



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 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:

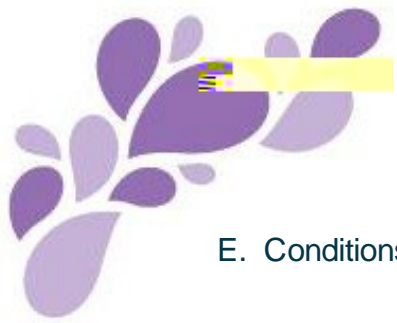
A. Symptomatic, stable ischemic heart disease (SIHD);

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 has not been evaluated for the following populations:

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

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