

# Practical success in catalysing frontline applications of technology enabled care services for delivery of care of long term conditions

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## Abstract

Adopting and disseminating technology enabled care services at the NHS frontline is challenging for busy clinicians and under-confident patients and their carers. We capture our experiences of trying to generate digital healthcare options on a population-wide scale in general practice, mental health and acute care settings, including: Flo Simple Telehealth, apps, skype, Facebook modes of delivery of care.

## Introduction

Despite the common usage of the Internet and other technologies in people's personal lives, take up of telehealth and technology enabled delivery of care across the NHS and social care settings has been very slow. Digital technology is making it much easier for health and care professionals to share knowledge about patients for whom they jointly care, and help patients and their carers build their understanding and confidence of their long term health conditions. Innovative leaders who have made technology enabled care services (TECS) happen in NHS settings share their insights into how to engage patients and practitioner users of TECS. The objective of this paper is to present examples of TECS as underpinning health service redesign, supporting delivery of healthcare in virtual ways.

## Methods

The team associated with WMAHSN Patient Centred Care Theme and Long Term Conditions (LTC) Network worked with individual practitioners, healthcare teams, commissioners, and provider practices/Trusts across the West Midlands to agree the range of TECS they wanted to pilot or rollout. Choices were: apps focused on long term conditions such as asthma, diabetes type 2, Chronic Obstructive Pulmonary Disease (COPD), back pain; Flo Simple Telehealth, such as hypertension, COPD, redressing adverse lifestyle habits; Facebook, such as closed Facebook Groups for patients with multiple sclerosis(MS), or atrial fibrillation(AF); skype/video consultation such as between practitioners and nursing home residents. Sometimes more than one mode of technology was used; e.g. Autographer camera and Flo Simple Telehealth in parallel.

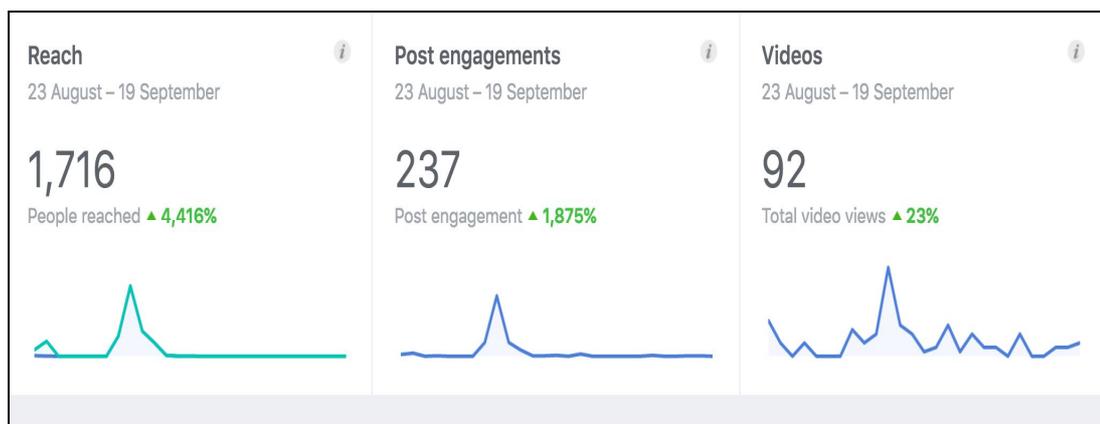
We endeavoured to solve any barriers to access to skype such as by lifting the firewall in general practice surgeries, writing Privacy Impact Assessment and Standard Operating Procedure documents that were endorsed by the Caldicott Guardian of the

organisation, and solving information governance concerns. We trained front line staff who volunteered in the use of social media; helping clinicians at the Royal Stoke University Hospital for instance to create and manage closed Facebook groups for patient groups such as those with MS or AF, or who participated in cardiac rehabilitation. We introduced organisations across the West Midlands to the opportunities via locally delivered workshops, emailed information updates, individual interactions between organisational leads and our project. The original development and support team have now separated and continue the organisation and promotion of Flo as a social enterprise<sup>1</sup>.

## Results

We are sharing three examples of the frontline applications of TECS for which we have provided support for population-based rollout:

1. The number of patients who have used Flo telehealth is now more than 43,000, around one-tenth being from the West Midlands. Hypertension, asthma, COPD are popular choices for applications in general practice, alongside redressing of adverse lifestyle habits and medication reminders.



**Figure 1:** Promotions via AF Closed Facebook Group with patients of Royal Stoke University Hospital in an example time period 23.8.16 – 19.9.16

2. Example Facebook Closed group membership for three Facebook sites at the Royal Stoke University Hospital (as at 1.10.16) is:
  - Multiple Sclerosis support = 120
  - Atrial Fibrillation and Stroke = 74
  - Cardiac rehabilitation = 65

A typical month's insight data for the AF page is given in Figure 1:

Reach = number of people reached by your page

Post engagements = number of people who have actively engaged with the page e.g. 'likes' 'comments' 'shares'

Videos = number of people who have viewed site videos in the last 28 days

3. In March 2016, there were 956 users of one of the four Manage Your Health apps, of whom 237 were return users; 55% used IOS and 45% used Android operating systems.

4. The [www.digitalhealthshot](http://www.digitalhealthshot) website in the time period of 28.2.16-29.3.16 had a total of 211 views. The most popular website video is the whiteboard animation ‘What is Flo and how does it work?’ with a total of 956 viewings and 116,000 loads to date (as at 30.3.16). The Vimeo videos in total have had 2,005 viewings and 377,000 loads to date.

## Discussion

The challenges we addressed were the lack of uptake of TECS by commissioners and providers, and frontline practitioners as elements of clinical pathways; resistance from all to embedding new models of care (that include digital healthcare) in organisational delivery of healthcare. But in focused ways we have evidence of impact that digital healthcare improved healthcare usage particularly for Long Term Conditions (LTCs) such as those patients with COPD via Flo telehealth<sup>2,3</sup>; improved prevention through technology approaches supporting people to stay healthier or remain stable for longer such as apps used by those with asthma; empowering patients to take more responsibility for their own care such as those with AF via Facebook; modernise delivery by workforce by addressing learning and confidence needs.

## Conclusions

One of the five ‘big enablers’ of the shift in modernising healthcare is technology, the others being: finance, integration, workforce and empowerment. TECS can underpin more effective and productive working and thus save money, aid integration across health and social care settings, support the workforce in more efficient and virtual delivery of care as well as empower citizens. Enable clinicians to try out, recommend and engage patients to use one or more of the range of modes of digital healthcare that can support their self care or shared management plans.

## References

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