Resources for Effective Sleep Treatment (REST): case study of engaging general practice teams to improve the quality of care for patients presenting with sleep problems

A N Siriwardena, University of Lincoln

Michelle Tilling, NHS Lincolnshire

Fiona Togher, NHS Lincolnshire

Roderick Orner, University of Lincoln

Michael Dewey, Institute of Psychiatry

Resources for Effective Sleep Treatment

Method: multiple case study

- Empirical enquiry investigating a contemporary phenomenon in real-life context
- Boundary between phenomenon and context unclear
- Using multiple sources of evidence, triangulating data

Yin RK (2003) *Case study research: design and methods* Ca, Thousand Oaks: Sage.

Questions

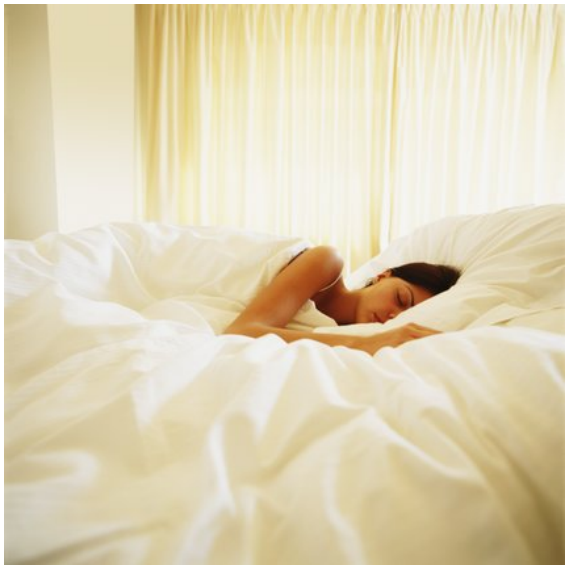
- Why and how did general practices engage to improve quality of care for insomnia?
- What was the effect of this engagement?
- What are the lessons for future quality improvement collaboratives?

