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Overview – Flo's Role in Healthcare Delivery

Non-compliance to health care guidance has always been a significant challenge in healthcare, particularly long-term condition management. 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.

Acknowledging the significant impact that patients can have on their own health care if supported, educated and enabled, by focusing on improving patient adherence clinical outcomes are improved, faster.

The clinician clearly retains responsibility yet with effective mechanism of motivating patients towards behaviour changes impacting on condition, the patient becomes an active participant adding a value that often only they can.

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.

Flo is not condition or purpose specific. Flo focuses on helping patients to help themselves and dependent upon the original local purpose of using Flo, 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.

Such interactions may need to be short term perhaps where a condition is being diagnosed or excluded, where medication is being titrated or if a condition has been newly diagnosed or longer term where ongoing support adds additional benefit; although overtime many patients grow in confidence sufficiently to self manage without Flo's interactions as their understanding and sense of control over their condition grows.

Across the many pathways currently implemented, sometimes Flo will support patients to follow advice as and when required, and in others Flo will motivate patients to take some sort of necessary action if their condition has deteriorated and a particular threshold has been met. Both elements are typically involved in Flo's pathways and either advice or action requirements will be initiated depending on the patient's reported data. This allows the patient to safely self manage according to Flo's advice as documented in their shared management plan where this is possible yet adds a further interventional prompt where the patient's condition has deteriorated sufficiently enough to require them to undertake a definite action such as contacting their clinician. This allows care to be accessed and delivered at the right time when clinically indicated.

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Rationale for use of Florence

Supporting the shared management plan agreed with the health care team, increasing the patient's awareness of their health and empowering the patient to take responsibility for their adherence to agreed advice, improving their self-care capability

- Care accessed and delivered according to clinical need
- Creating capacity in the team to provide care and support at the appropriate point in the patient's pathway based on level of need as a result of released capacity generated by home monitoring
- Reducing avoidable, non value-added face-to-face contact as a result of increased patient understanding of when to access services and opportunity to monitor at home
- Promotion of appropriate routes of access into services as clinically indicated
- Reduce avoidable healthcare usage, crisis episodes and side effects of non compliance (e.g. attendance at GP surgery, Out of Hours, Community Nursing or A&E) due to patient's increased understanding of clinical indicators, appropriate routes of access and improved compliance to clinical guidance
- Reduced patient anxiety due to opportunity to self monitor with timely feedback and increased understanding of their condition and what it means for them
- Based on patient reported readings/symptoms, Flo to offer clinically agreed advice in a proactive manner with thresholds of when to contact the practice / team
- To effectively reinforce patient education associated to their condition
- To improve the patients' freedom to manage their own condition with increased or decreased clinical support as required.

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Examples – Primary Care

Also see:

- 'Using Simple Telehealth in Primary Care to Reduce Blood Pressure' http://bmjopen.bmj.com/content/2/6/e001391.full
- 'Interactive Simple Telehealth for the Management of Blood Pressure' https://www.nice.org.uk/sharedlearning/interactive-simple-telehealth-for-the-management-of-blood-pressure
- 'A Cross-Sectional Survey and Service Evaluation of Simple Telehealth in Primary Care: What do Patients Think?' http://bmjopen.bmj.com/content/2/6/e001392.full
- 'Tackling High Blood pressure from Evidence to Action' https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/527916/Tackling_high_blood_pressure.pdf
- 'Patient and Professional User Experiences of Simple Telehealth for Hypertension, Medication Reminders and Smoking Cessation: A Service Evaluation' http://bmjopen.bmj.com/content/5/3/e007270.abstract
- Implementation of simple telehealth to manage hypertension in general practice: a service evaluation
- 'Telehealth in Primary Care: What's in it For Me?' https://docs.google.com/a/simple.uk.net/viewer?a=v&pid=sites&srcid=c2ltcGxlLnVrLm5ldHxjb21tdW5pdHI8Z3g6NWZiNzMzODliMzQ3NGI3Yw

