Effect of a quality improvement programme on leadership, innovation and use of quality improvement methods in general practice

Fiona Togher¹, A Niroshan Siriwardena¹,2, John Flynn¹, Michael Dewey³
¹University of Lincoln, ²NHS Lincolnshire, ³Institute of Psychiatry

Introduction
Market mechanisms and pay-for-performance have failed to deliver continuing improvements in UK clinical care. Leadership and innovation are currently seen as essential to maintain and improve clinical quality but little is known about the relationship between these and the extent to which quality improvement (QI) methods are used in general practice.
This study aimed to investigate the effect of quality improvement training on leadership behaviour, culture of innovation and adoption of QI methods in general practice.

Method
A self-administered postal questionnaire was sent to general practitioner quality leads in one UK county at the beginning (2007) and the end (2010) of a QI programme: the Resources for Effective Sleep Treatment (REST) programme.
The questionnaire consisted of background demographic information, a 12-item scale to assess leadership behaviour, a seven-dimension self-rating scale for innovation culture and questions on current use of quality improvement techniques as well as questions on the effect of this on practice.
We analysed change between the two surveys and the effect of participation in QI training.

Organisational Culture for Innovation Self Assessment

+5  =   We have outstanding positive skills, systems, and experiences on this dimension; supporting innovation
0  =   Our skills, systems and experiences on this dimension have no real impact; neither hamper nor support innovation
-5  =   We have outstanding negative skills, systems or recent experiences on this dimension; hampering innovation

The spider diagram and corresponding scoring explanation is an example of one of the components of the questionnaire that participants were asked to complete.

Results
Sixty-three completed questionnaires (62%) were returned in 2007 and 47 (46%) in 2010; 32 practices completed both surveys.
Although leadership behaviours were not commonly expressed, many practices reported a positive culture of innovation with significant positive correlation between leadership and innovation (r = 0.57; P <0.001).
Apart from clinical audit and significant event analysis, QI methods were not reported as having been adopted by most participating practices.
Percentage leadership score changed little over three years (increase 4.0 points, 95%CI -8.9 to 16.9) with some difference between participating and non participating practices (7.6, 6.4 to 21.6) and no evidence of differential change (-1.5, -17.0 to 14.0).
Percentage innovation culture scores showed a similar pattern: time 4.1 points (15.1 to 6.9), group 1.6 (-12.7 to 9.4) and differential change 5.3 (-7.8 to 18.5).

Quality Improvement training
Practices that participated in the Resources for Effective Sleep Treatment (REST) project were provided with training in a number of well established QI methods including: Process Mapping, the Model for Improvement (including Plan-Do-Study-Act cycles) and Statistical Process Control (SPC).

Conclusion
Leadership behaviours were infrequently reported, and despite describing a culture of innovation there was low uptake of QI methods beyond clinical and significant event audit even after practices participated in a QI programme.
General practice may need greater support to enhance leadership competences and to develop quality improvement skills to stimulate innovation if improvements in health care are to accelerate.