



OPEN ACCESS

Positive deviance: a different approach to achieving patient safety

Rebecca Lawton,^{1,2} Natalie Taylor,^{2,3} Robyn Clay-Williams,³ Jeffrey Braithwaite³

¹Bradford Institute for Health Research, Bradford Royal Infirmary, Bradford, UK

²Institute of Psychological Sciences, University of Leeds, Leeds, UK

³Faculty of Medicine, Centre for Clinical Governance Research, University of New South Wales, Sydney, Australia

Correspondence to

Dr Natalie Taylor, Faculty of Medicine, Centre for Clinical Governance Research, University of New South Wales, Sydney, NSW 2051, Australia; natalie.taylor@unsw.edu.au

Received 11 April 2014

Revised 20 May 2014

Accepted 4 July 2014

Published Online First

21 July 2014

Patient safety management within healthcare systems globally can feel like a relentlessly negative treadmill. Mortality reviews, incident reporting systems and audits all focus attention on what goes wrong and how often, why errors occur, and who or what is at the root of the problem. Sometimes these methods help us to understand why patients are harmed. However, such ‘find and fix’ approaches tell us little about the *presence* of patient safety, alerting us instead to its *absence*. These efforts aim to prevent harm by striving to reduce the number of things that go wrong,¹ as opposed to identifying instances when—often despite challenging circumstances and limited resources—things go right. The focus on error detection and its management has not produced the expected gains in patient safety,² primarily because these methods are not well suited to a complex adaptive system such as healthcare.³ Behaviours that produce errors are variations on the same processes that produce success, so focusing on successful practices may be a more effective tactic.⁴

FOCUSING ON THE UPSIDE

One approach to focusing on success is positive deviance. While positive deviance can be used to describe the behaviour of an exemplary individual, the term can also be extended to describe the behaviours of successful teams and organisations. Originating in international public health projects,⁵ positive deviance has recently been embraced to improve quality and safety of healthcare delivered in organisations.^{6,7} The premise is that solutions to common problems mostly exist within clinical communities rather than externally with policy makers or managers, and that identifiable members of a community have tacit knowledge and wisdom that can be generalised. Moreover, because the solutions have been generated within a community, they

tend to be more readily accepted and feasible within existing resources, thus increasing the likelihood of success and, potentially, of adoption elsewhere.⁸ The specific steps in the positive deviance approach, modified for our purposes to represent the organisation, team and individual, are outlined in [figure 1](#).⁷

Along with other more optimistic approaches to patient safety, such as identifying and empowering resilient individuals or teams,³ and developing methods for capturing safety improvement work,⁹ positive deviance is starting to be tested in healthcare settings, albeit intermittently. For example, Gabbay *et al*¹⁰ identified five primary care practices demonstrating positive deviance for improvement in managing diabetic patient care. Compared to teams whose practices improved least, the positively deviant groups had leaders who encouraged ownership and planned the implementation of change. There was a sense of collective decision making and development of the team. Data were collected as a progress-monitoring tool and shared across the practice.

The approach has also been used to promote hand hygiene.⁶ In Marra *et al*'s study, positively deviant individuals—those who were particularly good at practising hand hygiene and who wanted to improve further—stimulated others to use antibacterial gel. Positive deviants recruited others to join the enterprise. It became a source of pride to be labelled as such, elevating the importance of hand hygiene, and the prestige of those working to improve it. Although a limited study, this work illuminated the potential of such an approach to bring about improved safety outcomes.

In another recent study, Bradley *et al*⁷ demonstrated the spread of positively deviant behaviour based on identifying and working with hospitals meeting the



Open Access
Scan to access more
free content



CrossMark

To cite: Lawton R, Taylor N, Clay-Williams R, *et al*. *BMJ Qual Saf* 2014;**23**:880–883.

