

Non-compliance to health care guidance has always been a significant challenge in healthcare. Our healthcare system was not designed to be patient centric with a legacy of minimal emphasis on empowering patients to take responsibility for their conditions resulting in cohorts of patients who can become fairly passive and non-compliant increasing reliance on NHS services.

Flo was designed by looking at motivation and what motivates patients to increase their quality of care in between face-to-face contacts as part of a shared management plan. Using Flo's unique persona to her best advantage is an important component in motivating patients to take an active role and teams to 'let go' safely.

When patients take a more active role and become more compliant to clinical guidance, their clinical outcomes improve and need for NHS resources reduce in the short and longer term.

Flo is not condition or purpose specific. Flo focuses on helping patients to help themselves and dependent upon the original local purpose, Flo's interactions and pathways will vary as designed by clinical teams. Existing pathways and best practice are willingly shared amongst organisations using Flo.

For example, through motivating and engaging patients to adhere to their shared management plan, patients reporting biometric or symptom data and following Flo's advice in between clinical contacts increases the likelihood of patients accessing the right service, at the right time when additional clinical intervention *is* required.

This added quality gain not only enables earlier clinical intervention to take place resulting in more effective decision-making, but also increases the productivity and value of any subsequent intervention. Where additional clinical intervention is *not* required, Flo reassures the patient who can then continue on with their day, increasing the patient's feeling of control of their condition and reducing avoidable contacts driven by concern.

Opportunities for Acute Care

Listed below are some examples of how Flo is currently being used in acute care. The models are largely transferable to other pathways e.g. facilitating remote discharge of patients from hip/knee follow-up could be applied to other follow-up clinics.

The licence commissioned by South Tees Hospitals would enable as many pathways as required.

This list is not exhaustive but more examples are available here

<http://www.simple.uk.net/home/blog/blogcontent/acuteleadersrecognisethevalueofflo>

Key transferable models that can be developed across many acute pathways:

- remote biometric or symptom monitoring negating need for routine clinic attendance whilst **creating outpatient capacity** for those clinically indicated via home monitoring to be seen quicker. Overall reduction in clinic demand that can be used for new patients (RTT) or staff reduced/deployed into e.g. surgical capacity to impact on surgical waiting times
- Remote follow up, negating need for face-to-face care thus increasing capacity and allowing it to be used to the organisations' advantage.
- supported discharge from acute beds enables **LoS reduction** and improved support to self manage at home **reduced likelihood of readmission within 30 days**
- medication compliance support initiated at clinic or as an inpatient for patients with known issues around concordance to prescribed medication. Reduces likelihood of exacerbation or side effects due to non compliance and **reduces patient demand on acute services**

Pathway	Main Outcomes	Enabled
Maternity – Gestational Diabetes	<ul style="list-style-type: none"> No adverse maternal outcomes Improved clinical outcomes, level of glucose control rose from 57% (pre Flo) to 85% (with Flo) High levels of patient satisfaction, convenience and flexibility Enhanced understanding of diabetes with all patients <p>http://www.simple.uk.net/home/casestudies/casestudiescontent/acutetrustmanagementofmildpregnancyinducedhypertensionca10</p>	<ul style="list-style-type: none"> Increased clinic capacity Reduced need for face-to-face care with nursing team Excluding fixed cost (Flo licence) - organisation net savings £11,624.73 (7.6%) with 119 patients - patient net savings £3,650.03 (15.1%)
Maternity – Pregnancy Induced Hypertension	<ul style="list-style-type: none"> No adverse maternal outcomes Approx. 50% of women using Flo for PIH raised an 'alert' and 5 were admitted (providing earlier intervention) Level of blood pressure control rose from 42% (pre Flo) to 82% (with Flo) Positive patient feedback vs. previous experience High patient satisfaction <p>http://www.simple.uk.net/home/casestudies/casestudiescontent/cityhospitalssunderlandnhsftgestationaldiabetesca09</p>	<ul style="list-style-type: none"> Increased clinic capacity Reduced need for face-to-face care with nursing team Earlier intervention prior to condition exacerbating further Excluding fixed cost (Flo licence) organisation net savings £7,745.82 with 79 patients
Diabetic monitoring	<ul style="list-style-type: none"> Improved blood glucose control Improved self-care Reduced dependence on acute specialist team 	<ul style="list-style-type: none"> Reduces exacerbations of diabetes and therefore demand on specialist services Improved capacity for specialist team to support patients with more complex issues Allows earlier intervention via increased home monitoring Significant cost avoidance in the medium to long term on this large cohorts trajectory of comorbidities if diabetes is not controlled <p>http://www.diabetesselfmanagement.com/blog/good-control-now-lifetime-benefit/</p> <ul style="list-style-type: none">
Facilitating remote discharge from follow-up 12 months post hip/knee surgery	<ul style="list-style-type: none"> Improving the appropriate allocation of follow up appointments only where clinically indicated Improved patient experience Improved new: follow up ratio Improved peaks and troughs in radiology Positive patient experience 	<ul style="list-style-type: none"> £29.21 difference in traditional tariff cost Safely releasing clinic capacity to see new (impacting on 18 week RTT) or triaged follow up patients Enabled the service to increase new patient appointments and/or allows for increased Operating Theatre sessions

