

**Health Technology Clinical Committee  
FINAL Findings and Decision**

**Topic:** Cardiac Magnetic Resonance Angiography (CMRA)

**Meeting date:** November 19, 2021

**Final adoption:** March 18, 2022

**Number and coverage topic:**

**20211119A** – Use of Cardiac Magnetic Resonance Angiography (CMRA) in Adults and Children

**HTCC coverage determination:**

CMRA is a **covered benefit** for adults or children with known or suspected coronary vessel anomalies or congenital heart disease.

CMRA is a **covered benefit with conditions** for stable symptomatic adults with known or suspected coronary artery disease (CAD).

**HTCC reimbursement determination:**

**Limitations of coverage:** CMRA should not be a first line diagnostic tool in patients with stable symptoms consistent with CAD. CMRA is covered with conditions for stable symptomatic adults with known or suspected CAD when the following conditions are met:

- In consultation with a cardiologist, and
- The patient is unable to tolerate or safely participate in other noninvasive anatomic or functional testing.

CMRA is not a covered service in coronary artery bypass graft (CABG) patients without CAD symptoms, or in those requiring cardiac lead placement unless cardiac vascular anomalies are suspected.

**Non-covered indicators:**

N/A

**Notes:**

Out of scope/data not reviewed for this decision:

- Cardiac stress MRI

**Related documents:**

- [Final key questions](#)
- [Final evidence report](#)
- [Meeting materials and transcript](#)

**Final**

**Agency contact information:**

| Agency                                  | Phone Number   |
|---|----------------|
| Labor and Industries                    | 1-800-547-8367 |
| Public and School Employees Health Plan | 1-800-200-1004 |
| Washington State Medicaid               | 1-800-562-3022 |

**HTCC coverage vote and formal action:**

***Committee decision***

Based on the deliberations of key health outcomes the committee decided that it had the most complete information: a comprehensive and current evidence report, public comments, and state agency utilization information. The committee decided that the current evidence on the use of cardiac magnetic resonance angiography (CMRA) in adults and children was sufficient to make a determination. The committee discussed and voted on the evidence for the use of CMRA in adults and children with known or suspected coronary vessel anomalies or congenital heart disease, and adults with known or suspected coronary artery disease. The committee considered the evidence, public comment and expert input, and gave greatest weight to the evidence it determined, based on objective factors, to be the most valid and reliable.

Based on these findings, the committee voted to cover CMRA for adults or children with known or suspected coronary vessel anomalies or congenital heart disease. They voted to cover with conditions CMRA for stable symptomatic adults (18 years old and older) with known or suspected coronary artery disease (CAD).

|   | Not covered | Covered under certain conditions | Covered unconditionally |
|---|-------------|----------------------------------|-------------------------|
| CMRA use for known or suspected coronary vessel anomalies or congenital heart disease | 0           | 0                                | 8                       |
| CMRA use for stable symptomatic adults with known or suspected CAD                    | 1           | 7                                | 0                       |

***Discussion***

The committee reviewed and discussed the available studies for use of CMRA in adults and children. Details of study design, inclusion criteria, outcomes, and other factors affecting study quality were discussed. A majority of committee members found the evidence sufficient to determine use of CMRA for being safer, more effective, or more cost-effective than comparators.

For CMRA in adults with stable symptoms with known or suspected CAD, the committee developed conditions for coverage.

### **Limitations**

Based on discussion and review of the evidence, CMRA is not a covered service in coronary artery bypass graft (CABG) patients without CAD symptoms, or in those requiring cardiac lead placement unless cardiac vascular anomalies are suspected.

### **Action**

The committee checked for availability of a Centers for Medicare and Medicaid Services (CMS) national coverage decision (NCD). There is no Medicare NCD for CMRA in adults and children at this time.

The committee discussed clinical guidelines identified for CMRA from the following organizations:

- Adults With Suspected CAD
  - National Institute of Health and Care Excellence (NICE) *Recent-onset chest pain of suspected cardiac origin: assessment and diagnosis*, (2016)
  - Expert Panel on Cardiac Imaging, American College of Radiology ACR *Appropriateness Criteria(®) Chronic Chest Pain-High Probability of Coronary Artery Disease*, (2017)
  - Expert Panel on Cardiac Imaging, American College of Radiology ACR *Appropriateness Criteria(®) Chronic Chest Pain Noncardiac Etiology Unlikely-Low to Intermediate Probability of Coronary Artery Disease*, (2018)
- Adults With Suspected Coronary Vessel Anomalies
  - American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines *AHA/ACC guideline for the management of adults with congenital heart disease: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines*, (2019)
  - Expert Panel on Cardiac Imaging, American College of Radiology ACR *Appropriateness Criteria(®) Known or Suspected Congenital Heart Disease in the Adult*, (2017)

The committee's determination is consistent with the noted guidelines. The HTCC determination included consideration of local, clinical expert considerations related to the complexities low, intermediate, and high risk, comparisons to other imaging technologies, and uncertainty of evidence for efficacy and cost-effectiveness. The quality of evidence assessment was either not performed or not reported for these guidelines.

The committee chair directed HTA staff to prepare a findings and decision document on use of CMRA in adults and children for public comment to be followed by consideration for final approval at the next committee meeting.

### **Health Technology Clinical Committee Authority:**

Washington State's legislature believes it is important to use a science-based, clinician-centered approach for difficult and important health care benefit decisions. Pursuant to chapter 70.14 RCW, the legislature has directed the Washington State Health Care Authority (HCA), through its Health Technology Assessment (HTA) program, to engage in an evaluation process that gathers and assesses

the quality of the latest medical evidence using a scientific research company that takes public input at all stages.

Pursuant to RCW 70.14.110, a Health Technology Clinical Committee (HTCC) composed of eleven independent health care professionals reviews all the information and renders a decision at an open public meeting. The Washington State HTCC determines how selected health technologies are covered by several state agencies (RCW 70.14.080-140). These technologies may include medical or surgical devices and procedures, medical equipment, and diagnostic tests. HTCC bases its decisions on evidence of the technology's safety, efficacy, and cost effectiveness. Participating state agencies are required to comply with the decisions of the HTCC. HTCC decisions may be re-reviewed at the determination of the HCA Director.