Insomnia and general practice

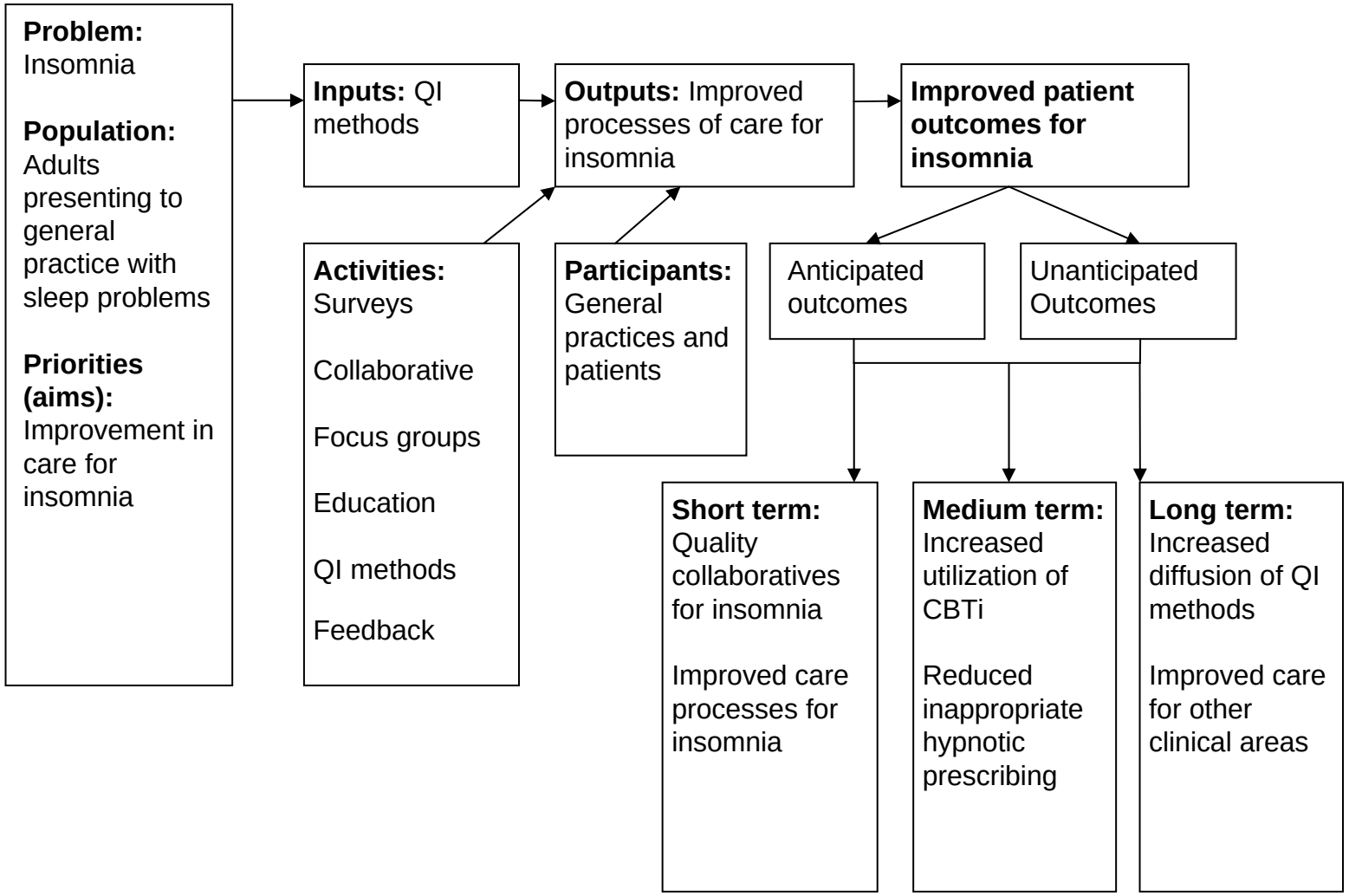
- Common > 30% of adults in any year
- Recurrent or chronic in 33%, i.e. 10% of population
- Psychological, physical effects, reduced productivity and impaired quality of life
- Hypnotic drug use persistent despite evidence for non-pharmacological interventions

Resources for Effective Sleep Treatment

- Improve the user experience of treatment for insomnia
- Increase non-pharmacological treatment of insomnia
- Reduce rate (and costs) of inappropriate Z- drug and benzodiazepine hypnotic prescribing



Logic model: design



Wholey, J.S. (1979). Evaluation: promise and performance. Washington, D.C.: Urban Institute.

Practitioner beliefs about sleep

- GPs did not like prescribing drugs but were not sure what else they could do or how to do this
- Compared to anxiety where GPs tended to use or refer for psychological treatments for insomnia, drugs were often an early choice of treatment, particularly Z drugs over benzodiazepine hypnotics
- GPs positive to initiatives to reduce inappropriate prescribing

Siriwardena AN, Qureshi Z, Gibson S et al. Family doctors' attitudes and behaviour to benzodiazepine and Z drug *BJGP* 2006.

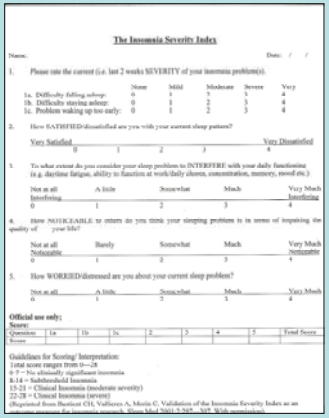
Siriwardena AN et al. General practitioners' preferences for managing insomnia and opportunities for reducing hypnotic prescribing. J *Eval Clin Pract* 2010 (in press).

