MEMORANDUM

To: Kim Gifford
From: Diane Millman
Rebecca Burke
Date: October 28, 2016
Subject: MACRA Final Rule

As you know, CMS has released the final rule implementing MACRA. This memo analyzes the impact of the final rule on ASTS members and supplements the more general memo we sent you last week. In addition, we are attaching to this memo a summary of CMS’ response to ASTS’ MACRA comments, which were submitted in response to the MACRA Proposed Rule. Attachment A.

The CMS summary of the rule includes extremely useful information, and excellent summaries have been prepared by the American Medical Association and other groups. It is another thing altogether to thoroughly understand what this new—and extraordinarily complex—program actually means for ASTS members.

This memorandum focuses on those aspects of the new payment adjustments that have the potential to most significantly ASTS members. This memo is divided into four sections:

1. General observations;
2. Impact of new transition rules for the 2017 performance year (2019 payment year) and expanded low volume exclusion under MIPS;
3. Other issues of importance to ASTS members raised by the final MIPS requirements; and
4. Issues of interest with regard to Advanced Alternative Payment Models.

I. General Observations

The MACRA rule implements two paths to Medicare payment for physicians’ services, beginning in 2019: The Merit-based Incentive Payment System (MIPS) and the Advanced Alternative Payment Models (AAPMs).

Preliminarily, please note that while the changes adopted by MACRA are often referred to as a “new” payment system for physicians services, this description is not entirely accurate. In fact, physicians’ basic payment rates will continue to be based on the Physician Fee Schedule and the basic methodology for determining the “relative value units” of particular services will remain substantially unchanged by MACRA. However, under MIPS, Medicare Physician Fee Schedule
payment for physicians and certain other clinicians\(^1\) will be adjusted up or down based on how they perform with respect to four performance categories: Quality (currently PQRS), Advancing Care Information (ACI) (currently Meaningful Use of Certified Electronic Health Records (CEHRT)), Clinical Practice Improvement Activities (CPIA) (new), and Cost (currently Value-Based Modifier). Under the AAPM track, a 5% bonus on top of otherwise payable PFS amounts will be made for the initial years of the program for those with substantial participation in AAPMs and these physicians will be entitled to higher annual adjustments in the out years. While the final rule attempts to widen the AAPM “track,” CMS still projects that the substantial majority of eligible clinicians (between 592,000 and 642,000) will be paid under MIPS in 2019, based on 2017 performance.

But in either case—MIPS or AAPM—whatever adjustments are made are made to the basic PFS rates. In that regard, at least, major changes to the PFS affecting surgical services—for example, revaluation of transplant surgery codes and CMS’ reexamination of the global surgery packages—may well have a greater short term impact on transplant surgeons than the implementation of MIPS, especially since, as discussed below, we believe it likely that many transplant surgeons will fair reasonably well under the final MACRA rules.

Because of special rules that are applicable for the first MIPS performance year (2017) and because CMS significantly increased the maximum threshold for determining if a physician qualifies for a “low volume” exception to MIPS, CMS projects that over 35% of physicians will be exempt from MIPS and that 95% of MIPS eligible clinicians will have neutral or positive payment adjustments under the new program in 2019. For these reasons, we would not anticipate that implementation of MACRA will have a significant impact on payment for ASTS members in 2019. It is another thing to consider what the impact may be in subsequent years and what impact MACRA implementation may have on broader trends in the health care industry.

First, it is possible, if not probable, that MACRA implementation will reinforce the trend for physicians to seek employment by hospitals and larger health care systems. MIPS incentives and penalties are required by law to be budget neutral, and, in addition, there is $500 million available outside of budget neutrality rules for “exceptional performers.” Performing well under MIPS is likely to require substantial investments in IT and quality reporting infrastructure, especially to the extent that MIPS requirements increase over time. And while MIPS-eligible physicians who do not perform well under MIPS will be subject to a maximum payment reductions of -9% when the system is fully implemented (2022), the maximum positive adjustment is not necessarily limited to +9%. Rather, the basic MIPS system is designed to be budget neutral (not counting the exceptional performance bonuses), and if aggregate negative adjustments exceed aggregate positive adjustments, the positive adjustments can be scaled so that the MIPS positive and negative adjustments balance out. Theoretically, positive adjustments could reach up to three times the maximum (-9%) negative adjustment –up to a 27% positive adjustment -- when MIPS is fully phased in. While positive adjustments of this magnitude are extremely unlikely, in light of the substantial potential for up-side adjustments, the overall system may have a tendency to

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\(^1\) MIPS impacts certain non-physician clinicians. This article generally uses the term physicians and MIPS eligible clinicians interchangeably.
disproportionately favor those groups that have substantial resources behind them to dedicate to MIPS compliance (most likely, hospitals).

