



Dear Colleague(s)

Cardiovascular (CVD) Risk Assessment – ASSIGN v2.0

In Scotland, CVD is the second largest cause of overall disease burden in our country, and the second most common cause of death after cancer. It causes more than 25% of all deaths in Scotland, many of which are in the under 75 years category and considered avoidable deaths, meaning that they are preventable or treatable through public health interventions or timely and effective healthcare.

To address this issue, we have commenced a national CVD Risk Factors Programme. This programme has an overarching stretch aim of reducing avoidable¹ CVD deaths by 20% in 20 years. More detail on the suite of work launching under the programme can be found in the attached **Annex B**.

One of the first actions was to work on a refresh of ASSIGN, which is the Scottish calculator used to estimate the 10 year risk of cardiovascular disease (coronary heart disease and stroke) in those without existing cardiovascular disease. The reasons for the refresh and the key differences of the new version 2.0 are described fully in **Annex A**.

In a separate letter from the Primary Care Directorate within Scottish Government, you will have had communication about the new Cardiovascular Disease Prevention Enhanced Service (DES), which will commence from April 2025. For practices who opt into the DES, the use of ASSIGN v2.0 is part of the CVD assessment bundle. For practices that do not opt into the DES, but are still working in a more general way to optimise CVD health for their practice populations, there will still be the advised use of ASSIGN v2.0 to guide evidence based clinical care to reduce cardiovascular risk.

At present we continue to have circa 506 practices on EMIS PCS (with some of these with Bluebay CT/INPS) and 369 on Vision. Practices with Vision or INPS have access to the embedded ASSIGN v1.5. However, practices without this have always had to access ASSIGN via an old standalone website, which is no longer running, having had a major fault in November 2024.

From the Chief Medical Officer

Professor Sir Gregor Smith

Thursday, 10th April 2025

To:

For action

Chief Executives, NHS
Boards Medical Directors,
NHS Boards Primary
Care Leads, NHS Boards
Directors of Nursing &
Midwifery, NHS Boards
Chief Officers of
Integration Authorities
Directors of Pharmacy
Directors of Public Health
General Practitioners
Practice Managers
Practice Nurses
CTAC Services

For information

Chairs, NHS Boards
Area Drug and
Therapeutics Committee
Collaborative
(ADTCC)(HIS)
CHSS
BHF
Diabetes Scotland

Further Enquiries

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CVD Risk Factor

Programme:
PPC Programme
Management Office

¹ Deaths which are considered either preventable or treatable through public health interventions or timely and effective healthcare (under 75 yrs).



We recognise that it would be preferable for all GP teams to move simultaneously to the use of ASSIGN v2.0, with the GP IT codes for ASSIGN available at the same time as the launch, and an integrated version in all GP IT systems. Unfortunately, due to the original website malfunction, this has not been possible. In order that users of the website version have access to a CVD risk calculator, we are launching this as soon as possible, with other relevant updates to follow.

We have requested updated SNOMED CT and GP IT codes to support the accurate recording of CVD risk linked to ASSIGN v2.0. These will be available from May 2025 and will be distributed at that point.

Therefore the interim ask and advice is:

- ASSIGN v2.0 is now available on the RDS platform. The URL for which remains <https://assign-score.com/>
- This will allow EMIS practices without an embedded calculator to have a website based CVD risk assessment calculator to use and guide clinical care. This will also allow secondary care clinicians to have access to a calculator again.
- For practices with an embedded ASSIGN v1.5 (whether opting into the DES, or not) we recognise that until the SNOMED and GP IT codes are ready in May, it may be preferable to use the older v1.5 embedded calculator. Whilst this is not ideal, practices can opt to use either the old embedded calculator or the new RDS based calculator. However, once the codes are provided we ask all practices to use the new RDS ASSIGN v2.0 (to guide best evidence based clinical care).
- Our medium term aim is that once the GP IT situation becomes clearer again, we will work with the Right Decision Service to develop a service integration with GP IT systems.
- Please distribute this information across your clinical systems and teams, to advise them of these changes.