What patients told us about hypnotics

- 95% had taken hypnotics for 4 weeks or more
- 45% advised to continue treatment for a month or more and a further 42% not advised on duration
- 92.1% were on repeat prescriptions
- 87.9% first prescribed by GP
- 18.6% wished to stop medication

Siriwardena AN, Qureshi MZ, Dyas JV, Middleton H, Ørner R. Magic bullets for insomnia? Patients' use and experience of newer (z drugs) versus older (benzodiazepine) hypnotics for sleep problems in primary care. *BJGP* 2008.

Practice collaborative



ISI

Sleep Diary

PSQI

What patients needed

- Listening, empathy, taking the problem seriously
- Health beliefs: concerns about sleep tablets vs. need for help
- Previous self-help: what they have tried already: OTC, complementary
- Careful assessment
- Problem focused therapy: including CBT-i

Dyas JV et al. Patients' and clinicians' experiences of consultations in primary care for sleep problems and insomnia: a focus group study. *BJGP* 2010; 60: 329 -333.

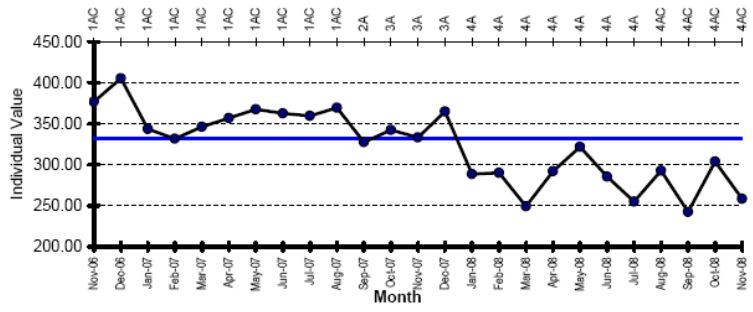
What practitioners needed to understand

- Don’t assume that patients would always want or need a prescription
- Many patients had tried non-drug treatments but not adequately or consistently
- Patients are often open to alternatives

Dyas JV et al. Patients’ and clinicians’ experiences of consultations in primary care for sleep problems and insomnia: a focus group study. *BJGP* 2010; 60: 329 -333.

Changes in processes and prescribing

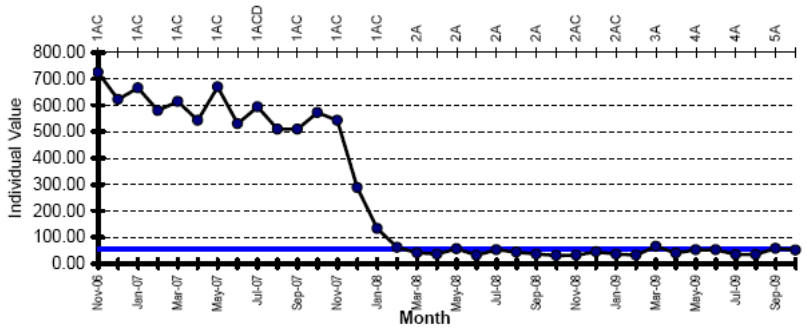
SWINGBRIDGE SURGERY



N	25
Average	322.6644
Median	331.69
N Runs	4
Min Runs	8
Max Runs	17
Special Cause(s) Detected	

Tests:
A. Fails Runs Test
B. Trend of 7
C. 8 One Side of Median
D. 14 Alternating
E. 7 Same Value
X. Excluded or Missing Data

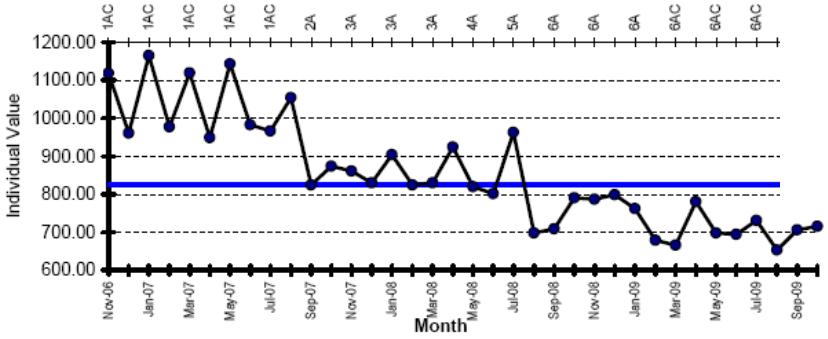
BINBROOK SURGERY



N	36
Average	250.691111
Median	56.48
N Runs	6
Min Runs	13
Max Runs	24
Special Cause(s) Detected	

