016
COPD Readmission	30-day unplanned readmissions for COPD Medicare patients 65 and older. These data are risk adjusted for patient characteristics such as age and comorbidities.	CMS	July 2013 - June 2016
COPD Mortality	30-day mortality rate for COPD Medicare patients 65 and older. These data are risk adjusted for patient characteristics such as age and comorbidities.	CMS	July 2013 - June 2016

Cut-offs used for calculating COPD ratings:

Measure	**Performance* Better <<<------>>> Worse**				
	⏫	🔼	⏺	🔽	⏬
COPD Readmission	Min-10th percentile	>10th to 30th percentile	>30th to 70th percentile	>70th to 90th percentile	>90th percentile
COPD Mortality	Min-10th percentile	>10th to 30th percentile	>30th to 70th percentile	>70th to 90th percentile	>90th percentile

*Percentiles are based on national rates of hospitals with a minimum denominator of 25 cases. For a hospital to qualify to be rated, a minimum denominator of 25 cases must be met.

COPD Readmission and Mortality Ratings

The reported readmission and mortality rates were re-scaled on a CS scale, as described in the chart below. Cut points for the ratings are based on a combination of the data distribution and on input and review by experts in quality measurement and clinical medicine.

	Rating	Converted Score Range	Readmission/Mortality Rate*
Better ↕ **Worse**	⏫	5.5 ≥ CS ≥ 4.5	Min-10th percentile
	🔼	4.5 > CS ≥ 3.5	>10th to 30th percentile
	⏺	3.5 > CS ≥ 2.5	>30th to 70th percentile
	🔽	2.5 > CS ≥ 1.5	>70th to 90th percentile
	⏬	1.5 > CS ≥ 0.5	>90th percentile

* Percentiles are based on national rates of hospitals with a minimum denominator of 25 cases.

Overall COPD Replacement Rating

The Overall COPD rating combines the COPD Readmission rating and Mortality rating together into a single composite. In order to calculate this, the two individual measures are put on the same scale using CS, as described above, which are then geometrically averaged. This score is used to determine the overall rating as described in the table below.

	Overall COPD Rating	Converted Score Range
Better ↕ Worse	⏫	5.5 ≥ CS ≥ 4.5
	🔼	4.5 > CS ≥ 3.5
	➖	3.5 > CS ≥ 2.5
	🔽	2.5 > CS ≥ 1.5
	⏬	1.5 > CS ≥ 0.5

2.1.4 Heart

Acute Myocardial Infarction (AMI) and Heart Failure (HF)

Measures used for calculating Acute Myocardial Infarction (AMI) and Heart Failure (HF) ratings:

Measure	Description	Source	Dates
Overall AMI	This rating is a combination of AMI readmissions and mortality.	N/A	July 2013–June 2016
AMI Readmissions	30-day unplanned readmissions for AMI Medicare patients 65 and older. These data are risk adjusted for patient characteristics such as age and comorbidities.	CMS	July 2013–June 2016
AMI Mortality	30-day mortality for AMI Medicare patients 65 and older. These data are risk adjusted for patient characteristics such as age and comorbidities.	CMS	July 2013 – June 2016
Overall HF	This rating is a combination of HF readmissions and mortality.	N/A	July 2013–June 2016
HF Readmissions	30-day unplanned readmissions for HF Medicare patients 65 and older. These data are risk adjusted for patient characteristics such as age and comorbidities.	CMS	July 2013 – June 2016
HF Mortality	30-day mortality for HF Medicare patients 65 and older. These data are risk adjusted for patient characteristics such as age and comorbidities.	CMS	July 2013 – June 2016

Cut-offs used for calculating AMI and HF ratings:

Measure	Performance* Better <<< ------ >>> Worse				
	⏫	🔼	⏺	🔽	⏬
AMI Readmissions	Min-10th percentile	>10th to 30th percentile	>30th to 70th percentile	>70th to 90th percentile	>90th percentile
AMI Mortality	Min-10th percentile	>10th to 30th percentile	>30th to 70th percentile	>70th to 90th percentile	>90th percentile
HF Readmissions	Min-10th percentile	>10th to 30th percentile	>30th to 70th percentile	>70th to 90th percentile	>90th percentile
HF Mortality	Min-10th percentile	>10th to 30th percentile	>30th to 70th percentile	>70th to 90th percentile	>90th percentile

*Percentiles are based on national rates of hospitals with a minimum denominator of 25 cases. For a hospital to qualify to be rated, a minimum denominator of 25 cases must be met.

AMI and HF Readmission and Mortality Ratings

The reported readmission and mortality rates were re-scaled on a CS scale, as described in the chart below. Cut points for the ratings are based on a combination of the data distribution and on input and review by experts in quality measurement and clinical medicine.

	Rating	Converted Score Range	Readmission / Mortality Rate*
Better ↕ Worse		5.5 ≥ CS ≥ 4.5	Min-10th percentile
		4.5 > CS ≥ 3.5	>10th to 30th percentile
		3.5 > CS ≥ 2.5	>30th to 70th percentile
		2.5 > CS ≥ 1.5	>70th to 90th percentile
		1.5 > CS ≥ 0.5	>90th percentile

* Percentiles are based on national rates of hospitals with a minimum denominator of 25 cases

Overall AMI and HF Rating

The overall rating combines Readmission rating and Mortality rating together into a composite for AMI and a composite for HF. In order to calculate this, the two individual measures are put on the same scale using CS, as described above, which are then averaged using a geometric mean. This score is used to determine the overall rating as described in the table below.