Second, while it would appear that relatively few physicians are likely to qualify for the AAPM track in the first year of the program, CMS makes it clear that it intends to significantly expand the types of entities that it will recognize as AAPMs, and that its goal is to increase the proportion of physicians who have substantial participation in AAPMs. While the type of entities that qualify for AAPM status differ significantly, they generally fall within three categories: patient-centered medical homes and other primary care models; Accountable Care Organizations and specialized Accountable Care Organizations (e.g. for ESRD or cancer patients); and episode based payment models (generally focused on incentives for cost-effective delivery of inpatient hospital care for particular admissions and post-discharge care. In light of the financial benefits of the AAPM track—and the fact that those qualifying for that track are exempt from MIPS administrative burdens—MACRA implementation is likely to increase physician interest in substantial participation in these models over the years. For ASTS members, the inclusion of the CEC (ESRD) model among demonstrations eligible to be treated as AAPMs is especially significant, as discussed in further detail below.

Third, while CMS will not be “counting” the cost category of MIPS in the transition year and it will count for only 10% of a physician’s MIPS score in the 2018 performance year, it will ultimately count for 30% of a physician’s MIPS score. The cost measures adopted by CMS (total cost per beneficiary, Medicare spending per beneficiary, and a handful of episode based measures that were already tested through the Value-based Modifier and sQRUR programs) may have significant implications for transplant surgeons.

II. The Impact of Transition Year Rules and the Expanded Low Volume Exclusion for ASTS Members

In response to adverse reaction to the onerous requirements that would have been imposed by the proposed rule on solo and small practices, CMS has adopted a more liberal standard for a physician to meet to qualify for an exclusion from MIPS as a “low volume physician.” Under the final rule, those with $30,000 or less in Medicare allowed claims OR 100 or fewer Medicare patients for the year are eligible for exemption.

Implications for ASTS Members: While intended to benefit solo and group practices, it is possible that some transplant surgeons who provide services to 100 or fewer Medicare beneficiaries may qualify for the expanded low volume exemption.

In addition, CMS has adopted special transition year rules for MIPS for the 2017 performance year (2019 payment year). Under the MIPS transition year rules, only MIPS eligible clinicians who choose to not report even one measure or activity, will receive the full negative 4 percent adjustment. Clinicians who report at least one measure in the quality performance category OR one activity in the improvement activities performance category; OR report the required measures of the advancing care information performance category and avoid a negative MIPS payment adjustment. And physicians who report for a full 90-day period at a minimum and report more than
one quality measure, more than one improvement activity, or more than the required measures in
the advancing care information performance category will not only avoid a negative payment
adjustment but also may receive a positive adjustment.

Implications for ASTS Members: In light of the leniency of the transition rules, it would
appear to us to be highly unlikely that transplant surgeons will incur negative payment
adjustments in 2019 under the MIPS program. In fact, to the extent that transplant
surgeons are associated with faculty practice plans, large health care systems and/or
large group practices, it is highly likely that they are currently participating in PQRS,
since PQRS participation for larger groups (100+) is about 98.5%. Since the quality
component of MIPS is modeled on PQRS, there is a very low likelihood that ASTS members
in such groups will incur negative adjustments for the MIPS transition year.

III. MIPS Scoring: How Will Transplant Surgeons Do?

The CMS specialty impact charts do not list transplant surgery separately from general surgery;
however, for general surgery and cardio thoracic surgery (a specialty designation that may be
applicable to some heart transplant surgeons, the impact of MIPS in the transition year are
projected by CMS as follows:

- 24.6% of general surgeons (19.9% of cardiothoracic surgeons) will be exempt from MIPS
  because they meet the “low volume” criteria;
- MIPS upward and downward adjustments (including consideration of the bonuses for
  exceptional performers) will have an estimated + 0.7% impact on Medicare payments to
  general surgeons and an estimated +1% impact on cardiothoracic surgeons; and
- General surgeons will get $12 million in exceptional performance bonuses and
  cardiothoracic surgeons will get $5 million.

We have the following comments with respect to the implications of the final MIPS scoring rules
for transplant surgeons:

Quality

Quality is the most important component of MIPs for the first several years, since this component
will account for 60% of a physician’s score in the first MIPS year and 50% in the second. With
regard to the quality component of MIPS, we note:

- It is our understanding that most transplant surgeons are associated with large medical
  systems, teaching institutions and large group practices. As noted above, most larger
groups are already participating in PQRS and thus will not have a difficult time reporting
quality measures under MIPS. The big difference between PQRS and MIPS, however, is
that under MIPS it is not enough to simply report. Rather, quality scores will take into
account the physician’s performance against a performance benchmark. Those who score
poorly compared to their peers will receive lower quality scores which could result in
negative MIPS adjustments. To the extent that transplant surgeons are associated with
practice entities that have the resources to dedicate to identifying the best measures to report (i.e. the measures they are likely to do well on), positive adjustments are more likely.

- There are no MIPS quality measures specific to transplant. Therefore, to the extent that they report as individual clinicians, transplant surgeons will have to report general surgery or thoracic surgery measures. A list of potentially applicable quality measures is attached. (Attachment B).

- The final MIPS scoring for the quality component requires reporting on at least 6 quality measures, including one outcome measure. While we would anticipate that larger groups with which transplant surgeons are associated will not have difficulty choosing six appropriate measures, transplant surgeons reporting individually may wind up reporting on quality measures that are not particularly relevant to transplant outcomes or quality.

- To the extent that the practice entities with which ASTS members are associated decide to report as a group, ASTS members will be entitled to the same upward or downward adjustments as the other group members, regardless of the quality of transplant services (as measured, for example, through the SRTR reports.)