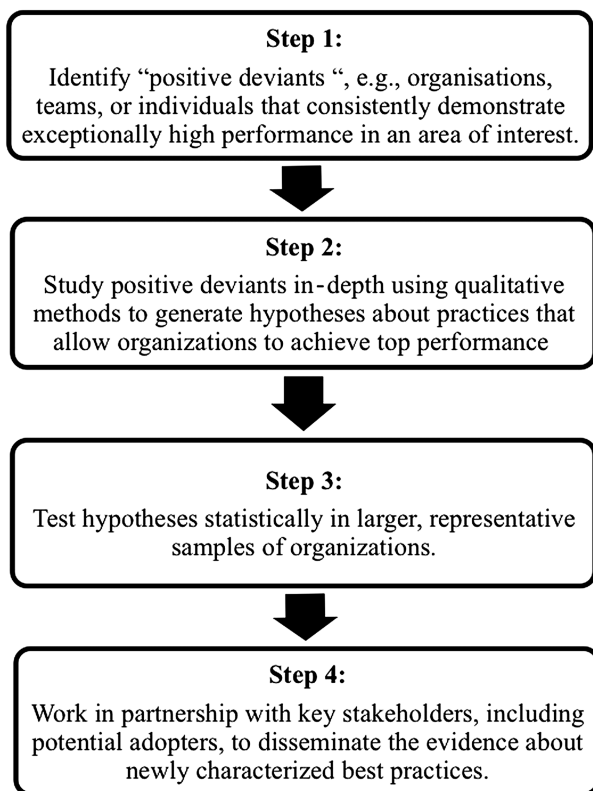


Figure 1 Steps in the positive deviance approach. Modified from Bradley *et al.*⁷

90 min door-to-balloon guideline for the treatment of acute myocardial infarction. More specifically, by using a positive deviance approach (ie, identification of positive deviants, understanding how top performance is achieved, statistically testing the hypothesis for achieving top performance, and working with key stakeholders and adopters to disseminate evidence about best practice), there was an increase from 50% to 75% in the number of hospitals meeting the 90 min guidelines, and those hospitals which adopted best practice (approximately 1000/1400) were significantly more likely to meet the target time than those that did not. In other words, the positive deviance approach allowed organisations to learn from others with the potential to save lives.

PROBLEMS WITH THE ADOPTION OF THE POSITIVE DEVIANCE APPROACH

Despite these encouraging findings, mobilising or learning from positively deviant teams and organisations has not gained widespread acceptance by those planning quality improvement interventions or managing poor performance. Patient safety initiatives still tend to focus mainly on the negative cases, and finding the problems, root causes, or the culprits responsible for adverse events (negative deviance), rather than attempting to identify unusually effective practice. Why might this be?

One possibility is that the success of positive deviance approaches relies on the ability of a community

to identify role models within its midst who use uncommon, but demonstrably successful, strategies to tackle common problems.⁸ Currently, there does not appear to be a well-defined strategy for achieving this. In the modern patient safety paradigm, unlike the instantaneous, negative and often publicised response to an adverse event,¹¹ the consistent delivery of well-executed safe care under typically difficult circumstances tends to go unrecognised; if, by chance, positively deviant individuals or teams are identified, they tend to be labelled so retrospectively, after a successful enterprise has been proclaimed. Detecting positively deviant *safe* patient care is particularly challenging because of the lack of reliable measures of safe care,¹² and comparable patient safety performance measures between individual healthcare professionals,¹³ wards¹⁴ and organisations.^{13 15} It is also unclear how to define sustained safe patient care (eg, is it the extent to which effective processes for ensuring patient care are embedded within an organisational system, or the length of time since a patient safety incident has occurred on a particular ward?).¹⁶

Another explanation is that humans tend to look for 'problems to fix'¹⁷ rather than to 'recognise and spread success', and this predisposition is exacerbated by the presence of regulatory climates globally (eg, the UK's Care Quality Commission; Australia's Safety Alert Broadcasting Systems), which focus on mortality, reporting and analysing adverse events, and generally reducing harm. Most healthcare quality improvement resources are allocated to interventions based on negative deviance approaches that have little chance of diminishing risks or harms,^{1 18} yet healthcare organisations continue to use such methods in their attempts to avoid patient safety incidents. Despite the accumulating evidence demonstrating its potential, engagement via a positive deviance approach is lacking, or intermittent at best.

The spread of positively deviant behaviours to some degree relies on individuals, teams, or organisations to share their own successful practice with others, and be willing to consider adopting effective ideas from elsewhere. It is also important to appreciate ways to address those factors that can inhibit sharing across boundaries, such as power differentials between groups (eg, doctors, nurses and allied health professionals) and across organisations.¹⁹ For some, there is a temptation to shield knowledge in pursuit of self-interest due to, for example, provider organisations who feel they are in competition for local resources, or staff who feel insecure about their job due to efficiency drives.²⁰

THE CHALLENGE

In order to identify positively deviant individuals, wards and organisations effectively, and diffuse their behavioural characteristics, a model is needed. This might include: guidance on how to identify positive

deviants based on evidence gathered from the existing measurement and positive deviance literature, inclusion criteria for defining deviant practice, and suggested methods for statistically testing the ‘deviance’ hypothesis. Such progress will facilitate more accurate completion of the first three steps in a positive deviance framework (see [figure 1](#)).

