Reducing Hospital Admissions in Diabetes Mellitus

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Introduction

Good diabetes management has been shown to reduce the risks of complications, however only 20% of people with diabetes are achieving the targets recommended to reduce their risk. Nationally, diabetic related complications accounts for 1 in 5 of all CHD, foot and renal admissions. People with diabetes are twice as likely to be admitted to hospital and experience prolonged stays, resulting in 80,000 bed days per year in the UK with associated costs. It is currently estimated that about £10b is spent by the NHS on diabetes (10% of the NHS budget), of which £76bn is on prescription items. Prescribing and admissions data for Leeds North CCG for the period April-Dec ’13 showed that we had a high drugs cost and higher rate of diabetes-related hospital admissions in the region, which prompted this piece of work (fig 1).

Searches before and after the audit showed positive results (fig 3). An improvement in % targets achieved improved in all groups apart from one (group H - pre-diabetes with no HbA1c recorded). It was encouraging to see a reduction in the numbers of patients in group I (T2DM on treatment with HbA1c < 42mmol/mol), as a recent audit at the local acute trust, showed a high percentage of patients being admitted with hypoglycaemia.

Method

We developed an outcome based NICE implementation tool to help GP practices identify and review certain groups of high risk non-insulin diabetic patients (method detail and audit available on request). There were 9 groups in total and practices were given a year to identify, review and report back on all patients in each group. The audit was part of the prescribing engagement scheme and so was mandatory for all 28 GP practices to complete. Detailed searches were developed to allow practices to interrogate their prescribing systems and identify patients in each group. The aim of the tool was to improve glycaemic control and modifiable risks such as; BMI, BP and cholesterol, as well as optimising the treatment of existing organ damage (e.g. ACE I/ARBs for microalbuminuria). Patients were also offered lifestyle advice and referred to dieticians and health trainers if necessary. The audit ran from April ’14 to March ’15.

Results

Practices reviewed 813 patients during the audit period. The percentage reviewed in each group can be seen in figure 2.

Discussion

The outcome of this work means more patients are benefitting from their treatment, fewer are being admitted to hospital and the costs of treatment has fallen (see fig 4 below). It was so worthwhile that we’re repeating the audit again this year as part of our prescribing engagement scheme. We have changed it slightly to try and capture more detail on what changes were made to the patient’s regime and the individual outcomes. Citywide guidance for the treatment of type 2 diabetes has also been developed, and this will hopefully help prescribers to optimise treatment further.

GP Feedback

It was a large piece of work which we found challenging, however we made some worthwhile interventions to improve patient care. We feel that the care our patients receive for their diabetes has improved as a result of the audit.

By taking time to focus on each group it meant we identified undertreated and undiagnosed problems e.g in the pre-diabetes group we found patients who’d developed hypertension, or were overdue other monitoring. So it was worthwhile calling them in.

We initially thought the numbers were daunting but by breaking it up into groups and sharing it out across the practice, we soon managed to cover most patients.

References