

### Use of Telehealth to Shift the Balance of Care From Acute to Primary Care: Inverclyde Community Health Partnership

During 2009 – 2010, the Inverclyde Partnership carried out a pilot on the use of telehealth on 10 patients selected from a cohort of 94 patients with Chronic Obstructive Pulmonary Disease who were identified as at risk of readmission to hospital. The principal aim of the pilot was to improve the care of patients with Chronic Obstructive Pulmonary Disease (COPD) by early identification and treatment of exacerbations, facilitated by an alternative pathway of care.

The pilot aimed to support patients in their homes and thereby assist them to better understand and self-manage their condition; to facilitate further mainstreaming of telehealth/telecare at a local partnership level; and to promote of telehealth/telecare convergence. The pilot also examined the effect of the intervention in accordance with targets to reduce hospital admissions. During the pilot a reduction in 26 admissions was observed, from 33 in 2009 to 7 in 2010 (78% reduction). This suggest that telehealth would to be an effective aid in shifting the balance of care from the acute to primary care setting.

#### Aims and Objectives

Key objectives included:

- ◆ evaluate the use of DOC@HOME® telehealth in the management COPD
- ◆ promote supported self care empowering patients to manage their own condition
- ◆ develop the role of District Nurses to provide early intervention in the event of COPD exacerbations with the support of the Respiratory Clinical Nurse Specialist.

#### Methods

10 patients with COPD were recruited via their GP practices, in accordance with Scottish Patients at Risk of Readmission (SPARRAA). Each patient measured and remotely entered symptoms and signs of their COPD at regular intervals using a Docobo HEALTHHUB® and this data was uploaded to a secure server. Alert triggers were set, unique to each patient according to their baseline recordings, i.e. pulse oximetry (SpO2), pulse rate, blood pressure and also responses to a symptomatic question set.

Telephone triage and patient treatment algorithms were compiled to facilitate the management of patients who had 'alerted'. The data was reviewed daily by the Respiratory Nurse Specialist's (RNS). Using defined assessment criteria, the RSN decided if any intervention was required. Interventions were defined as actions where either the District Nurse or RNS was either required to visit patient or make telephone contact with the patient to clarify telemetry issues or patient enquiries. Patients were interviewed 4 times within the duration of the project to examine their experiences.

#### Results

Patient Experience:

The outcomes of the patient interviews were generally positive, and patients had confidence in the support provided by the RNS. After 6 months, all patients interviewed said they contacted their GP less than they used to and cited being able to contact the RNS as a reason for this.

Comments included:

- ◆ Patients found the HEALTHHUB® easy to use
- ◆ The readings help people to understand their condition more
- ◆ The readings help people to manage their condition, whether by signalling a need to slow down or indicating that all is well
- ◆ Patients welcomed feeling more confident about their condition knowing that others are looking at their readings and will intervene if necessary

Hospital Admissions

During the pilot a reduction in 26 admissions was observed, from 33 in 2009 to 7 in 2010 (78% reduction).

#### Conclusion

These results suggest that telehealth would to be an effective aid in shifting the balance of care from the acute to primary care setting.

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