Tests:
A. Fails Runs Test
B. Trend of 7
C. 8 One Side of Median
D. 14 Alternating
E. 7 Same Value
X. Excluded or Missing Data

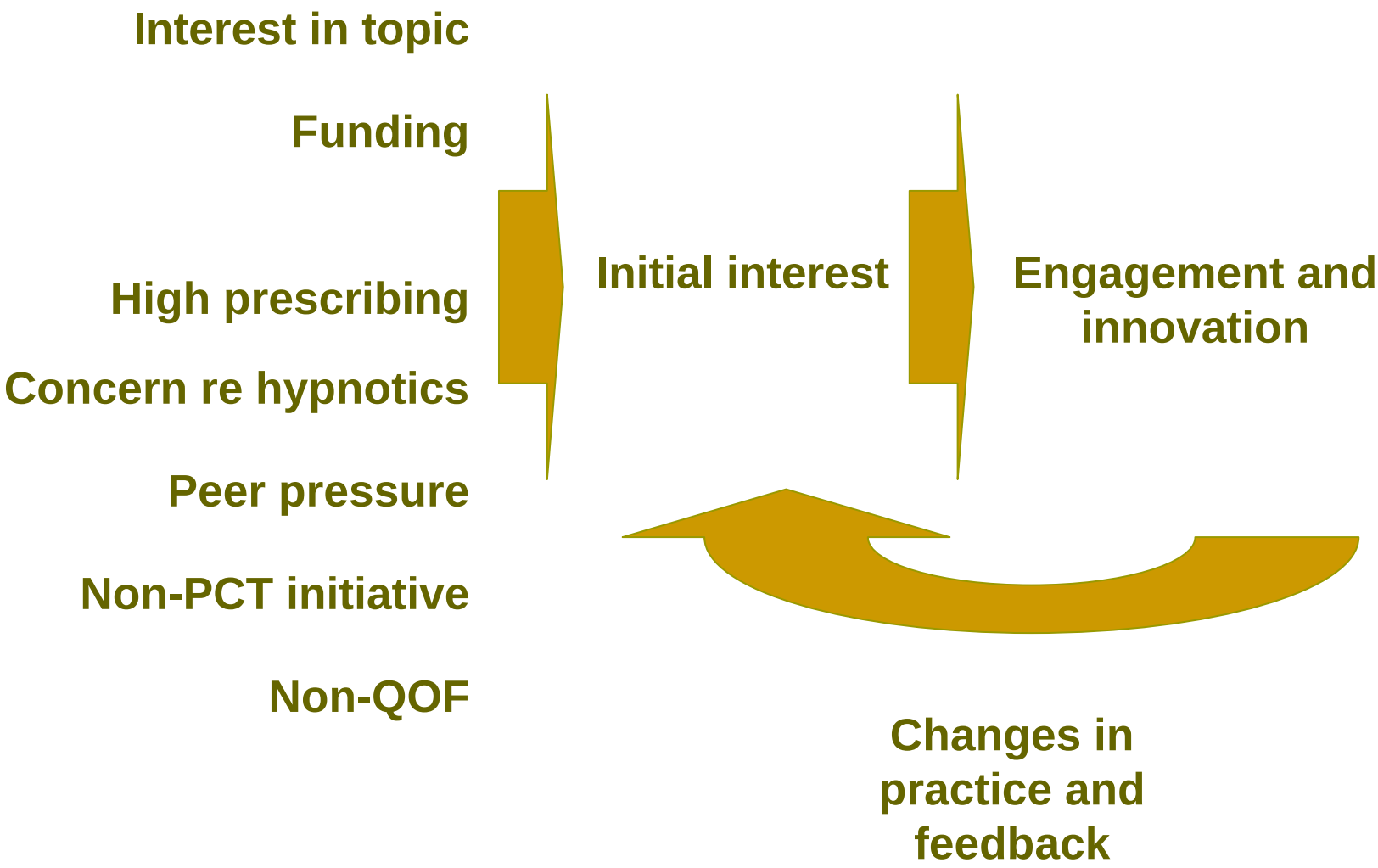
NEWMARKET MEDICAL PRACTICE



N	36
Average	854.529444
Median	824.515
