

## Community Care: Efficiencies from Implementing Sustainable TEC Best Practice in Community Care with Florence

### Florence Overview

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 this and the significant impact that activating our patients can have on their own health outcomes, Flo provides an opportunity to educate and enable patients by focusing on improving their adherence to clinical guidance, and consequently clinical outcomes improve, faster.

The clinician clearly retains responsibility yet with an 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.

Florence (or Flo to her friends) 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 the Florence Community.

### Rationale for use of Florence

- Reduction in avoidable non-value added face-to-face contact, healthcare usage, crisis episodes and side effects of non-compliance (e.g. readmission or A&E attendance)
- Support clinician and patient adherence to agreed best practice care and shared management plans
- Empowering patients to take responsibility for their adherence to agreed advice, increasing engagement with their health and improving their self-care capability
- Supporting prioritisation of care - releasing capacity, enabling appropriate and timely care to be delivered to patients based on clinical need.
- Promotion of appropriate routes of access into services as clinically indicated due to patient's increased understanding of clinical indicators, appropriate routes of access and improved compliance to clinical guidance.
- Reduced patient anxiety with the opportunity to self-monitor reinforced by timely feedback developing an increased understanding of their condition and what it means for them
- Improve the patients' freedom to manage their own condition with reinforced patient education - permits increased or decreased clinical support as required.

Florence has been recently cited in independent publications as an exemplar innovation. The King's Fund publication "[Florence: telehealth for long-term conditions](#)" highlights Flo amongst eight examples of successful innovation. The Innovation Unit and The Health Foundation came together in the "[Against the Odds](#)" research project to identify 10 UK innovations which have demonstrated "successful scaling", one of which is Florence. From these case studies, they were able to highlight eight key enablers for scalability of new innovations within the NHS.



## **Focus: Community Care**

It is widely acknowledged that more people are living longer, with more complex conditions, costs are increasing whilst NHS funding remains flat with a rising expectation of the quality of care received.

In 2018, [The King's Fund](#) reported that community health service budgets are not keeping pace with rising demand, while local authority spending on health has fallen in real terms. Workforce shortages are also an issue in community care; for example, District Nurse numbers have halved over recent years.

“Community health services are particularly vulnerable to financial pressures, as funding (usually via block contracts) is not directly linked to the activity taking place. Care is less visible than in other settings, and quality is more difficult to monitor due to a lack of quality metrics and national data collection. This makes it easier to squeeze funding, but more difficult to see the consequences of doing so.”

*The King's Fund 2017 - [Understanding NHS financial pressures: how are they affecting patient care?](#)*

There is now a significant opportunity to integrate evidence based technology enabled care services into routine healthcare delivery, moving towards clinical pathways that represent safe, efficient healthcare that is popular with patients and carers alike

Clinicians in community care are continuing to embrace Flo as a tool to help them to deliver sustained improvement in both clinical and efficiency outcomes.

“It fits within and can be adapted for existing work processes rather than requiring substantial redesign. It doesn't require staff to develop new skills or very different ways of working.”

*The King's Fund – [“Florence: telehealth for long-term conditions”](#)*

## **Condition Index:**

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## Example Pathway: COPD

### Benefits:

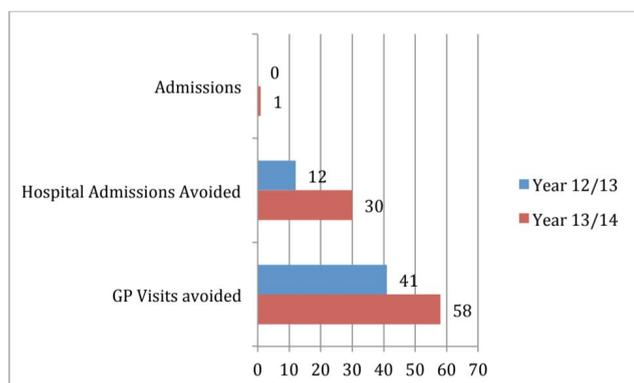
1. To establish, and sustain, **better habits around inhaler use and supporting recognition** of signs and symptoms of exacerbation, **empowering patients to initiate rescue medication** as directed by their care plan.
2. To support appropriateness of treatment with **correct medication dosage**, and 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. **Educating** patients with a diagnosis of COPD and/or asthma to **improve confidence** with **self-management** of their condition.

