

MEDICAL POLICY STATEMENT	
Michigan Health Link	
Policy Name & Number	Date Effective
Fraction Flow Reserve from computer tomography (FFRct)- MI Health Link-MM-1558	07/01/2024
Policy Type	
MEDICAL	

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A. Subject

Fraction Flow Reserve from Computer Tomography (FFRct)

B. Background

Heart disease, with coronary artery disease (CAD) being the most common, is the leading cause of death for men and women. The traditional test in management of coronary artery stenosis is a procedure where the fractional flow reserve measures the blood pressure to determine adequate blood flow or blockage during an invasive coronary angiography.

A noninvasive alternative for stable symptomatic members with CAD is Heartflow Fraction Flow Reserve from Computer Tomography (FFRct), in which a digital 3-D model of the heart arteries is created to assist in determining restricted blood flow. Heartflow FFRct is intended to be used in conjunction with clinical history, symptoms, diagnostic tests, and the clinician's professional judgement.

C. Definitions

- **FFRct** – A mathematically derived quantity computed from simulated pressure, velocity, and blood flow information that was obtained from a 3D computer model derived from a coronary CT image.
- **Heartflow FFRct** – Post-processing software for the clinical quantitative and qualitative analysis of previously acquired computed tomography.

D. Policy

I. FFRct technology may be considered reasonable and necessary in the management of patients with symptomatic, stable ischemic heart disease (SIHD). For example, a member with stable angina pectoris would be a candidate for this procedure, but a member with unstable angina would not.

II. Procedure limitations

The safety and effectiveness of FFRct has not been evaluated for the following populations:

- A. Suspicion of acute coronary syndrome (where acute myocardial infarction or unstable angina have not been ruled out)
- B. Recent prior myocardial infarction within 30 days
- C. Complex congenital heart disease
- D. Prior coronary artery bypass graft (CABG) surgery
- E. Patients with a body mass index >35
- F. Patients who require emergent procedures or have any evidence of ongoing or active clinical instability, including acute chest pain (sudden onset), cardiogenic shock, unstable blood pressure with systolic blood pressure <90 mmHg, severe congestive heart failure (New York Heart Association [NYHA] III or IV) or acute pulmonary edema.

E. Conditions of Coverage
NA

F. Related Policies/Rules
NA

G. Review/Revision History

	DATE	ACTION
Date Issued	12/13/2023	New Policy. Approved at Committee.
Date Revised	03/27/2024	Updated references. Approved at Committee.
Date Effective	07/01/2024	
Date Archived		

H. References

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4. FFRct Software (HeartFlow, Inc.) for Evaluating Coronary Artery Disease. ECRI. March 15, 2019. Accessed March 8, 2024. www.ecri.org
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Independent medical review – 12/2020

The MEDICAL Policy Statement detailed above has received due consideration as defined in the MEDICAL Policy Statement Policy and is approved.