Yours sincerely



Professor Sir Gregor Smith
Chief Medical Officer

Annex A

ASSIGN Refresh from v1.5 to v2.0

- The build of the ASSIGN v2.0 has been undertaken with Healthcare Improvement Scotland (HIS) on the Right Decision Service (RDS) platform. This has enabled the registration of the calculator with the Medicines and Healthcare products Regulatory Agency (MHRA) as a Class 1 medical device in accordance with current UK legislation.
- The Scottish Index of Multiple Deprivation dataset used in the previous version of the ASSIGN calculator (SIMD 2012) has been updated in this version, to the most recent dataset (SIMD 2020).
- ASSIGN v2.0 has also undergone a re-centering and updating of baseline hazards, based on contemporary cohort studies (UK Biobank and Generation Scotland). This was undertaken to reflect changing trends in population cardiovascular disease event rates since 2006. This process did not alter the coefficients for the individual cardiovascular disease risk factors. Rheumatoid arthritis has now been removed as a variable within the calculator. Further details are available here: <http://heart.bmj.com>.
- HIS Scottish Health Technologies Group assessed the Scottish level population impact of recalibration of the ASSIGN score, at varying thresholds. This established that, for ASSIGN v2.0, maintaining the 20% threshold would result in 551,408 fewer people identified as at high risk.
- In light of this recalibration, the threshold defining 'high risk' was re-considered by the CVD Risk Factors Steering Group, chaired by CMO. They considered options and likely impact and also noted that lowering to a 10% threshold would align with the [current NICE guidelines \(NG238 2023\)](#) and was an overall straightforward threshold to interpret.
- Therefore, the new 10% threshold was approved and the ASSIGN v2.0 calculator has the 10% threshold built into the outputs.
- To note – *SIGN 149: Risk estimation and the prevention of cardiovascular disease (2017)*, recommends a 20% threshold (linked to v1.5 of ASSIGN). This guideline is planned for an update and this is in progress with the SIGN team. In the interim, there is a signpost in the online guideline to the ASSIGN changes.

Annex B

Information for GMS and HSCPs (March 2025)

What is the CVD Risk Factors Programme?

The CVD Risk Factors programme is a national programme focusing on improving identification and management of clinical risk factors for CVD (high blood pressure, high blood lipids, high blood sugar, obesity, and smoking). The programme is led by a CVD Steering Group chaired by the Chief Medical Officer and is part of our drive on prevention to reduce the burden of disease in Scotland.

The earliest point of prevention is to help our population be healthy and stay healthy. A new Population Health Framework for Scotland is being published this Spring to look at many aspects of this. However, we need to complement this with the next layer of prevention to detect risk factors as quickly as we can and to help people to reduce these.

Mission and Stretch Aims for the CVD Risk Factors Programme:

- To reduce avoidable CVD deaths by 20% in 20 years in Scotland leading to improved life and healthy life expectancy for all. Avoidable CVD deaths are deaths in people aged under 75 which are considered either preventable or treatable through public health interventions or timely and effective healthcare.
- Through enhanced proportional universalism, increase the identification and management of those with higher risk of cardiovascular disease, thus reducing associated health inequalities.
- Improve early identification of key risk factors and work with people to effectively manage these either to reverse or lower their risks or by preventing an escalation to more significant disease.
- By reducing risks earlier, this will prevent conditions escalating to their acute or chronic stages and support sustainability of our health and social care systems.

Key Workstreams

Workstream 1: Information & Awareness (Public and Community)

To ensure that the public and communities have a better understanding of CVD Risk Factors via clear information routes and messaging; citizens are enabled to self-identify their risk level, implement self-care via lifestyle approaches, and know where and when to access healthcare services for further investigation and early management. See the CVD hub on NHS Inform - [CVD Hub](#)

Workstream 2: Transforming Care Models of Care

To improve the models of care for the identification and management of significant health harming and modifiable risk factors - high blood pressure, high blood lipids; high blood sugar; obesity; and smoking.

Core narrative for the programme:

- Focus on Risks: Find>Optimise>Reduce
- Identification and management of any one risk factor > should lead to the consideration of all CVD related risk factors
- Every Contact Counts – always consider CVD risk factors, possibilities for opportunistic checks, conversations about risk factors
- The use of ASSIGN v2.0 in the recommended cohorts
- Reaching the missing – people with the highest risks are likely to be those who are unable to use our services as they are routinely structured. We must do more to reach them, to work in different ways e.g. beyond the practice doors

Supporting change across Primary and Community Care



Tools and Finding Out More

1. CVD Toolkit on Right Decision Scotland (RDS) – <https://rightdecisions.scot.nhs.uk/cvdprevention>
2. ASSIGN v2.0 – <https://assign-score.com/>
3. CVD Hub on NHS Inform - [CVD Hub](#) (A weight management hub is also being created on NHS Inform)
4. Quality Prescribing Guidance on CVD risk factors – in development and will be cascaded out in the future and embedded as a link via the CVD Toolkit on RDS
5. SIGN 149 – will be updated
6. New SIGN Prevention and Remission of Type 2 Diabetes - [Prevention and remission of type 2 diabetes \(SIGN\) | Right Decisions](#)
7. Webinars and education resources will be launched soon and cascaded via email/newsletter.

If you would like to find out more about the programme or have specific questions – please contact NSS.ppc@nhs.scot

We will use all current distribution lists to ensure that our future newsletters are cascaded to you all.