- The quality component scoring mechanism gives “extra credit” to measures reported electronically (and to high priority measures that exceed the one required outcome/high priority measure). At least some of the quality measures for surgery are high priority measures. (High priority measures are indicated with a ! or !! sign in the table in Attachment B).

- The all-cause 30-day hospital readmission (ACR) measure (which is determined by CMS based on claims data) is also considered as part of the MIPS quality component, for groups of 16 or more with at least 200 cases. Although this measure is risk-adjusted it could, nevertheless, have a disproportionately negative impact on transplant surgeons.

- As discussed below, it appears likely that transplant surgeons generally will qualify as “hospital-based” physicians for the purposes of the Advancing Care Information (CEHRT) component of MIPS, and for hospital-based physicians the weight of the quality component of MIPS increases to 85% in the 2017 performance year, 75% in the 2018 performance year, and 55% thereafter

Clinical practice improvement activities

Clinical Practice Improvement Activities (CPIA) counts for 15% of a physician’s final score both for 2017 and thereafter. To get full credit for CPIA physicians will have to perform either two highly weighted CPIAs or four medium weighted CPIAs. While physicians technically may use CEHRT, registries and QCDRs to meet CPIA requirements, it is unclear whether or not these mechanisms will be in place in time for CPIA reporting in 2017, and physicians are most likely to need to attest to their performance of CPIAs in order to get credit for the first MIPS year. It does not appear that reporting to the SRTR will count as a CPIA. Reporting to qualified clinical data registries is considered a CPIA, however. Attachment C includes a list of CPIAs most likely to be of interest to transplant surgeons.

Advancing Care Information (ACI) (CEHRT)
The ACI component of MIPS is weighted at 25% of the final score for the 2017 performance year. Note, however, that this component of MIPS is not counted for hospital-based physicians—those for whom at least 75% of services are provided in inpatient, emergency room and on-campus hospital outpatient settings. We would expect a large number of transplant surgeons would be considered hospital-based and thus not subject to ACI. When the score for this category is zero, either because the physician is hospital based or because s/he qualifies for an exception, the weight that would otherwise be accorded to this component is shifted to the quality component. Thus, for many hospital-based transplant surgeons, the quality score will comprise 75%-85% of the overall score for the first two years and more than half of the score thereafter.

For those transplant surgeons associated with practice entities that report as a group, CMS is allowing a single attestation of compliance with the ACI (CEHRT) requirements. Unlike the Meaningful Use program, members of the group will not be required to attest individually.

**Cost**

CMS will not weight the cost component of MIPS for 2017 and it will only count for only 10% of a physician’s score for performance year 2018; however, this component of MIPS ultimately will count for 30% of a physician’s overall score. Therefore, it is worth paying attention to your score on this component of MIPS in 2017 even though it won’t “count” in 2019.

- While the measures used in this component of MIPS are included in the current Value-Based Modifier (VBM program) and sQRURs, the attribution and scoring methods are different. CMS implies that it will be providing performance reports for physicians in 2017 that apply the new attribution and scoring methodology to the cost measures. Look out for these reports.
- The cost measures used in the new system have the potential to disadvantage transplant surgeons reporting individually. For example, with the results of ostensibly risk adjusted, the Medicare Spending Per Beneficiary measures could negatively impact transplant surgeons since their patients are likely to be high cost relative to other physicians’ patients. Transplant surgeons associated with practices that report as groups will be affected by the group’s cost score.

**IV. AAPMs**

The most significant aspects of the AAPM portion of the final rule are 1) CMS’ decision to proceed, without modifications, to implement the Comprehensive ESRD Care (CEC) demonstration; and 2) the option, beginning in 2019, for physicians to participate in all-payer AAPMs.

**CEC Demonstration**

CMS has announced that End Stage Renal Disease Large Dialysis Organization (ESCOs) under the CEC Initiative will qualify as AAPMs beginning in 2017. This could have profound effects on
which patients are referred for transplantation. ESCOs have an incentive to refer for evaluation only those ESCO-aligned Medicare beneficiaries for whom they do not believe savings are achievable (i.e. sicker patients who consume relatively more Part A and Part B medical services). LDO ESCOs, which are at risk for losses, are especially likely to have a strong incentive to refer ESCO-aligned Medicare patients with multiple co-morbidities for transplantation, while continuing to provide dialysis for those ESCO-aligned Medicare beneficiaries who are relatively healthy. It does not appear that the quality metrics used to measure ESCO participants’ performance includes any measure of the number of patients referred by the participants for transplantation, or the medical condition of patients referred for transplantation. By including ESCOs as AAPMs this model is likely to attract more renal physicians and dialysis facilities and has the potential to substantially jeopardize appropriate referrals for transplant evaluations.

All Payer AAPMs

Transplant surgeons may be able to qualify as participants in AAPMs (and thereby avoid MIPS) by taking advantage of the all-payer AAPM combination option. Beginning in payment year 2021 (performance year 2019), CMS will recognize participation in an other-payer AAPM as counting towards the thresholds for AAPM participation. It is our understanding that many commercial payers already pay for transplantation through a single bundled payment to the transplant center which covers both hospital and physician services. If these payment models can qualify as AAPMs this could facilitate the qualification of transplant surgeons as AAPM participants. Under the final MACRA rules, capitation arrangements in which a pre-determined or per capita payment is made for all items and services covered through the APM would generally qualify as AAPMs. Other-payer AAPMs that meet certain financial risk requirements may also qualify.