### COPD

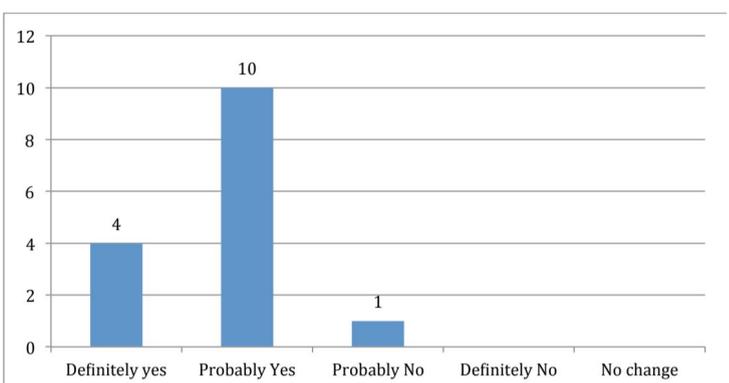
Flo is a tool helping Community Respiratory Nurses and Community Matrons to support patients to manage their COPD. Flo prompts patients to send in timely readings and/or symptoms, whilst her friendly feedback reassures and guides patients (and their families) to self manage supporting improved education around their condition.

Community Matrons in Nottinghamshire integrated Flo into their COPD pathway, whereby patients would send oxygen saturation readings to Flo daily. If a low reading was recorded, patients would then be asked to send a sputum, cough and breathlessness score; if this was again out of range, they would be asked to contact their COPD Nurse. The initial patient cohort was evaluated, and there were some promising results.

- An overall reduction in GP and Hospital visits compared to the previous year prior to starting Flo.
- Positive patient feedback, with 88% of patients reporting that Flo was helping them to better manage their COPD, and that Flo was reassuring.
- Staff feedback showed that they felt Flo was supporting their patients to self manage better, and overall were seeing fewer contacts with patients.



*Patient admissions - year 12/13 without Flo year 13/14 with Flo*



*Clinician responses to the question "Do you think that as helped this patient to manage their own health and wellbeing better?"*

Community Matrons in Stoke-on-Trent have also employed Flo to support their patients with COPD, including Shirley Silvers who was a patient representative for Flo. Shirley was diagnosed with COPD in 1997, and in 2009 she contracted swine flu which left her vulnerable to further complications. Shirley's clinician suggested that she try using Flo to help her improve her confidence to self-manage her COPD. Prior to using Flo, Shirley would have to either visit her GP practice regularly (which risked exposing her to illness that her COPD made her vulnerable to), or have a visit at home



from the Community Matron. With Flo's help, Shirley was able to self-manage her COPD, resulting in both fewer trips to the practice and home visits. In addition, Shirley's understanding of her condition improved, as did her management, which has reduced her chance of chest infection and other complications that could lead to a hospital visit/admission.

One of the Stoke-on-Trent Community Nurses has also shared a case study featuring a 72-year-old patient who received additional support from Flo:

"I was recently asked to see a gentleman, who was unwell, on a Saturday morning in my role as an advanced practitioner within the single point of care. Ray (not his real name) is a 72-year-old gentleman who lives with his wife. He suffers from COPD, hypertension (high blood pressure) and angina.

