Centers for Medicare & Medicaid Services

Facility-Specific Report User Guide for the 2019 Public Reporting Period

OP-8: MRI Lumbar Spine for Low Back Pain

OP-9: Mammography Follow Up Rates

OP-10: Abdomen CT—Use of Contrast Material

OP-11: Thorax CT—Use of Contrast Material

OP-13: Cardiac Imaging for Preoperative Risk Assessment for Non-Cardiac, Low-Risk Surgery

OP-14: Simultaneous Use of Brain CT and Sinus CT

July 2019

Table of Contents

Section 1. Facility-Specific Report (FSR) User Guide Overview

1.1. Introduction

The Centers for Medicare & Medicaid Services (CMS) is providing facilities with a preview of their performance data for the six Outpatient Imaging Efficiency (OIE) measures in advance of the July 2019 refresh on Hospital Compare:

- Magnetic Resonance Imaging (MRI) Lumbar Spine for Low Back Pain (herein referred to as *OP-8*)
- Mammography Follow Up Rates (herein referred to as *OP-9*)
- Abdomen Computed Tomography (CT)—Use of Contrast Material (herein referred to as *OP-10*)
- Thorax CT—Use of Contrast Material (herein referred to as *OP-11*)
- Cardiac Imaging for Preoperative Risk Assessment for Non-Cardiac, Low-Risk Surgery (herein referred to as *OP-13*)
- Simultaneous Use of Brain CT and Sinus CT (herein referred to as *OP-14*)

FSRs have been distributed to facilities and are available for download as Microsoft® Excel® workbooks from the *QualityNet Secure Portal*. The FSR includes facility-level results and patient episode-level data, which CMS used to calculate facility scores for each OIE measure. To accompany the FSR, CMS has provided this document, the FSR User Guide, which gives an overview of the methodology, describes how to interpret its results, and offers detailed guidance for using the FSR. CMS recommends that facilities review their FSRs in tandem with this User Guide to support accurate interpretation of the data and results provided.

The FSR is a read-only workbook, which prevents users from unintentionally altering its content. Changes can be made by saving a new version locally using the *Save As* option from the Excel® menu. Key terms described throughout this User Guide are defined in Appendix A.

1.2. User Guide Structure

Content presented in this FSR User Guide is presented in the following sections:

- **Introduction:** Provides an overview of the OIE measures, including the facilities that report on each measure, goals, initial patient population methodology, and specifications.
- **Instructions for Use of FSRs:** Describes the data tables included in the FSR, including:
  - Your facility's data for each OIE measure, which will be displayed on Hospital Compare (http://www.medicare.gov/hospitalcompare/search.html).
  - State and national performance for each OIE measure.
  - Patient episode-level data used to calculate your facility's score for each OIE measure.

If you have questions about your facility's FSR, please contact the QualityNet Help Desk through the Questions and Answers tool at https://cms-ocsq.custhelp.com..

1.3. Measure Goals

CMS began developing measures evaluating imaging efficiency in 2007; the rationale for doing so was four-fold: to promote high-quality, efficient care; to reduce unnecessary exposure to contrast materials and/or radiation; to ensure adherence to evidence-based medicine and practice guidelines; and, to provide data to consumers and other stakeholders about facility imaging use. The timeline for adoption by CMS in the Outpatient Prospective Payment System (OPPS) rule and public reporting is outlined below:

- CMS adopted OP-8, OP-9, OP-10, and OP-11 in the OPPS rule for calendar year 2010; public reporting for these measures began in July 2011.
- CMS adopted OP-13 and OP-14 in the OPPS rule for calendar year 2011; public reporting for these measures began in July 2012.

CMS finalized removal of OP-9, OP-11, and OP-14 from the Hospital Outpatient Quality Reporting (HOQR) Program in the calendar year (CY) 2019 OPPS rule.[1]

1.4. Facilities that Report on Outpatient Imaging Measures

OIE measures are calculated using data from final claims that facilities submit for Medicare fee-for-service (FFS) beneficiaries. Performance results are calculated only for facilities paid through the OPPS for MRI lumbar spine (for OP-8), mammography (for OP-9), abdomen CT (for OP-10), thorax CT (for OP-11), cardiac imaging (for OP-13), or brain CT (for OP-14) studies performed in the hospital outpatient setting.

1.5. Measure Methodology Overview

CMS's OIE measures apply only to Medicare beneficiaries enrolled in original, FFS Medicare who were treated as outpatients at facilities reimbursed through the OPPS. The OIE measures do not include Medicare managed care beneficiaries, non-Medicare patients, or beneficiaries who were admitted to the hospital as inpatients. Due to claims adjudication, there is a lag between when an imaging study is performed and when it is reported on Hospital Compare; the data collection period for values reported on Hospital Compare in July 2019 ran from July 1, 2017 through June 30, 2018.

1.6. Measure Specifications

An overview of the measure specifications for OIE measures are available in Appendix B. For detailed measure specifications and supplementary material (including historical data on each measure's performance, updates to the evidence for each measure, and value sets for each measure), please reference the 2019 *Reevaluation Reports* for all OIE measures on QualityNet at: (www.qualitynet.org) → Hospitals–Outpatient → Measures → Imaging Efficiency Measures.

[1] Additional information on the removal of OP-9, OP-11, and OP-14 from the HOQR Program can be found in the Medicare Program: Changes to Hospital Outpatient Prospective Payment and Ambulatory Surgical Center Payment Systems and Quality Reporting Programs final rule with comment (83 CFR 58818 through 59179), available here from the Federal Register: https://www.federalregister.gov/documents/2018/11/21/2018-24243/medicare-program-changes-to-hospital-outpatient-prospective-payment-and-ambulatory-surgical-center.

Section 2. Instructions for Use of FSRs

2.1. Introduction

The following section includes a description of the data and results contained in the OIE measures' FSR. Your facility's FSR will contain nine worksheets with information on patient episodes included in calculation of OIE measures at your facility, in your state, and across the nation.

The FSR workbook contains the following nine tabs:

1. *OIE FSR Read Me:* A cover page orienting users to the FSR's content, including a link to the OIE measures' page on the *QualityNet* website and the email address to which questions about FSRs should be sent.
2. *Table 1—Your Facility's Rate for Outpatient Imaging Efficiency Measures:* Facility-level details on your scores for the six OIE measures.
3. *Table 2—National and State Statistics for Outpatient Imaging Efficiency Measures:* National and state scores for facilities in your state and across the United States for the six OIE measures.
4. *Table 3—Patient Episode-Level Information for OP-8*: Patient episode-level data for the MRI lumbar spine studies performed at your facility that met the inclusion criteria for OP-8.
5. *Table 4—Patient Episode-Level Information for OP-9:* Patient episode-level data for all screening mammography studies performed at your facility that met the inclusion criteria for OP-9
6. *Table 5—Patient Episode-Level Information for OP-10:* Patient episode-level data for all abdomen or abdominopelvic CT studies performed at your facility that met the inclusion criteria for OP-10.
7. *Table 6—Patient Episode-Level Information for OP-11:* Patient episode-level data for all thorax CT studies performed at your facility that met the inclusion criteria for OP-11.
8. *Table 7—Patient Episode-Level Information for OP-13:* Patient episode-level data for all stress echocardiography, SPECT MPI, stress MRI, or CCTA studies performed at your facility that met the inclusion criteria for OP-13.
9. *Table 8—Patient Episode-Level Information for OP-14*: Patient episode-level data for all brain CT studies performed at your facility that met the inclusion criteria for OP-14.

Note: The accompanying Microsoft© Excel® FSR workbook contains patient episode-level data that are protected under the Health Insurance Portability and Accountability Act (HIPAA) of 1996. It is a violation of HIPAA rules to share these protected patient episode-level data with other organizations, including the press.

Emailing protected health information poses a security issue; each HIPAA-covered entity is responsible for ensuring compliance with the security standards. There is only one secure way to share your patient episode-level data electronically: by sending them via the government-approved, secure section of the QualityNet website (www.qualitynet.org).

2.2. Table 1: Your Facility Scores for the Outpatient Imaging Efficiency (OIE) Measures

Table 1 in your FSR (labeled *Table 1 Facility Data* in the FSR workbook) displays your facility's scores for the six OIE measures. *Table 1* also includes information on your facility's public reporting status,[2] the number of eligible cases at your facility (included in your denominator), the number of cases removed from your facility's denominator (listed as exclusions), and the number of cases captured in your numerator for each OIE measure. CMS used imaging claims data from July 1, 2017 through June 30, 2018 for measure calculation.

Exhibit 1, on the next page, details the data elements included in this worksheet.

[2] The public reporting status for each Outpatient Imaging Efficiency measure reported in *Table One* reflects the application of a minimum case count (noting if a facility's score will be suppressed because no denominator cases were recorded or because the number of denominator cases did not meet minimum case count requirements). Facility scores may not appear on Hospital Compare for reasons outside of the application of a minimum case count; details on the reasons for removing a facility's score outside of the minimum case count requirements would be described using a footnote on the facility's Hospital Compare page.

