Reviewer’s report

Title: Research in Action: Using Positive Deviance to Improve Quality of Health Care

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Reviewer: Elisabeth Wilson-Evered

Reviewer’s report:

Review of Implementation Science manuscript
From: Implementation Science Editorial
(implementationscience.editors@ncl.ac.uk)
Reviewer: Dr Elisabeth Wilson-Evered, Monash University, Melbourne, Australia
Elisabeth.Wilson-Evered@med.monash.edu.au
Due 7 October 2008

Re: 'Research in Action:
Using Positive Deviance to Improve Quality of Health Care
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Elizabeth H Bradley, Leslie A Curry and Harlan M Krumholz
Implementation Science
Methodology Paper

GUIDELINES
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Implementation Science currently considers the following article types: Debate, Meeting report, Methodology, Research, Short report, Study protocol and Systematic Review articles.

When assessing the work, please consider the following points:

1. Is the question posed by the authors new and well defined?

The authors pose a very important and vexed question of translating clinical and management discoveries to practice in the workplace. This matter is becoming more and more complex and the difficulty in making this translation suggests some deep processes are afoot that among other things, link to incentives, rewards, habits, social systems, cultures, skills, leadership and other influences that lead to change. However, the authors suggest a positive deviance approach as a new way to deal with this complex and highly resistant issues to knowledge transfer to practice. Rather than consider a range of antecedents that might predict uptake of innovation or implementation of guidelines or known effective
treatments, the authors propose a process that they argue should deliver positive outcomes. To enhance this section, I would prefer deeper discussion of the theoretical and conceptual underpinnings of Positive Deviance. The notion makes intuitive sense but I would like to see this notion linked with other theories and models extracting synergies and similarities as well as points of divergence that the PD concept offers in comparison to other ideas.

The paper started with great promise and stimulated the reader to think more deeply and broadly about the concept of positive deviance and its underpinnings and application. However, there was scant discussion of meaning and components of positive deviance other than securing those are successful among the majority of those not so in implementing new ideas. I am not sure where this differs from exiting ideas if you are taking a deviant rather and success approach which is nice but these ideas need more exploration and explanation. In either case, the focus is on a group from whom others may be able to learn. Though admittedly here, it is the process that is to be learned rather than simply from the group. But it is difficult to separate a methodology from an outcome and important to compare outcomes of methodologies to determine the way in which it contributed to success. So description of how the methodology has worked and reporting some details of successes rather than broad brush statements is warranted. Further, learning about how the methodology itself – not only the target of the methodology - was received and taken up is important to explore.

The key limitation for me is that the paper did not illustrate the key characteristics of PD and the way in which the PD methodology differs from other OCD (organizational change and development) approaches. Similar methods are found in action learning or participative action research or interventions to implement change (See Revans, 1961; Cummins, Waddell & Worley, 2008; French & Bell, 1990; Peter Reason, 1999 eg Cooperative Enquiry/Culture for Human Factors).

Furthermore, though E. Rogers' work on innovation was mentioned, I was looking for more means of understanding what makes an organization innovative and open to adoption and implementation of innovations from their own or other’s discoveries. There are ample theories and models here, most notable are in the works of Andy Ven de Ven and Colleagues, Michael West and Colleagues and Theresa Amabile and colleagues. Mumford and others have also produced good theoretical as well qualitative and quantitative work on leading innovations and change. So though this is a methodology paper, and argues for a step wise approach to implementing change, it is bereft of ideas from the broader literature on explaining reasons for change or resistance. Identifying those that stand out as different by the fact they have implemented successful change where those around them have not, therefore they are deviant, is not convincingly developed at this point in this paper. Nonetheless, the idea does have potential to impact the field with more development and grounding.

Most other methodologies for change engage participants in understanding the process though mixed methods approach; so the authors need to make clear how the PD approach substantially adds something new. However, if deeper
understanding was put forward in the theoretical understanding of what is happening in Positive Deviance (antecedents, processes, outcomes and interactions) and then exploring or testing those hypotheses in action would be an interesting and important contribution to theoretical underpinnings to the methodology.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?