As a result of attending a locally run pulmonary rehabilitation course, Ray was aware that he was starting with a flare-up/exacerbation. He had listened to the advice and was aware that he could ring for a visit. **When I visited Ray, he was unwell, though he didn't need to be admitted to the hospital at that point. He was worried though, as it was a weekend and his GP, with whom he had a close relationship with, was not available.** I was able to offer Ray and his wife the ability to use Florence. Ray already uses his mobile phone to text. I had a spare set of equipment which would allow him to record his blood pressure and oxygen saturation (SATS). I explained how the system worked; I had my laptop with me anyway. It was very quick and easy to set Ray up on the system. **Ray sent me a number of readings via the Florence system which meant that I could observe what was happening with him. I also sent him messages via the text system reassuring him.** Ray used the system for the period of his flare up and when well again decided that he didn't need the support from the system as he was well again. Ray then texted stop to Florence and dropped the equipment off to his GP surgery which we then collected.

Feedback from Ray and his wife was that they found the support very beneficial from using Florence.

The knowledge that a health professional was able to monitor the readings as well was very reassuring for them. **Ray actually said that previously he would have gone to A&E so that he could be checked over during the weekend. However, he felt he didn't need to do that this time due to the support offered."**

Patient comment: "It has made a vast difference to me, as I used to get very worried about my husband. The important points to me is the whole thing, if the oxygen, temperature or pulse is high when we send them, within seconds we get a reply back letting us know, and we ring the team up, everyone we have contact with is so helpful and it really does ease any concerns that we have. The Telehealth is excellent and we are both so grateful and thank you."

Clinician comment: **"We have been able to increase our caseloads; telehealth has helped enormously with that and improving our capacity"**.

## **Example Pathway: Children's Community Nursing - Enteral Feeding Weaning & Blood Pressure Monitoring**

### **Benefits:**

1. Blood pressure and weight readings taken at home resulting in **fewer home visits, saving clinical time and improving capacity.**
2. Improved access to real-time blood pressure and weight readings to **improve clinical decision making.**
3. **Patient safety increased** with real-time advice including guidance of what to do if readings are out of the desirable range.
4. **Improved timeliness** of clinical decisions, resulting in the opportunity to **intervene earlier** if the patient's condition worsens.

The Children's Community Nursing Team at **Shropshire Community Health Care NHS Foundation Trust** developed two pathways, enteral feeding weaning and blood pressure monitoring, to support children (and their families) receiving community care. Parents send Flo their child's weight (enteral feeding weaning) or BP at regular intervals when prompted by Flo. If any child's weight or BP reading is outside of the desirable range, the Children's Community Nursing Team would be notified, and would be able to take appropriate action.

As the case studies demonstrate, implementation of Flo benefits both patients and clinicians. Patients (and their families) **feel supported and reassured to manage care independently**, allowing them the freedom to tailor this to family schedules at their convenience, whilst clinicians are able to **free up time and improve their work capacity.**

### **Case study one:**

Child Y requires weight measurements every 2 weeks since referral to the team back in September 2012 as a result of being enlisted on the enteral feeding weaning pathway.

Upon being offered the opportunity to support their child via Flo, **the family were happy to interact remotely, confident that the team could access their child's weight reading and intervene when necessary.** The family now weighs their child at a convenient time for them as prompted by Flo, and sends their child's weight reading for the team to review.

This has allowed the family to be able to weigh their child as part of their family routine and **avoided the reliance, scheduling and intervention of a nurse visit every other week.** Child Y now sees Flo as part of her routine and on a Sunday after her bath and hair wash, she understands that is when she is weighed and Mum sends her weight to Flo.

For Child Y alone, this has made family life much easier and **avoided 2 hours 20 minutes of travel time and associated mileage cost for the team every fortnight with no negative impact on clinical outcomes.**

### **Case study two:**

A pragmatic secondary benefit arose from the capture of patient data sent to Flo that enabled quick and efficient clinical decision making between the Children's Community Nursing Team and Acute Paediatric Team at Shrewsbury and Telford Hospitals when upon assessment of the child's blood pressure readings further clinical input was deemed to be required.

