

A case study approach to understand how quality improvement methods led to improvements in primary care for insomnia

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Context

The Resources for Effective Sleep Treatment (REST) project was conducted in Lincolnshire, UK from 2007 to 2010. Its aim was to develop and evaluate new approaches to implementing sleep assessment methods and non-pharmacological treatments for insomnia into routine general practice.

Problem

Sleep problems are common affecting 30% of the population in the previous year. Many insomnia sufferers present to general practice but patients and clinicians feel that primary care management should be improved. For example, there is considerable evidence of underuse of sleep assessment tools and psychological treatments such as cognitive behavioural therapy for insomnia (CBTi), continuing evidence of inappropriate long term prescribing of hypnotics and a perception of poor practice among patients and practitioners.

Assessment of problem and analysis of causes

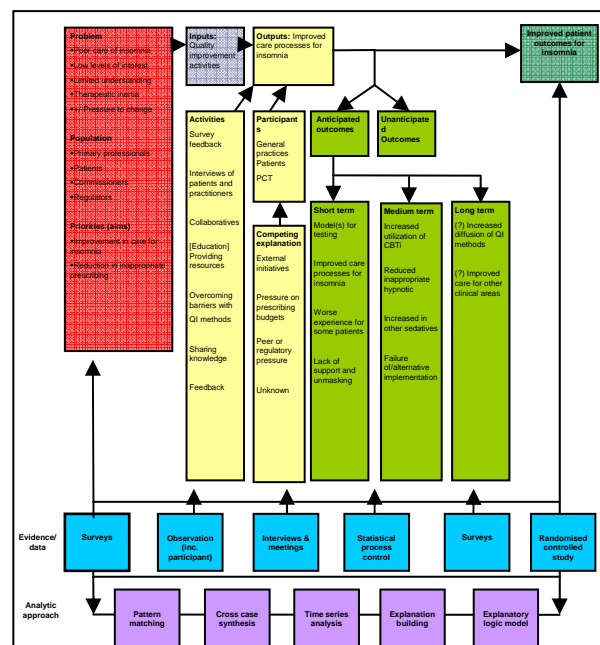
Multiple mixed methods including surveys, qualitative analysis (of focus groups, interviews, practice visits and collaborative meetings) and analysis of prescribing data were used to understand the problem of sleep management and how to improve it.

Intervention

We used a series of collaboratives to develop and spread the intervention. The initial modelling collaborative (September 2007 to March 2008) was used to develop a multidisciplinary model for management of sleep problems in primary care: 'problem focused therapy'. This uses careful assessment using sleep diaries and sleep assessment tools and treatment using modified CBTi for insomnia. A subsequent collaborative was used to spread the intervention more widely.

Study design

We used a multiple case study approach to develop an explanatory model of why and how GPs engaged to improve sleep management in the 'modelling' and 'spread' collaboratives. Using practices as the units of analysis we describe how clinicians (re)framed the problem, developed solutions and saw the impact of these on changing practice.



Strategy for change

We used a range of multidisciplinary team approaches to understand the need for and receptiveness to change, how change could be introduced and how these changes in management of sleep problems could be spread more widely during the project and beyond.

Measurement of improvement

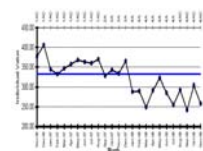
We used qualitative and time series methods to show changes in care over time. We gathered evidence on what care patients currently received and what they needed, how practitioners responded, how they could change practice, how practice teams redesigned processes of care and the impact of these changes on quality of care and prescribing for sleep problems.

Effects of changes

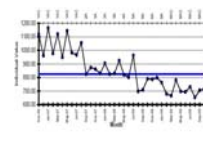
Within two years, over one third of practices (36/102) in the county had participated in the quality improvement project with evidence of change in clinical routines, benefits to patients' experiences of care and significant reductions in prescribing in some practices.

Run charts of patterns of prescribing change

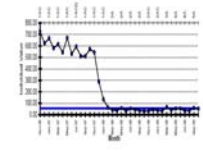
Small shift in prescribing (RCP07)



Moderate shift in prescribing (RCP05)



Large shift in prescribing (RCP01)



ADQ per STAR PU hypnotic benzodiazepine prescribing; blue line is median of values shown.

Lessons learnt

Quality improvement projects which aim to introduce new health technologies require different collaborative approaches for developing new models of care compared to projects which are trying to improve the reliability of care or to spread knowledge.

Message for others

Case study methods provided an invaluable way to understand the complex 'black box' of quality improvement and to show how patients and practitioners adopted and benefited from improved systems of care for insomnia.