Pathway	Benefits
Hypertension diagnosis / exclusion	1. Blood pressure readings taken at home result in **less face-to-face consultation time** in practice and are taken in real time (avoidance of white-coat symptoms) 2. **Improved access to real time blood pressure readings** to **improve clinical decision making** 3. **Patient safety increased** with real time advice including guidance of what to do if their condition worsens or support needs increasing as per their management plan 4. **Capture of data** on which decision made to diagnose / exclude 5. **Improved timeliness of diagnosis or exclusion** where capacity constraints for ambulatory monitoring exist, or where patients are required to have face-to-face blood pressure readings taken due to lack of alternative 6. **Avoids inappropriate diagnosis** of hypertension (thus avoid follow-up and medication) See http://www.simple.uk.net/home/casestudies/casestudiescontent/Hypertension-monitoring-improves-efficiency-and-supports-clinical-decision-making-in-General-Practice
Improving control of hypertension	1. An **alternative to patients having to attend the practice** for blood pressure readings and hypertension management 2. Opportunity to **titrate medication remotely** based on increased real time readings 3. Opportunity to **intervene earlier** with medication changes or if the patients condition worsens 4. An opportunity to support patients understanding of **lifestyle improvements** that support controlling their hypertension 5. An increase in **patient engagement and awareness** of their blood pressure with motivation and support in **adopting a healthier lifestyle** See http://bmjopen.bmj.com/content/2/6/e001391.full
Asthma / COPD – Inhaler compliance	1. To establish, and sustain, **better habits around inhaler use**. 2. To support appropriateness of treatment with **correct medication dosage**, and type, as applicable. 3. To actively promote and encourage **sustained behaviour change**. 4. **Reduce avoidable healthcare usage** and crisis episodes, (e.g. attendance at GP surgery, Out of Hours, Walk-in Centres or A&E) resulting from a poorly controlled asthma or COPD.

	5. **Faster and sustained achievement of clinical outcomes** through patient's adherence to self-management guidance and prescribed medication. 6. Based on patient reported use of reliever inhaler, to offer advice in a proactive manner to **retain the stability or improve the control of the patient's asthma** See http://www.simple.uk.net/home/casestudies/casestudiescontent/asthmapoorcontrolnhsstoke-on-trent
Diabetes	1. To empower **the patient to take responsibility for their adherence to agreed treatment**, improving their self-care around blood glucose testing and associated actions. 2. To **establish, and sustain, better habits** around blood glucose testing. 3. To support **appropriateness of treatment** with correct medication dosage as applicable. 4. To actively promote and encourage **sustained behaviour change**. 5. **Reduce avoidable healthcare usage and crisis episodes**, (e.g. attendance at GP surgery, Out of Hours, Walk-in Centres or A&E) resulting from a poorly controlled condition. 6. **Faster and sustained achievement of clinical outcomes** through patient's adherence to self-management guidance and prescribed medication. 7. Based on patient reported readings, to offer advice in a proactive manner to **retain the stability or improve the control** of the patient's diabetes. 8. To improve care planning through access to increased patient reported information. 9. To support diabetic patients in **accessing services as appropriate**, via the appropriate pathway. 10. To effectively **reinforce patient education** associated to diabetes. 11. To improve the patients' freedom to manage their own condition with increased or decreased clinical support as required. See http://www.simple.uk.net/home/casestudies/casestudiescontent/nottinghamshireprimarycareimprovedcompliancefordiabeticpatiente005

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Examples – Community

Also see
- 'Enabling Supported Self-Management of Wound Care in a Community Setting' http://journals.rcni.com/doi/abs/10.7748/phc.2016.e1137
- 'Self-Management: Keeping it Simple with Flo' http://dx.doi.org/10.2147/NRR.S72791
- 'Helping Patients Take Charge of Their Chronic Illnesses: The best Thing you can do for your Patients with Chronic Illnesses is let them run with the ball' http://www.aafp.org/fpm/2000/0300/p47.html
- 'High Risk Patients Benefit Most from the SMS Based Intervention' http://journals.lww.com/jhypertension/Fulltext/2010/06001/High_Risk_Patients_Benefit_Most_From_the_Sms_Based.957.aspx

Pathway	Benefits
Long term condition pathways: - COPD - HF - Diabetes - Pain management - etc. Unstable vital signs monitoring	1. **Care delivered according to clinical indication** 2. **Capacity to manage more complex patients increased** 3. **Reduced patient anxiety, increased interactions with their healthcare** 4. **Improved access to readings** to **improve clinical decision making** 5. **Patient safety increased** with real time advice including guidance of what to do if their condition worsens or support needs increasing as per their management plan: who to contact, how and where 6. **Capture of data** on which treatment decision is made 7. Improved timeliness of treatment facilitating **early intervention** 8. **Reduce avoidable healthcare usage** and crisis episodes, (e.g. attendance at GP surgery, Out of Hours, Walk-in Centres or A&E) 9. An **alternative to home visits – titrated with face-to-face care according to need** 10. To improve the patients' freedom to manage their own condition with **increased or decreased clinical support as required** 11. Positive **patient satisfaction** See http://www.simple.uk.net/system/app/pages/search?scope=search-site&q=community
Medication concordance	1. To establish, and sustain, **better habits around prescribed medication** 2. To reduce side effects associated with non-compliance 3. To actively promote and encourage **sustained behaviour change**. 4. **Reduce avoidable healthcare usage** and crisis episodes, (e.g. attendance at GP surgery, Out of Hours, Walk-in Centres or A&E) 5. **Faster and sustained achievement of clinical outcomes** through patient's adherence prescribed medication. 6. **Maximises patient independence** and familiarisation with technology as a pre-cursor for step-up monitoring with Flo See http://www.simple.uk.net/system/app/pages/search?scope=search-site&q=medication