Turning the tide on ineffective prescribing of glucagon like peptide (GLP-1) mimetics in type 2 diabetes in East Sussex

Introduction

Spend on diabetes prescribing; in particular glucagon like peptide 1 (GLP-1) mimetics within our CCGs was significantly higher than expected based on national prescribing patterns with significant variation existing between GP practices. This project was undertaken by the Medicines Management (MM) Team to support primary care diabetes teams to work with patients to optimise prescribing through implementation of NICE guidelines for Type 2 diabetes,

Aim

To review all patients prescribed GLP-1 mimetics within our GP practices to assess prescribing in accordance with NICE guidelines. The main objectives were to identify suboptimal prescribing, rationalise therapy, and improve quality of life for patients, whilst ensuring good value from the prescribing budget

Method

The project was included as a key part of our GP prescribing support scheme (PSS) which provides financial incentive for engagement. All key stakeholders were consulted during the project development. Opportunities to educate clinicians on diabetes medicines optimisation and share details of our project were utilised during GP engagement events. Inspirational speakers delivered key note sessions at our annual GP education event. Details of the project were shared with all key stakeholders through communications such as newsletters.

Training was provided for pharmacists undertaking reviews prior to project implementation. Key resources included searches and an EMIS template which were developed to standardise data collection.

Practices were required to meet with their MM Pharmacist to discuss patient level diabetes medication reviews and agree an action plan to improve prescribing in line with NICE guidelines.

The focus of these reviews was diabetes medication optimisation to include blood pressure and cholesterol management; however, other medication issues identified were highlighted and discussed making the reviews more holistic. Action plans were agreed to ensure key messages became embedded into normal practice. An audit was then carried out to ensure the agreed actions had been implemented.

In addition, a formulary update and development of key resources in collaboration with primary and secondary care colleagues ran parallel to the patient centred reviews.

Results

Forty four practices (all but two practices in both CCGs) undertook the project and agreed an action plan with their MM Pharmacist.

In total, 850 patient records were reviewed by the MM team. Half were considered suitable for a face to face clinician review, with the aim of stopping the GLP 1 mimetic where appropriate and optimising medicines for diabetes.

In 93% (n=396) of patients, recommendations to optimise therapy were implemented generating significant financial savings across both CCGs.

Prescribing shows the positive impact of the project as shown in figure 1 – our CCGs demonstrate reduced growth of GLP-1 mimetic prescribing compared to national.

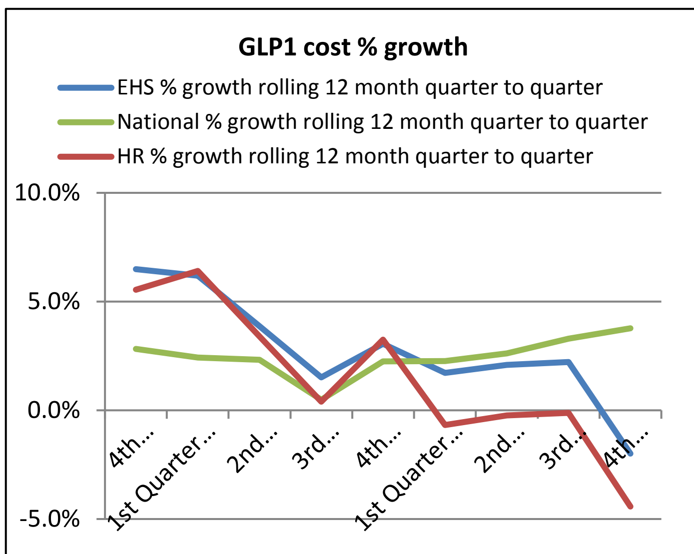

Figure 1-Chart showing % growth in costs of GLP-1 mimetics Jan 2016-March 2018

Discussion

Owing to the variation in baseline prescribing of these agents, rates of change achieved varied between practices. Some practices achieved rates of change of 20%, whereas others achieved significantly higher rates of change (over 75%). It was proposed that GP practices with small patient numbers at baseline may have the least potential for change; however, in practice, there was no data to support any such correlation.

We identified cases of diabetic polypharmacy where patients were receiving more than three blood glucose lowering therapies suggesting clinical inertia towards insulin. This also suggests therapy had been added to rather than reviewing current therapies and stopping if no sufficient reduction in HbA1c.

Cases were identified where medication should have been stopped owing to poor renal function. We also identified numerous cases of patients receiving both GLP-1 mimetics and DPP-4 inhibitors suggesting a lack of awareness of mechanisms of action as both these agents work on the same pathway. These messages were highlighted to clinicians during the project.

There was a clear focus on improving quality of prescribing which clinicians valued. Feedback on the project was very positive; clinicians enjoyed the holistic discussions and the presentation of patient cases using the EMIS template which made it clear where NICE recommended HbA1c and weight reductions had not been achieved.

There was an apparent lack of awareness of NICE guidance in relation to both initiation and monitoring of these agents. Many clinicians were unaware of the initiation criteria and the 6 month targets to continue requiring both a reduction in HbA1c and weight to continue. Additionally, it was noted that GLP-1 mimetics were frequently added to patients' repeat prescription record in quantities not aligned to the dose, resulting in inadvertent over ordering. We used this opportunity to develop local guidance and resources to support our clinicians.

The project was not without challenges; in some practices it was possible to observe difference in behaviour between individual GPs, appearing to reflect the individual clinician's attitudes, beliefs and engagement with the project. Other barriers such as capacity and capability were also identified.

Next Steps

We continue to share the legacy messages of this project encouraging clinicians to refer to our formulary GLP 1 mimetic initiation flowchart and GLP 1 mimetic patient contract when initiating these agents documenting the targets for continuation at 6 months and prescribing appropriate quantity of devices. These resources are available on our formulary website (available here).

We are working collaboratively with clinicians and managers to integrate effective medicines optimisation including insulin initiation into local service redesign for diabetes. This year's GP support scheme continues to focus on medicines optimisation for diabetes with MM pharmacists undertaking polypharmacy reviews in frail elderly patients with type 2 diabetes.

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