



medvivo

integrating health and care



The Portsdown Case Study: What a fully-managed service can accomplish

Medvivo

Telehealth is an increasingly commissioned service due to the recognition of the benefits in managing long term conditions with remote monitoring. The purpose of telehealth services is to improve clinical outcomes for patients and increasing productivity in health services, which will result in significant long-term cost savings. Telehealth has been specifically mentioned in the NHS Mandate published in November 2012 and is acknowledged as a vehicle for delivering QIPP.

Medvivo (formally Telehealth Solutions) believe that telehealth is the game changer that will ensure a sustainable NHS. To help add to the pool of evidence Medvivo are working with Imperial College London on a case study that looks at the cost and efficiency benefits of telehealth as well as quality of life for the patients.

Study

Donal Markey, Clinical Director for telehealth at Medvivo and responsible for service design and delivery explains "The Case Study is assessing the effectiveness of a telehealth intervention from a quantitative and qualitative perspective and cost effectiveness from a GP Practice perspective.

The cohort characteristic is similar to the Whole Systems Demonstrator (WSD) in that we have focused on patients with Chronic Obstructive Pulmonary Disease (COPD), Chronic Heart Failure (CHF) and diabetes at various stages of disease progression. It was mutually agreed to start with COPD patients and then to progress to CHF patients and finally to diabetes patients due to the complexity of these conditions and the subsequent complexity of developing an

"It gives me security because it's there so I know that somebody else, other people are on the outside listening in and looking after me, so it's good. I'm quite comfortable with my illness now." Rose COPD Patient in Portsmouth

effective and cost effective intervention.

Rather than add to research with another randomised controlled trial we have chosen a case study research format to explore the practical aspects of how a GP Practice implements a telehealth intervention with centralised triage, how best to implement this intervention into established care pathways, the impact of the intervention on clinicians within the GP Practice and the impact on the patients that access the service.

The WSD set out to measure the effectiveness of telehealth and also the cost of delivery but it did not attempt to establish the cost effectiveness of telehealth as an intervention therefore we have specifically looked at measuring the cost effectiveness of telehealth from a GP Practice perspective as part of our study."

This research is being conducted by Imperial College London, led by Professor Nick Bosanquet with initial top line findings released in 2013.

Introduction to Portsdown Group Practice

The Portsdown Group Practice operates across 4 surgeries and covers Portsmouth and the surrounding areas. Of the 30,000 patients, 14.5% of the practice population is aged over 65.

Dr Julian Neal, Senior Partner at the



Professor Nick Bosanquet

Portsdown Practice explains, "Long-term conditions are becoming an increasing problem in general practice, and these patients will inevitably need extra attention after the initial diagnosis and during more challenging periods of their diseases. This means that a significant proportion of our patients will benefit from telehealth at one time or another. Having patients record their vital signs and answer pertinent questions about their health gives us a greater insight into their disease and enables us to optimize their treatment and Medvivo Specialist Nurses to support them during difficult times, empowering them to take greater control over their condition".

Fully-managed telehealth service model

There is a wealth of experience in the UK and elsewhere concerning telehealth deployment and the elements listed below have been identified as those that are often the hardest for existing services to offer:

- Composition of clinical protocols reflecting the input and approval of senior specialists
- Support in patient recruitment
- Scheduling & performing installations
- Training the patient in how to use the equipment
- Nurse-led Clinical triaging
- De-installation and cleaning of equipment to pass onto the next patient
- Support of data analysis – both quantitative and qualitative

These can be offered by a specialist organisation that manages all aspects of the implementation of telehealth services. This is the most cost-effective and efficient method as staff are utilised for specific tasks. Robust project management should be in place to support the initiation and expansion of telehealth services, supporting the NHS teams to deliver the service they want for their patients. On-going performance analysis should also feature from the start of any service to recognise the benefits of the service, which can be particularly difficult to measure (in terms of admissions avoidance and projected savings).

In particular, clinical triaging should feature as a component of a commissioned service as it is key to the scalability of telehealth envisaged by the Department of Health in the 3millionlives campaign, which aims to make telehealth and telecare available to 3 million people over the next 4 years to 2017. The aim of this service is to reduce hospital admissions for patients with conditions such as COPD and CHF thus reducing the acute care costs for these patient cohorts.