N Runs	6
Min Runs	13
Max Runs	24
Special Cause(s) Detected	

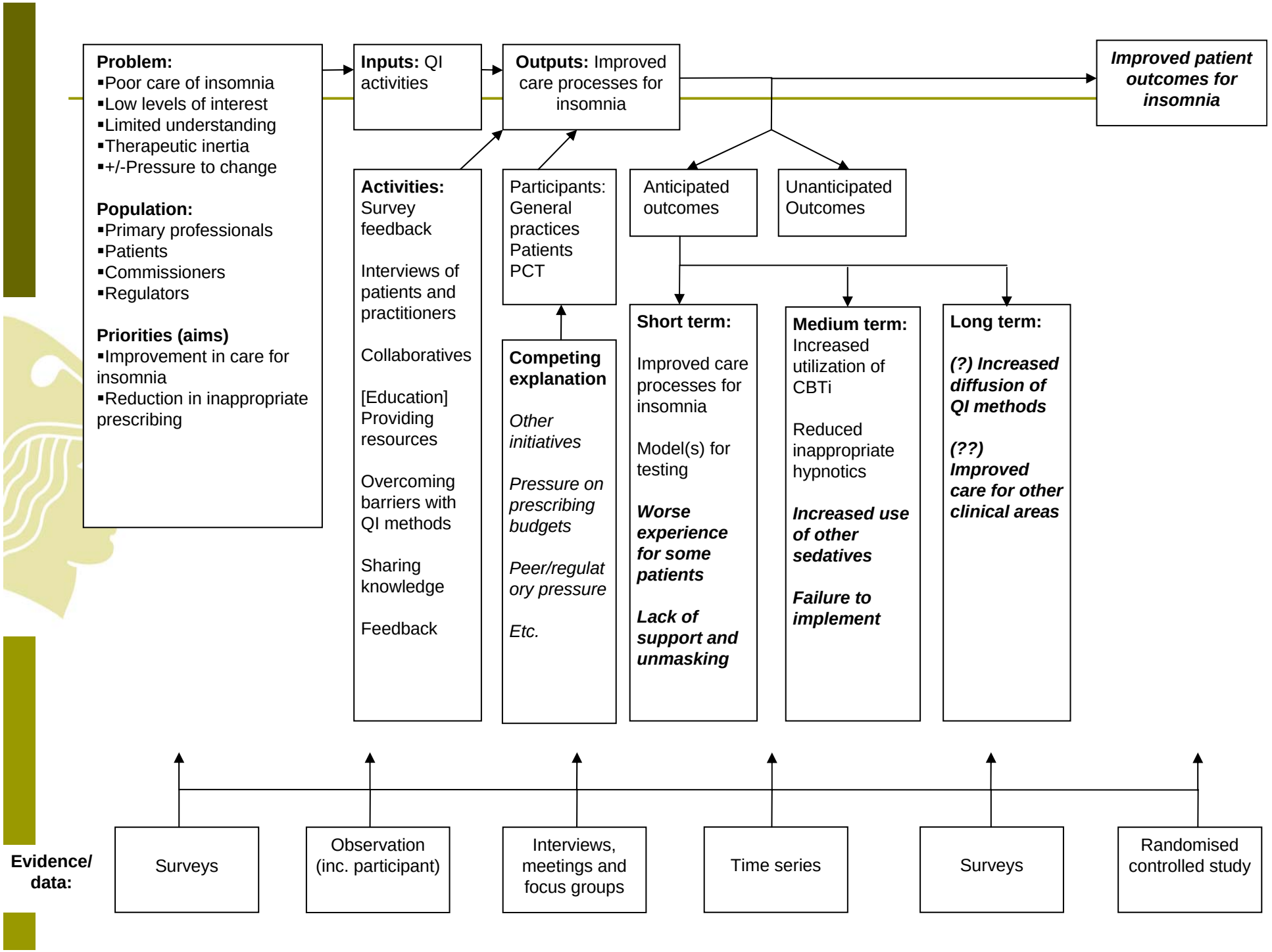
Tests:
A. Fails Runs Test
B. Trend of 7
C. 8 One Side of Median
D. 14 Alternating
E. 7 Same Value
X. Excluded or Missing Data