Transplant surgeons will still need to participate in at least one Medicare AAPM in order to meet Medicare specific payment or patient count thresholds that are part of the all-payer combination option. For payment years 2021 and 2022, a total of 50% of payment must be through a combination of Medicare and other-payer AAPMs but 25% (i.e. half of those payments) must be through a Medicare AAPM. In 2023 and beyond, 75% of payments must be through the all-payer combination model but the Medicare percentage remains at 25%. Alternatively, for 2021 and 2022, 35% of patients must receive care through the all-payer AAPM model and 20% must be Medicare patients. For 2023 and beyond, the percentage is 50% and 20% respectively. ASTS may want to work with the American College of Surgeons on development of AAPMs that might qualify under this model.
Attachment A

Summary of CMS Response to ASTS Comments on MACRA rule

General Observations/Comments

- **Simplification of MIPS Reporting**: ASTS urged CMS to simplify the new payment system by, for example, limiting the number of reportable measures. *CMS has eased reporting requirements for the first year (or in some cases first two years) of the program and has reduced the number of clinical practice improvement activities from 6 to 4. It has also reduced data completeness thresholds.*

- **Approval of Bundled Payment for Care Improvement (BPCI) as AAPMs**: ASTS encouraged CMS to modify its criteria for approval of Advanced Alternative Payment Models (AAPMs) to include BPCI and similar episode based payment models. *CMS states that the Innovation Center is considering developing a new voluntary BPCI payment model that could meet the AAPM criteria.*

Advanced Alternative Payment Models

- **AAPM Status for End Stage Renal Disease Comprehensive Care Organizations (ESCOs)**: ASTS urged that CMS not allow large dialysis organization (LDO) ESCOs to qualify as AAPMs until strong safeguards have been implemented to ensure that these entities refer ESRD patients for transplant evaluation without regard to financial considerations. *CMS states that it expects ESCOs will qualify as AAPMs and, specifically, that both LDO and non-LDO models that accept two-sided risk will likely meet the criteria. The agency did not comment on the concerns raised by ASTS. A list of approved AAPMs will be published by January 1, 2017.*

Merit-Based Incentive Program

- **Virtual Group Reporting**: ASTS stated that it supported the use of a virtual group identifier for MIPS purposes that could be used by transplant teams to ensure that patient outcomes are shared by the transplant team without individual attribution of results. *CMS has not implemented virtual groups for 2017 but states that it intends to do so in 2018.*

- **Exception for Transplant Team Based on SRTR Reporting**: ASTS urged that CMS consider excepting transplant surgeons and other team members from the MIPS quality reporting requirements because they already report on quality through the SRTR and because existing measures were not meaningful to transplant surgeons. *CMS did not create an exception based on SRTR reporting. However, some transplant surgeons may qualify for the low-volume of exception if they have 100 or fewer Medicare patients per year or receive less than $30,000 in annual Medicare Part B allowed charges.*

- **Patient Experience of Care Survey Measure**: ASTS commented that the CAHPS (Consumer Assessment of Healthcare Provider and Systems) survey had little relevance to transplant surgeons and urged that CMS work with the transplant community and the
American College of Surgeons to adopt a patient experience of care measure that is more appropriate for team-based transplant care. *CMS did not comment on this issue and the CAHPS remains as a quality measure and is also a clinical practice improvement activity.*

- **Population-Based Quality Measures:** ASTS expressed concern about the use of population-based quality measures, and, in particular, the use of readmissions as a measure of quality and noted that readmissions are disproportionately higher for transplantation compared to other inpatient procedures. ASTS asked that CMS remove these measures from the quality component of MIPS. *CMS has removed two of the three population-based quality measures but did not remove the measure for all-cause hospital readmissions. It did, however, raise the group size to which this measure applies from 10 to 15 clinicians. The minimum case number for this measure remains at 200.*

- **SRTR as a Qualified Clinical Data Registry (QCDR):** ASTS commented that the SRTR should be treated as a QCDR but that some of the requirements for QCDRs would be difficult for the SRTR to meet. ASTS indicated that it would like to work with CMS to see if these issues can be resolved. *CMS noted ASTS’ comment but stated that QCDRs would need to meet the CMS criteria and that it would be issuing additional sub-regulatory guidance on how registries can qualify as QCDRs.*

- **Adoption of Hospital Quality Measures under MIPS:** ASTS urged CMS to modify its rules to allow members of a transplant team to elect to use their institution’s performance rates as a proxy for the clinician’s MIPS quality score. *CMS indicated that it would consider this option in the future but did not make any changes to current requirements.*

- **Cost/Resource Component of MIPS:** ASTS requested that CMS eliminate the Medicare Spending Per Beneficiary (MSPB) measure or, at least, retain the 125 case minimum that was finalized for the Value-Based Modifier Program. *CMS is maintaining the MSPB measure but has raised the minimum number of cases from 20 to 35. In addition, CMS will not include cost as a MIPS measure category in 2017.*

