

**Supplementary data 3: Detail of responses within the six emergent themes derived from free-text feedback from professional users**

What went well	Themes arising from free text comments	What could be improved
<p>Encouraged and/or motivated patients to:</p> <ul style="list-style-type: none"> <li>• Acknowledge the presence of a health issue requiring management</li> <li>• Take ownership/responsibility for (monitoring) their health</li> <li>• Feel more involved and/or in control of their health management</li> <li>• Make lifestyle changes</li> <li>• Take their medication</li> </ul> <p>[12x individuals; 4 nurses, 2 HCA, 2 GPs, 1x administrator and 3 CTFs]</p>	<p>System empowers patients and puts them in control of their health/condition</p>	<p>Doubt about the educational value for patients [1x GP]</p>
<p>Saved (nurses and GP) appointments (particularly AIM01/02/03) and, as a result:</p> <ul style="list-style-type: none"> <li>• Saves patients time</li> <li>• Saves resources</li> <li>• Reduces patient inconvenience</li> </ul> <p>Reduced waiting list for ABPM Enhanced value of appointments that did occur [13x individuals; 5x nurses, 3x HCAs, 1x GP and 4x CTFs]</p>	<p>Use of appointments</p>	<p>Increased contact time with nurses and GPs due to anxieties about e.g. BP readings No time saved once patient set up (can take more than one 10 minute appointment) and reviewing data are considered Wasted appointments if patients change their mind about being involved Duplication through problems receiving texts Failure of patients to return equipment e.g. sphygmomanometer and requiring 'chasing' [9x individuals; 5x GPs, 1x nurse, 1x HCA, 1x independent pharmacist prescriber and 1x CTF]</p>
<p>Patients and primary care clinical users find Flo easy to use [7x individuals; 4x nurses, 1x GP, 1x patient services manager and 1x CTF]</p>	<p>Ease of use</p>	<p>Patients struggled with:</p> <ul style="list-style-type: none"> <li>• Using sphygmomanometer</li> <li>• Using Flo</li> <li>• Submitting answers that were recognised</li> </ul> <p>Clinicians (possibly those in small practices in particular) struggled with:</p> <ul style="list-style-type: none"> <li>• Setting up the patients on protocols</li> <li>• Logging on</li> <li>• Tailoring protocols to individual patients' preferences</li> <li>• Cross-covering colleagues' patients</li> </ul> <p>[10x individuals; 6 GPs, 1x nurse, 1x HCA, 1x clinical administrator and 1x CTF]</p>
<p>Patients:</p> <ul style="list-style-type: none"> <li>• Are happy and interested to be involved</li> <li>• Value the feedback given</li> <li>• Appreciate the flexibility e.g. fitting submitting readings around complex/variable life and work</li> </ul> <p>Primary care clinical users:</p> <ul style="list-style-type: none"> <li>• Enjoyed being able to send simple messages</li> </ul>	<p>Acceptability of the system</p>	<p>Patients:</p> <ul style="list-style-type: none"> <li>• Not interested in this type of service delivery, resulting in failure to respond to messages</li> <li>• Become anxious upon using the system</li> </ul> <p>Clinicians:</p> <ul style="list-style-type: none"> <li>• Too complex</li> <li>• Increased work</li> <li>• Takes too long to get patients</li> </ul>