Upon Shropshire Community Children's Nursing Team identifying deterioration in a patient's blood pressure, **readings were able to be downloaded from Flo** into a shareable excel file and **emailed securely to the Acute Paediatric Team.** This provided sufficient **evidence for the patient to be expedited and seen more quickly and medication changes to be initiated promptly.**

The Children’s Community Nursing Team analysed the number of hours saved by using Flo; across only 7 patients, a total of **795 clinical hours was saved**, releasing **the same capacity as an extra 1.0wte nurse working for over 21 weeks**. More importantly, this enabled the team to **work even more efficiently, prioritising their time for higher dependency patients, or those who clinically need face-to-face care**.

Round trip mileage	Travel time Approx (round)	Average appointment time	Frequency of interactions	No of interactions	Total Time released
59	90 mins	30 mins	Fortnightly	147	294 hours
26	30 mins	30 mins	Fortnightly	85	85 hours
36	80 mins	30 mins	Fortnightly	117	214 hours
34	60 mins	30 mins	Weekly	17	25 hours
30	40 mins	30 mins	Weekly	101	117 hours
29	50 mins	20 mins	Weekly	36	42 hours
29	50 mins	20 mins	Weekly	16	18 hours

*Table showing time savings across patients when using Flo for remote monitoring.*

## Example Pathway: Oncology

### Benefits:

1. Temperature taken at home improved access to real-time readings to **improve clinical decision making**.
2. **Patient safety increased** with real-time advice including guidance of what to do if patient temperature is raised or support needs increasing as per their management plan.
3. **Improved timeliness of clinical decisions**, resulting in the opportunity to **intervene earlier** before patient condition worsens.

The Community Oncology team in Stoke-on-Trent developed an innovative pathway where patients who had received chemotherapy would take their temperature at home. A raised reading of 38 degrees celsius could be a possible early sign of potential infection caused by a lowered immune system following treatment; those patients who had high temperatures were asked to contact the Emergency Assessment Bay at University Hospitals of North Midlands NHS Trust for treatment and/or advice. **Acting early prevented more serious complications, which could potentially result in a hospital admission and a potentially lengthy stay.** Furthermore, a microcase completed by the team predicted a **potential cost saving of between £708.25 - £1,411 per patient across both acute and community services.** Due to the success of the Community Oncology Team, UHNM's Oncology Department also integrated Flo in the same way. Take a look at the case studies below from UHNM for more information.



### Case study one:

The patient was alerted by Flo to call the Emergency Assessment Bay at the hospital as her body temperature was 38.4 degrees. The patient called into the hospital as requested, and was able to discuss her associated symptoms of shortness of breath and fatigue with the triage practitioner, who then asked the patient to attend the Emergency Assessment Bay for further investigation. Upon review by the doctor the patient was suspected to have neutropenic sepsis, yet upon further investigation, including a chest x-ray, the patient was diagnosed with a chest infection. The patient was then prescribed antibiotics and **able to be discharged home the same day. The prompt action of the patient to contact the EAB as advised reduced the duration and severity of the infection and potentially the patient's length of stay in hospital"**

### Case study two:

The patient was alerted by Flo to call the Emergency Assessment Bay at the hospital as his body temperature was 38 degrees. The patient called in as requested and the patient was subsequently asked to attend the Emergency Assessment Bay for further investigation.

Upon review, the patient's pyrexia was confirmed and he was admitted to a specialist ward for 3 days where he received 48 hours of intravenous antibiotics and was discharged home. **By this patient acting promptly by calling the Emergency Assessment Bay for further advice upon experiencing a raised temperature, the severity and duration of infection was not exacerbated and the patient was able to return home quicker.**

### Case study three:

The patient was alerted by Flo to call the Emergency Assessment Bay at the hospital as his body temperature was 38.6 degrees after his chemotherapy treatment the day previously. The patient called in as requested and was admitted to AMU Ward 218 as he was experiencing tiredness, a high temperature and cough.

The patient was treated for an infection secondary to a UTI and started on the appropriate medication. The patient was discharged the day after. **The prompt action by the patient to contact the Emergency Assessment Bay and receive appropriate clinical treatment reduced the severity and duration of the infections** and also the patient experiencing side effects associated with the UTI and secondary infection plus potential further complications.