	<p>http://www.simple.uk.net/home/casestudies/casestudiescontent/supporting-remote-follow-up-post-hip-and-knee-surgery-to-improve-patient-flow-e028</p>	<p>optimising staff resources/skills</p> <ul style="list-style-type: none"> • Staffing cost avoidance due to reduction in required face-to-face appointments • Improved patient flow – outpatient, radiology • SFHFT Orthopaedic service are now lower than contracted and national average with regards to the new to follow up ratio
Pre-operative hypertension monitoring at pre-assessment for surgery	<ul style="list-style-type: none"> • A reduction in clinic appointments • A reduction in GP referrals and higher quality/more appropriate referrals when clinically required • A reduction in cancelled surgical operations • Improved patient satisfaction. • Improved identification of pre-op risk factors <p>http://www.simple.uk.net/home/casestudies/casestudiescontent/managementofpre-ophypertensionca08</p>	<ul style="list-style-type: none"> • A reduction in clinic appointments allows waiting times to be reduced • Improved clinical productivity • Fully utilised theatre time • Quicker, more appropriate referral to GP
Nephrology outpatient blood pressure monitoring pre-clinic	<ul style="list-style-type: none"> • Reduced patient DNAs • Increased quality and breadth of discussion with patient as home reading easily available • Improved clinical decision making • Reduced likelihood of requiring more expensive 24 hour ambulatory monitor • Reduced need to rebook patients who DNA as home readings are available • Improved patient safety due to Flo's guidance <p>http://www.simple.uk.net/home/blog/blogcontent/kidneyunitattheroyalstokeuniversityhospitalembbraceflo</p>	<ul style="list-style-type: none"> • Maximising clinic efficiency and capacity • Clinic waiting times reduced • Cost savings vs. 24 hour ambulatory monitor • Improved clinical productivity
Oncology post-chemotherapy temperature monitoring	<ul style="list-style-type: none"> • Patients know when to contact acute care as clinically required • Improved patient satisfaction and support <p>http://www.simple.uk.net/home/casestudies/casestudiescontent/e015universityhospitalsofnorthmidlandsnhstrustpost-chemotherapytemperaturemonitoring</p>	<ul style="list-style-type: none"> • Earlier intervention at onset of infection can reduce severity and duration and therefore LoS
Epilepsy home seizure monitoring and medication compliance	<ul style="list-style-type: none"> • Increased home data improves clinical decision making and treatment planning in clinic • Avoids side effects of non-compliance with prescribed medication • Reduces likelihood of condition exacerbating and need to access emergency portals • Patients are motivated and know who to contact if seizures exacerbate • 	<ul style="list-style-type: none"> • Improves patient flow via A&E and bed capacity due to patients accessing care at the appropriate time • Can reduce frequency of outpatient appointments due to improved control
Supported early discharge post breast cancer surgery	<ul style="list-style-type: none"> • Creates safe opportunities for supported early discharge post-surgery • Reassurance that key post-discharge indicators of additional clinical need can be 	<ul style="list-style-type: none"> • Increased bed capacity due to reduced LoS • Reduction in likelihood of readmission due to improved monitoring of clinical

	identified and managed	indicators at home
Heart Failure early supported discharge	<ul style="list-style-type: none"> Monitoring of vital measurement to indicate when intervention is required from the team for admission avoidance Motivates patients to self care or access specialist input as clinically required. 	<ul style="list-style-type: none"> Increased bed capacity due to reduced LoS Reduction in likelihood of readmission due to improved monitoring of clinical indicators at home
Administration of pre-operative vitamin K medication	<ul style="list-style-type: none"> Patients more motivated and compliant in vitamin k administration pre-surgery 	<ul style="list-style-type: none"> Reduction in cancelled operations Improved theatre utilisation Impact on surgical waiting times
COPD (or asthma) supportive self-care	<ul style="list-style-type: none"> Patients comply with appropriate medication at home reducing exacerbations 	<ul style="list-style-type: none"> Reduced emergency needs due to uncontrolled COPD (or asthma) Improved patient flow Reduction in outpatient appointments where patient non compliance to medication was an issue