Exhibit 1. Content from *Table 1* in your Facility's FSR Worksheet

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 8	Public Reporting Status **[a] [b]**	Indicates whether your facility's results will be publicly reported. Facilities will see *facility score will be reported*, *number of cases too small to report publicly*, or *zero eligible denominator cases* for this row. If the value in this cell is *number of cases too small to report publicly* or *zero eligible denominator cases*, then your results will not be publicly reported.	Indicates whether your facility's results will be publicly reported. Facilities will see *facility score will be reported*, *number of cases too small to report publicly*, or *zero eligible denominator cases* for this row. If the value in this cell is *number of cases too small to report publicly* or *zero eligible denominator cases*, then your results will not be publicly reported.	Indicates whether your facility's results will be publicly reported. Facilities will see *facility score will be reported*, *number of cases too small to report publicly*, or *zero eligible denominator cases* for this row. If the value in this cell is *number of cases too small to report publicly* or *zero eligible denominator cases*, then your results will not be publicly reported.	Indicates whether your facility's results will be publicly reported. Facilities will see *facility score will be reported*, *number of cases too small to report publicly*, or *zero eligible denominator cases* for this row. If the value in this cell is *number of cases too small to report publicly* or *zero eligible denominator cases*, then your results will not be publicly reported.	Indicates whether your facility's results will be publicly reported. Facilities will see *facility score will be reported*, *number of cases too small to report publicly*, or *zero eligible denominator cases* for this row. If the value in this cell is *number of cases too small to report publicly* or *zero eligible denominator cases*, then your results will not be publicly reported.	Indicates whether your facility's results will be publicly reported. Facilities will see *facility score will be reported*, *number of cases too small to report publicly*, or *zero eligible denominator cases* for this row. If the value in this cell is *number of cases too small to report publicly* or *zero eligible denominator cases*, then your results will not be publicly reported.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 9	Total Number of Imaging Studies Performed at your Facility for each Measure (Initial Patient Population)	Number of MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim performed at your facility that meet the inclusion and exclusion criteria for measure calculation.	Number of screening mammography studies at your facility that meet inclusion criteria for measure calculation.	Number of abdomen or abdominopelvic CT (those without contrast, with contrast, or without contrast followed by with contrast) studies performed at your facility that meet the inclusion and exclusion criteria for measure calculation.	Number of thorax CT (those without contrast, with contrast, or without contrast followed by with contrast) studies performed at your facility that meet the inclusion and exclusion criteria for measure calculation.	Number of stress echocardiography, SPECT MPI, stress MRI, or CCTA studies performed at your facility that meet the inclusion and exclusion criteria for measure calculation.	Number of brain CT studies performed at your facility that meet the inclusion and exclusion criteria for measure calculation.
Row 10	Number of Imaging Studies Removed from the Initial Patient Population at your Facility (Exclusions)	Number of MRI of the lumbar spine studies with a diagnosis of low back pain that were excluded from the measure. Excluded cases are not counted toward facility performance scores, nor are they included in your denominator.	Not applicable—OP-9 does not exclude cases from the initial patient population. No value will appear in row 10 for this measure.	Number of abdomen or abdominopelvic CT (those without contrast, with contrast, or without contrast followed by with contrast) studies that were excluded from the measure. Excluded cases are not counted toward facility	Number of thorax CT (those without contrast, with contrast, or without contrast followed by with contrast) studies that were excluded from the measure. Excluded cases are not counted toward facility performance scores, nor are	Number of stress echocardiography, SPECT MPI, stress MRI, or CCTA studies that were excluded from the measure. Excluded cases are not counted toward facility performance scores, nor are they included in your denominator.	Number of brain CT studies that were excluded from the measure. Excluded cases are not counted toward facility performance scores, nor are they included in your denominator.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
				performance scores, nor are they included in your denominator.	they included in your denominator.		
Row 11	Number of Eligible Imaging Studies with no Exclusions at your Facility (Denominator)	Number of MRI of the lumbar spine studies with a diagnosis of low back pain from row 9 that did not meet one or more exclusions.	Number of screening mammography studies from row 9.	Number of abdomen or abdominopelvic CT (without contrast, with contrast, or without contrast followed by with contrast) studies from row 9 that did not meet one or more exclusions.	Number of thorax CT (without contrast, with contrast, or without contrast followed by with contrast) studies from row 9 that did not meet one or more exclusions.	Number of stress echocardiography, SPECT MPI, stress MRI, or CCTA studies from row 9 that did not meet one or more exclusions.	Number of brain CT studies from row 9 that did not meet one or more exclusions.
Row 12	Number of Imaging Studies included in your Facility's Numerator	Number of MRI of the lumbar spine studies with a diagnosis of low back pain from row 11 that did not have claims-based evidence of prior antecedent conservative therapy.	Number of screening mammography studies from row 11 that were followed by a diagnostic mammography, ultrasound of the breast, or MRI of the breast in an outpatient setting within 45 days.	Number of abdomen or abdominopelvic CT studies from row 11 that were performed without contrast followed by with contrast.	Number of thorax CT studies from row 11 that were performed without contrast followed by with contrast.	Number of stress echocardiography, SPECT MPI, stress MRI, or CCTA studies from row 11 that were performed at an outpatient facility in the 30 days prior to an ambulatory non-cardiac, low-risk surgery performed	Number of brain CT studies from row 11 that were performed on the same day as a sinus CT.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
						in any location.	
Row 13	Your Facility's Score (Numerator/ Denominator) **[c] [d]**	The percentage of MRI of the lumbar spine studies with a diagnosis of low back pain on the imaging claim for which the beneficiary did not have prior claims-based evidence of antecedent conservative therapy. This score will be publicly reported if the value in row 8 was *facility score will be reported*.	The percentage of mammography screening studies that were followed by a diagnostic mammography, ultrasound of the breast, or MRI of the breast in an outpatient or office setting within 45 days. This score will be publicly reported if the value in Row 8 was *facility score will be reported*.	The percentage of abdomen or abdominopelvic CT studies performed without contrast, followed by with contrast, out of all abdomen and abdominopelvic CT studies performed (those without contrast, those with contrast, and those without and with contrast). This score will be publicly reported if the value in Row 8 was *facility score will be reported*.	The percentage of thorax CT studies performed without contrast, followed by with contrast, out of all abdomen and abdominopelvic CT studies performed (those without contrast, those with contrast, and those without and with contrast). This score will be publicly reported if the value in Row 8 was *facility score will be reported*.	The percentage of stress echocardiography, SPECT MPI, stress MRI, and CCTA studies performed at an outpatient facility in the 30 days prior to an ambulatory non-cardiac, low-risk surgery performed in any location (for example, same hospital facility, other hospital facility, or physician office). This score will be publicly reported if the value in Row 8 was *facility score will be reported*.	The percentage of brain CT studies with a simultaneous sinus CT (i.e., brain and sinus CT studies performed on the same day at the same facility). This score will be publicly reported if the value in Row 8 was *facility score will be reported*.

The following footnotes are referenced in *Table 1* of your facility's FSR:

- **[a] Public Reporting status:** Facility results will not be posted on Hospital Compare if they do not meet the minimum number of cases for public reporting; minimum case count (MCC) requirements vary by facility score. For more information on MCC, please refer to the facility-

specific report (FSR) User Guide or the Outpatient Imaging Efficiency measures reevaluation reports, available on QualityNet.[3]

- **[b] Hospital Compare footnotes:** The public reporting status for each Outpatient Imaging Efficiency measure reported in Table 1 reflects the application of a minimum case count (noting if a facility's score will be suppressed because no denominator cases were recorded or because the number of denominator cases did not meet minimum case count requirements). Facility scores may not appear on Hospital Compare for reasons outside of the application of a minimum case count; details on the reasons for removing a facility's score outside of the minimum case count requirements would be described using a footnote on the facility's Hospital Compare page.
- **[c]** This value is reported as a percentage (numerator counts/denominator counts).
- **[d] N/A:** No data are available from the facility for this measure. No values will be publicly reported.

[3] Applying a *minimum case count* is an approach CMS adopts for public reporting of some facility scores. For the OIE measures, CMS has identified a minimum number of patient episodes that a facility must have each year before its score is reported publicly on the Hospital Compare web-site. CMS elected to apply a minimum case count for the OIE measures to increase our confidence that each facility's score is reliable (or accurate). For more information on the minimum case count standards, please reference *Appendix C* of the OIE measures' reevaluation reports.

2.3. Table 2: State and National Data for the Outpatient Imaging Efficiency Measures

Table 2 in your FSR (labeled *Table 2 State and Natl Data* in the FSR workbook) displays data on the six Outpatient Imaging Efficiency measures for your state and nationally. *Table 2* includes the number of eligible cases in your state and nationally (included in the denominator), and the number of imaging studies included in the numerator at the state and national level. CMS used imaging claims data from July 1, 2017 through June 30, 2018 for measure calculation.

Exhibit 2, on the next page, details the data elements included in this worksheet.

Exhibit 2. Content from your Facility's FSR *Table 2: National and State Statistics for Outpatient Imaging Efficiency (OIE) Measures* Worksheet

