Americas Hernia Society Quality Collaborative
2019 Qualified Clinical Data Registry
Merit-Based Incentive Payment System Measure Specifications – Version February 11, 2019

The Americas Hernia Society Quality Collaborative (AHSQC) will submit the following measures below on behalf of its eligible professionals to the Center for Medicare and Medicaid Services as a Qualified Clinical Data Registry (QCDR) within the Merit-Based Incentive Payment System (MIPS). All measures are captured on patients who have undergone ventral hernia repair (VHR) in the United States within the AHSQC. VHR is defined as any patient who has undergone operative repair of umbilical, epigastric, lumbar, Spigelian, incisional, or parastomal hernias.

AHSQC MIPS MEASURES

MIPS Measure Number QPP 128: Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan

DESCRIPTION:

Percentage of patients aged 18 years and older with a BMI documented during the current encounter or during the previous twelve months AND with a BMI outside of normal parameters, a follow-up plan in documented during the encounter or during the previous twelve months of the current encounter.

Normal Parameters: Age 18 years and older BMI $\geq$ 18.5 and < 25 kg/m2

TYPE:

Process

NATIONAL QUALITY STRATEGY DOMAIN:

Community/Population Health

NUMERATOR:

Patients with a documented BMI during the encounter or during the previous twelve months, AND when the BMI is outside of normal parameters, a follow-up plan is documented during the encounter or during the previous twelve months of the current encounter.

DENOMINATOR:

All patients aged 18 and older on the date of the encounter with at least one eligible encounter during the measurement period

DENOMINATOR EXCEPTIONS:

RATIONALE:

BMI Above Normal Parameters
Obesity is a chronic, multifactorial disease with complex psychological, environmental (social and cultural), genetic, physiologic, metabolic and behavioral causes and consequences. The prevalence of overweight and obese people is increasing worldwide at an alarming rate in both developing and developed countries. Environmental and behavioral changes brought about by economic development, modernization and urbanization have been linked to the rise in global obesity. The health consequences are becoming apparent (ICSI 2013. p.6).

Hales et al (2017), report that the prevalence of obesity among adults and youth in the United States was 39.8% and 18.5% respectively, from 2015–2016. They note that obesity prevalence was higher among adults in the 40–59 age bracket than those in the 20–39 age bracket, for both men and women. Hales et al. (2017) also disaggregated the data according to ethnicity and noted that obesity prevalence was higher among non-Hispanic black and Hispanic adults and youth when compared with other races ethnicities. While obesity prevalence was lower among non-Hispanic Asian men and women, obesity prevalence among men, was comparable between non-Hispanic black and non-Hispanic white men. Obesity prevalence was higher among Hispanic men compared with non-Hispanic black men. While the prevalence among non-Hispanic black and Hispanic women was comparable, the prevalence for both groups was higher than that of non-Hispanic white women. Most notably, Hales et al (2017), report that the prevalence of obesity in the United States remains higher than the Healthy People 2020 goals of 14.5% among youth and 30.5% among adults.

More than a third of U.S. adults have a body mass index [BMI] ≥ 30 kg/m2; substantially at increased risk for and cardiovascular disease (CVD) (Flegal et al., 2012; Ogden et al., 2014). Behavioral weight management treatment has been identified as an effective first-line treatment for obesity with an average initial weight loss of 8–10%. This percentage weight loss is associated with a significant risk reduction for diabetes and CVD (Butryn et al., 2011; Wadden et al., 2012). Despite the availability of effective interventions, two-thirds of obese U.S. patients were not offered or referred to weight management treatment during their primary care visit between 2005 and 2006, (Ma et al., 2009). In addition, the rate of weight management counseling in primary care significantly decreased by 10% (40% to 30%) between 1995–1996 and 2007–2008 (Kraschnewski et al., 2013). This suggests that the availability of evidence based clinical guidelines since 2008 obesity management in primary care remains suboptimal (Fitzpatrick S.L., Stevens, V. J., 2017, pp 128-132).

BMI continues to be a common and reasonably reliable measurement to identify overweight and obese adults who may be at an increased risk for future morbidity. Although good quality evidence supports obtaining a BMI, it is important to recognize it is not a perfect measurement. BMI is not a direct measure of adiposity and as a consequence it can over- or underestimate adiposity. BMI is a derived value that correlates well with total body fat and markers of secondary complications, e.g., hypertension and dyslipidemia (Barlow, 2007).

In contrast with waist circumference, BMI and its associated disease and mortality risk appear to vary among ethnic subgroups. Female African American populations appear to have the lowest mortality risk at a BMI of 26.2-28.5 kg/m2 and 27.1-30.2 kg/m2 for women and men, respectively. In contrast, Asian populations may experience lowest mortality rates starting at a BMI of 23 to 24 kg/m2. The correlation between BMI and diabetes risk also varies by ethnicity (LeBlanc, 2011. p.2-3).