The methods are well described and clear and there is sufficient detail. However, the work read like a procedure in a manual or text book and could be boring to readers. I would suggest bringing the ideas and approaches alive and real for the reader by including details of examples of successful approaches using the PD methodology. There is a lot of intuitive appeal in this approach and perhaps rather than spell out only the steps, which are not dissimilar to other mixed methods approaches, I would prefer to learn how the steps were applied and results achieved in the examples given. I am not suggesting reporting a study but when the authors make references to support the PD approach, some examples of the successes in more detail would be helpful to distinguish and elaborate the approach/methods compared with others.

3. Are the data sound and well controlled?

This is a methodology paper and no data or studies are reported in depth.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

NA

5. Are the discussion and conclusions well balanced and adequately supported by the data?

The discussion refers to the benefit of the methodology as a means of implementation of innovations or successful approaches disseminated to other contexts. As such, the methodology works because it engages the stakeholders in identifying PD success in the context and unpacks those and embeds discoveries and actions to explain the success. But can that success now be transplanted and expected work elsewhere or does each organization require a PD process to succeed. Some terrific examples were included here that impressed the reader but would have liked more detail. However, I was left asking to what degree with the PD approach the predictor or main contributor of successful outcomes? As different context introduce variance in to the experience, though arguably the methodology remains constant across contexts, the question emerges about what is similar or different about those contexts that contributed to variance in successful outcomes across deviant and non deviant groups. Such an approach is important for the field of health care. The discussion (Translating Research to Practice) was very good and the best part of the paper.

6. Do the title and abstract accurately convey what has been found?

Yes
Is the writing acceptable?
Yes, The authors write effectively; the paper is logically constructed, flows well and communicates ideas clearly and simply.

Please make your report as constructive and detailed as possible in your comments so that authors have the opportunity to overcome any serious deficiencies that you find and please also divide your comments into the following categories:

- **Major Compulsory Revisions** (which the author must respond to before a decision on publication can be reached)

The major revision I would like to see relate to comparing the PD methodology with others and making clear the points of difference and synergy as well as contribution to current approaches to health care research on implementation. The paper should differentiate among the PD approach compared with other participative and community consultation methodologies that have existed for many years and have developed some sophistication. See the work of Fred Emery and Merrelyn Emery and importantly writings in the Human Relations Journal and over a long period from Socio-Technical Schools of thought in Europe. Further, when examples are quoted that attribute success to the PD methodology, please consider more discussion of how this was achieved. Similarly, the way in which the methodology supports approaches of Complex Adaptive Systems which many advocate for understanding health care is warranted. As mentioned above, understanding how the methodology interacts with context i.e. at what stages of the process does the methodology enable design, adoption and diffusion of innovation? The paper would be enhanced by linking with and grounding in extant theories and models for understanding change and enabling change to happen at individual, group, institutional and large scale societal or collective levels.

- **Minor Essential Revisions** (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

- **Discretionary Revisions** (which are recommendations for improvement but which the author can choose to ignore)

Once you have done this, there are also some questions for you to answer, including one that asks your advice on publication.

**REPORT TEMPLATE**

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Reviewer's report
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Please number your comments and divide them into:
Major Compulsory Revisions

The author must respond to these before a decision on publication can be reached. For example, additional necessary experiments or controls, statistical mistakes, errors in interpretation.

1. Explain PD concept and its theoretical underpinnings or extrapolate/ground them in theories relating to individual, institutional, collective change
2. Distinguish PD methodology from other known and established approaches
3. Situate PD methodology in broader organizational change, development and innovation literatures
4. Make clear the advantages and demonstrate or propose potential benefits of PD methodology over and above any extant approaches.

What next?
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Given your assessment of the manuscript, what do you advise should be the next step?

- Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest
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Please indicate how interesting you found the manuscript:

- An article whose findings are important to those with closely related research interests (but needs development).

Quality of written English

Please indicate the quality of language in the manuscript:

- Acceptable

Statistical review
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Is it essential that this manuscript is seen by an expert statistician? If so, please give your reasons in your report.

- No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests
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Please complete a declaration of competing interests, considering the following questions:

'I declare that I have no competing interests'

Open peer review
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Submission of this report is taken as confirmation that you are happy for your signed report to be posted on the Implementation Science website as part of the pre-publication history of this article.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I have no competing interests.