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 8	Number of Facilities in the Nation	Number of facilities across the nation that have at least one eligible MRI lumbar spine study with a diagnosis of low back pain on the imaging claim.	Number of facilities across the nation that have at least one eligible screening mammography study.	Number of facilities across the nation that have at least one eligible abdomen or abdominopelvic CT study.	Number of facilities across the nation that have at least one eligible thorax CT study.	Number of facilities across the nation that have at least one eligible stress echocardiography, SPECT MPI, stress MRI, or CCTA study.	Number of facilities across the nation that have at least one eligible brain CT study.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 9	Facilities that Have Enough Cases for Public Reporting in the Nation (Met Minimum Case Count)	Number of facilities across the nation for which the minimum number of MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim were performed during the measurement period to reliably determine how the facility is performing. Details about facility-level minimum case count requirements can be found in the OP-8 *Reevaluation Report (Appendix C)*, located on QualityNet.	Number of facilities across the nation for which the minimum number of screening mammography studies were performed during the measurement period to reliably determine how the facility is performing. Details about facility-level minimum case count requirements can be found in the OP-9 *Reevaluation Report (Appendix C)*, located on QualityNet.	Number of facilities across the nation for which the minimum number of abdomen or abdominopelvic CT studies were performed during the measurement period to reliably determine how the facility is performing. Details about facility-level minimum case count requirements can be found in the OP-10 *Reevaluation Report (Appendix C)*, located on QualityNet.	Number of facilities across the nation for which the minimum number of thorax CT studies were performed during the measurement period to reliably determine how the facility is performing. Details about facility-level minimum case count requirements can be found in the OP-11 *Reevaluation Report (Appendix C)*, located on QualityNet.	Number of facilities across the nation for which the minimum number of stress echocardiography, SPECT MPI, stress MRI, or CCTA studies were performed during the measurement period to reliably determine how the facility is performing. Details about facility-level minimum case count requirements can be found in the OP-13 *Reevaluation Report (Appendix C)*, located on QualityNet.	Number of facilities across the nation for which the minimum number of brain CT studies were performed during the measurement period to reliably determine how the facility is performing. Details about facility-level minimum case count requirements can be found in the OP-14 *Reevaluation Report (Appendix C)*, located on QualityNet.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 10	Number of Facilities in the Nation that had too few Cases in the Nation (did not Meet Minimum Case Count)	Number of facilities across the nation for which too few MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim were performed during the measurement period to reliably determine how the facility is performing.	Number of facilities across the nation for which too few screening mammography studies were performed during the measurement period to reliably determine how the facility is performing.	Number of facilities across the nation for which too few abdomen or abdominopelvic CT studies were performed during the measurement period to reliably determine how the facility is performing.	Number of facilities across the nation for which too few thorax CT studies were performed during the measurement period to reliably determine how the facility is performing.	Number of facilities across the nation for which too few stress echocardiography, SPECT MPI, stress MRI, or CCTA studies were performed during the measurement period to reliably determine how the facility is performing.	Number of facilities across the nation for which too few brain CT studies were performed during the measurement period to reliably determine how the facility is performing.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 11	Number of Eligible Cases (Denominator) Nationally **[a]**	Number of MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim performed across the nation that meet the inclusion and exclusion criteria for measure calculation.	Number of screening mammography studies performed across the nation that meet the inclusion and exclusion criteria for measure calculation.	Number of abdomen or abdominopelvic CT (those without contrast, with contrast, or without contrast followed by with contrast) studies performed across the nation that meet the inclusion and exclusion criteria for measure calculation.	Number of thorax CT (those without contrast, with contrast, or without contrast followed by with contrast) studies performed across the nation that meet the inclusion and exclusion criteria for measure calculation.	Number of stress echocardiography, SPECT MPI, stress MRI, or CCTA studies performed across the nation that meet the inclusion and exclusion criteria for measure calculation.	Number of brain CT studies performed across the nation that meet the inclusion and exclusion criteria for measure calculation.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 12	Number of Imaging Studies included in the Numerator Nationally **[a]**	Number of MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim from row 11 that did not have claims-based evidence of prior antecedent therapy that were performed nationally.	Number of screening mammography studies from row 11 for which follow-up imaging (including diagnostic mammography, ultrasound of the breast, or MRI of the breast) that were performed nationally.	Number of abdomen or abdominopelvic CT studies from row 11 that were performed without contrast followed by with contrast nationally.	Number of thorax CT studies from row 11 that were performed without contrast followed by with contrast nationally.	Number of stress echocardiography, SPECT MPI, stress MRI, or CCTA studies from row 11 were performed at an outpatient facility in the 30 days prior to an ambulatory non-cardiac, low-risk surgery performed in any location (for example, same hospital facility, other hospital facility, or physician office) nationally.	Number of brain CT studies from row 11 that were performed on the same day as a sinus CT at the same facility nationally.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 13	National Average Rate	National average percentage of MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim that were performed.	National average percentage of screening mammography studies for which follow-up imaging (including diagnostic mammography, ultrasound of the breast, or MRI of the breast) was performed.	National average percentage of abdomen or abdominopelvic CT studies performed without and with contrast, out of all abdomen or abdominopelvic CT studies performed (those without contrast, those with contrast, and those without contrast followed by with contrast).	National average percentage of thorax CT studies performed without and with contrast, out of all thorax CT studies performed (those without contrast, those with contrast, and those without contrast followed by with contrast).	National average percentage of stress echocardiography, SPECT MPI, stress MRI, or CCTA studies that were performed at an outpatient facility in the 30 days prior to an ambulatory non-cardiac, low-risk surgery performed in any location (for example, same hospital facility, other hospital facility, or physician office).	National average percentage of brain CT studies with a simultaneous sinus CT study that were performed on the same day at the same facility nationally.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 14	Your Facility's Rate	Your facility's percentage of MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim, for which the beneficiary did not have prior claims-based evidence of antecedent conservative therapy.	Your facility's percentage of mammography screening studies that are followed by a diagnostic mammography, ultrasound of the breast, or MRI of the breast in an outpatient or office setting within 45 days.	Your facility's percentage of abdomen or abdominopelvic CT studies performed without and with contrast, out of all abdomen and abdominopelvic CT studies performed (those without contrast, those with contrast, and those without and with contrast).	Your facility's percentage of thorax CT studies performed without and with contrast, out of all thorax CT studies performed (those without contrast, those with contrast, and those without and with contrast).	Your facility's percentage of stress echocardiography, SPECT MPI, stress MRI, and CCTA studies performed at an outpatient facility in the 30 days prior to an ambulatory non-cardiac, low-risk surgery performed in any location (for example, same hospital facility, other hospital facility, or physician office).	Your facility's percentage of brain CT studies with a simultaneous sinus CT (that is, brain and sinus CT studies performed on the same day at the same facility).
Row 15	Number of Facilities in your State	Number of facilities in your state that have at least one eligible MRI lumbar spine study with a diagnosis of low back pain on the imaging claim.	Number of facilities in your state that have at least one eligible screening mammography study.	Number of facilities in your state that have at least one eligible abdomen or abdominopelvic CT study.	Number of facilities in your state that have at least one eligible thorax CT study.	Number of facilities in your state that have at least one eligible stress echocardiography, SPECT MPI, stress MRI, or CCTA study.	Number of facilities in your state that have at least one eligible brain CT study.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 16	Facilities that Have Enough Cases for Public Reporting in your State (Met Minimum Case Count)	Number of facilities in your state for which the minimum number of MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim were performed during the measurement period to reliably determine how the facility is performing. Details about facility-level minimum case count requirements can be found in the OP-8 *Reevaluation Report (Appendix C)*, located on QualityNet.	Number of facilities in your state for which the minimum number of screening mammography studies were performed during the measurement period to reliably determine how the facility is performing. Details about facility-level minimum case count requirements can be found in the OP-9 *Reevaluation Report (Appendix C)*, located on QualityNet.	Number of facilities in your state for which the minimum number of abdomen or abdominopelvic CT studies were performed during the measurement period to reliably determine how the facility is performing. Details about facility-level minimum case count requirements can be found in the OP-10 *Reevaluation Report (Appendix C)*, located on QualityNet.	Number of facilities in your state for which the minimum number of thorax CT studies were performed during the measurement period to reliably determine how the facility is performing. Details about facility-level minimum case count requirements can be found in the OP-11 *Reevaluation Report (Appendix C)*, located on QualityNet.	Number of facilities in your state for which the minimum number of stress echocardiography, SPECT MPI, stress MRI, or CCTA studies were performed during the measurement period to reliably determine how the facility is performing. Details about facility-level minimum case count requirements can be found in the OP-13 *Reevaluation Report (Appendix C)*, located on QualityNet.	Number of facilities in your state for which the minimum number of brain CT studies were performed during the measurement period to reliably determine how the facility is performing. Details about facility-level minimum case count requirements can be found in the OP-14 *Reevaluation Report (Appendix C)*, located on QualityNet.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 17	Number of Facilities in your State that had too few Cases (did not Meet Minimum Case Count)	Number of facilities in your state for which too few MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim were performed during the measurement period to reliably determine how the facility is performing.	Number of facilities in your state for which too few screening mammography studies were performed during the measurement period to reliably determine how the facility is performing.	Number of facilities in your state for which too few abdomen or abdominopelvic CT studies were performed during the measurement period to reliably determine how the facility is performing.	Number of facilities in your state for which too few thorax CT studies were performed during the measurement period to reliably determine how the facility is performing.	Number of facilities in your state for which too few stress echocardiography, SPECT MPI, stress MRI, or CCTA studies were performed during the measurement period to reliably determine how the facility is performing.	Number of facilities in your state for which too few brain CT studies were performed during the measurement period to reliably determine how the facility is performing.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 18	Number of Eligible Cases (Denominator) in your State **[a]**	Number of MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim performed in your state that meet the inclusion and exclusion criteria for measure calculation.	Number of screening mammography studies performed in your state that meet the inclusion and exclusion criteria for measure calculation.	Number of abdomen or abdominopelvic CT (without contrast, with contrast, or without then with contrast) studies performed in your state that meet the inclusion and exclusion criteria for measure calculation.	Number of thorax CT (without contrast, with contrast, or without then with contrast) studies performed in your state that meet the inclusion and exclusion criteria for measure calculation.	Number of stress echocardiography, SPECT MPI, stress MRI, or CCTA studies performed in your state that meet the inclusion and exclusion criteria for measure calculation.	Number of brain CT studies performed in your state that meet the inclusion and exclusion criteria for measure calculation.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 19	Number of Imaging Studies included in the Numerator for your State **[a]**	Number of MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim from row 18 that were performed in your state.	Number of screening mammography studies from row 18 for which follow-up imaging (including diagnostic mammography, ultrasound of the breast, or MRI of the breast) were performed in your state.	Number of abdomen or abdominopelvic CT studies from row 18 that were performed without contrast followed by with contrast in your state.	Number of thorax CT studies from row 18 that were performed without contrast followed by with contrast in your state.	Number of stress echocardiography, SPECT MPI, stress MRI, or CCTA studies from row 18 that were performed at an outpatient facility in the 30 days prior to an ambulatory non-cardiac, low-risk surgery performed in any location (for example, same hospital facility, other hospital facility, or physician office) in your state.	Number of brain CT studies from row 18 that were performed on the same day as a sinus CT at the same facility in your state.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 20	State Average Rate	Your state's average percentage of MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim that were performed.	Your state's average percentage of screening mammography studies for which follow-up imaging (including diagnostic mammography, ultrasound of the breast, or MRI of the breast) were performed.	Your state's average percentage of abdomen or abdominopelvic CT studies performed without and with contrast, out of all abdomen or abdominopelvic CT studies performed (those without contrast, those with contrast, and those without contrast followed by with contrast).	Your state's average percentage of thorax CT studies performed without and with contrast, out of all thorax CT studies performed (those without contrast, those with contrast, and those without contrast followed by with contrast).	Your state's average percentage of stress echocardiography, SPECT MPI, stress MRI, or CCTA studies that were performed at an outpatient facility in the 30 days prior to an ambulatory non-cardiac, low-risk surgery performed in any location (for example, same hospital facility, other hospital facility, or physician office).	Your state's average percentage of brain CT studies with a simultaneous sinus CT study that were performed on the same day at the same facility.

Row	Row Name	Description (OP-8)	Description (OP-9)	Description (OP-10)	Description (OP-11)	Description (OP-13)	Description (OP-14)
Row 21	Your Facility's Rate	Your facility's percentage of MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim, for which the beneficiary did not have prior claims-based evidence of antecedent conservative therapy.	Your facility's percentage of mammography screening studies that are followed by a diagnostic mammography, ultrasound of the breast, or MRI of the breast in an outpatient or office setting within 45 days.	Your facility's percentage of abdomen or abdominopelvic CT studies performed without and with contrast, out of all abdomen and abdominopelvic CT studies performed (those without contrast, those with contrast, and those without and with contrast).	Your facility's percentage of thorax CT studies performed without and with contrast, out of all thorax CT studies performed (those without contrast, those with contrast, and those without and with contrast).	Your facility's percentage of stress echocardiography, SPECT MPI, stress MRI, and CCTA studies performed at a hospital outpatient facility in the 30 days prior to an ambulatory non-cardiac, low-risk surgery performed in any location (for example, same hospital facility, other hospital facility, or physician office).	Your facility's percentage of brain CT studies with a simultaneous sinus CT (that is, brain and sinus CT studies performed on the same day at the same facility).

The following footnotes are referenced in *Table 2* of your facility's FSR:

- **[a]** These values are not reported on Hospital Compare, but are provided in this FSR for your reference.

2.4. Table 3: Patient Episode-Level Information for OP-8 (MRI Lumbar Spine for Low Back Pain)

Table 3 in your FSR (labeled *Table 3 OP-8 Episodes* in the FSR workbook) displays patient episode-level results used in the calculation of your facility's OP-8 score. *Table 3* contains detailed information about each patient for whom an MRI of the lumbar spine study with a diagnosis of low back pain on the imaging claim was performed at your facility during the measurement period, including patient identifiers and information about his or her study. Data on this table come from CMS imaging claims from July 1, 2017 through June 30, 2018.