Screening for BMI and follow-up therefore is critical to closing this gap and contributes to quality goals of population health and cost reduction. However, due to concerns for other underlying conditions (such as bone health) or nutrition related deficiencies providers are cautioned to use clinical judgment and take these into account when considering weight management programs for overweight patients, especially the elderly (NHLBI Obesity Education Initiative, 1998, p. 91)

BMI below Normal Parameters

On the other end of the body weight spectrum is underweight (BMI <18.5 kg/m2), which is equally detrimental to population health. When compared to normal weight individuals (BMI 18.5-25 kg/m2), underweight individuals have significantly higher death rates with a Hazard Ratio of 2.27 and 95% confidence intervals (CI) = 1.78, 2.90 (Borrell & Lalitha (2014).

Poor nutrition or underlying health conditions can result in underweight (Fryer & Ogden, 2012). The National Health and Nutrition Examination Survey (NHANES) results from the 2007-2010 indicate that women are more likely to be underweight than men (2012). Therefore patients should be equally screened for underweight and followed up with nutritional counselling to reduce mortality and morbidity associated with underweight.

RISK ADJUSTMENT/MINIMUM ELIGIBLE CASES:

MIPS Measure Number QPP 355: Unplanned Reoperation within the 30 Day Postoperative Period

DESCRIPTION:

Percentage of patients aged 18 years and older who had any unplanned reoperation within the 30 day postoperative period of the primary procedure

TYPE:

Outcome – High Priority

NATIONAL QUALITY STRATEGY DOMAIN:

Patient Safety

NUMERATOR:

Unplanned return to the operating room for a surgical procedure, for any reason, within 30 days of the principal operative procedure

DENOMINATOR:

Patients aged 18 years and older undergoing an operative procedure

DENOMINATOR EXCEPTIONS:

RATIONALE:

This is an adverse surgical outcome, which is often a preventable cause of harm, thus it is important to measure and report. It is feasible to collect the data and produces reliable and valid results about the quality of care. It is useful and understandable to stakeholders. As highlighted earlier, this measure was developed in a collaborative effort by the American College of Surgeons and the American Board of Surgery. This measure addresses the National Quality Strategy Priorities, and was identified by an expert panel of physician providers to be a critical outcome for this procedure. This measure addresses a high-impact condition as it is one of the most common procedures performed in the U.S. The measure aligns well with the intended use. The care settings include Acute Care Facilities/Hospitals. Data are being collected in a clinical registry that has been in existence for over 5 years, with over 4000 current users. Thus, we are requesting consideration of this measure in the MIPS CQM reporting option. The level of analysis is the clinician/individual. All populations are included, except children. The measure allows measurement across the person-centered episode of care out to 30 days after the procedure whether an inpatient, outpatient, or readmitted. The measure addresses disparities in care. The risk adjustment is performed with a parsimonious dataset and aims to allow efficient data collection resources and data reporting. Measures have been harmonized when possible.

RISK ADJUSTMENT/MINIMUM ELIGIBLE CASES:

MIPS Measure Number QPP 356: Unplanned Hospital Readmission within 30 Days of Principal Procedure

DESCRIPTION:

Percentage of patients aged 18 years and older who had an unplanned hospital readmission within 30 days of principal procedure

TYPE:

Outcome – High Priority

NATIONAL QUALITY STRATEGY DOMAIN:

Effective Clinical Care

NUMERATOR:

Inpatient readmission to the same hospital for any reason or an outside hospital (if known to the surgeon), within 30 days of the principal surgical procedure

DENOMINATOR:

Patients aged 18 years and older undergoing a surgical procedure

DENOMINATOR EXCEPTIONS:

RATIONALE:

This is an adverse surgical outcome, which is often a preventable cause of harm, thus it is important to measure and report. It is feasible to collect the data and produces reliable and valid results about the quality of care. It is useful and understandable to stakeholders. As highlighted earlier, this measure was developed in a collaborative effort by the American College of Surgeons and the American Board of Surgery. This measure addresses the National Quality Strategy Priorities, and was identified by an expert panel of physician providers to be a critical outcome for this procedure. This measure addresses a high-impact condition as it is one of the most common procedures performed in the U.S. The measure aligns well with the intended use. The care settings include Acute Care Facilities/Hospitals. Data are being collected in a clinical registry that has been in existence for over 5 years, with over 4000 current users. Thus, we are requesting consideration of this measure in the MIPS CQM reporting option. The level of analysis is the clinician/individual. All populations are included, except children. The measure allows measurement across the person-centered episode of care out to 30 days after the procedure whether an inpatient, outpatient, or readmitted. The measure addresses disparities in care. The risk adjustment is performed with a parsimonious dataset and aims to allow efficient data collection resources and data reporting. Measures have been harmonized when possible.

