Coding for RFR (Resting Full-Cycle Ratio) and resting FFR (Pd/Pa without hyperemia)

BACKGROUND:

The FDA has granted clearance to market two approaches to perform a physiological measurement in the coronary arteries that do not involve the use of a pharmacological stress agent (typically adenosine). These methods are referred to as RFR (Resting Full-Cycle Ratio) and resting FFR (Pd/Pa without hyperemia).

Consistent with traditional FFR, RFR and resting FFR require the use of a specialized pressure wire but are two different algorithms. The clinician advances this specialized pressure wire into the coronary arteries and across the target lesion to evaluate flow. RFR identifies the lowest point of least resistance across five heartbeats and averages the five points to calculate the measurement. Resting FFR is calculated by averaging every Pd/Pa ratio in the heart cycle for 3-5 cycles and then averages the values for the measurement. The resulting measurements provide the clinician with information regarding the severity of the lesion, to assist in determining appropriate therapy options.

Q: RFR and Resting FFR are non-hyperemic indices that do NOT require the step of administering a pharmacological stress agent, like FFR. The code descriptors for the existing FFR codes (93571, 93572) specifically state that pharmacological induced stress is included. What would be the appropriate way to code an FFR procedure that did not involve pharmacological induced stress?

A: The preponderance of the work associated with RFR and resting FFR (or Pd/Pa without hyperemia) is similar enough to be considered performing an FFR study. Therefore, the existing codes are applicable - however, as the existing codes specifically state that the work of pharmacological induced stress is included, for those cases not involving pharmacological induced stress, modifier -52, signifying a “reduced level” of service has been provided is to be appended to the applicable existing FFR code(s) (93571, 93572).

Code descriptors for existing FFR codes -

93571 - Intravascular Doppler velocity and/or pressure derived coronary flow reserve measurement (coronary vessel or graft) during coronary angiography including pharmacologically induced stress; initial vessel (List separately in addition to code for primary procedure)

93572 - Intravascular Doppler velocity and/or pressure derived coronary flow reserve measurement (coronary vessel or graft) during coronary angiography including pharmacologically induced stress; each additional vessel (List separately in addition to code for primary procedure)

Modifier 52 – Reduced service