	Overall Rating	Converted Score Range
Better ↕ Worse		5.5 ≥ CS ≥ 4.5
		4.5 > CS ≥ 3.5
		3.5 > CS ≥ 2.5
		2.5 > CS ≥ 1.5
		1.5 > CS ≥ 0.5

Coronary Artery Bypass Graft (CABG) Surgery

Measures used for calculating Coronary Artery Bypass Graft (CABG) surgery ratings:

Measure	Description	Source	Dates
CABG Readmissions	30-day unplanned readmission for Medicare patients 65 and older cases where a CABG was performed. These data are risk adjusted for patient characteristics such as age and comorbidities.	CMS	July 2013–June 2016
CABG Mortality	Deaths within 30 days of a CABG performed in Medicare patients 65 and older. These data are risk adjusted for patient characteristics such as age and comorbidities.	CMS	July 2013–June 2016
CABG Stroke	Post-operative central neurologic deficit that does not resolve within 24 hours of isolated CABG surgery. These data are risk adjusted for patient characteristics such as age and comorbidities.	OSHPD	2013 - 2014
CABG Surgical Site Infection	Surgical site infection related to a CABG procedure as measured by the standardized infection ratio (SIR).	CDPH	2016

Cut-offs used for calculating CABG ratings:

Measure	Performance* Better <<< ------ >>> Worse				
	⏫	🔼	❗	🔽	⏬
Readmissions	Min-10th percentile	>10th to 30th percentile	>30th to 70th percentile	>70th to 90th percentile	>90th percentile
Mortality	Min-10th percentile	>10th to 30th percentile	>30th to 70th percentile	>70th to 90th percentile	>90th percentile
Stroke	Min-10th percentile	>10th to 30th percentile	>30th to 70th percentile	>70th to 90th percentile	>90th percentile
Surgical Site Infection	SIR = 0	>0 SIR ≤ 0.5	>0.5 SIR ≤ 1.0	>1.0 SIR ≤ 1.5	SIR > 1.5

*Regarding Stroke: Percentiles are based on California rates of hospitals with a minimum denominator of 25 cases. Regarding Surgical Site Infection: Percentiles are based on California rates of hospitals meeting the minimum threshold as stated below. Regarding Readmissions and Mortality: Percentiles are based on national rates of hospitals with a minimum denominator of 25 cases.

Regarding Surgical Site Infection: For a hospital to qualify to be rated, at least one of the following two criteria must be met: a) At least one total predicted infection, or b) At least three infections.

Regarding Readmissions, Mortality and Stroke: For a hospital to qualify to be rated, a minimum denominator of 25 cases must be met.

2.2 Doctor Groups

General Approach to Doctor Group Ratings

Our ratings use 1-to-4 scale for doctor groups using a pre-existing ratings method from the Office of the Patient Advocate (OPA) and IHA. These methodologies were used to maintain consistency across tools available to Californians. Below are the cut-offs used for each health topic presented for Doctor Groups (Diabetes, Cancer screening, Pediatric care, and Back pain). For more detailed information, please visit http://reportcard.opa.ca.gov/rc/medicalgroupabout.aspx.

Each of the measures use the following cut-offs:

Performance Better <<<------>>> Worse			
			
Top 10 Percent	50th-89th	25th-49th	Bottom 24%

2.2.1 Diabetes

Measures used for calculating Diabetes ratings:

Measure	Description	Source	Dates
Overall Diabetes rating	An overall composite rating for provider performance on Diabetes care.	IHA	January 2016 - December 2016
Kidney functioning	The percentage of patients who received testing for nephropathy (kidney function)	IHA	January 2016 - December 2016
Blood pressure controlled	The percentage of patients whose blood pressure was <140/90.	IHA	January 2016 - December 2016
Blood sugar screening	The percentage of patients who had two HA1c blood sugar tests.	IHA	January 2016 - December 2016
Blood sugar kept under control	The percentage of patients whose most recent HbA1c was <8.0%.	IHA	January 2016 - December 2016

2.2.2 Cancer Screening

Measures used for calculating Cancer Screening rating:

Measure	Description	Source	Dates
Overall Cancer Screening	This rating is the combination of how well the doctor group was at screening for cancers of the breast, cervix, and colon.	IHA	January 2016 - December 2016
Colon Cancer Screening	This rating is the percentage of adults 50–75 years of age who had appropriate screening for colorectal cancer.	IHA	January 2016 - December 2016
Breast Cancer Screening	This rating is the percentage of female patients ages 52 to 74 who had a screening mammogram in the past 2 years.	IHA	January 2016 - December 2016

Measure	Description	Source	Dates
Cervical Cancer Screening	This rating is the percentage of female patients 21 to 64 who received appropriate cervical cancer screening.	IHA	January 2016 - December 2016

2.2.3 Back Pain

Measure used for calculating Back Pain ratings:

Measure	Description	Source	Dates
Avoiding Overuse of Imaging	The percentage of members with a primary diagnosis of low back pain who did not have an imaging study (X-ray, MRI, CT scan) within 28 days of the diagnosis.	IHA	January 2016 - December 2016

2.2.4 Pediatric Care

Measures used for calculating Pediatric Care ratings:

Measure	Description	Source	Dates
Overall Pediatric Care	This rating is a combination of the medical group's appropriate treatment of children for upper respiratory and throat infections, immunizations for children and adolescents, and HPV vaccines in male and female adolescents.	IHA	January 2016 - December 2016
Treating Children with Upper Respiratory Infections	This rating is based on the percentage of children 3 months to 18 years old who were diagnosed with an upper respiratory infection (URI) and were not improperly prescribed an antibiotic.	IHA	January 2016 - December 2016
Treating Children with Throat Infections	This rating is based on the percentage of children 2 to 18 years old with sore throats who were prescribed antibiotics and received an A streptococcus (strep) test.	IHA	January 2016 - December 2016
Immunizations for Children	This rating is based on the percentage of children who received the following vaccines by their second birthday: four diphtheria, tetanus, acellular pertussis (DtaP) vaccinations; three polio (IPV) vaccinations; one measles, mumps, rubella (MMR) vaccination; two flu vaccinations; three haemophilus type B (HiB) vaccinations; three hepatitis B (HepB) vaccinations; one hepatitis A (HepA) vaccination; two or three rotavirus (RV) vaccinations; one chicken pox (VZV) vaccination; and four pneumococcal conjugate (PCV) vaccinations.	IHA	January 2016 - December 2016
Immunizations for Early Teens	This rating is based on the percentage of 13-year-olds who had meningococcal vaccine and one tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) and three doses of the human papillomavirus (HPV) vaccine.	IHA	January 2016 - December 2016
HPV Vaccine for Male Adolescents	This rating is based on the percentage of male 13-year-olds who had three doses of the human Papillomavirus (HPV) vaccine by their 13th birthday.	IHA	January 2016 - December 2016
HPV Vaccine for Female Adolescents	This rating is based on the percentage of female 13-year-olds who had three doses of the human Papillomavirus (HPV) vaccine by their 13th birthday.	IHA	January 2016 - December 2016

3. Patient Experience

Our Patient Experience ratings are based on survey data collected by the U.S Department of Health and Human Services, CMS. The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey evaluates dimensions of patient care that are important to consumers (e.g. how often the room and bathroom were kept clean; how often pain was well-controlled) and that are related to safety concerns (e.g. communication about new medications, communication about discharge).

The HCAHPS survey data are collected using a standardized survey instrument by CMS-approved and trained vendors contracted by individual hospitals (in rare occasions, the hospital serves as the approved vendor itself). Data are delivered to a centralized data bank, where they are analyzed and prepared for public reporting on CMS's Hospital Compare website (www.hospitalcompare.hhs.gov).

The survey asks a sample of former inpatients from each hospital about various dimensions of their experiences. CMS reports HCAHPS survey results for nine categories, some of which are composites of more than one survey question and two global items about their care.

CMS recently released Star Ratings based on HCAHPS performance. We base our patient experience ratings on these Star Ratings. For more information on the method, please visit https://www.medicare.gov/hospitalcompare/Data/HCAHPS-Star-Ratings.html.

4. Hospital Deficiencies

This is the number of deficiencies cited in inspection reports from the CMS (Form CMS 2567). Currently we show all of the deficiencies reported for that hospital for all reasons for September 2014 - September 2017. For more details about these reports see http://www.hospitalinspections.org/qa-with-cms/ or https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandComplianc/Hospitals.html.

Hospitals with one or two deficiencies get a yellow triangle symbol, while hospitals with three or more get an orange symbol. Hospitals without deficiencies receive no triangle.

5. Payment Estimates

Introduction

This document describes the method used to define and calculate payment estimates for medical episodes and procedures that are reported on CAHealthcareCompare.org as part of the California Medical Price and Quality Transparency (COMPAQT) Initiative. The cost information displayed on this site reflects the patient payments, insurance payments and overall payments made to providers and facilities based on individual services or a bundle of services provided from claims data. The method used to generate the payment estimates varied by the claim type and grouping of claims.

Data Sources

The COMPAQT Initiative cost estimates are based on Truven Health MarketScan® Research Databases (Truven Health Analytics Inc., Ann Arbor, Michigan), which contain de-identified, individual-level health care commercial claims from employers, health plans, states, and hospitals.

Data were extracted for claims that were billed in California between January 2010 and December 2016.

Method

The COMPAQT Initiative reported payments based on claims data, which can broadly be classified into two categories: Medical Episode Group (MEG) and Procedures. The Truven Health MarketScan® Medical Episode Grouper groups inpatient, outpatient, and pharmaceutical claims into single episodes of medical care for specific illnesses or health conditions. This grouping method was used to capture the health conditions and illnesses comprising the top 75% of healthcare costs for California, and some additional conditions with matched quality scores. This corresponded to 99 MEGs, with pediatric subgroups also reported for two of these MEGs by subsetting the grouping to ages 2-18.