RISK ADJUSTMENT/MINIMUM ELIGIBLE CASES:

MIPS Measure Number QPP 357: Surgical Site Infection (SSI)

DESCRIPTION:

Percentage of patients aged 18 years and older who had a surgical site infection (SSI)

TYPE:

Outcome – High Priority

NATIONAL QUALITY STRATEGY DOMAIN:

Effective Clinical Care

NUMERATOR:

Number of patients with a surgical site infection

DENOMINATOR:

Patients aged 18 years and older who have undergone a surgical procedure

DENOMINATOR EXCEPTIONS:

RATIONALE:

This is an adverse surgical outcome, which is often a preventable cause of harm, thus it is important to measure and report. It is feasible to collect the data and produces reliable and valid results about the quality of care. It is useful and understandable to stakeholders. As highlighted earlier, this measure was developed in a collaborative effort by the American College of Surgeons and the American Board of Surgery. This measure addresses the National Quality Strategy Priorities, and was identified by an expert panel of physician providers to be a critical outcome for this procedure. This measure addresses a high-impact condition as it is one of the most common procedures performed in the U.S. The measure aligns well with the intended use. The care settings include Acute Care Facilities/Hospitals. Data are being collected in a clinical registry that has been in existence for over 5 years, with over 4000 current users. Thus, we are requesting consideration of this measure in the MIPS CQM reporting option. The level of analysis is the clinician/individual. All populations are included, except children. The measure allows measurement across the person-centered episode of care out to 30 days after the procedure whether an inpatient, outpatient, or readmitted. The measure addresses disparities in care. The risk adjustment is performed with a parsimonious dataset and aims to allow efficient data collection resources and data reporting. Measures have been harmonized when possible.

RISK ADJUSTMENT/MINIMUM ELIGIBLE CASES:

AHSQC Non-MIPS MEASURE

AHSQC6: Abdominal Wall Reconstruction Surgical Site Occurrence Requiring Procedural Intervention within the 30 Day Postoperative Period

DESCRIPTION:

Percentage of patients aged 18 years and older who have undergone abdominal wall reconstruction defined as ventral hernia repair with myofascial release (abdominal wall fascial layer separated from muscular layer) who had a surgical site occurrence requiring procedural intervention within the 30 day postoperative period. Surgical site occurrences include any surgical site infections (superficial, deep, organ space) or any of the following: wound cellulitis, non-healing incisional wound, fascial disruption, skin or soft tissue ischemia, skin or soft tissue necrosis, wound serous drainage, wound purulent drainage, chronic sinus drainage, localized stab wound infection, stitch abscess, seroma, infected seroma, hematoma, infected hematoma, exposed biologic mesh, exposed synthetic mesh, contaminated biologic mesh, contaminated synthetic mesh, infected biologic mesh, infected synthetic mesh, mucocutaneous anastomosis disruption, enterocutaneous fistula). Procedural interventions include any of the following: wound opening, wound debridement, suture excision, percutaneous drainage, partial mesh removal, complete mesh removal.

This measure is reported as three performance rates stratified by hernia width:

1) Abdominal Wall Reconstruction Surgical Site Occurrence Requiring Procedural Intervention within the 30 Day Postoperative Period-Any hernia width (overall rate)
2) Abdominal Wall Reconstruction Surgical Site Occurrence Requiring Procedural Intervention within the 30 Day Postoperative Period-Hernia width of ≤10cm
3) Abdominal Wall Reconstruction Surgical Site Occurrence Requiring Procedural Intervention within the 30 Day Postoperative Period-Hernia width of >10cm

MEASURE TYPE:

Outcome – High Priority

NATIONAL QUALITY STRATEGY DOMAIN:

Patient Safety

NATIONAL QUALITY STRATEGY DOMAIN RATIONALE:

This measure reflects the safe delivery of abdominal wall reconstruction to patients requiring an extensive ventral hernia operation. In addition, this measure enables longitudinal assessment of condition-specific, patient-focused episodes of care.

