



# MEDICAL POLICY STATEMENT

## Marketplace

Policy Name & Number	Date Effective
Fraction Flow Reserve from computer tomography (FFRct)- MP-MM-1356	IN, GA, WV, KY: 01/03/2023 OH: 02/01/2023
Policy Type	
<b>MEDICAL</b>	

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Medical Policy Statements prepared by CareSource and its affiliates do not ensure an authorization or payment of services. Please refer to the plan contract (often referred to as the Evidence of Coverage) for the service(s) referenced in the Medical Policy Statement. If there is a conflict between the Medical Policy Statement and the plan contract (i.e., Evidence of Coverage), then the plan contract (i.e., Evidence of Coverage) will be the controlling document used to make the determination. According to the rules of Mental Health Parity Addiction Equity Act (MHPAEA), coverage for the diagnosis and treatment of a behavioral health disorder will not be subject to any limitations that are less favorable than the limitations that apply to medical conditions as covered under this policy.

### This policy applies to the following Marketplace(s):

<input checked="" type="checkbox"/> <b>Georgia</b>	<input checked="" type="checkbox"/> <b>Indiana</b>	<input checked="" type="checkbox"/> <b>Kentucky</b>	<input checked="" type="checkbox"/> <b>Ohio</b>	<input checked="" type="checkbox"/> <b>West Virginia</b>
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### Table of Contents

A. Subject .....	2
B. Background .....	2
C. Definitions.....	2
D. Policy .....	2
III. Conditions of Coverage .....	3
IV. Related Policies/Rules .....	3
V. Review/Revision History .....	3
VI. References .....	3
VII. State-Specific Information.....	3

## 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 test, 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 under the following conditions:

A. Symptomatic, stable ischemic heart disease (SIHD);

1. For example, a member with stable angina pectoris would be a candidate for this procedure; whereas a member with unstable angina would not be a candidate for this procedure.

II. Procedure limitations

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

1. Suspicion of acute coronary syndrome (where acute myocardial infarction or
2. unstable angina have not been ruled out);
3. Recent prior myocardial infarction within 30 days;
4. Complex congenital heart disease;
5. Prior coronary artery bypass graft (CABG) surgery;
6. Patients with a Body Mass Index >35; and
7. 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.



III. Conditions of Coverage  
NA

IV. Related Policies/Rules  
NA

V. Review/Revision History

	DATE	ACTION
<b>Date Issued</b>	01/06/2021	
<b>Date Revised</b>	10/12/2022	Updated references
<b>Date Effective</b>	GA, IN, KY, WV: Effective Date 01/01/2023 OH: 02/01/2023	
<b>Date Archived</b>		

VI. References

1. Budde R, Nous F, Roest S, et al. Non-Invasive Functional Coronary Artery Evaluation by CT-Derived Fractional Flow Reserve (FFRct) in Heart Transplant Patients. J Heart Lung Transplant. 2020;39(4S):S62.
2. Centers for Disease Control. (2020, June 22). Heart Disease Facts. Retrieved September 9, 2022 from [www.cdc.gov](http://www.cdc.gov).
3. Food and Drug Administration. (n.d.). DeNovo Classification Request for FFRctv. 1.4. Retrieved September 9, 2022 from [www.accessdata.fda.gov](http://www.accessdata.fda.gov).
4. ECRI. (2019, March 15). FFRct Software (HeartFlow, Inc.) for Evaluating Coronary Artery Disease. Retrieved September 9, 2022 from [www.ecri.org](http://www.ecri.org).
5. Hayes Inc. (2019, September 24). Noninvasive Computed Fractional Flow Reserve from Computed Tomography for Coronary Artery Disease. Retrieved September 9, 2022 from [www.hayesinc.com](http://www.hayesinc.com).
6. Heartflow. (n.d.). Heartflow. Retrieved September 9, 2022 from [www.heartflow.com](http://www.heartflow.com).
7. Knuuti J. 2019 ESC guidelines for the diagnosis and management of chronic coronary syndromes. European Heart Journal. 2020;41:407-477.
8. MCG. 26<sup>th</sup> ed. (2022). ACG - A-0001 - Cardiac Catheterization and Angiography. Retrieved September 9, 2022 from [www.careweb.careguidelines.com](http://www.careweb.careguidelines.com).
9. Nous F, Budde RPJ, Fairbairn TA, et al. Temporal changes in FFRCT-Guided Management of Coronary Artery Disease - Lessons from the ADVANCE Registry. J Cardiovasc Comput Tomogr. 2020.
10. Pontone G, Guaricci AI, Palmer SC, et al. Diagnostic performance of non-invasive imaging for stable coronary artery disease: A meta-analysis. Int J Cardiol. 2020;300:276-281.

VII. State-Specific Information

- I. Georgia
  1. Effective: 01/01/2023
- II. Indiana
  1. Effective: 01/01/2023

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



- III. Kentucky
  - A. Effective: 01/01/2023
- IV. Ohio
  - 1. Effective: 02/01/2023
- V. West Virginia
  - A. Effective: 01/01/2023

*Independent medical review – 12/2020*