CMS has updated its OP-8 reevaluation report for 2019 public reporting. This year's reevaluation report provides additional background on the rationale and intent of publicly reporting the OIE measures, summarizes the descriptive statistics and longitudinal findings for this year's OP-8 data at a national level, describes findings from the 2018 environmental scan/literature review, shares the most recent version of the measure specifications, and details the minimum case count methodology used to determine which facilities' scores will be publicly reported. A copy of the reevaluation report can be found here on *QualityNet*: https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228695266120. Alternatively, users can navigate from the QualityNet homepage: (www.qualitynet.org) → Hospitals–Outpatient → Measures → Imaging Efficiency Measures.

If you have questions on the contents of this FSR User Guide or the OP-8 reevaluation report, submit a question through the *QualityNet Question and Answer Tool* here: https://cms-ocsq.custhelp.com/.

Exhibit 3, below, details the data elements included in this worksheet.

Exhibit 3. Content from your Facility's FSR *Table 3 OP-8 Episodes* Worksheet

Column	Column Name	Description (OP-8)
A	Row ID **[a] [b]**	Unique identifier for each row of data listed on this worksheet.
B	Patient Identifier (HICN)	Ten or 11-digit patient Medicare health insurance claim number (HICN) for the patient imaged.
C	Medicare Beneficiary Identifier (MBI)	Fourteen-digit identifier, which will replace the Social Security number-based HICN on the new Medicare cards for Medicare transactions like billing, eligibility status, and claim status.
D	Medical Record Number	Your facility's medical record for the patient imaged. This value is provided directly from facilities on a patient's claim; CMS includes medical record numbers in this worksheet to help facilities identify those patients and procedures included in the calculation of their OP-8 performance score. If your facility did not provide a patient's medical record number on his or her claim, this field will contain a double dash (--).
E	Patient Date of Birth (DOB)	Date of birth (MM/DD/YYYY) for the patient imaged.

Column	Column Name	Description (OP-8)
F	Date of MRI Lumbar Spine	Date on which the MRI lumbar spine was performed (MM/DD/YYYY). This value is associated with the CPT code in Column *J*.
G	Included in Measure Calculation	Indicates whether the patient's claim was included in calculation of OP-8 for your facility. Values for this field include *Yes* or *No*. If the value is *Yes*, this MRI lumbar spine study is included in the measure denominator.
H	Reason for Exclusion Category **[c]**	Indicates whether a patient's imaging study had an excluded diagnosis on the claim. Values for this field are available in the OP-8 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's Value Set Authority Center (VSAC).[4] The following values may appear in this column, in alignment with the excluded diagnoses for OP-8: **0:** Included in measure **1:** Cancer **2:** Congenital spine and spinal cord malformations **3:** Inflammatory and autoimmune disorders **4:** Infectious conditions **5:** Spinal vascular malformations and/or the cause of occult subarachnoid hemorrhage **6:** Spinal cord infarction **7:** Neoplastic abnormalities **8:** Treatment fields for radiation therapy **9:** Spinal abnormalities associated with scoliosis **10:** Syringohydromyelia **11:** Postoperative fluid and soft tissue changes **12:** Trauma **13:** Intravenous (IV) drug abuse **14:** Neurological impairment **15:** Human immunodeficiency virus (HIV) **16:** Unspecified immune deficiencies **17:** Intraspinal abscess **18:** Lumbar spine surgery

[4] All value sets (including the CPT and ICD codes used to calculate OP-8) have been moved to the Value Set Authority Center (VSAC) for 2019 public reporting. The VSAC is maintained by the National Library of Medicine (NLM), in collaboration with the Office of the National Coordinator for Health Information Technology and CMS. Users can now download Excel workbooks of the value sets for the measure's denominator, numerator, and exclusions. To access the VSAC, please visit this link: https://vsac.nlm.nih.gov/.

Column	Column Name	Description (OP-8)
I	Reason for Exclusion ICD Code(s)	Provides the CPT, ICD-9, or ICD-10 code(s) for any exclusion associated with this row's imaging claim, if the study is removed from your facility's OP-8 denominator. This field is associated with the exclusion category in Column *H* and will only be populated if the value in Column *G* is *No.* If the value in Column *G* is *Yes*, you will see *N/A* here.
J	MRI Lumbar Spine CPT Code(s) **[d]**	Provides the CPT code(s) for this row's imaging claim. The CPT code captured in this field is used to identify your facility's initial patient population (when billed along with an ICD-10 code for low back pain). Values for this field are available in the OP-8 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.
K	Antecedent Therapy Performed?	Indicates whether an antecedent therapy was performed for OP-8.[5] Values for this field include *Yes*, *No*, or *N/A*. This column will only list a value of *N/A* if the case is excluded from your facility's denominator (as noted in Column *G*). If a row has a value of *No* for this column, which means this patient episode is included in your facility's numerator count.
L	Date of Most Recent Antecedent Therapy	Provides the date the most recent antecedent therapy was performed (MM/DD/YYYY). This field will contain a double dash (--) if antecedent therapy did not occur. If antecedent therapy were attempted, the CPT code associated with this date will be listed in Column *M*.
M	Most Recent Antecedent Therapy CPT Code(s)	Provides the CPT code(s) of the most recent claim antecedent therapy included in the numerator of your facility's OP-8 score. This field will only be populated if the value in Column *K* is *Yes.* A value of *N/A* will appear if antecedent therapy were not performed. Values for this field are available in the OP-8 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.

The following footnotes are referenced in *Table 3* of your facility's FSR:

- **N/A:** Information is not applicable for this case.
- **[a]** Facilities with zero MRI lumbar spine studies with a diagnosis of low back pain on the imaging claim for Medicare fee-for-service patients will not have case-level data for OP-8 on this worksheet.

[5] Eligible types of antecedent therapy for this field include physical therapy, chiropractic manipulation, and evaluation and management. Claim(s) for physical therapy and chiropractory must occur within the 60 days preceding the MRI lumbar spine study captured in Column *K*; claim(s) for evaluation and management must occur in the 28 to 60 days preceding the MRI lumbar spine study captured in Column *K*.

- **[b]** A patient may be listed more than once if he or she had multiple lumbar spine MRIs performed on different dates during the measurement period.
- **[c]** Refer to the Facility-Specific Report User Guide for the exclusion category (or categories) that are listed in Column *H*.
- **[d]** Procedure codes listed in this column were performed on the date listed in Column *F*.

2.5. Table 4. Patient Episode-Level Information for OP-9 (Mammography Follow Up Rates)

Table 4 in your FSR (labeled *Table 4 OP-9 Episodes* in the FSR workbook) displays patient episode-level results used in the calculation of your facility's OP-9 score. *Table 4* contains detailed information about each patient for whom follow-up imaging (including diagnostic mammography, ultrasound of the breast, or MRI of the breast) was performed at your facility during the measurement period, including patient identifiers and information about his or her study. Data on this table come from CMS imaging claims from July 1, 2017 through June 30, 2018.

CMS has updated its OP-9 reevaluation report for 2019 public reporting. This year's reevaluation report provides additional background on the rationale and intent of publicly reporting the OIE measures, summarizes the descriptive statistics and longitudinal findings for this year's OP-9 data at a national level, describes findings from the 2018 environmental scan/literature review, shares the most recent version of the measure specifications, and details the minimum case count methodology used to determine which facilities' scores will be publicly reported. A copy of the reevaluation report can be found here on *QualityNet*: https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228695266120. Alternatively, users can navigate from the QualityNet homepage: (www.qualitynet.org) → Hospitals–Outpatient → Measures → Imaging Efficiency Measures.

If you have questions on the contents of this FSR User Guide or the OP-9 reevaluation report, submit a question through the *QualityNet Question and Answer Tool* here: https://cms-ocsq.custhelp.com/.

Exhibit 4, below, details the data elements included in this worksheet.

Exhibit 4. Content from your Facility's FSR *Table 4 OP-9 Episodes* Worksheet

Column	Column Name	Description (OP-9)
A	Row ID **[a] [b]**	Unique identifier for each row of data listed on this worksheet.
B	Patient Identifier (HICN)	Ten or 11-digit patient Medicare health insurance claim number (HICN) for the patient imaged.
C	Medicare Beneficiary Identifier (MBI)	Fourteen-digit identifier, which will replace the Social Security number-based HICN on the new Medicare cards for Medicare transactions like billing, eligibility status, and claim status.
D	Medical Record Number	Your facility's medical record for the patient imaged. This value is provided directly from facilities on a patient's claim; CMS includes medical record numbers in this worksheet to help facilities identify those patients and procedures included in the calculation of their OP-9 performance score. If your facility did not provide a patient's medical record number on his or her claim, this field will contain a double dash (--).
E	Patient Date of Birth (DOB)	Date of birth (MM/DD/YYYY) for the patient imaged.

Column	Column Name	Description (OP-9)
F	Date of Mammography	Date on which the mammography was performed (MM/DD/YYYY). This value is associated with the CPT code in Column *G*.
G	Denominator Imaging CPT Code(s) **[c]**	Provides the CPT code(s) for this row's imaging claim. Values for this field are available in the OP-9 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.[6]
H	Follow Up Imaging Performed?	Indicates whether follow up imaging was performed on the same day or within 45 days of the screening mammography (documented in Column *F*). Values for this field include *Yes* or *No*. If the value in this field is *Yes*, this study is counted in the numerator of the measure.
I	Date of Follow Up Imaging	Provides the date when follow up imaging was performed (MM/DD/YYYY). This field will contain a double dash (--) if follow-up imaging was not performed. If follow-up imaging were performed, the CPT code associated with this date will be listed in Column *J*.
J	Numerator Imaging CPT Code(s)	Provides the CPT code(s) for this row's imaging claim, if included in the numerator of your facility's OP-9 score. This field will only be populated if the value in Column *H* is *Yes*. A value of *N/A* will appear if follow-up imaging were not performed. Values for this field are available in the OP-9 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.

The following footnotes are referenced in *Table 4* of your facility's FSR:

- **N/A:** Information is not applicable for this case.
- **[a]** Facilities with zero screening mammographies for Medicare fee-for-service patients will not have case-level data for OP-9 on this worksheet.
- **[b]** A patient may be listed more than once if he or she had multiple screening mammographies performed on different dates during the measurement period.
- **[c]** Procedure codes listed in this column were performed on the date listed in Column *F*.

[6] All value sets (including the CPT and ICD codes used to calculate OP-9) have been moved to the Value Set Authority Center (VSAC) for 2019 public reporting. The VSAC is maintained by the National Library of Medicine (NLM), in collaboration with the Office of the National Coordinator for Health Information Technology and CMS. Users can now download Excel workbooks of the value sets for the measure's denominator, numerator, and exclusions. To access the VSAC, please visit this link: https://vsac.nlm.nih.gov/.