<ul style="list-style-type: none"> <li>• Manage patients using the telephone based on the information that had been submitted, rather than having to offer face-to-face appointments</li> <li>• Valued the space it provided for e.g. nurses to seek advice from GP regarding best ongoing management</li> <li>• Appreciated all readings being on record</li> <li>• Liked the simplicity in working out an average blood pressure</li> </ul> <p>For BP monitoring protocols a significant advantage was elimination of the white coat effect thus readings perceived to be more accurate.</p> <p>[21x individuals; 6x nurses, 4x HCAs, 2x GPs, 1x patient services manager, 2x clinical administrators, 1x independent pharmacist prescriber and 5x CTFs]</p>		<ul style="list-style-type: none"> <li>• started on the protocols</li> <li>• Returned readings were unreliable</li> <li>• Uncertain of benefit over traditional methods</li> </ul> <p>Technical problems included:</p> <ul style="list-style-type: none"> <li>• Patient failure to receive or to send text messages</li> <li>• Poor mobile reception</li> </ul> <p>Suggestions for development:</p> <ul style="list-style-type: none"> <li>• Be selective about choosing patients</li> <li>• Integrate into electronic patient records</li> <li>• Ability to track patients once they had finished a protocol</li> <li>• Reliable printing of graphs</li> <li>• Facility to choose type of presentation of data to improve ease of entering into medical records</li> <li>• Alternative means for communication (e.g. landline phones and email) to widen acceptability to larger patient group</li> <li>• Prompts for clinicians (e.g. via email) to check alerts and/or weekly automatic practice reports of summarised reports sent via email were suggested</li> <li>• Provision of greater numbers of BP machines and disposable cuffs.</li> </ul> <p>[32x individuals; 13x GPs, 7x nurses, 4x HCAs, 1x practice manager, 1x independent pharmacist prescriber, 1x associate practitioner, 4x CTFs and 1x clinical lead]</p>
<p>If able to use the system, patients using Flo were felt to be easier to monitor</p> <p>Patients:</p> <ul style="list-style-type: none"> <li>• Enjoyed the improved support and enhanced motivation (smoking cessation and hypertension protocols)</li> <li>• Satisfied with the hypertension protocols, particularly compared with ABPM</li> <li>• Reported benefit from inhaler reminder protocols</li> <li>• Reassured and less anxious (hypertension protocols)</li> <li>• Valued management plans for signposting them regarding the next steps</li> </ul> <p>AIM01 is simple, saves time and the short burst of intervention with advice were all valued</p> <p>Flo is a useful tool within an efficient system, specifically for managing hypertension</p>	<p>Acceptability of protocol(s)</p>	<p>Protocols 'misleading' at times. Specific sources of confusion reported were:</p> <ul style="list-style-type: none"> <li>• Motivational texts posed as questions leading to patients attempting to respond</li> <li>• RAG ratings</li> </ul> <p>Patients did not like:</p> <ul style="list-style-type: none"> <li>• Frequent messages</li> <li>• Questions about depression</li> </ul> <p>Hypertension protocols were criticised for:</p> <ul style="list-style-type: none"> <li>• Increasing patients' anxiety</li> <li>• Increasing clinician workload</li> <li>• Not fitting closely with NICE guidelines for diagnosis and review – as perceived by commenting clinician</li> <li>• Adding little but complexity in the presence of good pre-existing systems (e.g. pen and paper, ABPM).</li> </ul> <p>[22x individuals; 4x GPs, 4x HCAs, 3x nurses, 1x pharmacist independent prescriber, 1x administrator, 1x smoking</p>

<p>Hypertension protocol was praised for being compliant with NICE guidelines. [23x individuals; 5x nurses, 5xHCA, 4x GPs, 1x practice manager, 1x smoking adviser, 1x assistant practitioner, 4x CTF and 1x clinical lead]</p>		<p>advisor, 1x assistant practitioner, 6x CTF and 1x clinical lead]</p>
<p>Valued aspects</p> <ul style="list-style-type: none"> <li>• Initial briefing session and demos</li> <li>• Practice level support, in particular the use of case studies and examples of how others are using Flo</li> <li>• Patient pack</li> </ul> <p>An effective model of delivery reported included the use of an administrator and practice pharmacist as leads. [4x individuals; 1x GP and 3x CTFs]</p>	<p>Support with using the system</p>	<p>More support at the practice level was requested to educate staff about its use (e.g. leaflets) and also to launch the service. Information on necessary Read codes was not timely enough. [3x individuals; 1x GP, 1x nurse and 1x CTF]</p>
<p>Fourteen respondents did not give a negative comment [3x nurses, 3x HCAs, 2x GPs, 1x patient services manager, 1x clinical administrator, 3x CTFs and 1x clinical lead],</p>	<p>No comments</p>	<p>Eight respondents did not give a positive comment [5x GPs, 1x nurse, 1x CTF and 1x clinical lead]</p>
<p>ABPM = ambulatory blood pressure monitoring; CTF = clinical telehealth facilitator; GP = general practitioner; RAG = red amber green (on shared management plan); HCA = health care assistant</p>		