NUMERATOR:

All patients in the cohort who have undergone ventral hernia repair with myofascial release and had a surgical site occurrence requiring procedural intervention as described in the measure description

DENOMINATOR:

Performance Rate 1) All patients in the cohort who have undergone ventral hernia repair with myofascial release with 30 day postoperative follow up

Performance Rate 2) All patients in the cohort who have undergone ventral hernia repair with myofascial release with 30 day postoperative follow up with hernia width ≤10cm

Performance Rate 3) All patients in the cohort who have undergone ventral hernia repair with myofascial release with 30 day postoperative follow up with hernia width >10cm

DENOMINATOR EXCEPTIONS:

Patients under the age of 18 years, patients without completed 30 day postoperative follow up

DENOMINATOR EXCLUSION:

None

RATIONALE:

Myofascial release techniques are often used in abdominal wall reconstruction to treat large, complex ventral hernias.[8] These techniques often require extensive training and experience to help patients with complex hernias while minimizing complications. Myofascial release techniques used for abdominal wall reconstruction have been associated with increased rates of surgical site infection.[9, 10] However, surgical site infections alone often do not reflect the spectrum of wound events that can occur after ventral hernia repair. Surgical site occurrences represent a comprehensive spectrum of wound complications occurring after ventral hernia repair. However, this includes both relatively benign wound issues and serious complications. Surgical site occurrences requiring procedural intervention represent a subset of surgical site occurrences that encompass the spectrum of wound events that can occur after ventral hernia repair but that also require procedural intervention.[2] These type of wound events incur significant cost and morbidity to patients and hospitals.[3] A significant stratification metric for wound outcomes in this population is hernia width of ≤10cm or >10cm.[15] This is reflected in the multiple performance rates. This measure was developed and endorsed as a metric of safety of ventral hernia medical care by the Americas Hernia Society Quality Collaborative Qualified Clinical Data Registry Task Force.

MEANINGFUL MEASURE AREA:

Admissions and Readmissions to Hospitals

RISK ADJUSTMENT/MINIMUM ELIGIBLE CASES:

Yes/minimum 25 eligible cases for the reporting period

NQF ID:

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eCOM #:

N/A

DATA SOURCE:

Registry (Americas Hernia Society Quality Collaborative)

STEWARD:

Americas Hernia Society Quality Collaborative/ArborMetrix

 # OF PERFORMANCE RATES TO BE SUBMITTED IN THE XML:

3

INVERSE MEASURE:

Yes

PROPORTION MEASURE SCORING:

Yes

CONTINUOUS MEASURE SCORING:

No

AHSQC10: Ventral Hernia Repair: Pain and Functional Status Assessment

DESCRIPTION:

Percentage of patients aged 18 years and older who have undergone ventral hernia repair and who completed baseline and 30 day follow-up patient-reported functional status assessments, and achieved at least a 10% improvement in functional status score from baseline.

MEASURE TYPE:

Patient Reported Outcome – High Priority

NATIONAL QUALITY SURGERY DOMAIN:

Person and Caregiver-Centered Experience and Outcomes

NATIONAL QUALITY STRATEGY DOMAIN RATIONALE:

This measure reflects the potential to improve patient-centered hernia care and the quality of care delivered to patients by collecting disease-specific patient-reported data. This measure allows the ability to impact care at the individual patient level as well as the population level through greater involvement of patients in decision-making and understanding of their hernia disease and its management.

NUMERATOR:

All patients aged 18 years and older who have undergone ventral hernia repair and who completed baseline and 30 day follow-up patient-reported functional status assessments, and achieved at least a 10% improvement in functional status score from baseline.

DENOMINATOR:

All patients aged 18 years and older who undergo ventral hernia repair

DENOMINATOR EXCEPTIONS:

Patients who are within the 30-day patient-reported outcome window, but for whom the reporting year ends prior to their responding to the survey.

DENOMINATOR EXCLUSIONS:

Patients who choose to not provide consent or participate in patient-reported outcome surveys at baseline or follow-up.

RATIONALE:

Elective repair of ventral hernias is often performed to alleviate pain and improve functional status of the abdominal wall. Preoperative (baseline) and postoperative pain and functional status assessments have been established as important measures to ascertain the success of alleviating pain and improving core abdominal wall functional status after ventral hernia repair (Krpata DM, Schmotzer BJ, Flocke S, Jin J, Blatnik JA, Ermlich B, et al. Design and initial

implementation of HerQLes: a hernia-related quality-of-life survey to assess abdominal wall function. Journal of the American College of Surgeons. 2012;215:635-42). This measure was developed and endorsed as a metric to assess patient reported outcomes associated with ventral hernia medical care by the Americas Hernia Society Quality Collaborative Qualified Clinical Data Registry Task Force.

MEANINGFUL MEASURE AREA:

Patient Reported Functional Outcomes

RISK ADJUSTMENT/MINIMUM ELIGIBLE CASES:

No/no minimum cases

NQF ID:

0000

eCOM #:

N/A

DATA SOURCE:

Registry (Americas Hernia Society Quality Collaborative)

STEWARD:

Americas Hernia Society Quality Collaborative/ArborMetrix

 # OF PERFORMANCE RATES TO BE SUBMITTED IN THE XML:

2

INVERSE MEASURE:

No

PROPORTION MEASURE SCORING:

Yes

CONTINUOUS MEASURE SCORING:

No

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