

Improving Home Blood Pressure Monitoring Through Digital Self-Service

A lightweight digital tool that calculates home blood pressure averages and lets patients submit their readings straight to the practice.



Background

Home blood pressure monitoring is widely used across primary care to support the diagnosis and management of hypertension. Patients are asked to take a series of readings at home and submit the results to their GP practice for review.

Traditionally, readings are submitted by paper, telephone, email or online consultation, and practice staff or clinicians then manually calculate the average before a clinical decision can be made. This is time-consuming and introduces the potential for calculation errors.

Existing tools such as SystmOne questionnaires, PATCHS templates and online consultation forms can collect readings but often don't automatically calculate the average. As practices transition from PATCHS to Systmconnect, there is a growing need for tools that plug into websites and work alongside current systems.

The Challenge

- ◆ Patients submitted multiple readings in a format that varied from person to person.
- ◆ Staff were spending time manually calculating averages from submitted readings.
- ◆ Existing collection methods did not always calculate the average blood pressure automatically.
- ◆ Practices needed a solution that worked regardless of their online consultation platform.
- ◆ Patients needed a simple and accessible way to provide accurate information.

The Solution

PHASE 1 Standalone Blood Pressure Average Calculator

Users enter a series of home blood pressure readings and the tool automatically calculates the average result, in line with recognised home blood pressure monitoring processes. It was designed to:

- ◆ Reduce manual calculations
- ◆ Improve consistency
- ◆ Minimise the risk of averaging errors
- ◆ Make home monitoring easier

Available on the Wakefield Practice Resource Page — [Blood Pressure Averages](#)

Access to the wider Wakefield Practice Resource SharePoint site is required for some supporting resources, guidance materials and implementation information. However, the Blood Pressure Averages tool itself can be accessed directly via the link above.

PHASE 2 Website-integrated patient submission tool

Building on the success of the standalone calculator, a second version was developed for integration into GP practice websites. It creates a simple self-service pathway that can be used at any time, without specialist software, and works alongside a range of online consultation systems. This version enables patients to:

- ◆ Enter their blood pressure readings online
- ◆ Automatically calculate their average results
- ◆ Submit the calculated results directly to the practice by email

Live example — Stanley Health Centre. The tool is embedded within the practice website, letting patients calculate and submit their home readings through a streamlined digital process. [View the live tool →](#)

Innovation

The project shows how relatively small digital solutions can address everyday challenges in primary care. Rather than replacing existing systems, the tool complements them by providing functionality that was previously unavailable or required manual intervention. The website version is particularly valuable because it:

- ◆ Supports practices regardless of their consultation provider
- ◆ Reduces reliance on manual calculations
- ◆ Gives patients immediate feedback on their average readings
- ◆ Creates a consistent submission process
- ◆ Is easy to deploy and maintain

Benefits

For Patients	For Practice Staff	For Clinicians
◆ Simpler recording and submitting of readings ◆ No need to manually calculate averages ◆ Confidence that readings were submitted correctly ◆ Convenient access through the practice website	◆ Reduced administrative workload ◆ Less time spent calculating averages ◆ More consistent information from patients ◆ Streamlined handling of monitoring requests	◆ Average readings available immediately ◆ Reduced risk of calculation errors ◆ Faster review of patient data ◆ Improved consistency of submitted information

User Feedback

The response from practice staff has been overwhelmingly positive , highlighting the simplicity of the tool and the reduction in time spent manually calculating averages. Common feedback has included:

- ◆ Easier review of home blood pressure readings
- ◆ Reduced administrative workload
- ◆ Improved consistency of information received
- ◆ Greater confidence that averages are correct
- ◆ A straightforward process, easy to explain to patients

Adoption beyond the original Practice

As practices review and change their online consultation platforms, some have identified the website-based calculator as a useful, supplier-independent alternative. This flexibility has driven adoption beyond the original site, demonstrating the wider applicability of the solution.

Lessons learned

Small digital improvements make a big difference 	Solving a real user problem drives adoption 	Simple solutions have the biggest impact 	Website-based tools add flexibility across clinical systems 	Build, test, improve, repeat
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In Summary

The blood pressure average calculator began as a simple answer to a common problem: patients submitting readings that require staff to calculate an average before a clinical review. It evolved into a patient-facing digital service that lets patients calculate and submit results directly from practice websites.

By reducing administrative effort, improving consistency and supporting a more streamlined patient journey, the tool shows how practical digital innovation can improve both patient experience and operational efficiency in primary care. The growing interest from other practices highlights the potential for scalable digital solutions that address everyday challenges across the NHS .