#### **Case study four:**

The patient was alerted by Flo to call the Emergency Assessment Bay at the hospital as her body temperature was 38 degrees. The patient therefore attended the Emergency Assessment Bay, was administered with oral antibiotics and **discharged home as there were no signs that neutropenia had developed. The patient did not require an admission.**

The same patient also attended the Emergency Assessment Bay a few days later, as Flo had alerted her due to a temperature of 38.6 degrees, and was diagnosed with community acquired pneumonia and administered the appropriate treatment as an inpatient. **The prompt action of the patient to contact the EAB as advised reduced the duration and severity of the infection and potentially the patient's length of stay in hospital.**



## Example Pathway: Diabetes

### Benefits:

1. BG & BP readings taken at home result in **less face-to-face consultation time** during home visits and are taken in real time.
2. Reduction in home visits **frees up capacity in clinician's caseload** with associated cost savings.
3. Improved access to real-time BG & BP readings to **improve clinical decision making**.
4. **Patient safety increased** with advice including guidance of what to do if their condition worsens or support needs increasing as per their management plan.
5. **Improved timeliness of clinical decisions**, resulting in the opportunity to **intervene earlier** if the patient's condition worsens.
6. An opportunity to support patients understanding of **lifestyle improvements** that support controlling their hypertension.
7. An increase in **patient engagement and awareness of their BG/BP** with motivation and support in adopting a healthier lifestyle.
8. **Stabilisation of condition** due to medication reminders & regular testing, resulting in **improved patient outcomes**.



The Diabetes Specialist Nurse Team at Derbyshire Community Health Services (DCHS) has implemented Flo to support patients to self manage their diabetes. Patients have demonstrated improved glycaemic control, **reducing both short and long term associated health risks and reducing the number of required clinic appointments or home visits required**. DCHS have shared a number of case studies with us since they joined the SSHC community of practice:

### Case study one:

The patient was a 68-year-old man with type 2 diabetes. He was disengaged with his health; **he didn't really want to attend appointments, or discuss his diabetes in general**. The patient was also **not taking his medicine**, so initially he was **set up on Florence to receive medication reminders to try and improve his adherence**. However, after a short time, he began to use Florence to help him monitor his blood glucose levels. Due to complications with his diabetes, the patient also developed a foot ulcer which required treatment.

Since beginning to use Florence, the **patient's HbA1c has dropped from between 13.5% – 12.9% to 6.9%**. Additionally, during the 2 years that the patient has been using Florence, **they have only had 2 face-to-face appointments, with potential cost and time savings**. The patient has expressed his gratitude for the help received from his DSN and Florence towards improving his health. The longer-term savings with improved control are also significant.

### Case study two:

Patient 1 was a 77 year old with type 2 diabetes. **The patient lived in a residential care home, and their diabetes was difficult to control, with blood glucose readings anywhere between 2mmol and 30mmol being recorded**. This poor control led to the patient being **hospitalised for a total of four weeks from 14th August 2017**, while various methods were attempted to control their blood glucose. The patient's HbA1c in June 2017 was 8.4%.

Upon discharge and returning to the residential home, it was requested by the hospital that the patients' blood glucose be monitored four times a day, and these readings continued to fluctuate. To counteract high blood glucose levels, the home was advised to administer quick acting insulin. **The Diabetes Specialist Nurse visited the care**

**home and found that the patient's care plan was very complicated, and felt somewhat uneasy about this.**

The patients' blood glucose before going bed was around 2.4mmol, and this rose to between 24-30mmol in the morning – no explanation could be found for this as the patient had no access to food during the night time. As of 18th September, the patient's blood glucose remained unstable, leading to an ambulance being called out and a subsequent hospital admission on 20th September.

