

**ACR**  
**Technical Expert Panel Meeting Notes**  
**Documentation of AAA Evidence-based Recommendations**  
**August 31, 2022**

TEP Attendees: Nadja Kadom, MD (chair); Olga Brook, MD; Rich Heller, MD; Ryan Lee, MD; Melissa Chen, MD

Staff Attendees: Judy Burleson, MSPH; Samantha (Sam) Shugarman, MS

**Welcome**

Dr. Kadom thanked the panelists for joining today's meeting. Sam reviewed the meeting goals, which focused on refining the measure's narrative specifications based on the revisions discussed during the last TEP meeting draft dated May 24, 2022.

**Discussion**

*Guidance Section*

Sam shared the draft narrative statement for editing during the meeting, existing practice guidelines, and other imaging and clinical recommendation papers referencing AAA size. Panelists noted the differences in recommended imaging follow-up between the Society for Vascular Surgery's (SVS) practice guidelines on the care of patients with an abdominal aortic aneurysm (Chaikof, 2018) and the Managing Incidental Findings on Abdominal and Pelvic CT and MRI, Part 2: White Paper of the ACR Incidental Findings Committee II on Vascular Findings (Khosa, 2013). The TEP agreed that the quality measure should not prescribe the references for successful completion, noting that radiologists may base their recommendations on local (facility policy) or nationally evidence-based guidance.

The panel discussed the appropriateness of including both references in the guidance section of the measure. However, as they further examined the differences between these documents, the panel noted that the ACR white paper (Khosa, 2013) is five years older than the SVS guidance and vascular surgeons are routinely responsible for the clinical management of AAAs. Additionally, Dr. Kadom highlighted the zero percent risk for rupture of AAAs less than 4.0 cm (Aggarwal 2011) and those between 4.0 and 4.9 cm, maintaining a 0.5 percent to five percent rupture risk. In other words, the low rupture risk for both AAA size ranges and the SVS guidelines recommending ten-year and annual follow-up (respectively) coincide with rupture rates. Despite the TEP choosing to include the SVS guidance as the preferred measure guidance, both citations will be included (see the notes below on the discussion regarding evidence-based recommendation guideline examples).

Dr. Brook commented that while patients with AAA findings greater than 2.5 cm call for reimaging at specific times according to their size, they also consult with their primary care or vascular medicine doctor to address the clinical aspects of their AAA (e.g., having their vascular risk adjusted, learning about smoking cessation and lifestyle changes, and receiving lipid treatments). Dr. Brook suggested that the TEP define the metric captured by the quality measure, asking whether it should focus on imaging follow-up and clinical recommendations. The panelists decided that rather than requiring citations of the clinical recommendation for each AAA size, the measure guidance should contain the following

phrase: *Radiologists should recommend clinical referrals, comprising further counseling for any newly discovered AAA, such as AAA rupture risk, lifestyle factors, and available treatments.*

Dr. Heller asked the group whether it would be sufficient for the radiologist to report (yes/no) that the imaging and clinical recommendations are evidence-based or if meeting the measure should require documentation of the specific evidence used. Those on the call agreed that achieving the measure should only need a yes/no response that an evidence-based recommendation was made. Dr. Kadom remarked that including the reference information of the evidence used to make the recommendation would become onerous because each follow-up scenario is different (according to AAA size), imposing a measure specified for each AAA size. Thus, further emphasizing the importance of including the SVS's guidelines (Chaikof, 2018) in the measure's guidance section.

Dr. Kadom questioned the panel about the definitions appropriate for ensuring that the specifications capture the correct type of aortic aneurysm to meet the denominator. Specifically, should the measure define the AAA's classification and the view from which it was discovered (e.g., the AAA is infrarenal with the transverse diameter size of X and if it were on the axial or coronal view)? The panel decided that since it is a common assumption that AAA is either assessed on an axial or constructed axial image, which contains few differences, it is unnecessary to define it in the measure. The group agreed that unneeded complications would be avoided by excluding this degree of measure specificity. Dr. Heller also stressed that the measure, specified for *abdominal* aortic aneurysms, informs users it's not for thoracic or cerebral aortic aneurysms and, therefore, unnecessary to define its relation to the arteries.

#### *Purpose, Description, Denominator*

Reviewing the most current measure draft, the panel discussed comments and questions from the last meeting and agreed to the following updates.

The measure's purpose establishes this as a surveillance measure, signaling that it is not an outcome measure and is better described as an intermediate outcome measure. Those with a AAA equal to or greater than a 2.5 cm abdominal aorta must be 18 years or older. TEP members considered which exams to include in the denominator (i.e., abdomen only or all exams containing images of the abdomen, like the pelvis).

