

Use of low intensity Telehealth in Adult Social Care to prevent avoidable admissions

From the beginning of November 2013 to the end of June 2014 Sussex Community Trust (SCT) carried out a pilot for 8 months on the use of low intensity Telehealth with 92 patients in the locality who were resident in Nursing/Care Homes. The patient cohort had a range of primary diagnosis; CHF, COPD, Diabetes and UTIs. The pilot aimed to support patients and staff in the Nursing/Care Homes with specific focus on preventing unnecessary admission to hospital.

During the 8 month pilot SCT saw a 75% reduction in admissions across the patients involved compared to the same period the year previously. 23 of the patients (49%) had no admissions at all through the period compared to the previous year. During the pilot SCT collected quantitative data as well as qualitative data using questionnaires for the Nursing/Care Homes, patients and their families and clinical staff.

Aim

The purpose of the study was to examine whether the use of low intensity telehealth to assist in the early detection of signs and symptoms in patients residing in Nursing/Residential Homes within Coastal West Sussex would lead to the prevention of unnecessary admissions to hospital.

Objectives

- ◆ Reduce unnecessary face to face contacts with patients
- ◆ Prevent avoidable admissions to hospital
- ◆ Give control and improve relationships between the nursing/residential home staff and SCT Matrons
- ◆ Manage risk through effective procedures

Approach

Each of the four Admission Avoidance Matrons selected two high admitting Homes within their geographical locality with home managers who wished to be involved.

The Homes were supplied with android tablets to use the digital healthcare platform DocoboAPP. The matrons put together a set of questions for each patient group looking for key indicators for CHF, COPD, Diabetes and UTIs. Once the patients were selected and enrolled on the Doc@HOME secure clinical server, each patient upon enrolment were assigned a set of questions based on their primary diagnosis.

These questions would be presented to the patients at a frequency the matrons deemed suitable using the android tablets. Once the patient had answered the questions their response would be sent to the secure clinical server where the matrons could look at the physiological and symptomatic data that had been collected. The matrons would use this health intelligence to inform ongoing care and if necessary adjust the questions on a per patient basis to look for comorbidities or action an appropriate intervention.

Key results

The overwhelming consensus from the homes involved with the pilot agreed that low intensity Telehealth had the following impact:

- ◆ Enhanced the standard of service for patients
- ◆ Provided security and peace of mind for patients
- ◆ Involving patients in their care had a positive effect on patient concordance
- ◆ Enabled early detection and intervention
- ◆ Assisted in reducing A&E visits and non-elective admissions

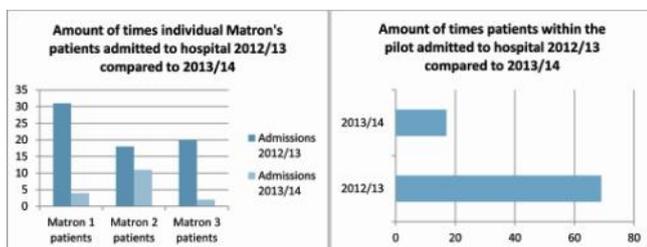
Findings overview

Residential homes in general found the pilot far more beneficial than the nursing homes. It raised their knowledge level, skill, competencies and confidence, not just for those patients on the pilot but for all resi-

evidence based telehealth

Comments

- Care homes and families involved with the pilot**
 'Useful in early detection and improved residents receiving treatments and improved recovery.'
 'I cannot stress how fantastic this has been for our residents and the number of potential admissions that we have avoided. This is so important to us given that we are a dementia home and our residents respond better in their own home.'
 'It has been useful as now the staff are aware of the early signs that something is changing.'
 'Mum was having problems with her blood pressure and the matron arranged for a 24hr tape. Mum's medication was altered accordingly, all done within the home.'
- Matrons Feedback**
 "Gave the homes more confidence in assessing their patients condition"
 "Exacerbations/deteriorations were identified sooner avoiding admissions"
 "Homes discussed issues, leading to advice and support given, resulting in reduced GP visits"
 "Families of the patients welcomed the pilot and were very excited by it"
- Care Quality Commission Feedback**
 CQC happened to make a visit to one of the homes involved in the pilot and commented
 'They felt it was a positive action for the home and really liked it.'



Comparative hospital admission data

Alert handling

All 4 matrons received alerts for their patients. Overall Heart Failure was the top primary diagnosis for the alerts with a total of 252 with COPD second at 181. However, when reviewing the primary diagnosis group on average alerts raised per patient were 23 for COPD and 18 for HF. The response to the alert depended on what the home told the Matron. Each alert would result in a telephone call which would lead to:

- ◆ advice given over the phone
- ◆ visit made to the patient
- ◆ new diagnosis with a new treatment plan to follow prescription
- ◆ The matrons did not admit any of their patients apart from one who was in Type 2 respiratory failure and was toxic from their medication.

Diagnosis	Patients	Patients alerting	Total alerts
CHF	19	14	252
COPD	12	8	181
UTI	18	9	36
Diabetes	25	9	20
Unrecorded	18	6	24

Conclusion

This pilot shows that using low intensity Telehealth is a cost effective approach to admission avoidance at a cost of £0.90 per day per patient and for the period of this pilot there was a 75% reduction for admission across the patients involved compared to the same period the year previously and 49% had no admissions at all compared to the previous year.

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