2.6. Table 5: Patient Episode-Level Information for OP-10 (Abdomen CT—Use of Contrast Material)

Table 5 in your FSR (labeled *Table 5 OP-10 Episodes* in the FSR workbook) displays patient episode-level results used in calculation of your facility's OP-10 score. *Table 5* contains detailed information about each patient for whom an abdomen or abdominopelvic CT was performed at your facility during the measurement period, including patient identifiers and information about his or her scan. Data on this table come from CMS imaging claims from July 1, 2017 through June 30, 2018.

CMS has updated its OP-10 reevaluation report for 2019 public reporting. This year's reevaluation report provides additional background on the rationale and intent of publicly reporting the OIE measures, summarizes the descriptive statistics and longitudinal findings for this year's OP-10 data at a national level, describes findings from the 2018 environmental scan/literature review, shares the most recent version of the measure specifications, and details the minimum case count methodology used to determine which facilities' scores will be publicly reported. A copy of the reevaluation report can be found here on *QualityNet*: https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228695266120. Alternatively, users can navigate from the QualityNet homepage: (www.qualitynet.org) → Hospitals–Outpatient → Measures → Imaging Efficiency Measures.

If you have questions on the contents of this FSR User Guide or the OP-10 reevaluation report, submit a question through the *QualityNet Question and Answer Tool* here: https://cms-ocsq.custhelp.com/.

Exhibit 5, below, details the data elements included in this worksheet.

Exhibit 5. Content from your Facility's FSR *Table 5 OP-10 Episodes* Worksheet

Column	Column Name	Description (OP-10)
A	Row ID **[a] [b]**	Unique identifier for each row of data listed on this worksheet.
B	Patient Identifier (HICN)	Ten or 11-digit patient Medicare health insurance claim number (HICN) for the patient imaged.
C	Medicare Beneficiary Identifier (MBI)	Fourteen-digit identifier, which will replace the Social Security number-based HICN on the new Medicare cards for Medicare transactions like billing, eligibility status, and claim status.
D	Medical Record Number	Your facility's medical record for the patient imaged. This value is provided directly from facilities on a patient's claim; CMS includes medical record numbers in this worksheet to help facilities identify those patients and procedures included in the calculation of their OP-10 performance score. If your facility did not provide a patient's medical record number on his or her claim, this field will contain a double dash (--).
E	Patient Date of Birth (DOB)	Date of birth (MM/DD/YYYY) for the patient imaged.

Column	Column Name	Description (OP-10)
F	Date of Abdomen CT	Date on which the abdomen or abdominopelvic CT was performed (MM/DD/YYYY). This value is associated with the CPT code in Column *J.*
G	Included in Measure Calculation	Indicates whether the patient's claim was included in calculation of OP-10 for your facility. Values for this field include *Yes* or *No.* If the value is *Yes,* this abdomen/abdominopelvic CT is included in the measure denominator.
H	Reason for Exclusion Category **[c]**	Indicates whether a patient's imaging study had an excluded diagnosis on the claim. Values for this field are available in the OP-10 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.[7] The following values may appear in this column, in alignment with the excluded diagnoses for OP-10: **0:** Included in measure **1:** Adrenal mass **2:** Diseases of urinary system **3:** Hematuria **4:** Infections of kidney **5:** Jaundice **6:** Liver lesion (mass or neoplasm) **7:** Malignant neoplasm of bladder **8:** Malignant neoplasm of pancreas **9:** Non-traumatic aortic disease **10:** Pancreatic disorder **11:** Unspecified disorder of kidney and ureter
I	Reason for Exclusion ICD Code(s)	Provides the ICD-10 code(s) for this row's imaging claim, if the study is excluded from your facility's OP-10 score. This field is associated with the exclusion category in Column *H* and will only be populated if the value in Column *G* is *No.* If the value in Column *G* is *Yes,* you will see *N/A* here. Values for this field are available in the OP-10 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.

[7] All value sets (including the CPT and ICD codes used to calculate OP-10) have been moved to the Value Set Authority Center (VSAC) for 2019 public reporting. The VSAC is maintained by the National Library of Medicine (NLM), in collaboration with the Office of the National Coordinator for Health Information Technology and CMS. Users can now download Excel workbooks of the value sets for the measure's denominator, numerator, and exclusions. To access the VSAC, please visit this link: https://vsac.nlm.nih.gov/.

Column	Column Name	Description (OP-10)
J	Abdomen CT CPT Code(s)	Provides the CPT code(s) for this row's imaging claim on the date listed in Column *F*. Values for this field are available in the OP-10 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.
K	Combined Imaging Performed?	Indicates whether the thorax CT was performed with and without contrast. Values for this field include *Yes, No,* or *N/A*. This column will only list a value of *N/A* if the case is excluded from your facility's denominator (as noted in Column *G*). If a row has a value of *Yes* for this column, which means this patient episode is included in your facility's numerator count.
L	Numerator Imaging CPT Code(s) **[d]**	Provides the CPT code(s) for this row's imaging claim, if included in the numerator of your facility's OP-10 score. This field will only be populated if the value in Column *K* is *Yes.* A value of *N/A* will appear if combined imaging were not performed. Values for this field are available in the OP-10 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.

The following footnotes are referenced in *Table 5* of your facility's FSR:

- **N/A:** Information is not applicable for this case.
- **[a]** Facilities with zero abdomen CT or abdominopelvic CT studies for Medicare fee-for-service patients will not have case-level data for OP-10 on this worksheet.
- **[b]** A patient may be listed more than once if he or she had multiple abdomen or abdominopelvic CTs performed on different dates during the data collection period.
- **[c]** Refer to the Facility-Specific Report User Guide for the exclusion category (or categories) that are listed in Column *H*.
- **[d]** Procedure codes listed in this column were performed on the date listed in Column *F*.

2.7. Table 6: Patient Episode-Level Information for OP-11(Thorax CT—Use of Contrast Material)[1]

Table 6 in your FSR (labeled *Table 6 OP-11 Episodes* in the FSR workbook) displays patient episode-level results used in the calculation of your facility's OP-11 score. *Table 6* contains detailed information about each patient for whom a thorax CT was performed at your facility during the measurement period, including patient identifiers and information about his or her scan. Data on this table come from CMS imaging claims from July 1, 2017 through June 30, 2018.

CMS has updated its OP-11 reevaluation report for 2019 public reporting. This year's reevaluation report provides additional background on the rationale and intent of publicly reporting the OIE measures, summarizes the descriptive statistics and longitudinal findings for this year's OP-11 data at a national level, describes findings from the 2018 environmental scan/literature review, shares the most recent version of the measure specifications, and details the minimum case count methodology used to determine which facilities' scores will be publicly reported. A copy of the reevaluation report can be found here on *QualityNet*: https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228695266120. Alternatively, users can navigate from the QualityNet homepage: (www.qualitynet.org) → Hospitals–Outpatient → Measures → Imaging Efficiency Measures.

If you have questions on the contents of this FSR User Guide or the OP-11 reevaluation report, submit a question through the *QualityNet Question and Answer Tool* here: https://cms-ocsq.custhelp.com/.

Exhibit 66, below, details the data elements included in this worksheet.

Exhibit 6. Content from your Facility's FSR *Table 6 OP-11 Episodes* Worksheet

Column	Column Name	Description (OP-11)
A	Row ID **[a] [b]**	Unique identifier for each row of data listed on this worksheet.
B	Patient Identifier (HICN)	Ten or 11-digit patient Medicare health insurance claim number (HICN) for the patient imaged.
C	Medicare Beneficiary Identifier (MBI)	Fourteen-digit identifier, which will replace the Social Security number-based HICN on the new Medicare cards for Medicare transactions like billing, eligibility status, and claim status.
D	Medical Record Number	Your facility's medical record for the patient imaged. This value is provided directly from facilities on a patient's claim; CMS includes medical record numbers in this worksheet to help facilities identify those patients and procedures included in the calculation of their OP-11 performance score. If your facility did not provide a patient's medical record number on his or her claim, this field will contain a double dash (--).
E	Patient Date of Birth (DOB)	Date of birth (MM/DD/YYYY) for the patient imaged.

Column	Column Name	Description (OP-11)
F	Date of Thorax CT	Date on which the thorax CT was performed (MM/DD/YYYY). This value is associated with the CPT code in Column *J*.
G	Included in Measure Calculation	Indicates whether the patient's claim was included in calculation of OP-11 for your facility. Values for this field include *Yes* or *No*. If the value is *Yes*, this thorax CT is included in the measure denominator.
H	Reason for Exclusion Category **[c]**	Indicates whether a patient's imaging study had an excluded diagnosis on the claim. Values for this field are available in the FSR Values for this field are available in the OP-11 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.[8] The following values may appear in this column, in alignment with the excluded diagnoses for OP-11: **0:** Included in measure **1:** Non-traumatic aortic disease
I	Reason for Exclusion ICD Code(s)	Provides the ICD-10 code(s) for this row's imaging claim, if the study is excluded from your facility's OP-11 score. This field is associated with the exclusion category in Column *H* and will only be populated if the value in Column *G* is *No*. If the value in Column *G* is *Yes*, you will see *N/A* here. Values for this field are available in the OP-11 *Reevaluation Report* located on QualityNet and as value sets on the National Library of Medicine's VSAC.
J	Thorax CT CPT Code(s)	Provides the CPT code(s) for this row's imaging claim. Values for this field are available in the OP-11 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.
K	Combined Imaging Performed?	Indicates whether the thorax CT was performed with and without contrast. Values for this field include *Yes*, *No*, or *N/A*. This column will only list a value of *N/A* if the case is excluded from your facility's denominator (as noted in Column *G*). If a row has a value of *Yes* for this column, which means this patient episode is included in your facility's numerator count.

[8] All value sets (including the CPT and ICD codes used to calculate OP-11) have been moved to the Value Set Authority Center (VSAC) for 2019 public reporting. The VSAC is maintained by the National Library of Medicine (NLM), in collaboration with the Office of the National Coordinator for Health Information Technology and CMS. Users can now download Excel workbooks of the value sets for the measure's denominator, numerator, and exclusions. To access the VSAC, please visit this link: https://vsac.nlm.nih.gov/.

Column	Column Name	Description (OP-11)
L	Numerator Imaging CPT Code(s) **[d]**	Provides the CPT code(s) for this row's imaging claim, if included in the numerator of your facility's OP-11 score. This field will only be populated if the value in Column *K* is *Yes.* A value of *N/A* will appear if combined imaging were not performed. Values for this field are available in the OP-11 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.

The following footnotes are referenced in *Table 6* of your facility's FSR:

- **N/A:** Information is not applicable for this case.
- **[a]** Facilities with zero thorax CT studies for Medicare fee-for-service patients will not have case-level data for OP-11 on this worksheet.
- **[b]** A patient may be listed more than once if he or she had multiple thorax CTs performed on different dates during the measurement period.
- **[c]** Refer to the Facility-Specific Report User Guide for the exclusion category (or categories) that are listed in Column *H*.
- **[d]** Procedure codes listed in this column were performed on the date listed in Column *F*.