The patient began a basal bolus regime, which meant that the patient was having 4 injections daily – not particularly ideal for a patient of this age. At this point, the DSN spoke to the patient's son about having a mobile phone to use with Florence, and also spoke to the care home about telehealth. **The patient was set up on Flo via a telephone call, and the patient's son did the initial text confirmation to opt in. The patient was put on to a simple protocol which asked for readings and recorded them. This enabled the DSN to remotely monitor the patient's blood glucose levels, and contact the care home to provide advice and support when necessary.**

**The care home staff reacted positively to the use of Florence, as they felt reassured that a clinician was checking the patient's readings remotely.** From the clinician's perspective, using Flo has created time savings, as they can now log into Florence and check the patient's readings. **If the readings are within range the DSN nurse doesn't need to contact the home, whereas before this was necessary to find out what the readings were.** On the other hand, if the DSN sees that the readings are too high or low, they can intervene in a timely manner, and avoid further ambulance call-outs or hospital admissions for the patient.

To find out more about how Flo is helping Community Diabetes Specialist Nurses at DCHS support patients, please take a look at the following case studies:

"Diabetes; Flo improves efficacy of best practice care - a collection of ten patient stories"

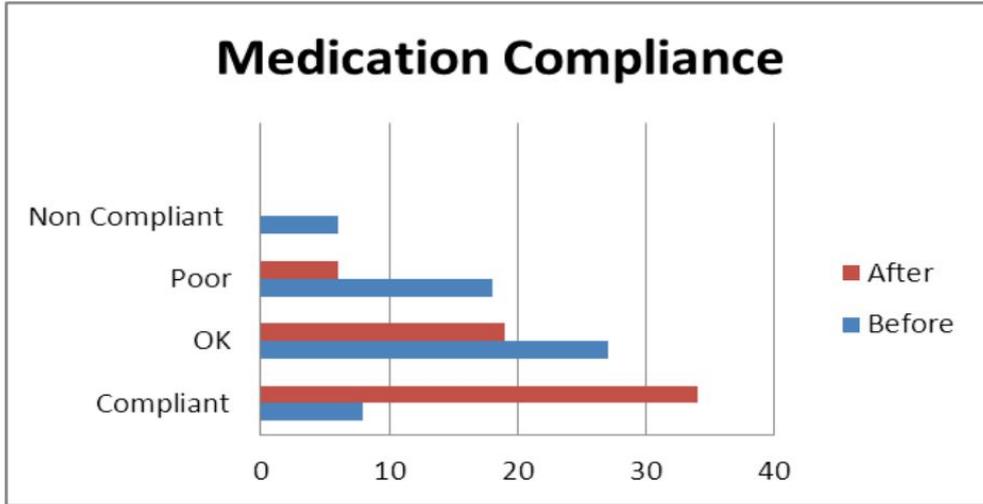
"Insulin stopped after three weeks with Flo"

"Enhanced diabetes management transforms care and reduces need for medication"

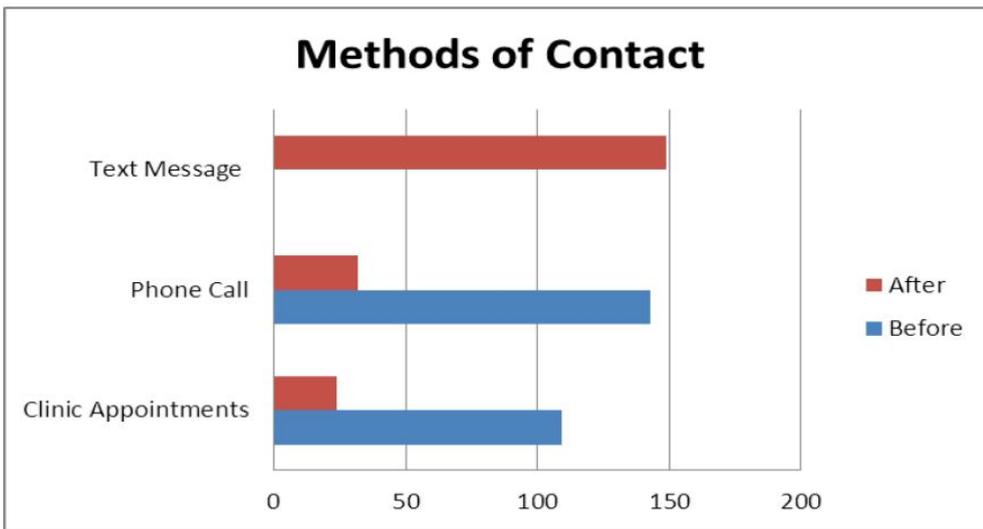
"Diabetes - Significant 4 month improvement in HbA1c"