“Working in partnership with Medvivo has given us the opportunity to support our patients whilst enabling our clinicians to focus on the most complex cases. The fully managed service is the only viable option to ensure high standards of care are met and maintained during this time of efficiencies, and actually represents improved care pathways for Long Term Conditions through self-management. It is clear that telehealth is good for patients; clinical outcomes are improved, lives are saved and admissions are prevented. Patient engagement with their long term conditions also increases. My own experience of telehealth suggests that significant cost savings can only be generated if a central nurse-led triage service is at the heart of any telehealth service” says Dr Julian Neal.

Benefits

“In November alone Medvivo’s Fully Managed Service produced savings of £31,141 and 89 bed days were saved from 19 hospital avoidances. Since the research began in June (until the end of November) 696 bed days and £249,128 have been saved. (Fig 1).

“I love it. It makes me feel as though I’m more superior to the disease. I’ve got it, but you are not going to kill me I’m going to beat you and I’m going to push you down. That’s the only way I can describe it”

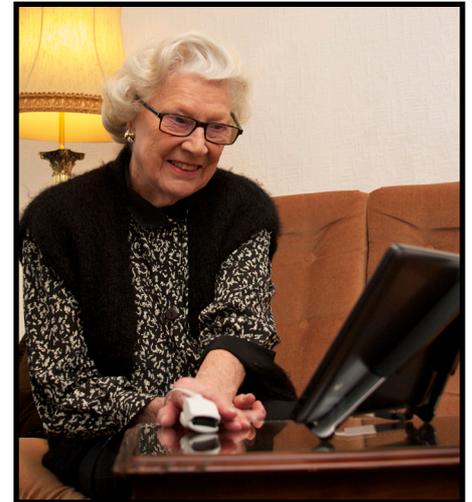
Patricia COPD Patient in Portsmouth



These are impressive figures and only represent a cohort of COPD patients. We are currently recruiting CHF patients and will then progress to diabetes patients. We believe that the results will continue to show that the Fully Managed Service can keep patients healthier for longer, reduce unplanned hospital admissions and save the NHS money.” Explains Clinical Director for telehealth Donal Markey.

Dr Julian Neal agrees adding, “Telehealth is about doing things differently. At the moment the NHS is facing a deluge of work, most of which is actually to do with ageing population with long term conditions. You simply cannot allow the triaging of every individual patient who has a telehealth system in their home to be done by people who are currently working in the community, all that does is it adds to their current workload rather than detract from it. So central triaging is the way that you get the financial and the efficiency gain.

“For example we see diabetic patients 3 times a year on average, so we are getting 3 snapshots a year of how they really are. With telehealth we can measure their blood pressure, their pulse, their blood glucose levels, how they are feeling on a daily basis without involving any of the current partners or practice staff by monitoring this remotely by a specialist nurse that we trust, who can, by him or herself look after between 2 and 300 patients quite easily every day. And that is a revolutionary new way of delivering healthcare to people living with long term conditions”.



Telehealth Specialist Nurse

“I have had a lot of positive comments from patients who feel that the service has made a big difference for them. They no longer go to the GP as much as they used to because they keep antibiotics as a rescue pack at home and there is someone always checking on their progress and advising them. The early intervention through Telehealth helps to treat patients in their own homes and therefore avoid unplanned hospital admission and A & E attendance. For some patients by the time we call them they would have taken the right action according to what we advised them previously. So Telehealth promotes patient education which in turn helps in self-management. “

Lawrence Gora

What products were used?

The Fully Managed Service utilises the user friendly HomePod, which is a touchscreen tablet loaded with approved clinical protocols, that patients interact with to identify how they are feeling that day. This information is sent, securely, to Medvivo Specialist Nurses who are based in a central triage centre. These nurses monitor the results using Medvivo Clinical User Interface (CUI) which collates the patient’s data and allows them to identify trends and communicate with the patient. Additionally we offer asset management and supportive infrastructure services.

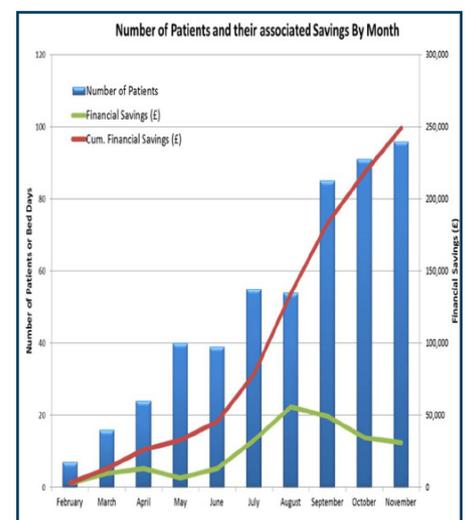


Fig 1