- **MIPS Clinical Practice Improvement Activities Component:** ASTS commented that reporting to a government-funded registry such as SRTR should count as a clinical practice improvement activity and urged CMS to add language to this effect. *CMS did not adopt the suggested language change and did not specifically address ASTS’ comment.*
Attachment B
### Measure Title and Description

**21. Surgery**

<table>
<thead>
<tr>
<th>Measure Title and Description</th>
<th>Measure Steward</th>
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<tbody>
<tr>
<td>Percent of patients undergoing open repair of small or moderate sized non-ruptured infrarenal abdominal aortic aneurysms who do not experience a major complication (discharge to home no later than post-operative day #7)</td>
<td>Society for Vascular Surgeons</td>
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<td>Rate of Endovascular Aneurysm Repair (EVAR) of Small or Moderate Non-Ruptured Infrarenal Abdominal Aortic Aneurysms (AAA) without Major Complications (Discharged at Home by Post-Operative Day #2)</td>
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<td>Percent of patients undergoing endovascular repair of small or moderate non-ruptured infrarenal abdominal aortic aneurysms (AAA) that do not experience a major complication (discharged to home no later than post-operative day #2)</td>
<td>Society for Vascular Surgeons</td>
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<td>Rate of Carotid Endarterectomy (CEA) for Asymptomatic Patients, without Major Complications (Discharged to Home by Post-Operative Day #2)</td>
<td>Society for Vascular Surgeons</td>
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<td>Percent of asymptomatic patients undergoing CEA who are discharged to home no later than post-operative day #2</td>
<td>Society for Vascular Surgeons</td>
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<tr>
<td>Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
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<tr>
<td>Percentage of patients aged 18 years and older seen during the reporting period who were screened for high blood pressure AND a recommended follow-up plan is documented based on the current blood pressure (BP) reading as indicated.</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
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<td>Rate of Carotid Artery Stenting (CAS) for Asymptomatic Patients, Without Major Complications (Discharged to Home by Post-Operative Day #2)</td>
<td>Society for Vascular Surgeons</td>
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<tr>
<td>Percent of asymptomatic patients undergoing CAS who are discharged to home no later than post-operative day #2</td>
<td>Society for Vascular Surgeons</td>
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<tr>
<td>Rate of Postoperative Stroke or Death in Asymptomatic Patients Undergoing Carotid Artery Stenting (CAS)</td>
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<th>CMS E-Measure ID</th>
<th>Data Submission Method</th>
<th>Measure ID</th>
<th>Measure Type</th>
<th>National Quality Strategy Domain</th>
<th>Measure Title and Description</th>
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**21. Surgery**

- **Rate of Endovascular Aneurysm Repair (EVAR of Small or Moderate Non-Ruptured Infrarenal Abdominal Aortic Aneurysms (AAA) Who Die While in Hospital**
  - Percent of patients undergoing endovascular repair of small or moderate infrarenal abdominal aortic aneurysms (AAA) who die while in the hospital
  - **Society for Vascular Surgeons**

- **Surgical Site Infection (SSI)**
  - Percentage of patients aged 18 years and older who had a surgical site infection (SSI)
  - **American College of Surgeons**

- **Closing the Referral Loop: Receipt of Specialist Report**
  - Percentage of patients with referrals, regardless of age, for which the referring provider receives a report from the provider to whom the patient was referred
  - **Centers for Medicare & Medicaid Services**

- **Tobacco Use and Help with Quitting Among Adolescents**
  - The percentage of adolescents 12 to 20 years of age with a primary care visit during the measurement year for whom tobacco use status was documented and received help with quitting if identified as a tobacco user
  - **National Committee for Quality Assurance**

**21b. General Surgery**

- **Perioperative Care: Selection of Prophylactic Antibiotic — First OR Second Generation Cephalosporin**
  - Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for a first OR second generation cephalosporin prophylactic antibiotic, which had an order for a first OR second generation cephalosporin for antimicrobial prophylaxis
  - **American Society of Plastic Surgeons**

- **Perioperative Care: Venous Thromboembolism (VTE) Prophylaxis (When Indicated in ALL Patients)**
  - Percentage of surgical patients aged 18 years and older undergoing procedures for which venous thromboembolism (VTE) prophylaxis is indicated in all patients, who had an order for Low Molecular Weight Heparin (LMWH), Low-Dose Unfractionated heparin (LDUH), adjusted-dose warfarin, fondaparinux or mechanical prophylaxis to be given within 24 hours prior to incision time or within 24 hours after surgery end time
  - **American Society of Plastic Surgeons**

