

# Project scope: Home blood pressure monitoring

17 December 2024

## Research question

What is the clinical effectiveness, safety, cost effectiveness and patient experience of home blood pressure monitoring in people with suspected or confirmed hypertension, compared with routine care?

## Inclusion criteria

The selection of studies for inclusion in the literature review element of the project will be based on the following criteria:

<b>Population</b>	Adults (18 years and older) who have suspected high blood pressure (hypertension) or confirmed hypertension and require monitoring for management of their condition.
<b>Intervention</b>	Home or remote blood pressure monitoring (for example, telemonitoring), inclusive of any additional supporting digital applications.
<b>Comparator</b>	Routine care, such as face-to-face blood pressure monitoring through attending appointment(s) at their GP practice.
<b>Outcomes</b>	<p>Patient</p> <ul style="list-style-type: none"> <li>• Blood pressure level (including controlled to target (140/90))</li> <li>• Incidence of stroke(s), myocardial ischemia, ischaemic heart disease.</li> <li>• Incidence premature cardiovascular mortality.</li> <li>• Incidence premature cardiovascular morbidity.</li> <li>• Medication initiation and adherence.</li> <li>• Psychological outcomes (for example, anxiety).</li> </ul> <p>System</p> <ul style="list-style-type: none"> <li>• Time to treatment initiation.</li> <li>• Hospital admission(s) and referral.</li> <li>• Number of appointments with clinical staff.</li> </ul>

	<p>Cost effectiveness</p> <ul style="list-style-type: none"> <li>• Costs (intervention and comparator).</li> <li>• Cost per outcome measure (for example, quality adjusted life-year (QALY)).</li> </ul> <p>Safety</p> <ul style="list-style-type: none"> <li>• Adverse events.</li> </ul> <p>Equality</p> <ul style="list-style-type: none"> <li>• Factors impacting equitable and wider access (for example, rurality, Scottish Index Multiple Deprivation, cuff diameter).</li> </ul> <p>Experience</p> <ul style="list-style-type: none"> <li>• Acceptability (including convenience) and concordance.</li> </ul> <p>Sustainability</p> <ul style="list-style-type: none"> <li>• Travel time.</li> <li>• Equipment disposal.</li> </ul>
<b>Limits</b>	English language

## Planned activities

SHTG have agreed on the following activities to support the development of SHTG Recommendation on the use at home blood pressure monitoring for suspected or confirmed hypertension:

- A comprehensive review of published clinical effectiveness, safety and cost effectiveness evidence.
- A review of the literature relating to patient issues associated with hypertension and monitoring using home blood pressure monitors.
- Engagement and input (where possible) with patient groups.
- Development of an economic and/or cost model for NHSScotland (the type of model will depend on data availability).
- A peer-review exercise to give topic experts an opportunity to comment on the review of the evidence and the modelling work. A consultation exercise to give topic experts an opportunity to comment on draft recommendations.

## End products

At the end of the project, SHTG will publish:

- An SHTG Recommendation on the use of home blood pressure monitoring in people with suspected or confirmed hypertension. The Recommendation will include a review of the evidence on clinical effectiveness, safety, cost effectiveness and patient experience.
- A plain language summary.

## Timescales (approximate)

June 2025