

## **Reviewer's report**

**Title:** Understanding uptake of continuous quality improvement in Indigenous primary health care: lessons from a multi-site case study of the Audit and Best Practice for Chronic Disease (ABCD)project

**Version:** 1 **Date:** 8 October 2009

**Reviewer:** Tricia Greenhalgh

### **Reviewer's report:**

#### ABSTRACT

reads as a little long, especially the intro bit!

Page 4 – isn't there an inherent difficulty attributing causality in any complex system. Personally I don't like the term 'causality' in papers as it means so many different things to different people. Can they rephrase this sentence?

Page 8 – if the format rules of the journal allow, I would actually separate out the descriptive data on the study sites into a separate section (perhaps part of the method) since the results should I think focus on what they found when they applied the 'Greenhalgh framework'

Overall the results resonate with my own intuitive (and I guess, evidence-based) beliefs about what is likely to 'work' in an initiative of this type. I wonder, however, how this results section would read to someone who wasn't the main architect of the extremely complex framework used. This is an editorial decision (and perhaps they should take a lot more notice of the perspective of OTHER reviewers here), but perhaps they need a 'summary box' listing the components of the framework. Milbank Quarterly (where it was originally published) are always very happy to give permission to reproduce the relevant figure, and if it's any use I've cut and pasted a box which I did for a BMJ article recently (1). Again I'm sure they'd give permission to reproduce.

CONCLUSION – I actually think they should give me a harder time here!! They say correctly that the diffusion of [complex] innovations framework is not a theory of action. But there's a more fundamental problem which is that if you start attacking your data with a pre-ordained framework in mind, you end up with a view of the world which is compatible with that framework. The results section has face validity for sure, but there's an inherent limitation in the method in that it will tend to produce findings compatible with the framework they started with. This limitation does not, I think, invalidate the method used, since they have rightly used it as a starting point for analysis not as the final word on organising/interpreting their data, which is great. But I think they should be bolder, perhaps, in highlighting instances where the framework was found wanting (i.e. where it didn't explain the data – or didn't explain them fully). Only when a few authors have done this task well will the framework improve!!!

Box 2: Components of the diffusion of innovation model for complex innovations in health services (see text for definitions and examples of organisational components)(2)

### 1. Material properties of the technology

To be successfully and widely adopted, a technology must include key functionality and work smoothly and efficiently under real conditions of use

### 2. Attributes of the technology as an innovation

To be successfully and widely adopted, a technology must be seen by potential adopters as having

- Relative advantage (i.e. clear benefits over existing technologies)
- Simplicity
- Compatibility with existing values and ways of working
- Trialability (can be tried out on a limited basis 'without obligation')
- Observability (benefits can be seen directly)
- Potential for reinvention (capacity for users to customise and adapt it)

### 3. Concerns of potential adopters

Adoption is a process, not a one-off event, and is influenced by concerns, including

- Prior to adoption (what are its properties and potential benefits? what will it cost me?)
- During early use (how do I make it work?; when and how should I use it?)
- During established use (how can I alter or improve it?)

### 4. Communication and influence

An individual's decision to adopt an innovation is influenced by

- Mass media (press, mailshots), which can raise awareness
- Interpersonal influence (e.g. champions, opinion leaders), which can change people's attitudes towards adoption

### 5. Organisational antecedents for innovation

Organisations may be more or less innovative. Differences are explained by several factors:

- Absorptive capacity for new knowledge
- Leadership and management
- Risk-taking climate
- Effective data capture systems
- Slack resources

## 6. Organisational readiness for innovation

An organisation must be 'ready' for a specific innovation. Readiness includes

- Innovation-system fit
- Tension for change
- Balance between supporters and opponents
- Specific preparedness

## 7. The implementation and routinisation process

Implementing a complex innovation, and making sure it becomes business as usual, is a highly non-linear process, typically characterised by shocks and setbacks. Critical success factors include:

- Appropriate of change model (balance between 'make it happen' and 'let it emerge')
- Good project management
- Autonomy of front-line teams
- Human resource issues, especially the selection, retention, continuity and training of staff
- Alignment between new and old routines

## 8. Linkage

Innovation is more likely when there is

- Early and ongoing dialogue between the developers of the innovation, the change agents charged with promoting its adoption, and the end users.
- Communication within the organisation and between similar organisations

## 9. The wider environment

Innovation in organisations is more likely when there is a 'following policy wind', a conducive socio-political climate, and specific incentives and mandates at national level.

## Reference List

- (1) Greenhalgh T, Stramer K, Bratan T, Byrne E, Mohammad Y, Russell J. Introduction of shared electronic records: multi-site case study using diffusion of innovation theory. *BMJ* 2008;337:a1786.
- (2) Greenhalgh T, Robert G, Macfarlane F, Bate P, Kyriakidou O. Diffusion of innovations in service organisations: systematic literature review and recommendations for future research. *Millbank Quarterly* 2004;82:581-629.