



NHS England and NHS Improvement mandate adoption of AI-powered Heartflow Analysis to fight coronary heart disease

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The new MedTech Funding Mandate will accelerate adoption of Heartflow's technology across hospitals in England

The Heartflow Analysis helps reduce reliance on unnecessary invasive diagnostic procedures such as angiograms, and has been found to reduce hospital waiting times from months to weeks

Funding for the AI-powered coronary heart disease diagnostic technology also extended under NHS England's Innovation and Technology Payment Programme

REDWOOD CITY, Calif. – January 26, 2021 — Heartflow, Inc., a leader in revolutionizing precision heartcare, today announced that the National Health Service England (NHSE) and NHS Improvement have mandated that English hospitals adopt the AI-powered Heartflow FFR_{CT} Analysis to fight coronary heart disease (CHD), the leading cause of death in the UK.

The Heartflow Analysis has been selected as one of the innovations supported by NHSE's new MedTech Funding Mandate. The Mandate, which will begin 01 April 2021, aims to provide innovative medical devices and digital products to NHSE patients faster, and is a key policy in helping to improve patient care and reduce costs for the public health service. The Mandate includes the option to extend funding for up to an additional three years through 31 March 2024.

The news comes as Heartflow announced it also has received extended funding through NHSE's Innovation and Technology Payment Programme ([ITP](#)) for a third year. The programme seeks to accelerate the uptake of innovations in the health service by removing financial barriers, with funding available until 31 March 2021.

The Heartflow Analysis streamlines the diagnostic experience for patients – often eliminating invasive diagnostic procedures for those who do not need them. It also helps ensure those who do need invasive procedures are swiftly and accurately diagnosed. The technology limits redundant non-invasive diagnostic testing, [reduces patient time in hospital and](#) face-to-face clinical contact, and helps ensure that hospital visits for those who do need them are streamlined, which is particularly crucial during the Covid-19 pandemic.

The Heartflow Analysis takes data from a coronary CT angiography (CTA) scan and uses deep learning technology and highly trained analysts to create a personalised, digital 3D model of the patient's coronary arteries. Its algorithms solve millions of equations to simulate blood flow in a patient's arteries to help clinicians assess the functional impact of any blockages.

The National Institute of Health and Care Excellence (NICE) advocates a CTA-first approach to diagnosing CHD. The Heartflow Analysis has been declared a best practice non-invasive option for patients in [recent updates](#) to NICE's guidance, stating that the technology should be considered as an option for patients with stable, recent onset chest pain who are offered CTA. Heartflow plays a central role in providing clinicians greater confidence in their diagnoses, [while reducing the time to diagnosis for patients](#).

Dr Anna Beattie, Consultant Cardiothoracic Radiologist at Newcastle Hospitals, says:

"We have used the Heartflow Analysis in Newcastle Hospitals since August 2018. It has contributed to significant changes in the way we diagnose patients and use hospital resources. Prior to adopting the technology, we used a coronary CT-first approach for 28% of all patients referred to our rapid access chest pain clinic. Now that has risen to more than 45% and the number of diagnostic-only invasive angiograms we perform has reduced. The Heartflow Analysis is a great tool to supplement a CT-first approach by providing functional information on top of the anatomical information from a CT scan. This is great for patients as it reduces unnecessary risks and means they [spend less time at the hospital](#)."

Dr Timothy Fairbairn, Consultant Cardiologist at Liverpool Heart and Chest Hospital says:

"In our practice, 4 out of 5 patients who have a Heartflow Analysis avoid the need for further invasive testing. This enables us to treat patients more quickly, leading to an improved patient experience and has had a positive impact on our waiting times for other non-invasive stress tests."

"The MedTech Funding Mandate allowed us to have a positive conversation with our commissioners, emphasising the real benefits our practice has experienced and secure funding for continued use of the Heartflow Analysis going forward. The MedTech Funding Mandate and funding commitment from commissioners means NHS hospitals will be able to continue to offer the best available technologies in our approach to the diagnosis and management of CHD for patients."

Heartflow's technology is already used in 60 NHSE hospitals. The extension of the ITP and introduction of the MedTech Funding Mandate will allow hospitals to continue providing cutting-edge care to patients and accelerate adoption of the technology in hospitals throughout the country.

Lance Scott, Chief Commercial Officer at Heartflow concludes: "The new MedTech Funding Mandate helps bring world-leading medical innovations to patients across NHSE hospitals. The Heartflow Analysis is already available in a number of English hospitals, and today's announcement, coupled with the immediate funding unlocked through the ITP programme, means we can rapidly scale and ensure more clinicians across England have access to the Heartflow Analysis to non-invasively diagnose CHD and formulate treatment plans for their patients."

"Since 2018, we've processed more than 15,000 Heartflow Analyses for NHSE patients, helping cardiology services prioritise invasive treatments for those who need it most. This has also contributed to a [better patient experience](#), [reducing unnecessary procedures](#) and the [time to diagnosis](#). Many patients can also receive a diagnosis and treatment plan after just one trip to the hospital, helping to reduce risks and face-to-face contact time during the ongoing pandemic."

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About the Heartflow FFR_{CT} Analysis

The Heartflow Analysis is a non-invasive, cardiac test for stable symptomatic patients with CAD, the leading cause of death worldwide. Starting with a standard coronary CTA, the Heartflow Analysis leverages deep learning and highly trained analysts to create a digital, personalized 3D model of the heart. The Heartflow Analysis then uses powerful computer algorithms to solve millions of complex equations to simulate blood flow and provides FFR_{CT} values along the coronary arteries. This information helps physicians evaluate the impact a blockage may be having on blood flow and determine the optimal course of treatment for each patient. A positive FFR_{CT} value (≤ 0.80) indicates that a coronary blockage is impeding blood flow to the heart muscle to a degree which may warrant invasive management.

Data demonstrating the safety, efficacy and cost-effectiveness of the Heartflow Analysis have been published in more than 400 peer-reviewed publications, including long-term data out to five years. The Heartflow Analysis offers the highest diagnostic performance available from a non-invasive test.¹ To date, clinicians around the world have used the Heartflow Analysis for more than 75,000 patients to aid in the diagnosis of heart disease.

About Heartflow, Inc.

Heartflow, Inc. is a leader in revolutionizing precision heartcare, uniquely combining human ingenuity with advanced technology. Our non-invasive Heartflow FFR_{CT} Analysis leverages artificial intelligence to create a personalized 3D model of the heart. By using this model, clinicians can better evaluate the impact a blockage has on blood flow and determine the best treatment for patients. Our technology is reflective of our Silicon Valley roots and incorporates decades of scientific evidence with the latest advances in artificial intelligence. The Heartflow FFR_{CT} Analysis is commercially available in the United States, Canada, Europe and Japan. For more information, visit www.Heartflow.com.

1. Driessen, R., et al. Comparison of Coronary Computed Tomography Angiography, Fractional Flow Reserve, and Perfusion Imaging for Ischemia Diagnosis. J Am Coll Cardiol. 2019;73(2),161-73.