Typically, a MEG is comprised of all encounters and services (including pre and post-service) that are associated with its grouping and thus are broader than a single procedure or event. In addition, the MEG takes into account whether a condition or illness is acute or chronic in the definition. This affected the way payments were calculated and reported. For acute MEGs, payments were calculated using the total payments for each of the 65 acute episodes as defined by the grouper. For chronic MEGs, annualized payments were calculated since a chronic episode could extend for several months or several years from their beginning date. As a result of this annualization, individuals were required to be continuously enrolled for 365 days from the beginning of a chronic episode ensuring that every individual had the opportunity to accrue claims for at least one 365-day period.

For medical encounters that are specific to a medical procedure (e.g. hip replacement surgery), individual claims data were extracted using CPT/HCPCS and ICD-9 codes (see Appendix below). Payments were calculated for seven procedures, four inpatient and three outpatient. Payment for inpatient procedures are calculated as all costs incurred within a single-continuous inpatient stay, whereas, outpatient procedure payments are calculated for a particular medical service performed.

Reporting Guidelines

The Truven Health MarketScan® Research Databases (Truven Health Analytics Inc, Ann Arbor, Michigan) data used for the COMPAQT Initiative are based on claims that were submitted prior to the new guidelines introduced under the Affordable Care Act (ACA). Under the new guidelines of the Public Health Service (PHS) Act section 2707(b), group health plans must now ensure that any annual cost sharing imposed under a plan does not exceed the limitations provided under section 1302(c)(1) of the ACA, which limits annual out-of-pocket maximums. In addition, the PHS Act Section 2713 requires non-grandfathered health plans to offer coverage of preventative services which have a rating of "A" or "B" in the current recommendations of the United States Preventative Services Task Force (USPSTF). This affected the way that price estimates were calculated in two ways. First, in order to reflect the 2017 limits for annual out-of- pocket maximums, if the individual's payment estimate for a MEG or procedure was greater than $14,300 (the maximum annual out-of-pocket allowed for families for a health plan) and the insurance payment estimate was less than that of the individual's payment it was excluded from payment calculations. Second, procedures that were rated either "A" or "B" by the USPSTF and therefore would commonly have no out-of- pocket responsibility associated with them, except when additional services were performed, were reported with an explanation of how claims can change from preventative categories to billed categories.

Capitation payments were excluded from our analyses. As these payments are made to treating physicians and providers on a regular basis (usually monthly) based on patient status, and not as direct compensation for services rendered, their inclusion in the data creates difficulties in producing precise estimates of payments for certain services.

The COMPAQT Initiative reports median, 10th and 90th percentile cost information for overall payment amounts, payments made by insurers, and payments made by patients. Payment information was calculated and reported for 18 of the 19 Covered California rating regions, as well as statewide.

For MEGs and procedures where payment and quality ratings were paired, rating regions were classified as “Less costly than statewide average” or “More costly than statewide average" if the median payment estimate for a region was 20% below or above the statewide median. A rating region was classified as "Similar to Statewide Average" if the median payment estimate for a region was 20% above or below the

statewide median cost estimate. For example, if the statewide median cost estimate was $100, regions with cost estimates below $80 would be labeled "Below State Average" and regions with median payment estimate above $120 would be labeled "Above State Average". A region with a median payment estimate between $80 and $120 would be labeled "At State Average". All payment estimates have been adjusted for inflation using the Medical Care component of the Consumers Price Index and are reported in 2016 dollars.

Outliers and Sample Size

MEGs or procedures with total payment amounts of zero dollars, or total payments that were less than payments made by insurers or patients, were excluded. In addition to removing payments of zero value, the top and bottom 1% of total payment values were excluded from payment calculations as they represented payments that are not typical of each MEG or procedure.

A minimum sample size for each MEG or procedure within a California geographic rating region was determined using confidence intervals for median total payments. If the lower and upper bounds of a confidence interval were more than twice the value of the median payment estimates in absolute value, then that region's prices were not reported. The payment data source required that for each region reported publicly that there be at least three payers in the rating region and that no one payer represented 60% or more of the claims in that region.

APPENDIX - ICD-9, ICD-10, and HCPCS/CPT Codes

Please note that ICD-9 codes were used through September 30, 2015. After that time, ICD-9 codes were discontinued and replaced with ICD-10 codes. Since the measurement period spans 2010 – 2016, both ICD-9 and ICD-10 codes are presented below. Italicized service names below refer to additional or subcomponent criteria of stated measures.

Hip Replacement & Repair:

Service	ICD-9	ICD-10	HCPCS/CPT
Total Hip Replacement	81.51	0SR9019, 0SR901A, 0SR901Z, 0SR9029, 0SR902A, 0SR902Z, 0SR9039, 0SR903A, 0SR903Z, 0SR9049, 0SR904A, 0SR904Z, 0SR9069, 0SR906A, 0SR906Z, 0SR907Z, 0SR90J9, 0SR90JA, 0SR90JZ, 0SR90KZ, 0SRB019, 0SRB01A, 0SRB01Z, 0SRB029, 0SRB02A, 0SRB02Z,	

