

Case study: Cambridge University Hospitals NHS Foundation Trust

Developing self management and personal health planning for housebound patients

The challenge

There is evidence that self-management support reduces the rate of hospital admissions in patients with COPD. Whilst we provide an Enhanced Pulmonary Rehabilitation programme locally for COPD patients who are mobile, the programme is not accessible to housebound patients – who are the most vulnerable group – so they cannot learn the skills or benefit from the social support that this group provides. Anxiety, depression and social isolation are prevalent in housebound COPD patients who are at increased risk of hospital admission.

What we did

In 2011 we were awarded Regional Innovation Funding to enable us to conduct a feasibility study to trial a web-based self management package with nurse coach support for this patient group. The aim is to enable patients with COPD who are housebound to develop self-management skills and participate in personal health planning.

The project is in partnership with UK Preventive Medicine which offers a web based package of support called The Prevention Plan, designed to support self-care and provide remote care support. The system provides the patient with an overall health risk assessment, personal Prevention Schedule according to NICE guidelines, their physician-defined care plan, action programmes to tackle risks, a full Personal Health Record which also allows for monitoring entries (such as peak flow, blood pressure, glucose etc.), NHS choices content rendered within their personal portal, trackers, safe messaging and telephonic and messaging support from the patient's care team. For the care team, a clinical back-end enables population health management, workflow management, passing messages between care team members, managing telephonic support for the patient, co-ordination with community care etc.

COPD patients who are mainly housebound are supported by a nurse coach to use The Prevention Plan and those who do not already have internet access at home are provided with the necessary

equipment (tablet or laptop) and internet connection. The nurse coach will identify and then work with patients to coach them in the use of the Prevention Plan and provide self management support for personal health planning. They will be able to communicate and share with other patients who are also learning to self-manage through the Prevention Plan.

Due to the financial challenges within the Trust recruitment of the nurse coach took longer than anticipated so patient recruitment was delayed until the end of April 2012. In the meantime the project manager put governance arrangements for the project in place and identified the necessary hardware and connectivity options, liaising with possible suppliers.

As a feasibility study, the key aim of the project is to ascertain the acceptability and usability of the package for both patients and clinicians, and to assess its potential as a means of self-management support. As the work develops we would wish to know if such support can contribute to decreased healthcare utilisation from home visits, GP visits and inpatient stays. We are interested to know if the patient experience will be improved by patients being able to access support not previously available to them.

The impact

We are in the early stages of patient recruitment, with three patients now enrolled in the programme, so it is too soon to assess the impact of The Prevention Plan and programme on patients. An evaluation plan has been drawn up and evaluation questionnaires are being created. The evaluation period will run until February 2013 and we are planning to recruit up to 15 patients.

If results of the feasibility study are positive, we will work with UK Preventive Medicine to consider how we can formally evaluate the package and potentially integrate the online tool “The Prevention Plan” into the working protocols of the Integrated Respiratory Team. This would be justified through the cost-savings achieved.

If this is the case, we would need to develop partnerships with hardware providers that would enable us to obtain the hardware and connectivity on cost effective terms.

Learning

Since we have only recently started patient recruitment, learning so far has primarily been confined to the practicalities of setting up such a unique project, where equipment will be used in patients' homes and patients will be supported remotely by a nurse coach. Governance agreements and arrangements took some weeks to put in place. However the bigger challenge was researching and identifying appropriate hardware and connectivity possibilities and telecommunication companies willing and able to be involved, who can also supply equipment within our budget.

We will mainly be giving patients computer tablets and it was agreed early on that they would need to have 10.5" screens for ease of use by elderly patients. We will be monitoring how patients (some of whom are expected to be IT novices) learn to use the tablets and their internet connection, and what difficulties they encounter or benefits they obtain. We have also purchased some laptops which we think may be helpful for patients to use when they complete the initial Health Risk Assessment and other forms in The Prevention Plan, which require a lot of data entry.

Some functionality tweaks to The Prevention Plan are possible and we are in constant contact with UK Preventive Medicine to iron out issues as they arise in these first few weeks of patient recruitment. We will continue to monitor patients' use of The Prevention Plan and how it supports patients with personal health planning and improves their self management skills but we have noted that there are some aspects of The Prevention Plan which we feel would need adapting or changing to better support patients. The nurse coach and project manager are recording these learning points as the project progresses.

There are some separate and additional benefits for patients which we have been able to incorporate into the project. These include a video conference facility for communication with the nurse coach and access to telehealth monitoring equipment which can be provided to the patient as an add-on if the nurse coach feels it would be beneficial.

There are other browser based packages available which support patients to improve their personal health planning skills such as Know Your Own Health and howareyou.com and we are signposting patients to these and assessing the functionality of these additional tools so that we can learn about other generic options for patients.