To support the adoption and spread of the positive deviance approach (step 4), existing and new methods for encouraging and enabling individuals, teams and organisations to be transparent and to share best practice to achieve the common goal of safe patient care might be developed. Given the potency regulatory bodies have in coercing healthcare organisations to provide information from patient safety incident reporting, analysis and actions, perhaps they have a duty to make use of this information in a way that encourages sharing of knowledge across boundaries to spread examples of success. Less regulation and more support of positive behaviours are key, but this requires a change in the prevailing mindset. It may also be worth considering how we can learn through examples from the negative deviance approach for engaging healthcare professionals ([table 1](#)).

For example, the negative deviance approach, during the aftermath of an adverse event, typically mobilises instantaneous attention, managerial resources, and a sense of urgency. The combination of these factors is likely to generate engagement from healthcare professionals to find and fix the problem. For positive deviance, a cohesive and well-performing team is unlikely

to create managerial attention, as the positive practices may have simply evolved over time. Harnessing strategies from the negative deviance approach applied to positive deviance might involve: allocating resources usually focussed on reporting and reducing error to spreading positive behaviours, recognising positively deviant teams, and creating a sense of urgency about spreading positive exemplars of practice.

CONCLUSION

The myopic focus on errors, harm and near misses has been sending negative messages for a long time. Politicians, bureaucrats, managers, the media and those leading enquiries as far back as Bristol Royal Infirmary and earlier, and more recently Mid-Staffordshire in the UK, have essentially indicated to clinicians: *you are prone to making mistakes, and we must insist that you reduce the harm or potential harm you cause; and if you do not, we will regulate your activities, tightening the rules over time.* While no one would argue against the need to identify those people and organisations whose performance is consistently or deliberately negatively deviant,²¹ there is a clear obligation to recognise that healthcare is delivered in complex, uncertain settings, and although clinicians are time-pressured and resource-constrained, things go right very often, even in times of austerity. Now is the time to send more optimistic signals to clinicians, focusing on the behaviours, processes and systems contributing to resilient, safe care. Healthcare professionals surely need more sincere and

Table 1 Positive and negative deviance: characteristics and learning opportunities

Negative deviance characteristics	Positive deviance characteristics	What can positive deviance learn from negative deviance?
Focus on what goes wrong and preventing harm	Focus on what goes right and spreading positive behaviours	Use the same mediums of dissemination about adverse events to encourage teams to vocalise their efforts and successes
Reactive	Proactive	Be responsive to positively deviant practice by encouraging the spread of successful behaviours identified using the positive deviance approach
Easily attracts attention	Does not naturally attract attention	Market positively deviant teams. Money is often spent campaigning to avoid adverse events—redirect resources to spreading positive practice
Sense of urgency to find and fix problems	Solutions evolve over time	Create a sense of urgency about spreading positively deviant practice
Backward-looking, retrospective thinking	Forward-looking, prospective thinking	Highlight the time it takes to analyse an adverse event, identify the cause, and implement the solution—and acknowledge that often the solution may not be evident from analysing the adverse event. Compare this to the time it takes for local teams to spend time looking at their own practice, and developing context-specific solutions currently available in the system
Managerial pressure	Cohesive well-performing team without reason for managerial intervention	Use managerial support to promote positive deviance; actively recognising (and rewarding) teams that have initiated change and found improvement—highlight the need to learn how it was achieved and to spread the good practice
Targeted success	A philosophy	Rather than single instances of find and fix, use a longer-term approach to build a philosophy of positive deviance across a system
Reduce variability	Promote effectiveness	Accept that variability is a recurring feature of all systems and can never be completely eradicated—even when evidence-based care is applied. This can be a sign of resilience
Measures change following harm	Good practice is a longitudinal phenomenon	Continuously measure practice to demonstrate improvement and sustained performance over time

constructive praise, and a positive message to balance the extensive criticism they receive.