#### *Additional Measure Considerations*

Dr. Brook asked the TEP if the measure should collect data on whether the recommendation is for imaging or clinical follow-up. The panel considered if the measure should track every referral (imaging or clinical follow-up) or just those for imaging. Dr. Brook's concern is that the numerator may capture part of the evidence-based recommendation. For instance, a patient with AAA may be referred for imaging follow-up without the appropriate clinical consultation. Further, since the measure is tracking 2.5 cm or greater AAAs, there is an automatic recommendation for vascular clinical follow-up. Dr. Heller said that evidence-based recommendation utilization would improve by revising the numerator to track documentation of evidence-based clinical recommendations.

Dr. Lee commented that revising the measure to track whether patients with a 2.5 cm or greater AAA received the radiologist-recommended follow-up would make this an outcome measure that would provide more robust information on patient care and physician performance. He remarked that NLP

algorithms could extract data from the EHR to designate patients who received the recommended follow-up. Panelists agreed that such an outcome measure is technically feasible. However, it may be hard to track since the recommended follow-up might not occur for ten years. Dr. Chen confirmed that the current specifications do not require that imaging occurs. Sam reminded the group of the Closing the Recommendation Follow-up Loop on Actionable Incidental Findings (AIF) Measure Set and its outcome measure that tracks whether follow-up recommendations of AIFs occurred.

Dr. Kadom proposed developing a set of measures for improving the use of evidence-based recommendations for AAA. The set could include four metrics.

1. Measuring the use of evidence-based imaging and clinical recommendations. The radiologist made the recommendation. Appropriate for utilization at the practice level.
2. Assessing the occurrence of follow-up imaging or first-time clinical recommendations. Evaluating imaging follow-up occurrence would be limited to those with AAAs size 4.0 cm or more since the recommended imaging guidance for these findings occurs annually. This concept may be separated into two outcome measures.
3. Determining how well the recommendation was followed. Likely more appropriate for system-level measurement.
4. Examining the use of The U.S. Preventive Services Task Force's (USFSTF) Guidelines for AAA Screening.

The panel agreed that metrics three and four are outside their scope of work since the measure would be attributed to primary care or vascular medicine doctors.

Most radiology practices may feasibly collect measurement data from their EHRs, indicating those who received evidence-based recommendations for AAA. Radiology practices within large healthcare systems benefit by accessing system-wide EHRs, like Epic. These practices possess greater technical feasibility and access to patient information from other specialties within that system. For instance, a radiology practice may ascertain that an encounter with a vascular medicine doctor occurred. Unfortunately, radiology practices in systems that employ various (disconnected) EHR platforms lack the feasibility to confirm whether the radiologist's referral to see a vascular medicine doctor occurred.

Dr. Heller described his preference for the numerator to remain ambiguous by accepting any evidence-based recommendation documentation (clinical or imaging follow-up). Sam suggested that the specifications remain broad, but that data collection during testing may inform the type of recommendation in the report. Judy noted that the technical specifications would capture the recommendation in the report, but the record must contain the recommendation's reference. To ensure that the measure is feasible for most practices, Judy also confirmed that this measure(s) would undergo public comment. The feedback received during the comment period could influence the specifications and guidance.

Dr. Chen supported the development of two quality measures, one tracking imaging follow-up recommendations and the other for clinical follow-up. She noted that small practices with limited resources, compared to larger institutions, will have difficulty determining if the follow-up recommendation occurred (i.e., metric two). She further stressed the importance of making evidence-based recommendations, which are less costly to small practices. Dr. Brook opined that development

should focus on the record comprising an evidence-based recommendation, not its occurrence and that developing a measure confirming follow-up may be considered later.

The panel considered whether to separate metric one into two surveillance measures (one on imaging and the other on clinical follow-up), given CMS' removal of several radiology-focused measures leaving radiology practices with a dearth of measures to report to MIPS. Judy remarked that CMS would prefer a single measure, explaining that they would require a strong rationale for why these measures should be separate. Sam suggested leveraging the follow-up occurrence metric as a MIPS improvement activity, noting that practices less familiar with follow-up occurrence may build an infrastructure to support this aspect of care before drafting it as a quality measure. Judy suggested the panel more closely examine the Closing the Loop AAA outcome measure in the context of the outcome measure discussed during today's meeting. Three measures would be appropriate given the varying follow-up imaging recommendations according to AAA size.

Dr. Kadom closed today's meeting by summarizing the TEP's decisions. She described the measure as documenting two arms of follow-up recommendations for all patients, one on imaging recommendations based on the SVS guidance (Chaikoff, 2018) and the other on clinical referrals for rupture risk management. Panelists agreed that the outcome measures for AAA comprise the Closing the Loop measure for confirming recommendation completion (for AAAs greater than 4.0 cm) and a new measure for confirming the completion of the clinical recommendation with a vascular medicine doctor.

### **Next Steps**

1. Sam will summarize today's meeting and share it with the group. Based on the final version of the notes, she will revise the current narrative specifications and draft a strawman version of the clinical recommendation outcome measure.
2. Dr. Kadom and Sam will work on the measure drafts and share them with the panel for review.
3. Measures will enter the 30-day public comment period.