2.8. Table 7: Patient Episode-Level Information for OP-13 (Cardiac Imaging for Preoperative Risk Assessment for Non-Cardiac, Low-Risk Surgery)

Table 7 in your FSR (labeled *Table 7 OP-13 Episodes* in the FSR workbook) displays patient episode-level results used in the calculation of your facility's OP-13 score. *Table 7* contains detailed information about each patient for whom a stress echocardiography, single photon emission computed tomography myocardial perfusion imaging (SPECT MPI), stress MRI, or cardiac computed tomography angiogram (CCTA) study was performed at your facility during the measurement period, including patient identifiers and information about his or her scan. Data on this table come from CMS imaging claims from July 1, 2017 through June 30, 2018.

CMS has updated its OP-13 reevaluation report for 2019 public reporting. This year's reevaluation report provides additional background on the rationale and intent of publicly reporting the OIE measures, summarizes the descriptive statistics and longitudinal findings for this year's OP-13 data at a national level, describes findings from the 2018 environmental scan/literature review, shares the most recent version of the measure specifications, and details the minimum case count methodology used to determine which facilities' scores will be publicly reported. A copy of the reevaluation report can be found here on *QualityNet*: https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228695266120. Alternatively, users can navigate from the QualityNet homepage: (www.qualitynet.org) → Hospitals–Outpatient → Measures → Imaging Efficiency Measures.

If you have questions on the contents of this FSR User Guide or the OP-13 reevaluation report, submit a question through the *QualityNet Question and Answer Tool* here: https://cms-ocsq.custhelp.com/.

Exhibit 7, below, details the data elements included in this worksheet.

Exhibit 7. Content from your Facility's FSR *Table 7 OP-13 Episodes* Worksheet

Column	Column Name	Description (OP-13)
A	Row ID **[a] [b]**	Unique identifier for each row of data listed on this worksheet.
B	Patient Identifier (HICN)	Ten or 11-digit patient Medicare health insurance claim number (HICN) for the patient imaged.
C	Medicare Beneficiary Identifier (MBI)	Fourteen-digit identifier, which will replace the Social Security number-based HICN on the new Medicare cards for Medicare transactions like billing, eligibility status, and claim status.
D	Medical Record Number	Your facility's medical record for the patient imaged. This value is provided directly from facilities on a patient's claim; CMS includes medical record numbers in this worksheet to help facilities identify those patients and procedures included in the calculation of their OP-13 performance score. If your facility did not provide a patient's medical record number on his or her claim, this field will contain a double dash (--).
E	Patient Date of Birth (DOB)	Date of birth (MM/DD/YYYY) for the patient imaged.

Column	Column Name	Description (OP-13)
F	Date of Cardiac Imaging	Date on which the cardiac imaging was performed (MM/DD/YYYY). This value is associated with the CPT code in Column *J*.
G	Included in Measure Calculation	Indicates whether the patient's claim was included in calculation of OP-13 for your facility. Values for this field include *Yes* or *No*. If the value is *Yes*, this cardiac imaging study is included in the measure denominator.
H	Reason for Exclusion Category **[c]**	Indicates whether a patient's imaging study had an excluded diagnosis on the claim. Values for this field are available in the OP-13 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.[9] The following values may appear in this column, in alignment with the excluded diagnoses for OP-13: **0:** Included in measure **1:** Diabetes mellitus **2:** Renal insufficiency **3:** Stroke or transient ischemic attack **4:** Prior heart failure **5:** Ischemic heart disease A case is excluded from measure calculation if this field contains diagnosis codes from at least three of the exclusion categories listed above. **6:** Emergency department cardiac imaging
I	Reason for Exclusion ICD Code(s)	Provides the ICD-9 or ICD-10 code(s) for this row's imaging claim, if the study is excluded from your facility's OP-13 score. This field is associated with the exclusion category in Column *H* and will only be populated if the value in Column *G* is *No*. If the value in Column *G* is *Yes*, you will see *N/A* here. Values for this field are available in the OP-13 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.
J	Cardiac Imaging CPT Code(s)	Provides the CPT code(s) for this row's imaging claim. Values for this field are available in the OP-13 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.

[9] All value sets (including the CPT and ICD codes used to calculate OP-13) have been moved to the Value Set Authority Center (VSAC) for 2019 public reporting. The VSAC is maintained by the National Library of Medicine (NLM), in collaboration with the Office of the National Coordinator for Health Information Technology and CMS. Users can now download Excel workbooks of the value sets for the measure's denominator, numerator, and exclusions. To access the VSAC, please visit this link: https://vsac.nlm.nih.gov/.

Column	Column Name	Description (OP-13)
K	Low Risk Surgery following Imaging?	Indicates whether non-cardiac, low-risk surgery was performed within 30 days following the cardiac imaging. Values for this field include *Yes, No,* or *N/A*. This column will only list a value of *N/A* if the case is excluded from your facility's denominator (as noted in Column *G*). If a row has a value of *Yes* for this column, which means this patient episode is included in your facility's numerator count.
L	Date of Low-Risk Surgery	Date on which the non-cardiac, low-risk surgery was performed (MM/DD/YYYY). This field will contain a double dash (--) if a low-risk surgery did not occur. If a low-risk surgery occurred, the CPT code associated with this date will be listed in Column *M*.
M	Low Risk Surgery CPT Code(s) **[d]**	Provides the CPT code(s) for low risk surgery, if included in the numerator of your facility's OP-13 score. This field will only be populated if the value in Column *K* is *Yes.* A value of *N/A* will appear if a low-risk surgery were not performed. Values for this field are available in the OP-13 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.

The following footnotes are referenced in *Table 7* of your facility's FSR:

- **N/A:** Information is not applicable for this case.
- **[a]** Facilities with zero cardiac imaging studies for Medicare fee-for-service patients will not have case-level data for OP-13 on this worksheet.
- **[b]** A patient may be listed more than once if he or she had multiple cardiac imaging studies performed on different dates during the measurement period.
- **[c]** Refer to the Facility-Specific Report User Guide for the exclusion category (or categories) that are listed in Column *H*.
- **[d]** Procedure codes listed in this column were performed on the date listed in Column *F*.

2.9. Table 8: Patient Episode-Level Information for OP-14 (Simultaneous Use of Brain Computed Tomography and Sinus Computed Tomography)[1]

Table 8 in your FSR (labeled *Table 8 OP-14 Episodes* in the FSR workbook) displays patient episode-level results used in the calculation of your facility's OP-14 score. *Table 8* contains detailed information about each patient for whom a brain CT was performed at your facility during the measurement period, including patient identifiers and information about his or her scan. Data on this table come from CMS imaging claims from July 1, 2017 through June 30, 2018.

CMS has updated its OP-14 reevaluation report for 2019 public reporting. This year's reevaluation report provides additional background on the rationale and intent of publicly reporting the OIE measures, summarizes the descriptive statistics and longitudinal findings for this year's OP-14 data at a national level, describes findings from the 2018 environmental scan/literature review, shares the most recent version of the measure specifications, and details the minimum case count methodology used to determine which facilities' scores will be publicly reported. A copy of the reevaluation report can be found here on *QualityNet*: https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228695266120. Alternatively, users can navigate from the QualityNet homepage: (www.qualitynet.org) → Hospitals–Outpatient → Measures → Imaging Efficiency Measures.

If you have questions on the contents of this FSR User Guide or the OP-14 reevaluation report, submit a question through the *QualityNet Question and Answer Tool* here: https://cms-ocsq.custhelp.com/.

Exhibit 8, below, details the data elements included in this worksheet.

Exhibit 8. Content from your Facility's FSR *Table 8 OP-14 Episodes* Worksheet

Column	Column Name	Description (OP-14)
A	Row ID **[a] [b]**	Unique identifier for each row of data listed on this worksheet.
B	Patient Identifier (HICN)	Ten or 11-digit patient Medicare health insurance claim number (HICN) for the patient imaged.
C	Medicare Beneficiary Identifier (MBI)	Fourteen-digit identifier, which will replace the Social Security number-based HICN on the new Medicare cards for Medicare transactions like billing, eligibility status, and claim status.
D	Medical Record Number	Your facility's medical record for the patient imaged. This value is provided directly from facilities on a patient's claim; CMS includes medical record numbers in this worksheet to help facilities identify those patients and procedures included in the calculation of their OP-14 performance score. If your facility did not provide a patient's medical record number on his or her claim, this field will contain a double dash (--).
E	Patient Date of Birth (DOB)	Date of birth (MM/DD/YYYY) for the patient imaged.

Column	Column Name	Description (OP-14)
F	Date of Brain CT	Date on which the imaging was performed (MM/DD/YYYY). This value is associated with the CPT code in Column *J*.
G	Included in Measure Calculation	Indicates whether the patient's claim was included in calculation of OP-14 for your facility. Values for this field include *Yes* or *No*. If the value is *Yes*, this brain CT is included in the measure denominator.
H	Reason for Exclusion Category **[c]**	Indicates whether a patient's imaging study had an excluded diagnosis on the claim. Values for this field are available in the OP-14 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.[10] The following values may appear in this column, in alignment with the excluded diagnoses for OP-14: **0:** Included in measure **1:** Neoplasms **2:** Trauma **3:** Orbital cellulitis **4:** Intracranial abscess
I	Reason for Exclusion ICD Code(s)	Provides the ICD code(s) for this row's imaging claim, if the study is excluded from your facility's OP-14 score. This field is associated with the exclusion category in Column *H* and will only be populated if the value in Column *G* is *No*. If the value in Column *G* is *Yes*, you will see *N/A* here. Values for this field are available in the OP-11 *Reevaluation Report* located on QualityNet and as value sets on the National Library of Medicine's VSAC.
J	Brain CT CPT Code(s)	Provides the CPT code(s) for this row's imaging claim on the date listed in Column *F*. Values for this field are available in the OP-14 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.
K	Sinus CT also Performed?	Indicates whether a sinus CT was performed on the same date, at the same facility, as the brain CT, on the date listed in Column *F*. Values for this field include *Yes*, *No*, or *N/A*. This field will contain a double dash (--) if a sinus CT was not performed. If a sinus CT was performed on the same date at the same location as the brain CT, its CPT code will be listed in Column *L*.

[10] All value sets (including the CPT and ICD codes used to calculate OP-14) have been moved to the Value Set Authority Center (VSAC) for 2019 public reporting. The VSAC is maintained by the National Library of Medicine (NLM), in collaboration with the Office of the National Coordinator for Health Information Technology and CMS. Users can now download Excel workbooks of the value sets for the measure's denominator, numerator, and exclusions. To access the VSAC, please visit this link: https://vsac.nlm.nih.gov/.

