

HIPS/24/31 - Scottish Cardiometabolic Assessment and Risk Determination: SCOTCARD

The ASSIGN risk score, developed in Scotland in 2006, is used in NHS practice to estimate a person's 10- year risk of heart attacks and strokes. It helps guide decisions on preventive treatments such as blood pressure and cholesterol-lowering medications. We recently partnered with the Scottish Government to update this tool, resulting in ASSIGN version 2.0 — a fairer and more accurate score tailored to Scotland's population. However, healthcare needs have changed. While rates of heart attacks are declining, conditions such as heart failure, type 2 diabetes, chronic kidney disease, peripheral vascular disease, and abdominal aortic aneurysm are becoming more common due to ageing and rising obesity. These serious conditions are often interconnected, yet current risk tools focus too narrowly on cardiovascular events alone. SCOTCARD aims to position Scotland at the forefront of prevention by expanding the scope of risk prediction to include a wider range of cardiometabolic diseases. Using large-scale datasets, SCOTCARD will apply advanced statistical and machine learning methods to predict who is at highest risk across multiple conditions. This integrated approach will help GPs identify high-risk patients earlier, tailor treatment more effectively, and decide when to screen for diseases such as heart failure or diabetes. By working closely with NHS stakeholders, patients, and the Scottish Government, SCOTCARD is designed for national implementation. It will support earlier, smarter, and fairer prevention strategies, reduce avoidable disease, and ensure healthcare resources are used where they have the greatest benefit for patients and the NHS.