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<td>Claims, Registry</td>
<td>Process</td>
<td>Communication and Care Coordination</td>
<td>Care Plan</td>
<td>Percentage of patients aged 65 years and older who have an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but the patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan.</td>
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<td>Process</td>
<td>Communinty/Population Health</td>
<td>Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan</td>
<td>Percentage of patients aged 18 years and older with a BMI documented during the current encounter or during the previous six months AND with a BMI outside of normal parameters, a follow-up plan is documented during the encounter or during the previous six months of the current encounter</td>
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<td>Claims, Registry, EHR, Web Interface</td>
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<td>Patient Safety</td>
<td>Documentation of Current Medications in the Medical Record</td>
<td>Percentage of visits for patients aged 18 years and older for which the eligible professional attests to documenting a list of current medications using all immediate resources available on the date of the encounter. This list must include ALL known prescriptions, over-the-counters, herbs, and vitamin/mineral/dietary (nutritional) supplements AND must contain the medications’ name, dosage, frequency and route of administration.</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
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<td>138v5</td>
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<td>Process</td>
<td>Communitinty/Population Health</td>
<td>Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention</td>
<td>Percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months AND who received cessation counseling intervention if identified as a tobacco user.</td>
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<td>Percentage of patients aged 18 years and older seen during the reporting period who were screened for high blood pressure AND a recommended follow-up plan is documented based on the current blood pressure (BP) reading as indicated.</td>
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<td>Outcome</td>
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<td>Anastomotic Leak Intervention</td>
<td>Percentage patients aged 18 years and older who required an anastomotic leak intervention following gastric bypass or colectomy surgery</td>
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<td>Measure Type</td>
<td>National Quality Strategy Domain</td>
<td>Measure Title and Description</td>
<td>Measure Steward</td>
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<tr>
<td>21. Surgery</td>
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<td>*!</td>
<td>N/A/ 355</td>
<td>N/A</td>
<td>Registry</td>
<td>Outcome</td>
<td>Patient Safety</td>
<td>Unplanned Reoperation within the 30 Day Postoperative Period</td>
<td>American College of Surgeons</td>
</tr>
<tr>
<td>*!</td>
<td>N/A/ 356</td>
<td>N/A</td>
<td>Registry</td>
<td>Outcome</td>
<td>Effective Clinical Care</td>
<td>Unplanned Hospital Readmission within 30 Days of Principal Procedure</td>
<td>American College of Surgeons</td>
</tr>
<tr>
<td>*!</td>
<td>N/A/ 357</td>
<td>N/A</td>
<td>Registry</td>
<td>Outcome</td>
<td>Effective Clinical Care</td>
<td>Surgical Site Infection (SSI)</td>
<td>American College of Surgeons</td>
</tr>
<tr>
<td>!</td>
<td>N/A/ 358</td>
<td>N/A</td>
<td>Registry</td>
<td>Process</td>
<td>Person and Caregiver-Centered Experience and Outcomes</td>
<td>Patient-Centered Surgical Risk Assessment and Communication</td>
<td>American College of Surgeons</td>
</tr>
<tr>
<td>NA/ 374</td>
<td>50v5</td>
<td>EHR</td>
<td>Process</td>
<td>Communication and Care Coordination</td>
<td>Closing the Referral Loop: Receipt of Specialist Report</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
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<td>NA/ 402</td>
<td>NA</td>
<td>Registry</td>
<td>Process</td>
<td>Community/Population Health</td>
<td>Tobacco Use and Help with Quitting Among Adolescents</td>
<td>National Committee for Quality Assurance</td>
<td></td>
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</tbody>
</table>

Comment: CMS received specific comments to add #357 to the measure set.

Response: CMS agrees that measure #357 is applicable to the surgery specialty and will, therefore add the measure to the set. CMS has also added previously identified cross-cutting measures that are relevant for the specialty set (#047, #128, #130, #226, #317, #374, and #402). CMS believes the finalized specialty set reflects the relevant measures appropriate for the surgery specialty and sub-specialties.

Final Decision: CMS is finalizing the surgery specialty measure set as indicated in the table above.
### 22. Thoracic Surgery