Column	Column Name	Description (OP-14)
L	Sinus CT CPT Code(s) **[d]**	Provides the CPT code(s) for low risk surgery, if included in the numerator of your facility's OP-14 score. This field will only be populated if the value in Column *K* is *Yes.* A value of *N/A* will appear if a sinus CT were not performed. Values for this field are available in the OP-14 reevaluation report, located on QualityNet, and as value sets on the National Library of Medicine's VSAC.

The following footnotes are referenced in *Table 8* of your facility's FSR:

- **N/A:** Information is not applicable for this case.
- **[a]** Facilities with zero brain CT studies for Medicare fee-for-service patients will not have case-level data for OP-14 on this worksheet.
- **[b]** A patient may be listed more than once if he or she had multiple brain CTs performed on different dates during the measurement period.
- **[c]** Refer to the Facility-Specific Report User Guide for the exclusion category (or categories) that are listed in Column *H*.
- **[d]** Procedure codes listed in this column were performed on the date listed in Column *F*.

2.10. For Additional Information

On QualityNet, you will find links to the following resources:

- **Frequently Asked Questions (FAQs):** A list of frequently asked questions and responses for the OIE measures, including general questions related to public reporting and measure specifications.
- **2019 Measure Reevaluation Reports**: Annual reports for each OIE measure, containing information on the measure's background and methodology; summary statistics for 2019 public reporting and historical scores; results from the 2018 environmental scan and literature review (ES/LR); detailed measure specifications, including annual updates and links to value sets; and, measure minimum case count rationale and methodology.

You can download your FSR from your inbox on the *QualityNet Secure Portal* (https://cportal.qualitynet.org/QNet/pgm_select.jsp), available through the QualityNet website.

Please submit questions about the Outpatient Imaging Efficiency measures, your facility's FSR, or this FSR User Guide through the *QualityNet* question and answers page (https://cms-ocsq.custhelp.com).

Note: Do NOT email the contents of this file. This file contains Personally Identifiable Information (PII) and Protected Health Information (PHI). Emailing these data is a security and HIPAA violation. When referring to the patient episode-level data in your FSR, only use the ID number(s) from Column *A* of the *Episodes* worksheet tab for each measure.

Appendix A. Glossary of Key Terms in the FSR User Guide

Cardiac Imaging: Imaging studies captured in the measure denominator for OP-13, including stress echocardiography, SPECT MPI, stress MRI, or CCTA. These studies have to be performed at an outpatient facility to qualify for inclusion in your facility's denominator.

Combined CT Study: Studies included in the measure denominator and numerator for OP-10 and OP-11, a "combined" CT study is one performed first without contrast and then with contrast.

Denominator: Denominators for the six Outpatient Imaging Efficiency measures could be the same as their initial patient populations or could contain a subset of the initial patient population. In general, the denominator of each measure contains all eligible imaging studies performed at each facility during the measurement period, subtracting those for which an excluded diagnosis code was recorded on the imaging claim or in the patient's history, if the exclusion relies on a look back.

Denominator Exclusion: Beneficiaries who should be removed from the denominator population if they have an ICD code on the imaging claim or in their medical history for which performing an imaging study may be appropriate. Excluded cases are not counted toward a facility's denominator or numerator.

Initial Patient Population: The initial patient population refers to all beneficiaries eligible for inclusion in the Outpatient Imaging Efficiency measures' populations. Beneficiaries in the initial patient populations for these measures had an imaging study at your facility during the measurement period.

Medicare Fee-for-Service (FFS): Original Medicare plan. Only beneficiaries in FFS, not in managed care (Medicare Advantage), are eligible for inclusion in the Outpatient Imaging Efficiency measures' initial patient populations.

Minimum Case Count: Like all publicly reported quality measures, the OIE measures impose a minimum case count requirement at the facility level to ensure reliability of the facility's performance score. Defining a minimum case count for quality measures is essential in determining how confident CMS can be about any observation that is reported as an average. For the OIE measures, each facility's performance score is an average of the imaging studies performed at the facility and captured by the measure. Facility performance data can be unintentionally skewed by seeing a disproportionate number of easy or challenging cases during certain times within the reporting period, which would skew a facility's average. Because of this uncertainty, minimum case counts are critical for accurate reporting. For more information on the minimum case count methodology used for the OIE measures, please reference *Appendix C* in each measure's reevaluation report.

Numerator: The numerator for each OIE measure documents potential overuse of imaging studies from your facility's denominator during the measurement period.

Patient Episode-Level Data: CMS provides information on imaging procedures for each measure at the patient level. These cases are first identified using the initial patient population criteria for each measure from your facility's Medicare FFS claims data; as necessary, CMS looks backward in the patient's medical history for claims-based evidence of an exclusion or forward to identify claims for a numerator procedure.

Simultaneous Brain and Sinus CTs: Studies included in the measure denominator and numerator for OP-14, a "simultaneous" brain/sinus CT study documents a sinus CT that is performed on the same day at the same facility as a brain CT for the same patient.

Appendix B. Measure Specifications

Exhibit 9. Measure Specifications for OP-8 *(MRI Lumbar Spine for Low Back Pain)*

Measure Feature	Description (OP-8)
Intent	Acute low back pain, without or with radiculopathy, is one of the most common health problems in the United States. Despite consensus that there is little value in diagnostic imaging for acute low back pain, significant practice variation exists for imaging resources. OP-8 aims to reduce the number of unnecessary MRI studies of the lumber spine.
Description	OP-8 calculates the percentage of MRI of the lumbar spine studies with a diagnosis of low back pain on the imaging claim, for which the beneficiary did not have prior claims-based evidence of antecedent conservative therapy. Antecedent conservative therapy may include: • Claim(s) for physical therapy in the 60 days preceding the lumbar spine MRI. • Claim(s) for chiropractic evaluation and manipulative treatment in the 60 days preceding the lumbar spine MRI. • Claim(s) for evaluation and management (E&M) visits in the period from 28 days and to 60 days preceding the lumbar spine MRI.
Initial Patient Population	Beneficiaries included in the measure's initial patient population had documentation of MRI of the lumbar spine studies with a diagnosis of low back pain on the imaging claim performed at the hospital outpatient department performed during the measurement period (July 1, 2017 to June 30, 2018). Beneficiaries can be included in the measure's initial patient population multiple times; each MRI lumbar spine study with a diagnosis of low back pain on the imaging claim performed at a facility measured by OPPS is counted once in the measure's denominator. The OP-8 denominator includes patient episodes from the initial patient population that do not have evidence of an exclusion.
Exclusion Criteria	The measure excludes a history of the following red-flag conditions from the measure initial patient population: • Cancer • Congenital spine and spinal cord malformation • Human immunodeficiency virus • Inflammatory and autoimmune disorders • Infectious conditions • Intraspinal abscess • IV drug abuse • Lumbar spine surgery

Measure Feature	Description (OP-8)
	• Neoplastic abnormalities • Neurologic impairment • Postoperative fluid collections and soft tissue changes • Spinal abnormalities associated with scoliosis • Spinal cord infarction • Spinal vascular malformations and/or the cause of occult subarachnoid hemorrhage • Syringohydromyelia • Trauma • Treatment fields for radiation therapy • Unspecified immune deficiencies
Numerator Criteria	To meet the numerator criteria, beneficiaries from the denominator have MRI of the lumbar spine studies with a diagnosis of low back pain without the beneficiary having claims-based evidence of prior antecedent conservative therapy counted in the measure's denominator. Not performing antecedent conservative therapy prior to imaging (for beneficiaries not excluded from the measure) may be a reflection of poor quality of care and overuse of diagnostic imaging.
Measure Score Calculation	The measure's denominator contains any Medicare beneficiary who underwent a MRI lumbar spine study at a facility subject to OPPS regulation during the measurement period (the measurement period for OP-8 runs from July 1, 2017 to June 30, 2018), less those cases for which an exclusion was documented on a claim in the patient's medical history. From these beneficiaries, the numerator contains those who did not have claims-based evidence of antecedent conservative therapy preceding the MRI (within the 60 days before the study for chiropractic manipulation or physical therapy, and within the 28 to 60 days before the study for evaluation and management visits). For the OIE measures, lower scores are better, meaning that high-performing facilities score near 0%.

Exhibit 10. Measure Specifications for OP-9 (*Mammography Follow Up Rates*)

Measure Feature	Description (OP-9)
Intent	OP-9 calculates the percentage of beneficiaries with mammography screening studies that are followed within 45 days by a diagnostic mammography, ultrasound of the breast, or MRI of the breast performed in an outpatient or office setting.
Description	From the perspective of both clinical quality and efficiency, there are potentially negative consequences if the mammography follow-up rate is either too high or too low. A high cumulative dose of low-energy radiation can be a consequence of too many false-positive mammography follow-up studies. Additional imaging and biopsies after a screening mammography can also result in overdiagnosis for patients who do not have breast cancer, increasing their anxiety and distress. Alternatively, inappropriately low follow-up rates may lead to delayed diagnoses or undetected cases of breast cancer.
Initial Patient Population	Beneficiaries included in the measure's initial patient population had documentation of a mammography screening performed during the measurement period (screening mammography studies could occur from July 1, 2017 to May 15, 2018; the measurement period for OP-9 runs from July 1, 2017 to June 30, 2018).[11] Beneficiaries can be included in the measure's initial patient population multiple times; each mammography screening performed at a facility measured by OPPS is counted once in the measure's denominator. The OP-9 denominator is equivalent to the initial patient population because no patient episodes are excluded.
Exclusion Criteria	For this measure, there are no excluded conditions.
Numerator Criteria	To meet the measure's numerator criteria, beneficiaries from the denominator have a diagnostic mammography, ultrasound, or MRI of the breast following a screening mammography study within 45 days counted in the measure's denominator.
Measure Score Calculation	The measure's denominator contains any Medicare beneficiary who underwent a screening mammography study at a facility subject to OPPS regulation during the measurement period (screening mammography studies could occur from July 1, 2017 to May 15, 2018; the measurement period for OP-9 runs from July 1, 2017 to June 30, 2018). From these beneficiaries, the numerator contains beneficiaries who had a diagnostic mammography study, ultrasound, or MRI of the breast following a screening mammography study within 45 days. At a facility level, recalling more than 14% of beneficiaries for a diagnostic mammography, MRI of the breast, or ultrasound of the breast may mean the

[11] The final date on which patient episodes are identified for inclusion in the measure is May 15 of each year, due to the look-forward period needed for the OP-9 numerator criteria (i.e., diagnostic imaging of the breast can occur on the same day or up to 45 days following the screening study, meaning that all screening cases captured in the OP-9 denominator must occur on or before May 15).

Measure Feature	Description (OP-9)
	facility is doing unnecessary follow up. Facilities whose follow-up rate is close to 0% may be missing cancers. A typical recall rate for a facility is around 9%.

