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Telehealth: a trial with acute medical patients

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Aims

To reduce hospital admissions and support early discharge in key acute medical conditions by enhancing care and safety within the patient's own home.

Methods

Following attendance at the acute medical unit / clinical assessment team as either a ward attender or inpatient, patients with one of four key conditions were identified for telehealth monitoring: pulmonary embolism, pneumonia, severe hypertension and atrial fibrillation.

The selected patients were given a mymedic telehealth system installed in their own homes. Patients recorded their own vital signs and answered key questions on a prescribed basis. Readings were received by a response centre and any deviation from set parameters raised an alert, to which the telehealth nurse responded. Telephone support was given by the telehealth nurse to patients as needed.

Monitoring was prescribed from 5 to 30 days. The monitoring was used to detect changes and improvements in the patient's condition and to initiate medication changes when needed.

85 patients were recruited to telehealth over 14 months from January 2013 to March 2014. 64 patients were sent surveys to complete to gather evidence of their experience with telehealth (78% response rate).

The case notes and computer records were reviewed to extract clinical and telehealth monitoring data for the 85 patients.

Results

- 27 admissions were prevented, equating to 43 bed days saved.
- Eight inpatients had a reduced length of stay, equating to 10 bed days saved.
- 56 follow-up visits were prevented.
- 84% of patients felt more confident following discharge.
- 55% of patients felt that monitoring enabled their management to be done at home.
- 42% of patients reported that monitoring reduced the need to visit hospital or GP.
- Average length of time for monitoring was 19 days, with an average of one alert per patient.

Conclusions

The trial clearly showed that monitoring prevented admissions, reduced length of stay and reduced follow-up visits to the acute medical unit and therefore had met its objectives. A significant number of patients reported benefits from having been on telehealth monitoring in terms of confidence and not having to attend for multiple follow-up appointments. It has shown that telehealth monitoring has its place in acute medicine .This allowed us as a team to develop further pathways that include the employment of telehealth monitoring for other conditions.

Conflict of interest statement

There were no conflicts of interest during this trial. ■

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