Reducing COPD admissions with a specialist chronic disease management team

An outline of the benefits of introducing a specialist community team with support from acute care services to manage patients with COPD.

There has been a drive to manage patients with COPD at home as an alternative to hospital admission but results from services that have attempted this have been mixed. Evidence based guidelines are available for managing this condition in the community (British Thoracic Society, 2007), but these relate to disease specific respiratory models as opposed to generic long term condition models. The use of generic models for managing COPD has been viewed with caution because there is a lack of evidence supporting their use (Halpin, 2008).

AIM OF THE TEAM

We wanted to explore whether a specialist chronic disease management team, working in the community under clinical supervision from acute care respiratory consultants, could reduce COPD admissions. The project involved two district general hospitals serving a semi-rural population of 179,000 across Carmarthenshire.

DEVELOPING THE SERVICE

Two nurses and a respiratory physiotherapist were employed by the local health board and coordinated by a manager with a background in specialist respiratory nursing.

<table>
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<tr>
<th>TABLE 1. MEAN NUMBER OF HOSPITAL ADMISSIONS PER PATIENT</th>
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<tr>
<td>Pre chronic disease management team</td>
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<tr>
<td>3 months</td>
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<td>6 months</td>
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<td>12 months</td>
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Each member of the team covers an area of the county. They accept referrals from primary and acute care for patients with a COPD diagnosis confirmed by spirometry. These patients were receiving optimal therapy, as recommended by NICE (2004), but may have the following:
- Continued symptoms;
- Recent admission due to COPD;
- Multiple exacerbations within the previous 12 months.

Process

Referrals are prioritised. Patients are seen within 1-28 days but not out of hours.

The team has weekly meetings with respiratory consultants on rotation, supported by direct access to the multidisciplinary hospital respiratory team for clinical advice, prescription of medicines and radiology. They provide home visits, including a clinical assessment and basic observations, and bring medicines to patients’ homes to treat exacerbations promptly. They also provide:
- Telephone contact;
- Education on COPD for patients, carers and relatives;
- Advice on self-management, exercise and pulmonary rehabilitation;
- Liaison with GPs and other community healthcare professionals.

Long term oxygen therapy, domiciliary non-invasive ventilation and pulmonary rehabilitation are available locally. When patients are stable, they are discharged. Using their written self management plan, they are encouraged to self-refer if they have problems.

RESULTS OF THE SERVICE

Patient admission data was reviewed retrospectively by two experienced nurses, one from the COPD clinical management team and also an independent hospital based nurse.

Over the first year, from 1 June 2006 to 31 May 2007, the team received 204 referrals with no reported adverse clinical events. There was a 32% reduction in the total number of patients with COPD coded as a primary diagnosis admitted to hospital, compared with the previous 12 months before the chronic disease management team was introduced.

Table 1 illustrates the mean number of admissions per (still living) patient in the three, six and 12 months before and after being referred to the team.

CONCLUSION

There was a sustained reduction in COPD admissions over 12 months in patients managed by the specialist team with close acute care support.

We believe this team approach has made a significant impact on hospital admissions. While it is difficult to identify which specific part or parts of their management caused the reduction in admissions, the only change in services available was the introduction of the home care team.

REFERENCES