Exhibit 11. Measure Specifications for OP-10 (*Abdomen CT—Use of Contrast Material*)

Measure Feature	Description (OP-10)
Intent	OP-10 calculates the percentage of CT abdomen studies performed with and without contrast out of all CT abdomen studies performed (those without contrast, those with contrast, and those with both).
Description	CT abdomen studies are very common imaging procedures in the Medicare population. OP-10 aims to promote the use of CT abdomen imaging that aligns with current clinical guidance, while avoiding the potentially harmful effects of unnecessary radiation and contrast exposure.
Initial Patient Population	Beneficiaries included in the measure's initial patient population had documentation of an abdomen CT without or with contrast performed during the measurement period (July 1, 2017 to June 30, 2018). Beneficiaries can be included in the measure's initial patient population multiple times; each abdomen CT (without contrast, with contrast, or both without then with contrast) performed at a facility measured by OPPS is counted once in the measure's denominator. The OP-10 denominator includes patient episodes from the initial patient population that do not have evidence of an exclusion.
Exclusion Criteria	The measure excludes the following conditions from the measure initial patient population: • Adrenal mass • Diseases of urinary system • Hematuria • Infections of kidney • Jaundice • Liver lesion (mass or neoplasm) • Malignant neoplasm of bladder • Malignant neoplasm of pancreas • Non-traumatic aortic disease • Pancreatic disorder • Unspecified disorder or kidney and ureter
Numerator Criteria	To meet the measure's numerator criteria, beneficiaries from the denominator had an abdomen CT without contrast followed by with contrast or an abdominopelvic CT without contrast followed by with contrast (one of the three study types captured in the measure's denominator). For beneficiaries not excluded from the denominator, doing so may be a reflection of poor quality of care and overuse of diagnostic imaging.
Measure Score	The measure's denominator contains any Medicare beneficiary who underwent an

Measure Feature	Description (OP-10)
Calculation	abdomen or abdominopelvic CT study at a facility subject to OPPS regulation during the measurement period (the measurement period for OP-10 runs from July 1, 2017 to June 30, 2018), less those cases for which an exclusion was documented on the CT claim. From these beneficiaries, the numerator contains those who underwent an abdomen or abdominopelvic CT study without contrast followed by with contrast. For the OIE measures, lower scores are better, meaning that high-performing facilities score near 0%.

Exhibit 12. Measure Specifications for OP-11 (*Thorax CT—Use of Contrast Material*)[1]

Measure Feature	Description (OP-11)
Intent	OP-11 calculates the percentage of CT thorax studies that are performed with and without contrast out of all CT thorax studies performed (those without contrast, those with contrast, and those with both).
Description	As indicated by current clinical guidelines, there are limited compelling uses for combined (with and without contrast) CT thorax studies. A CT study performed with and without contrast doubles the radiation dose to the beneficiary and exposes the beneficiary to the potential harmful side effects of the contrast material itself. Reducing the unnecessary use of combined CT studies—defined as those that are performed both without and with contrast agents for the evaluation of solid organs and body cavities—represents an important opportunity to improve practice and patient safety.
Initial Patient Population	Beneficiaries included in the measure's initial patient population had documentation of a thorax CT without or with contrast performed during the measurement period (July 1, 2017 to June 30, 2018). Beneficiaries can be included in the measure's initial patient population multiple times; each thorax CT (without contrast, with contrast, or both without then with contrast) performed at a facility measured by OPPS is counted once in the measure's denominator. The OP-11 denominator includes patient episodes from the initial patient population that do not have evidence of an exclusion.
Exclusion Criteria	The measure excludes the following population from the measure initial patient population: • Non-traumatic aortic disease
Numerator Criteria	To meet the measure's numerator criteria, beneficiaries from the measure's denominator had a thorax CT without contrast followed by with contrast (one of the three study types captured in the measure's denominator). For beneficiaries not excluded from the denominator, doing so may be a reflection of poor quality of care and overuse of diagnostic imaging.
Measure Score Calculation	The measure's denominator contains any Medicare beneficiary who underwent a thorax CT study at a facility subject to OPPS regulation during the measurement period (the measurement period for OP-11 runs from July 1, 2017 to June 30, 2018), less those cases for which an exclusion was documented on the CT claim. From these beneficiaries, the numerator contains those who underwent a thorax CT study without contrast followed by with contrast. For the OIE measures, lower scores are better, meaning that high-performing facilities score near 0%.

Exhibit 13. Measure Specifications for OP-13 (*Cardiac Imaging for Preoperative Risk Assessment for Non-Cardiac, Low-Risk Surgery*)

Measure Feature	Description (OP-13)
Intent	OP-13 calculates the percentage of stress echocardiography, SPECT MPI, stress MRI, or CCTA studies performed at a hospital outpatient facility in the 30 days prior to an ambulatory non-cardiac, low-risk surgery performed in any location (that is, studies performed at the same hospital, a different hospital, or a physician office).
Description	Cardiac imaging is among the most common imaging services in the Medicare population. Concomitant with the growth in cardiac imaging, the number of non-cardiac, low-risk surgeries and procedures has progressively increased during the past 20 years. While it is important to perform a cardiac risk assessment prior to surgery to identify high-risk beneficiaries, an extensive cardiac workup is unnecessary among both low-risk beneficiaries and for low-risk surgeries. Perioperative risk is proportional both to the severity of the beneficiaries' heart failure and the surgical risk.
Initial Patient Population	Beneficiaries included in the measure's initial patient population had documentation of a stress echocardiography, SPECT MPI, stress MRI, or CCTA study performed at the hospital outpatient department performed during the measurement period (cardiac imaging studies could occur from July 1, 2017 to May 31, 2018; the measurement period for OP-13 runs from July 1, 2017 to June 30, 2018).[12] Beneficiaries can be included in the measure's initial patient population multiple times; each stress echocardiography, SPECT MPI, stress MRI, and CCTA study performed at a facility measured by OPPS is counted once in the measure's denominator. The OP-13 denominator includes patient episodes from the initial patient population that do not have evidence of an exclusion.
Exclusion Criteria	Beneficiaries with a history of at least three diagnosis codes from the following categories are excluded from the measure's initial patient population; these conditions include diabetes mellitus, renal insufficiency, stroke/transient ischemic attack, prior heart failure, and ischemic heart disease. For these conditions, clinical evidence exists (within a practice guideline or the peer-reviewed literature) that indicates these beneficiaries may be at high risk of cardiac involvement during low-risk surgery; consequently, performing a stress echocardiography, SPECT MPI, stress MRI, or CCTA study prior to an ambulatory non-cardiac, low-risk surgery may be appropriate care. Thus, any beneficiary with a history of three or more of these conditions is excluded from the measure. Beginning with July 2019 public reporting, CMS also excludes cardiac imaging

[12] The final date on which patient episodes are identified for inclusion in the measure is May 31 of each year, due to the look-forward period needed for the OP-13 numerator criteria (i.e., low-risk surgeries can occur on the same day or up to 30 days following the cardiac imaging study, meaning that all imaging cases captured in the OP-13 denominator must occur on or before May 31).

Measure Feature	Description (OP-13)
	performed in the emergency department (ED) from the OP-13 denominator. Emergent cardiac imaging ordered in the ED frequently has a different indication from studies for which time is not of the essence. Thus, imaging cases associated with an ED visit no longer contribute to a facility's denominator.
Numerator Criteria	To meet the numerator criteria, beneficiaries from the denominator have stress echocardiography, SPECT MPI, stress MRI, or CCTA studies performed within a hospital's outpatient department within 30 days of an ambulatory non-cardiac, low-risk surgery performed at any location (for example, the same hospital, another hospital, or a physician office) counted in the measure's denominator. Doing so (for beneficiaries not excluded from the measure) may be a reflection of poor quality of care and overuse of diagnostic imaging.
Measure Score Calculation	The measure's denominator contains any Medicare beneficiary who underwent a cardiac imaging study (including a stress echocardiography, SPECT MPI, stress, MRI, or CCTA) at a facility subject to OPPS regulation during the measurement period (cardiac imaging studies could occur from July 1, 2017 to May 31, 2018; the measurement period for OP-13 runs from July 1, 2017 to June 30, 2018), less those cases for which an exclusion was documented on a claim in the patient's medical history. From these beneficiaries, the numerator contains those who underwent a low-risk surgery in the 30 days following the cardiac imaging study. For the OIE measures, lower scores are better, meaning that high-performing facilities score near 0%.

Exhibit 14. Measure Specifications for OP-14 (*Simultaneous Use of Brain Computed Tomography and Sinus Computed Tomography*)[1]

Measure Feature	Description (OP-14)
Intent	OP-14 calculates the percentage of brain CT studies with a simultaneous sinus CT (that is, brain and sinus CT studies performed on the same day at the same facility).
Description	A brain CT is often ordered in addition to a sinus CT because headache is a common symptom related to sinusitis; however, simultaneous CT sinus and brain imaging for headache without suspected complications is generally considered inappropriate as the imaging field for a brain CT contains large portions of the sinuses; performing both procedures is duplicative and results in inefficiency and lower quality care. Beyond concerns of efficiency and cost, there may be safety concerns to a patient undergoing two scans. A CT of the head has a typical effective radiation dose of approximately 2.3 milliSieverts (mSv), equivalent to approximately 115 chest X-rays. A CT of the paranasal sinuses and maxillofacial area is equivalent to approximately 50 chest X-rays (1 mSv).
Initial Patient Population	Beneficiaries included in the measure's initial patient population had documentation of a brain CT performed during the measurement period (July 1, 2017 through June 30, 2018). Beneficiaries can be included in the measure's initial patient population multiple times; each brain CT performed at a facility measured by OPPS is counted once in the measure's denominator. The OP-14 denominator includes patient episodes from the initial patient population that do not have evidence of an exclusion.
Exclusion Criteria	The measure excludes the following populations from the measure initial patient population: • Cancer • Trauma • Orbital cellulitis • Intracranial abscess
Numerator Criteria	To meet the measure's numerator criteria, beneficiaries from the measure's denominator had a brain CT followed by a sinus CT on the same day at the same facility. For beneficiaries not excluded from the denominator, doing so may be a reflection of poor quality of care and overuse of diagnostic imaging.
Measure Score Calculation	The measure's denominator contains any Medicare beneficiary who underwent a brain CT study at a facility subject to OPPS regulation during the measurement period (the measurement period for OP-14 runs from July 1, 2017 to June 30, 2018), less those cases for which an exclusion was documented on the CT claim. From these beneficiaries, the numerator contains those who underwent a sinus CT on the same day at the same facility as the brain CT study.

Measure Feature	Description (OP-14)
	For the OIE measures, lower scores are better, meaning that high-performing facilities score near 0%.