East London Foundation NHS Foundation Trust's (ELFT) community Diabetes Specialist Nurse team have also found Flo very helpful in supporting patients to self-manage their condition. Patients receive a daily message from Flo asking them to take their blood glucose measurement and reply to her with the reading; Flo then sends advice back depending on the patient's reading. The DSN team now has access to their patient's daily readings which they would not have had otherwise offering not only the **opportunity for earlier intervention** should the patient's diabetes exacerbate, but the additional **patient reported measurements have proved to enable a more effective consultation either face to face or via Skype, thus reducing the pressure on community services with time being released to focus on patients with more acute and complex needs.**

The South East Staffordshire community diabetes team also integrated Flo into the care they provided for patients. In 2011 they were part of a pilot to explore the use of remote blood glucose monitoring. The findings of the pilot demonstrated improved outcomes for patients, as well as benefiting clinician caseload. Graph 1 and 2 below shows some of the outcome measures.



Graph 1 - Patient medication compliance as rated by clinicians. Use of Flo demonstrates an increase in compliance.



Graph 2 - Contact time before and after the introduction of Flo. The pilot period demonstrated a potential saving of up to 58 hours of clinical time.

## Example Pathway: Mental Health

### Benefits:

1. Establish, and sustain, **better habits around medication concordance and supporting recognition** of signs and symptoms of deterioration of patient wellbeing, **empowering patients to engage with their care at an earlier stage**.
2. To actively promote and encourage **sustained behaviour change**.
3. **Reduce avoidable healthcare usage**, (e.g. attendance at GP surgery, Out of Hours, Walk-in Centres or A&E) resulting from crisis episodes.
4. **Reduced number of follow-up appointments**, leading to **improved capacity** for clinicians.
5. Contacts with patients are **more appropriate and efficient**.

### Medication Adherence

South Tyneside NHS Foundation Trust's Community Nursing teams utilised Flo to support their patients. A case study shared with us by the team demonstrates how Flo can help clinicians to provide best practice care for their patients, while helping to manage their workload.



### Case study:

Fred was an individual with mild Learning Disabilities who had also experienced a decline in his mental health, leading to increased clinical input from community teams. **Fred required several home visits from a Health Care Support worker to prompt him with regards to his medication compliance, and at the time the Community Nurse was also visiting him more often than would normally be required.** In conjunction, Fred's Consultant Psychiatrist was also offering more regular appointments as a result of symptoms of low mood. Despite these additional face-to-face interventions, Fred continued to have fluctuating compliance with his medication regime and associated symptoms due to this non-compliance.

Fred was introduced to Flo to help him improve his medication compliance and engagement with his health. He received three messages a day to remind him to take his medication. **With Flo's helpful reminders, Fred began to change his behaviour to become more compliant with his medication. Community Nurse and Health Care Support Worker visits were able to be gradually reduced, with fewer Consultant Psychiatry appointments also.** Fred's improvement in his medication compliance resulted in **his mental health becoming more stable**, and he no longer needs Flo to remind him to take his medication – which is a huge success! **Flo has gently helped Fred to establish his own regular routine for taking his medication on time.**

The stabilisation of Fred's condition has resulted in him **no longer being an open case to Community Learning Disabilities Nursing or his Health Care Support Worker.** Fred now only has his annual outpatient visit to the Psychiatry team for monitoring purposes and is otherwise independently self-managing without any additional intervention required, delivering long term, sustainable benefits for patient and clinician alike.

