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Brief outline of context

An improvement project was begun in a Primary Care Trust in Lincolnshire a large rural county in the East Midlands of the United Kingdom comprising almost 700,000 patients. The projects included patients, general practitioners and their primary care teams, pharmacists and research and audit teams.

Brief outline of problem

Hypnotic prescribing rates from general practice Prescribing Analysis and Cost Data was identified by the executive as high in Lincolnshire compared to the rest of the East Midlands and the United Kingdom. Published research has shown that the clinical benefits of hypnotic drugs are small with significant risks of complications from adverse cognitive, psychiatric or psychomotor effects which may persist for several months after stopping the drug. The extent of the problem, its nature and the barriers to improvement were not well understood given that previous attempts to improve prescribing rates in this area of practice had failed.

Assessment of problem and analysis of its causes

Previous efforts to improve this aspect of quality and safety in healthcare in Lincolnshire and nationally have been hampered because of practitioner and patient attitudes, lack of organisational support or systems for change and an emphasis on other areas of healthcare. To understand the barriers to improving prescribing more fully we used questionnaires to general practitioners and patients and measured variation in prescribing rates across practices. Unforeseen and hitherto invisible problems were revealed by the responses. In addition, the views of patients prescribed hypnotics in the previous six months exposed high rates of inappropriate long term prescribing (94.9% had taken benzodiazepine or Z drug hypnotics for four weeks or more), side effects (41.8% reported at least one side effect), a wish to stop taking drugs (Z-drugs vs. benzodiazepines: 22.7 vs. 12.3%; $p=0.001$) and previous attempts by patients to come off medication (Z-drugs vs. benzodiazepines: 52.4% vs. 41.0%; $p=0.001$). Potential barriers to improvement included attitudes of general practitioners which supported prescribing of newer (Z drug) hypnotics for the majority of indications. More positively, practitioners were aware of their practice prescribing rates to the extent that they were able to identify whether they were in a high, intermediate or low prescribing practice. Most doctors held a negative perception of hypnotics and were positive to the idea of reducing prescribing in this area. Practitioners' favoured methods for reducing prescribing helped inform potential strategies for change and will be presented. On the basis of these results it was felt that systematic efforts at implementation and improvement were likely to be successful given appropriate organisational support from the Primary Care Trust.

Strategy for change: How did you implement the proposed change? What staff or other groups were involved? How did you disseminate the results of your analysis and your plans for change to the groups involved with/affected by the planned change? What was the timetable for change?

A change project was developed, Resources for Effective Sleep Treatment (REST), with a number of stakeholders including partner organisation and patients. The aims of this project are to produce measurable improvements in the management of insomnia, specifically to:

- a. Reduce rate and (costs) of z-drug prescribing by 50% in 3 years
- b. Reduce the rate (costs) of benzodiazepine hypnotic prescribing by 25% in 3 years
- c. Increase use of recorded non-pharmacological measures in insomnia by at least 100% in 3 years.
- d. Improve the user experience of management of insomnia.

We will use evidence based methods to develop an effective spread and adoption strategy to effect a sustained and sustainable change in practice in relation to management of insomnia. We will initially work with 10 pilot practices (10% of the total) using rapid experimentation (plan, do, study, act) cycles. We plan to work with these willing adopter practices and practitioners to develop a network of good practice, measurement and improvement tools, opinion leaders and champions for good practice using rapid cycle of change.

We will also undertake focus groups with prescribing practitioners and patients to help understand more fully the barriers and facilitators, to identify good practice and to design appropriate improvement methods and interventions in this area of practice. Tailored interventions for practices involving clinician, pharmacy, secondary care and administrative support could help bring about change in clinical management.

Measurement of improvement

We will gather and analyse prescribing and improvement data from all practices in the county to enable systematic spread and adoption of improvements in prescribing and improvement methods more generally in the county.

Lessons learn

This project has emphasised the importance of gathering data at the onset of quality improvement initiatives to understand invisible barriers or facilitators for change and of involvement of patients and practitioners in their initial and ongoing development.

Message for others

Quality improvement projects benefit from research as well as quality improvement expertise in order to analyse, present and utilise information for their appropriate design.