		0SRB039, 0SRB03A, 0SRB03Z, 0SRB049, 0SRB04A, 0SRB04Z, 0SRB069, 0SRB06A, 0SRB06Z, 0SRB07Z, 0SRB0J9, 0SRB0JA, 0SRB0JZ, 0SRB0KZ	
Partial Hip Replacement	81.52	0SRA009, 0SRA00A, 0SRA00Z, 0SRA019, 0SRA01A, 0SRA01Z, 0SRA039, 0SRA03A, 0SRA03Z, 0SRA07Z, 0SRA0J9, 0SRA0JA, 0SRA0JZ, 0SRA0KZ, 0SRE009, 0SRE00A, 0SRE00Z, 0SRE019, 0SRE01A, 0SRE01Z, 0SRE039, 0SRE03A, 0SRE03Z, 0SRE07Z, 0SRE0J9, 0SRE0JA, 0SRE0JZ, 0SRE0KZ, 0SRR019, 0SRR01A, 0SRR01Z, 0SRR039, 0SRR03A, 0SRR03Z, 0SRR07Z, 0SRR0J9, 0SRR0JA, 0SRR0JZ, 0SRR0KZ, 0SRS019, 0SRS01A, 0SRS01Z, 0SRS039, 0SRS03A, 0SRS03Z, 0SRS07Z, 0SRS0J9, 0SRS0JA, 0SRS0JZ, 0SRS0KZ	
Total Hip Replacement Revision	00.70, 81.53	0SR9019, 0SR901A, 0SR901Z, 0SR9029, 0SR902A, 0SR902Z, 0SR9039, 0SR903A, 0SR903Z, 0SR9049, 0SR904A, 0SR904Z, 0SR9069, 0SR906A, 0SR906Z, 0SR90J9, 0SR90JA, 0SR90JZ, 0SP908Z, 0SP909Z, 0SP90BZ, 0SP90JZ, 0SRB019, 0SRB01A, 0SRB01Z, 0SRB029, 0SRB02A, 0SRB02Z, 0SRB039, 0SRB03A, 0SRB03Z, 0SRB049, 0SRB04A, 0SRB04Z, 0SRB069, 0SRB06A, 0SRB06Z, 0SRB0J9, 0SRB0JA, 0SRB0JZ, 0SPB08Z, 0SPB09Z, 0SPB0BZ, 0SPB0JZ, 0SW90JZ, 0SW93JZ, 0SW94JZ, 0SWA0JZ,	

		0SWA3JZ, 0SWA4JZ, 0SWB0JZ, 0SWB3JZ, 0SWB4JZ, 0SWE0JZ, 0SWE3JZ, 0SWE4JZ, 0SWR0JZ, 0SWR3JZ, 0SWR4JZ, 0SWS0JZ, 0SWS3JZ, 0SWS4JZ	
Partial Hip Replacement Revision	00.71, 00.72, 00.73	0SRA009, 0SRA00A, 0SRA00Z, 0SRA019, 0SRA01A, 0SRA01Z, 0SRA039, 0SRA03A, 0SRA03Z, 0SRA0J9, 0SRA0JA, 0SRA0JZ, 0SP908Z, 0SP909Z, 0SP90BZ, 0SPA0JZ, 0SRE009, 0SRE00A, 0SRE00Z, 0SRE019, 0SRE01A, 0SRE01Z, 0SRE039, 0SRE03A, 0SRE03Z, 0SRE0J9, 0SRE0JA, 0SRE0JZ, 0SPB08Z, 0SPB09Z, 0SPB0BZ, 0SPE0JZ, 0SRR019, 0SRR01A, 0SRR01Z, 0SRR039, 0SRR03A, 0SRR03Z, 0SRR0J9, 0SRR0JA, 0SRR0JZ, 0SP908Z, 0SP909Z, 0SP90BZ, 0SPR0JZ, 0SRS019, 0SRS01A, 0SRS01Z, 0SRS039, 0SRS03A, 0SRS03Z, 0SRS0J9, 0SRS0JA, 0SRS0JZ, 0SPB08Z, 0SPB09Z, 0SPB0BZ, 0SPS0JZ, 0SU909Z, 0SUA09Z, 0SUR09Z, 0SP908Z, 0SP909Z, 0SP90BZ, 0SP90JZ, 0SUB09Z, 0SUE09Z, 0SUS09Z, 0SPB08Z, 0SPB09Z, 0SPB0BZ, 0SPB0JZ	
Partial Hip Resurfacing	00.86, 00.87	0SUR0BZ, 0SUS0BZ, 0SUA0BZ, 0SUE0BZ	
Total Hip Resurfacing	00.85	0SU90BZ, 0SUB0BZ, 0SUR0BZ, 0SUA0BZ, 0SUS0BZ, 0SUE0BZ	
Hip Bearing Surface	00.74, 00.75, 00.76, 00.77	N/A	

Knee Replacement & Repair:

Service	ICD-9	ICD-10	HCPCS/CPT
Total Knee Replacement	81.54	0SRC06Z, 0SRC07Z, 0SRC0JZ, 0SRC0KZ, 0SRC0LZ, 0SRD06Z, 0SRD07Z, 0SRD0JZ, 0SRD0KZ, 0SRD0LZ, 0SRT07Z, 0SRT0JZ, 0SRT0KZ, 0SRU07Z, 0SRU0JZ, 0SRU0KZ, 0SRV07Z, 0SRV0JZ, 0SRV0KZ, 0SRW07Z, 0SRW0JZ, 0SRW0KZ, 0SRC069, 0SRC06A, 0SRC0J9, 0SRC0JA, 0SRC0L9, 0SRC0LA, 0SRD069, 0SRD06A, 0SRD0J9, 0SRD0JA, 0SRD0L9, 0SRD0LA, 0SRT0J9, 0SRT0JA, 0SRU0J9, 0SRU0JA, 0SRV0J9, 0SRV0JA, 0SRW0J9, 0SRW0JA	
Total Knee Replacement Revision	00.80, 81.55	0SRC069, 0SRC06A, 0SRC06Z, 0SRC0J9, 0SRC0JA, 0SRC0JZ, 0SPC08Z, 0SPC09Z, 0SPC0JZ, 0SPC48Z, 0SPC4JZ, 0SRD069, 0SRD06A, 0SRD06Z, 0SRD0J9, 0SRD0JA, 0SRD0JZ, 0SPD08Z, 0SPD09Z, 0SPD0JZ, 0SPD48Z, 0SPD4JZ, 0SWC0JC, 0SWC0JZ, 0SWC3JC, 0SWC3JZ, 0SWC4JC, 0SWC4JZ, 0SWD0JC, 0SWD0JZ, 0SWD3JC, 0SWD3JZ, 0SWD4JC, 0SWD4JZ, 0SWT0JZ, 0SWT3JZ, 0SWT4JZ, 0SWU0JZ, 0SWU3JZ, 0SWU4JZ, 0SWV0JZ, 0SWV3JZ, 0SWV4JZ,0SWW0JZ, 0SWW3JZ, 0SWW4JZ	
Total Knee Replacement Partial Revision	00.81, 00.82, 00.83, 00.84	0QPD0JZ, 0QPD3JZ, 0QPD4JZ, 0QPF0JZ, 0QPF3JZ, 0QPF4JZ, 0QRD0JZ, 0QRD3JZ, 0QRD4JZ, 0QRF0JZ, 0QRF3JZ, 0QRF4JZ, 0QUD0JZ, 0QUD3JZ, 0QUD4JZ, 0QUF0JZ,	

		0QUF3JZ, 0QUF4JZ, 0SPC08Z, 0SPC09Z, 0SPC48Z, 0SPC4JZ, 0SPD08Z, 0SPD09Z, 0SPD48Z, 0SPD4JZ, 0SPT0JZ, 0SPV0JZ, 0SPW0JZ, 0SRT0J9, 0SRT0JA, 0SRT0JZ, 0SRU0J9, 0SRU0JA, 0SRU0JZ, 0SRV0J9, 0SRV0JA, 0SRV0JZ, 0SRW0J9, 0SRW0JA, 0SRW0JZ, 0SUC09C, 0SUD09C, 0SUV09Z, 0SUW09Z	
Partial Knee Repair	81.43, 81.44, 81.45, 81.46, 81.47	0SBC0ZZ, 0SBC3ZZ, 0SBC4ZZ, 0MQN0ZZ, 0MQN3ZZ, 0MQN4ZZ, 0SBD0ZZ, 0SBD3ZZ, 0SBD4ZZ, 0MQP0ZZ, 0MQP3ZZ, 0MQP4ZZ, 0QSD04Z, 0QSD34Z, 0QSD44Z, 0QSF04Z, 0QSF34Z, 0QSF44Z, 0MQN0ZZ, 0MQN3ZZ, 0MQN4ZZ, 0MQP0ZZ, 0MQP3ZZ, 0MQP4ZZ, 0SQC0ZZ, 0SQC3ZZ, 0SQC4ZZ, 0SQCXZZ, 0SQD0ZZ, 0SQD3ZZ, 0SQD4ZZ, 0SQDXZZ	
Five-in-one Repair of Knee	81.42	0KXS0ZZ, 0KXS4ZZ, 0KXT0ZZ, 0KXT4ZZ, 0LSQ0ZZ, 0LSQ4ZZ, 0LSR0ZZ, 0LSR4ZZ, 0MQN0ZZ, 0MQN3ZZ, 0MQN4ZZ, 0MQP0ZZ, 0MQP3ZZ, 0MQP4ZZ, 0SBC0ZZ, 0SBC3ZZ, 0SBC4ZZ, 0SBD0ZZ, 0SBD3ZZ, 0SBD4ZZ	

<u>Hysterectomy</u>:

Service	ICD-9	ICD-10	HCPCS/CPT
Hysterectomy	68, 68.0, 68.1, 68.11, 68.12, 68.13, 68.14, 68.15, 68.16, 68.19, 68.2, 68.21, 68.22, 68.23, 68.24, 68.25, 68.29, 68.3, 68.31,	0UB90ZX, 0UB90ZZ, 0UB93ZX, 0UB93ZZ, 0UB94ZX, 0UB94ZZ, 0UB97ZX, 0UB97ZZ, 0UB98ZX, 0UB98ZZ, 0UT90ZL, 0UT90ZZ, 0UT94ZL, 0UT94ZZ, 0UT97ZL, 0UT97ZZ, 0UT98ZL, 0UT98ZZ,	51925, 56308, 58150, 58152, 58180, 58200, 58210, 58240, 58260, 58262, 58263, 58267, 58270, 58275, 58280, 58285, 58290, 58291,