<table>
<thead>
<tr>
<th>MIPS ID Number</th>
<th>NQF/PQRS</th>
<th>CMS E-Measure ID</th>
<th>Data Submission Method</th>
<th>Measure Type</th>
<th>National Quality Strategy Domain</th>
<th>Measure Title and Description</th>
<th>Measure Steward</th>
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<tbody>
<tr>
<td>!! 0268 /021</td>
<td>N/A</td>
<td>Claims, Registry</td>
<td>Process</td>
<td>Patient Safety</td>
<td>Perioperative Care: Selection of Prophylactic Antibiotic – First OR Second Generation Cephalosporin</td>
<td>Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for a first OR second generation cephalosporin prophylactic antibiotic, who had an order for a first OR second generation cephalosporin for antimicrobial prophylaxis</td>
<td>American Society of Plastic Surgeons</td>
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<tr>
<td>! 0239 /023</td>
<td>N/A</td>
<td>Claims, Registry</td>
<td>Process</td>
<td>Patient Safety</td>
<td>Perioperative Care: Venous Thromboembolism (VTE) Prophylaxis (When Indicated in ALL Patients)</td>
<td>Percentage of surgical patients aged 18 years and older undergoing procedures for which venous thromboembolism (VTE) prophylaxis is indicated in all patients, who had an order for Low Molecular Weight Heparin (LMWH), Low-Dose Unfractionated Heparin (LDUH), adjusted-dose warfarin, fondaparinux or mechanical prophylaxis to be given within 24 hours prior to incision time or within 24 hours after surgery end time</td>
<td>American Society of Plastic Surgeons</td>
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<tr>
<td>0326 /047</td>
<td>N/A</td>
<td>Claims, Registry</td>
<td>Process</td>
<td>Communication and Care Coordination</td>
<td>Care Plan</td>
<td>Percentage of patients aged 65 years and older who have an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but the patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan.</td>
<td>National Committee for Quality Assurance</td>
</tr>
<tr>
<td>0419 /130</td>
<td>68v6</td>
<td>Claims, Registry, EHR,</td>
<td>Process</td>
<td>Patient Safety</td>
<td>Documentation of Current Medications in the Medical Record</td>
<td>Percentage of visits for patients aged 18 years and older for which the eligible professional attests to documenting a list of current medications using all immediate resources available on the date of the encounter. This list must include ALL known prescriptions, over-the-counters, herbals, and vitamin/mineral/dietary (nutritional) supplements AND must contain the medications’ name, dosage, frequency and route of administration.</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
</tr>
<tr>
<td>! 0129 /164</td>
<td>N/A</td>
<td>Registry</td>
<td>Outcome</td>
<td>Effective Clinical Care</td>
<td>Coronary Artery Bypass Graft (CABG): Prolonged Intubation</td>
<td>Percentage of patients aged 18 years and older undergoing isolated CABG surgery who require postoperative intubation &gt; 24 hours</td>
<td>American Thoracic Society</td>
</tr>
<tr>
<td>MIPS ID Number</td>
<td>NQF/ PQRS</td>
<td>CMS E-Measure ID</td>
<td>Data Submission Method</td>
<td>Measure Type</td>
<td>National Quality Strategy Domain</td>
<td>Measure Title and Description</td>
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<tr>
<td>0130 /165</td>
<td>N/A</td>
<td>Registry</td>
<td>Outcome</td>
<td>Effective Clinical Care</td>
<td>Coronary Artery Bypass Graft (CABG): Deep Sternal Wound Infection Rate</td>
<td>Percentage of patients aged 18 years and older undergoing isolated CABG surgery who, within 30 days postoperatively, develop deep sternal wound infection involving muscle, bone, and/or mediastinum requiring operative intervention</td>
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<tr>
<td>0131 /166</td>
<td>N/A</td>
<td>Registry</td>
<td>Outcome</td>
<td>Effective Clinical Care</td>
<td>Coronary Artery Bypass Graft (CABG): Stroke</td>
<td>Percentage of patients aged 18 years and older undergoing isolated CABG surgery who have a postoperative stroke (i.e., any confirmed neurological deficit of abrupt onset caused by a disturbance in blood supply to the brain) that did not resolve within 24 hours</td>
<td></td>
</tr>
<tr>
<td>0114 /167</td>
<td>N/A</td>
<td>Registry</td>
<td>Outcome</td>
<td>Effective Clinical Care</td>
<td>Coronary Artery Bypass Graft (CABG): Postoperative Renal Failure</td>
<td>Percentage of patients aged 18 years and older undergoing isolated CABG surgery (without pre-existing renal failure) who develop postoperative renal failure or require dialysis</td>
<td></td>
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<tr>
<td>0115 /168</td>
<td>N/A</td>
<td>Registry</td>
<td>Outcome</td>
<td>Effective Clinical Care</td>
<td>Coronary Artery Bypass Graft (CABG): Surgical Re-Exploration</td>
<td>Percentage of patients aged 18 years and older undergoing isolated CABG surgery who require a return to the operating room (OR) during the current hospitalization for mediastinal bleeding with or without tamponade, graft occlusion, valve dysfunction, or other cardiac reason</td>
<td></td>
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<tr>
<td>0028 /226</td>
<td>138v5</td>
<td>Claims, Registry, EHR, Web Interface</td>
<td>Process</td>
<td>Communit y/Population Health</td>
<td>Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention</td>
<td>Percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months AND who received cessation counseling intervention if identified as a tobacco user.</td>
<td></td>
</tr>
<tr>
<td>0018 /236</td>
<td>165v5</td>
<td>Claims, Registry, EHR, Web Interface</td>
<td>Intermediate Outcome</td>
<td>Effective Clinical Care</td>
<td>Controlling High Blood Pressure</td>
<td>Percentage of patients 18-85 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (&lt;140/90 mmHg) during the measurement period</td>
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<tr>
<td>N/A/317</td>
<td>22v5</td>
<td>Claims, Registry, EHR</td>
<td>Process</td>
<td>Communit y/Population Health</td>
<td>Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented</td>
<td>Percentage of patients aged 18 years and older seen during the reporting period who were screened for high</td>
<td></td>
</tr>
</tbody>
</table>

22. Thoracic Surgery

* Registry

American Thoracic Society

American Thoracic Society

American Thoracic Society

Society of Thoracic Surgeons

Physician Consortium for Performance Improvement Foundation (PCPI®)