Why did change occur?



How did change occur?

- Real engagement of practice staff
- Willingness to innovate and initiate change
- Better understanding of patient expectations and staff preconceptions
- Commitment to address educational and learning needs for patients and practitioners
- Overcoming barriers to implementing new tools and techniques
- Response to feedback on new tools and techniques
- Approach tailored to practice


Problem:
▪Poor care of insomnia
▪Low levels of interest
▪Limited understanding
▪Therapeutic inertia
▪+/-Pressure to change
Population:
▪Primary professionals
▪Patients
▪Commissioners
▪Regulators
Priorities (aims)
▪Improvement in care for insomnia
▪Reduction in inappropriate prescribing
Inputs: QI activities
Outputs: Improved care processes for insomnia
Improved patient outcomes for insomnia
Activities:
Survey feedback
Interviews of patients and practitioners
Collaboratives
[Education] Providing resources
Overcoming barriers with QI methods
Sharing knowledge
Feedback
Participants:
General practices
Patients
PCT
Competing explanation
Other initiatives
Pressure on prescribing budgets
Peer/regulatory pressure
Etc.
Anticipated outcomes
Unanticipated Outcomes
Short term:
Improved care processes for insomnia
Model(s) for testing
Worse experience for some patients
Lack of support and unmasking
Medium term:
Increased utilization of CBTi
Reduced inappropriate hypnotics
Increased use of other sedatives
Failure to implement
Long term:
(?) Increased diffusion of QI methods
(??) Improved care for other clinical areas
Evidence/ data:
Surveys
Observation (inc. participant)
Interviews, meetings and focus groups
Time series
Surveys
Randomised controlled study

Conclusions

- GPs and patients contributed to information for how care for insomnia could be improved
- Practices tested out new models of assessment and non-drug treatment including components of CBTi showing how these could be 'normalized' within a primary care setting
- This type of 'modelling' collaborative is helpful for developing new or adapting existing interventions prior to formal testing

Siriwardena AN et al. Effectiveness and cost-effectiveness of an educational intervention for practice teams to deliver problem focused therapy for insomnia: rationale and design of a pilot cluster randomised trial. *BMC Family Practice* 2009, **10**:9

Contributors

- Patients and GPs in Lincolnshire
- Michelle Tilling, NHS Lincolnshire
- Fiona Togher, NHS Lincolnshire
- Tanefa Apekey, NHS Lincolnshire
- Dr Zubair Qureshi, General Practitioner, Lincoln
- Dr Roderick Orner, University of Lincoln
- Dr Hugh Middleton, University of Nottingham
- Dr Jane Dyas, NIHR Research Design Service East Midlands
- Dr Tracey Sach, UEA
- Dr Casey Quinn, NIHR Research Design Service East Midlands
- Prof Michael Dewey, Institute of Psychiatry

Acknowledgements

- REST steering group
- Practice teams and patients
- Funding: Health Foundation
- Contact: nsiriwardena@lincoln.ac.uk
- Website: http://www.restproject.org.uk/

Thank you

Lincolnshire NHS
Teaching Primary Care Trust

UNIVERSITY OF LINCOLN

The University of Nottingham