ELFT have also integrated Flo into pathways to support those with severe mental illness (SMI) living independently within the community. Flo has been part of a feasibility RCT called "REFRAME", funded by The Health Foundation's "Innovating for Improvement" programme. A protocol has been developed which aims to support service users more holistically, including:

- Medication and appointment reminders to improve compliance and stability of condition.
- Personalised wellbeing indicators; these were developed by service users individually, and Flo would regularly ask them to respond with their score to monitor their condition. Flo's responses to these scores are also personalised to the service user.

- Service users could receive signposting information at any time by texting predefined keywords to Flo. Information included support with housing, finance and immigration concerns. Care coordinators would also be alerted, and could follow-up with service users in more detail.

The REFRAME project not only aims to **improve outcomes for service users**, but is also **helping community services to better manage their caseloads**, focusing additional time on those service users who require the most support. In addition, medication reminders help service-users to **improve compliance and health behaviours**, leading to better **stabilisation of their condition**. This may also help to reduce pressures on out-of-hours care by avoiding crisis episodes.



For more information about ELFT's REFRAME project

## Example Pathway: Wound Care

### Benefits:

1. Improved confidence and knowledge of wound care, enabling patients to self-manage wounds.
2. **Patient safety increased** due to improved patient knowledge of warning signs of complications, such as infection.
3. **Improved timeliness of clinical interventions** due to patients ability to recognise warning signs between scheduled visits.
4. **Reduction in the number of home visits required** due to patients increased ability to self-manage their wound care.
5. **Increased capacity for clinicians**, allowing them to allocate more time to those patients who require additional support.

Pennine Care developed a unique Flo pathway to help patients (or caregivers) with wound care at home. Flo prompted patients when to change their dressing (dependant on dressing type and required regularity of dressing change). Prior to starting on Flo the individual changing the dressing, patient or caregiver, is assessed by a District Nurse thoroughly to ensure that they are able to adequately care for the wound.

Pennine Care completed an evaluation of Flo for wound care, which was published in *RCNi Primary Health Care* in 2016. An overview of findings demonstrated that Flo was highly successful when implemented to support wound care:

- Patients evaluated their experience of Flo's support highly, with **100% feeding back that they would recommend Flo**.
- Service capacity was created by a **53% reduction in required nursing contacts** for those patients supported via Flo, enabling the team to focus on more complex patients.
- **No unplanned visits were required**, supporting safe practice.
- Staff reported positively regarding the revised care pathway, appreciating the support that Flo offered with improvements to the patient experience.
- **Staff felt Flo released more time to care and improved their job satisfaction.**

Patient case studies sharing their views on self-management were also included in the article:

### Case study one:

Mr A was coming to the end of his life. He was no longer able to go away for weekends to his caravan as he had to wait for the nurse to come and attend to his wounds on alternate days. Mrs A was shown through the new pathway of how to manage her husband's wound care. **Mr A and his wife felt the self-management process gave him the freedom to spend the last few months of his life with his family and go away for weekends in their caravan.** They felt Flo was supportive not only in reminding them when to change the dressing and what to look out for but also psychologically and emotionally because they felt that they were not simply left to get on with it. **Mr A felt that the quality of his life was not dictated by having to wait for the nurse.**

### Case study two:

Mrs P had a skin graft to her leg following surgical removal of cancer. She received a nurse visit on alternate days to change her dressing. **It was important for her self-esteem that she showered daily, which would have meant doubling the nurse's visits** to apply dry dressings after her shower. Her husband was taught to dress his wife's wound as she was unable to do it herself. **His confidence and competence meant that Mrs P received self-care six days a week, with the nurse attending once a week to ensure ongoing healing.** There were **no unplanned visits** and the wound **healed with no complications.**

### **Case study three:**

Miss D needed to visit the treatment room several times a week for her wound dressing to be changed following pilonidal sinus excision. **She was anxious as she was unable to return to work due to her care needs.** She was happy for **her partner's mother to be trained to change her dressings**, and after competency was achieved Miss D joined the self-management pathway with Flo's support. **This allowed her to return to work three weeks earlier than would have been the case during standard care.**