	68.39, 68.4, 68.41, 68.49, 68.5, 68.51, 68.59, 68.6, 68.61, 68.69, 68.7, 68.71, 68.79, 68.8, 68.9	0UT9FZL, 0UT9FZZ	58292, 58293, 58294, 58548, 58550, 58552, 58553, 58554, 58570, 58571, 58572, 58573, 58951, 58953, 58954, 58956, 59135

Colorectal Cancer Screening:

Service	ICD-9	ICD-10	HCPCS/CPT*
Colon Cancer Screening - Colonoscopy, Screening Converted Colonoscopy, Diagnostic Colonoscopy			44388, 44389, 44392, 44393, 44394, 45378, 45380, 45381, 45383, 45384, 45385, G0105, G0121
Colon Cancer Screening - Sigmoidoscopy, Screening Converted Sigmoidoscopy, Diagnostic Sigmoidoscopy			45330, 45331, 45333, 45335, G0104
Colon Cancer Screening - Blood Fecal Test, Diagnostic Blood Fecal Test			82270, 82272, 82274, G0328
Anesthesia for Lower Endoscopy			00810
Pathology for Lower Endoscopy			88302, 88304, 88305, 88307, 88309

*A HCPCS/CPT code must be accompanied by an AHRQ Clinical Classification Software (CCS) diagnosis and screening code from the following list:

AHRQ CCS diagnosis:
6, 12, 13, 14, 15, 17, 18, 59, 120, 135, 138,139, 140, 141, 142, 144, 145, 146, 147, 148, 149, 151, 153, 154, 155, 215, 250, 251, 259

AHRQ CCS screening:
47, 256, 258

Breast Cancer Screening:

Service	ICD-9	ICD-10	HCPCS/CPT
Breast Cancer Screening, Breast Cancer Screening Converted, Breast Cancer Diagnostic	See below		See below
Mammography	V76.10, V76.11, V76.12	Z12.39, Z12.31	76090, 76091, 76092, 77057, 77055, 77056, G0202, G0203, G0204, G0205, G0206, G0207
Biopsy	85.11, 85.12, 85.19, 85.20, 85.21, 85.22, 85.23, 85.24, 85.25, 85.91, 174.0, 174.1, 174.2, 174.3, 174.4, 174.5, 174.6, 174.8, 174.9, 196.3, 217, 233.0, 239.3, 610.0, 610.1, 610.2, 610.3, 610.4, 610.8, 610.9, 611.1, 611.2, 611.5, 611.6, 611.7, 611.8, 611.9, 793.8, V10.3, V16.3, V76.1	0H5T0ZZ, 0H5T3ZZ, 0H5T7ZZ, 0H5T8ZZ, 0H5TXZZ, 0H5U0ZZ, 0H5U3ZZ, 0H5U7ZZ, 0H5U8ZZ, 0H5UXZZ, 0H5V0ZZ, 0H5V3ZZ, 0H5V7ZZ, 0H5V8ZZ, 0H5VXZZ, 0H5W0ZZ, 0H5W3ZZ, 0H5W7ZZ, 0H5W8ZZ, 0H5WXZZ, 0H5X0ZZ, 0H5X3ZZ, 0H5X7ZZ, 0H5X8ZZ, 0H5XXZZ, 0H9T0ZX, 0H9T30Z, 0H9T3ZX, 0H9T3ZZ, 0H9T70Z, 0H9T7ZX, 0H9T7ZZ, 0H9T80Z, 0H9T8ZX, 0H9T8ZZ, 0H9TXZX, 0H9TXZZ, 0H9U0ZX, 0H9U30Z, 0H9U3ZX, 0H9U3ZZ, 0H9U70Z, 0H9U7ZX, 0H9U7ZZ, 0H9U80Z, 0H9U8ZX, 0H9U8ZZ, 0H9UXZX, 0H9UXZZ, 0H9V0ZX, 0H9V30Z, 0H9V3ZX, 0H9V3ZZ, 0H9V70Z, 0H9V7ZX, 0H9V7ZZ, 0H9V80Z, 0H9V8ZX, 0H9V8ZZ, 0H9VXZX, 0H9VXZZ, 0H9W0ZX, 0H9W30Z, 0H9W3ZX, 0H9W3ZZ, 0H9W70Z, 0H9W7ZX, 0H9W7ZZ, 0H9W80Z, 0H9W8ZX, 0H9W8ZZ, 0H9WXZX, 0H9X0ZX, 0H9X30Z, 0H9X3ZX, 0H9X3ZZ, 0H9X70Z, 0H9X7ZX, 0H9X7ZZ, 0H9X80Z, 0H9X8ZX, 0H9X8ZZ,	19000, 19001, 19100, 19101, 19102, 19103, 19110, 19112, 19120, 19125, 19126, 19290, 19291, 19295, 76095, 76096, 76360, 76393, 76942, 77021, 77031, 77032, 10021, 10022, 38500-38525, 19160, 19301, C1879

