QAngio XA 3D/ QFR imaging software (and alternative technologies identified during scoping) for assessing the functional significance of coronary obstructions during diagnostic invasive coronary angiography

QAngio XA 3D/QFR is imaging software that could be used in people with stable chest pain of recent onset who are referred for diagnostic invasive coronary angiography (ICA). ICA provides information on the anatomical structure of the heart and whether any coronary arteries are blocked or narrowed. It is used to help confirm a diagnosis of stable angina. QAngio XA 3D/QFR imaging software can be used in addition to ICA and allows for non-invasive functional assessment of coronary artery obstructions (stenoses). It is claimed that QAngio XA 3D/QFR imaging software is more accurate than ICA alone for indicating whether intermediate anatomical obstructions are functionally significant and if revascularisation should be considered. Consequently, QAngio XA 3D/QFR may help avoid unnecessary referrals for percutaneous coronary intervention compared with the use of ICA alone. In contrast to invasive fractional flow reserve (FFR) measurement which is sometimes used during percutaneous coronary intervention, QAngio XA 3D/QFR imaging software allows for FFR measurement without the need for a pressure wire and drugs that increase blood flow (vasodilator drugs). The software is installed on a laptop or workstation that is connected to the ICA system. The analysis is done on site and is claimed to take about 4-5 min.

The NICE diagnostics assessment programme will assess the clinical and cost-effectiveness of the QAngio XA 3D/ QFR (and any other alternative technologies identified during scoping) in order to make recommendations on its use in the NHS.

Specialist committee member disciplines

Consultant cardiologist

Consultant interventional cardiologist

Interventional radiographer

Clinical nurse specialist in cardiology/cardiac nurse specialist (with an interest in functional imaging/ cardiac angiography)