National Committee for Quality Assurance

Centers for Medicare and Medicaid Services
### 22. Thoracic Surgery

<table>
<thead>
<tr>
<th>MIPS ID Number</th>
<th>NQF/PQRS</th>
<th>CMS E-Measure ID</th>
<th>Data Submission Method</th>
<th>Measure Type</th>
<th>National Quality Strategy Domain</th>
<th>Measure Title and Description&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Measure Steward</th>
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<tr>
<td>![N/A/358]</td>
<td>N/A</td>
<td>Registry</td>
<td>Process</td>
<td>Person and Caregiver-Centered Experience and Outcomes</td>
<td>Patient-Centered Surgical Risk Assessment and Communication</td>
<td>Percentage of patients who underwent a non-emergency surgery who had their personalized risks of postoperative complications assessed by their surgical team prior to surgery using a clinical data-based, patient-specific risk calculator and who received personal discussion of those risks with the surgeon</td>
<td>American College of Surgeons</td>
</tr>
<tr>
<td>NA/374</td>
<td>50v5</td>
<td>EHR</td>
<td>Process</td>
<td>Communication and Care Coordination</td>
<td>Closing the Referral Loop: Receipt of Specialist Report</td>
<td>Percentage of patients with referrals, regardless of age, for which the referring provider receives a report from the provider to whom the patient was referred.</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
</tr>
<tr>
<td>NA/402</td>
<td>NA</td>
<td>Registry</td>
<td>Process</td>
<td>Community/Population Health</td>
<td>Tobacco Use and Help with Quitting Among Adolescents</td>
<td>The percentage of adolescents 12 to 20 years of age with a primary care visit during the measurement year for whom tobacco use status was documented and received help with quitting if identified as a tobacco user</td>
<td>National Committee for Quality Assurance</td>
</tr>
</tbody>
</table>

CMS did not receive specific comments regarding changes to the measure set.

**Response:** CMS has added previously identified cross-cutting measures that are relevant for the specialty set (#047, #128, #130, #226, #236, #317, #374, and #402). CMS believes the finalized specialty set reflects the relevant measures appropriate for the thoracic surgery specialty.

**Final Decision:** CMS is finalizing the thoracic surgery specialty measure set as indicated in the table above.
## Attachment C

| Population Management | Manage medications to maximize efficiency, effectiveness and safety that could include one or more of the following:  
Reconcile and coordinate medications and provide medication management across transitions of care settings and eligible clinicians or groups;  
Integrate a pharmacist into the care team; and/or  
Conduct periodic, structured medication reviews. | Medium | * |
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Care Coordination</td>
<td>Performance of regular practices that include providing specialist reports back to the referring MIPS eligible clinician or group to close the referral loop or where the referring MIPS eligible clinician or group initiates regular inquiries to specialist for specialist reports which could be documented or noted in the certified EHR technology.</td>
<td>Medium</td>
<td>*</td>
</tr>
<tr>
<td>Coordination</td>
<td>Implementation of practices/processes that document care coordination activities (e.g., a documented care coordination encounter that tracks all clinical staff involved and communications from date patient is scheduled for outpatient procedure through day of procedure).</td>
<td>Medium</td>
<td>*</td>
</tr>
<tr>
<td>Care Coordination</td>
<td>Implementation of practices/processes to develop regularly updated individual care plans for at-risk patients that are shared with the beneficiary or caregiver(s).</td>
<td>Medium</td>
<td>*</td>
</tr>
<tr>
<td>Care Coordination</td>
<td>Implementation of practices/processes for care transition that include documentation of how a MIPS eligible clinician or group carried out a patient-centered action plan for first 30 days following a discharge (e.g., staff involved, phone calls conducted in support of transition, accompaniments, navigation actions, home visits, patient information access, etc.).</td>
<td>Medium</td>
<td></td>
</tr>
</tbody>
</table>
| Care Coordination     | Establish standard operations to manage transitions of care that could include one or more of the following:  
Establish formalized lines of communication with local settings in which empaneled patients receive care to ensure documented flow of information and seamless transitions in care; and/or  
Partner with community or hospital-based transitional care services. | Medium | |
| Patient Safety and Practice Assessment | Use decision support and standardized treatment protocols to manage workflow in the team to meet patient needs. | Medium | * |
| Patient Safety and Practice Assessment | Measure and improve quality at the practice and panel level that could include one or more of the following:  
- Regularly review measures of quality, utilization, patient satisfaction and other measures that may be useful at the practice level and at the level of the care team or MIPS eligible clinician or group(panel); and/or  
- Use relevant data sources to create benchmarks and goals for performance at the practice level and panel level. | Medium |
|--------------------------------------|---------------------------------------------------------------------------------------------------|--------|
| Patient Safety and Practice Assessment | Adopt a formal model for quality improvement and create a culture in which all staff actively participates in improvement activities that could include one or more of the following:  
- Train all staff in quality improvement methods;  
- Integrate practice change/quality improvement into staff duties;  
- Engage all staff in identifying and testing practices changes;  
- Designate regular team meetings to review data and plan improvement cycles;  
- Promote transparency and accelerate improvement by sharing practice level and panel level quality of care, patient experience and utilization data with staff; and/or  
- Promote transparency and engage patients and families by sharing practice level quality of care, patient experience and utilization data with patients and families. | Medium |
| Patient Safety and Practice Assessment | Ensure full engagement of clinical and administrative leadership in practice improvement that could include one or more of the following:  
- Make responsibility for guidance of practice change a component of clinical and administrative leadership roles;  
- Allocate time for clinical and administrative leadership for practice improvement efforts, including participation in regular team meetings; | Medium |