		0H9XXZX, 0HBT0ZX, 0HBT0ZZ, 0HBT3ZX, 0HBT3ZZ, 0HBT7ZX, 0HBT7ZZ, 0HBT8ZX, 0HBT8ZZ, 0HBTXZX, 0HBTXZZ, 0HBU0ZX, 0HBU0ZZ, 0HBU3ZX, 0HBU3ZZ, 0HBU7ZX, 0HBU7ZZ, 0HBU8ZX, 0HBU8ZZ, 0HBUXZX, 0HBUXZZ, 0HBV0ZX, 0HBV0ZZ, 0HBV3ZX, 0HBV3ZZ, 0HBV7ZX, 0HBV7ZZ, 0HBV8ZX, 0HBV8ZZ, 0HBVXZX, 0HBVXZZ, 0HBW0ZX, 0HBW0ZZ, 0HBW3ZX, 0HBW3ZZ, 0HBW7ZX, 0HBW7ZZ, 0HBW8ZX, 0HBW8ZZ, 0HBWXZX, 0HBWXZZ, 0HBX0ZX, 0HBX0ZZ, 0HBX3ZX, 0HBX3ZZ, 0HBX7ZX, 0HBX7ZZ, 0HBX8ZX, 0HBX8ZZ, 0HBXXZX, 0HBXXZZ, 0HBY0ZX, 0HBY3ZX, 0HBY7ZX, 0HBY8ZX, 0HBYXZX, 0HJT0ZZ, 0HJT3ZZ, 0HJT7ZZ, 0HJT8ZZ, 0HJU0ZZ, 0HJU3ZZ, 0HJU7ZZ, 0HJU8ZZ, 0HTWXZZ, 0HTXXZZ	
Pathology			88104, 88105, 88106, 88107, 88108, 88109, 88110, 88111, 88112, 88160, 88161, 88162, 88172, 88173, 88271, 88300, 88311, 88321, 88322, 88323, 88324, 88325, 88326, 88327, 88328, 88329, 88330, 88331, 88332, 88333, 88334, 88346, 83950

Cervical Cancer Screening:

Service	ICD-9	ICD-10	HCPCS/CPT
Cervical Cancer Screening, Cervical Cancer Screening Converted, Cervical Cancer Diagnostic	See below		See below
Pap smear	V70.0, V70.9, V72.31, V72.32, V76.2	Z01.42, Z12.4	88141, 88142, 88143, 88147, 88148, 88150, 88152, 88153, 88154, 88155, 88164, 88165, 88166, 88167, 88174, 88175, G0123, G0124, G0141, G0143, G0144, G0145, G0147, G0148, P3000, P3001, Q0091
Colposcopy			57420, 57452, 57421, 57455, 57500, 57505, 57454, 57456, 57450, 57460, 57461, 57520, 57522
Pathology			88305, 88307

Coronary Artery Disease with Coronary Artery Bypass Graft (CABG) Surgery:

Service	ICD-9	ICD-10	HCPCS/CPT
Coronary Artery Disease with CABG Surgery	414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.4, 414.8, 414.9, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.19	I25.10, I25.10, I25.810, I25.811, I25.812, I25.82, I25.83, I25.84, I25.5, I25.89, I25.9, 021008W, 021009W, 02100AW, 02100JW, 02100KW, 021048W, 021049W, 02104AW, 02104JW, 02104KW, 021108W, 021109W, 02110AW, 02110JW, 02110KW, 021148W, 021149W, 02114AW, 02114JW, 02114KW, 021208W, 021209W, 02120AW, 02120JW, 02120KW, 021248W, 021249W, 02124AW, 02124JW, 02124KW	

		021308W, 021309W, 02130AW, 02130JW, 02130KW, 021348W, 021349W, 02134AW, 02134JW, 02134KW, 0210088, 0210089, 021008C, 0210098, 0210099, 021009C, 02100A8, 02100A9, 02100AC, 02100J8, 02100J9, 02100JC, 02100K8, 02100K9, 02100KC, 02100Z8, 02100Z9, 02100ZC, 0210488, 0210489, 021048C, 0210498, 0210499, 021049C, 02104A8, 02104A9, 02104AC, 02104J8, 02104J9, 02104JC, 02104K8, 02104K9, 02104KC, 02104Z8, 02104Z9, 02104ZC, 0211088, 0211089, 021108C, 0211098, 0211099, 021109C, 02110A8, 02110A9, 02110AC, 02110J8, 02110J9, 02110JC, 02110K8, 02110K9, 02110KC, 02110Z8, 02110Z9, 02110ZC, 0211488, 0211489, 021148C, 0211498, 0211499, 021149C, 02114A8, 02114A9, 02114AC, 02114J8, 02114J9, 02114JC, 02114K8, 02114K9, 02114KC, 02114Z8, 02114Z9, 02114ZC, 021208C, 021209C, 02120AC, 02120JC, 02120KC, 02120ZC, 021248C, 021249C, 02124AC, 02124JC, 02124KC, 02124ZC, 021308C, 021309C, 02130AC, 02130JC, 02130KC, 02130ZC, 021348C, 021349C, 02134AC, 02134JC, 02134KC, 02134ZC, 0210083, 0210093, 02100A3, 02100J3, 02100K3, 02100Z3,	

		0210483, 0210493, 02104A3, 02104J3, 02104K3, 02104Z3	