Telehealth in Practice

Hywel Dda University Health Board, Wales - COPD

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Ambition

The aim of the telehealth service for patients living with COPD is to support self-management through the provison of an appropriate level of telemonitoring that is flexible and can respond with fluctuations in the patient's health status and thus avoid future emergency hospital admissions due to a COPD exacerbation.

COPD Care Management – routine care
Patients with COPD who are admitted to hospital due to an exacerbation of their COPD are usually referred to the specialist home-visiting nursing service on discharge. The nurse, together with the patient's GP, provide ongoing post-exacerbation care and support (Amber/Pink) designed to enable the patient's symptoms to stabilise and for them to self-manage (Green). Depending on the severity of patient's COPD, 'stable' patients will be discharged from the specialist home-visiting nursing service and return to having their COPD care management from their GP and GP nurse. Routine care for all patients with COPD includes the offer of annual flu vaccinations, single dose pneumonia vaccinations, appropriate inhalers, spirometry, and MRC score review, pulmonary rehabilitation, COPD Educational Programme for Patients, non-invasive ventilation, home oxygen and palliation according to the severity of their disease.

Patients are able to be referred to medical and nursing COPD specialists in the hospital and/or community services if required (Pink).

U4H Telehealth Enabled COPD Care Management
Patients living with COPD enrolled into U4H project received either the Florence (NHS developed Simple Telehealth www.getflorence.co.uk), GPRS software system or the Docobo landline system (www.docobo.co.uk). A patient or their carer performs the blood oximetry, temperature and symptom questions daily. The oximetry and temperature recordings are sent to the hub either via Bluetooth (Florence) or by wired connection (Docobo), and transferred to a computerised decision tree. The symptom questions are responded to manually by the patient, and answers are entered, either by the patient or their carer via Flo/Docobo (Green). For the first 7-10 days patients also received a daily telephone call from their specialist home-visiting nurse (Pink). (A video conference was unable to be performed due to the lack of reliable broadband and 3G coverage).

The patient continues to take their vital signs and symptom questions for at least 30 days after commencing the telehealth service up to a maximum of 3 months (Amber). Florence responds to the symptom question data according to an individualised set of parameters, and provides instant feedback to the patient via their computer tablet along with locally agreed advice messages every three days. The Docobo did not provide feedback direct to the patient. Alerts are sent to the patient's key healthcare professional if readings and responses are outside the patient's personalised parameters. The professional will contact the patient either by SMS or telephone (Pink).

After recovery from the initial exacerbation, patients are transferred on to the low intensity telemonitoring service and receive advice and motivational messages every three days (Green).

Healthcare professionals can access the results uploaded to Flo and Docobo, via a secure internet connection, at any time.