Contributors All authors contributed equally to this manuscript in line with the four criteria recommend by ICMJE (<http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html>).

Funding This article presents independent research funded partly by the Australian National Health and Medical Research Council (NHMRC) (program Grant APP1054146), and the National Institute for Health Research Collaboration for Leadership in Applied Health Research and Care Yorkshire and Humber (NIHR CLAHRC YH). The views and opinions expressed are those of the authors, and not necessarily those of the UK NHS, the NIHR the Department of Health, or the Australian NHMRC.

Competing interests None.

Provenance and peer review Not commissioned; externally peer reviewed.

Open Access This is an Open Access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>

REFERENCES

- Shojania KG, Thomas EJ. Trends in adverse events over time: why are we not improving? *BMJ Qual Saf* 2013;22:273–7.
- Landrigan CP, Parry GJ, Bones CB, *et al.* Temporal trends in rates of patient harm resulting from medical care. *N Engl J Med* 2010;363:2124–34.
- Hollnagel E, Braithwaite J, Wears RL, eds. *Resilient health care*. Ashgate, 2013.
- Hollnagel E, Braithwaite J, Wears RL. Epilogue: how to make health care resilient. In: Hollnagel E, Braithwaite J, Wears R, eds. *Resilient health care*. Surrey, UK: Ashgate Publishing Limited, 2013:227–38.
- Wishik SM, Van der Vynckt S. The use of nutritional “positive deviants” to identify approaches for modification of dietary practices. *Am J Public Health* 1976;66:38–42.
- Marra AR, Luciana RG, de Araujo CMP, *et al.* Positive deviance: a new strategy for improving hand hygiene compliance. *Infect Control Hosp Epidemiol* 2010;31:12–20.
- Bradley EH, Curry LA, Ramanadhan S, *et al.* Research in action: using positive deviance to improve quality of health care. *Implement Sci* 2009;4:25.
- Marsh DR, Schroeder DG, Dearden KA, *et al.* The power of positive deviance. *BMJ* 2004;329:1177–9.
- Mesman J. Resources of strength: an exnovation of hidden competences to preserve patient safety. In: Rowley E, Waring J, eds. *A sociocultural perspective on patient safety*. Surry, UK: Ashgate Publishing Ltd., 2011:71–92.
- Gabbay RA, Friedberg MW, Miller-Day M, *et al.* A positive deviance approach to understanding key features to improving diabetes care in the medical home. *Ann Fam Med* 2013;11 (Suppl 1):S99–107.
- Appleby J, Bell A. Reporting NHS performance: how did the media perform? *BMJ* 2000;321:248.
- Zhan C, Miller M. Administrative data based patient safety research: a critical review. *Qual Saf Health Care* 2003;12(Suppl 2):ii58–63.
- Berg M, Meijerink Y, Gras M, *et al.* Feasibility first: developing public performance indicators on patient safety and clinical effectiveness for Dutch hospitals. *Health Policy* 2005;75:59–73.
- Lilford R, Mohammed MA, Spiegelhalter D, *et al.* Use and misuse of process and outcome data in managing performance of acute medical care: avoiding institutional stigma. *Lancet* 2004;363:1147–54.
- Hutchinson A, Young T, Cooper K, *et al.* Trends in healthcare incident reporting and relationship to safety and quality data in acute hospitals: results from the National Reporting and Learning System. *Qual Saf Health Care* 2009; 18:5–10.
- Benn J, Burnett S, Parand A, *et al.* Studying large-scale programmes to improve patient safety in whole care systems: challenges for research. *Soc Sci Med* 2009; 69:1767–76.
- Newell A, Simon HA. *Human problem solving*. Englewood Cliffs, NJ: Prentice-Hall, 1972.
- Nicolini D, Waring J, Mengis J. Policy and practice in the use of root cause analysis to investigate clinical adverse events: Mind the gap. *Soc Sci Med* 2011;73:217–25.
- Currie G, Suhomlinova O. The impact of institutional forces upon knowledge sharing in the UK NHS: the triumph of professional power and the inconsistency of policy. *Public Adm* 2006;84:1–30.
- Currie G, Brown A. Narratological approach to understanding processes of organizing in a UK NHS hospital. *Hum Relations* 2003;56:563–86.
- Walshe K, Shortell SM. When things go wrong: how health care organizations deal with major failures. *Health Aff* 2004;23:103–11.