ANALYSIS OF MANAGEMENT PRACTICE

Improving the Health System with Performance Reporting – Real Gains or Unnecessary Work?

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Abstract

Aim: This paper will discuss current approaches to performance reporting and whether there are real benefits to healthcare organisations or whether it is a time consuming activity that adds little to improving quality healthcare and organisational performance. Most importantly, this paper will argue that performance reporting will not prevent another major healthcare scandal, such as that seen at Bundaberg Hospital or NHS Mid Staffordshire Trust. The paper will also outline learnings for Australia from other health systems where performance reporting is part of management practice.

Approach: While performance reporting is largely designed to increase the efficiency and effectiveness of healthcare organisations, this paper will explore the approach from a practical managerial perspective.

Context: This paper explores performance reporting across a range of Australian healthcare organisational settings to highlight differing approaches to improving performance.

Main findings: Performance reporting can be an effective tool to improve organisational performance. For performance reporting to be successful, managers

and clinicians need to work collaboratively to identify areas for performance improvement and useful measures to address these. Additionally, organisations must choose a meaningful suite of measurements that can help drive performance improvement. Real time performance reporting, such as through performance dashboards, provides managers with the opportunity to make timely, incremental improvements. Finally, performance reporting must be done in a way that does not detract from providing safe, quality patient care.

Conclusions: Performance reporting can be a useful management tool for healthcare organisations, however organisations must consider timeliness of performance reporting and select a number of measurements that have impact for their given facilities and avoid the wholesale analysis of data that has little opportunity to improve practice or performance.

Abbreviations: LHN – Local Health Network; NEAT – National Emergency Access Targets; NHPA – National Health Performance Authority.

Key words: performance reporting; efficiency; safety; quality.

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Introduction

There has been much recent interest in the collection, analysis and dissemination of data to demonstrate improved health system performance. [1-4] Healthcare organisations have taken a range of approaches, from basic spreadsheets and graphs to sophisticated data analysis and systems, to drive organisational performance. Despite these various approaches, and costs associated with performance reporting, the question remains as to whether performance reporting fundamentally improves health systems or burdens them with unnecessary and unproductive work. This paper will explore key challenges in performance reporting, analyse the relative benefits of this approach and outline what we might learn from other health systems that are focussed on systems improvement through performance reporting.

Analysing the issue or problem

Healthcare organisations have a growing data collection, analysis and distribution responsibility, not only to internal customers such as managers and clinicians, but also to an increasing number of voluntary and compulsory external agencies such as the Private Health Insurance Administrative Council; respective state health departments; the Australian Council on Healthcare Standards; the Health Roundtable; Australian Commission for Safety and Quality in Healthcare; and the National Health Performance Authority (NHPA). For example, the NHPA, initially established in 2011, [5] was established to monitor and report on the performance of local healthcare organisations including Local Hospital Networks (LHN), public and private hospitals, and primary healthcare organisations and other community related organisations that provide healthcare services. This public reporting organisation provides data on two main streams of activity, namely: aspects of Hospital Performance and Hospital Performance reports Healthy Communities. include analysis of activities such as patient times spent in Emergency Departments (National Emergency Access Targets [NEAT]); infection rates; hand hygiene and length of stay in acute hospitals, whereas Healthy Communities reviews issues such as: obesity; immunisation rates; maternal and child health; and General Practitioner care of chronic illnesses. From a health manager's perspective, the NHPA reports provide important broad and retrospective data on a range of hospital and broad health service performance measures. At best these reports can be used for benchmarking, but provide little in terms of real time data, at the disaggregated level, to correct current practice or performance at a local level.

While it would seem on face value that performance reporting is a worthwhile approach to improving quality and efficiency, [6,7] the research is divided on the topic. Public reporting of performance data no doubt has some effects, but the most convincing effects are on quality improvement activity, not on clinical outcomes. [8,9] Additionally, considering the amounts of data available, efforts to make data available across the system, have to date been partial and fragmented. [10] In addition, international evidence suggests that limited progress has been made in integrating even the existing measures into healthcare organisations. [4] More tellingly, Walley, Silverster and Mountford argue that '...measurement systems disguise failed decisions

and encourage managers to take a low-risk approach of "symptomatic relief" when trying to improve performance metrics. This prevents many managers from trying higher risk, sustainable process improvement changes. The behaviour of the healthcare system is not understood by many managers and this leads to poor analysis of problem situations'. [11, p.93]

The evaluation of public reporting is complex because there is a lack of data that would truly allow the ability to isolate the effect. [12] Krumholz argues that outcomes have not changed much with public reporting, and there may be other explanations for reported improvements in health service outcomes. For example, fewer patients may be undergoing procedures, however it cannot be known if access is being restricted or more judicious decisions are being made. In the end, substantial uncertainty remains about what is being currently achieved with public reporting. [12]

Management approaches

From a theoretical perspective it can be argued that performance reporting can and should be of value in the health and hospital context. [6,7] However, it could be suggested that in practice there is a wide variety and maturity of performance reporting across healthcare organisations in Australia, even within the same jurisdiction.

An interesting comparison in the practice of performance reporting in public sector health delivery environments can be illustrated across two Australian states – a metropolitan tertiary hospital for a large LHN in South Australia, and a regional hospital/healthcare service in a geographically spread Local Health District in New South Wales.

In considering performance reporting at a LHN and individual hospital/healthcare service level, firstly the question of what is being measured is important. While the size and complexity is different, the experience in these two settings is similar with broadly four domains (quality and safety; service access/patient flow; finance and activity; and people and culture) measured and reported. These domains or areas of performance measure are in part driven at a national level with efficient price (through the Independent Hospital Pricing Authority) and measures of efficiency; [13] however they nonetheless provide a 'balanced scorecard' approach to performance measurement. Interestingly, while the level and detail of performance reporting varies between the two settings there is a consistent strong focus on the service access, and finance and activity domains with less focus on quality and safety, and in these two settings, limited focus on people and culture.

A second question is, to whom is the performance being reported? In these comparative settings, again, there is similarity with who performance is being reported to with a tiered reporting framework evident from the Board and management performance reporting to local clinical councils, departmental heads and clinical managers. Additionally, and often at an aggregated level, health service performance reporting is also reported publically through websites and public reporting documents. [14]

The question of how performance is reported is where there is significant divergence. The two settings in guestion, and in fact mirrored across other jurisdictions for public sector healthcare environments, including Queensland and Victorian public health systems, show stark contrast in the sophistication and maturity of performance reporting systems. The larger hospital/health services and LHNs have developed, through dedicated performance management resources, high level, matured, and often real time performance reporting. This includes sophisticated performance dashboards with drill-down capability for performance analysis, and suites of reports with flexibility in reporting of targeted performance measurement. On the other hand, the smaller regional hospital/healthcare sites had less sophisticated performance reporting with barriers experienced in timeliness and validation of performance data and limited ability to drill-down and hence explain performance variance at a local level.

Given the contrast in available tools and sophistication of performance reporting in this comparison across these settings - does performance reporting in practice drive system improvement locally and in a broader context? If we consider that 'what we measure matters', [15] then there is a distinct disadvantage in limitations of performance reporting, particularly in respect to timeliness and hence responsiveness to systems improvement. If system access performance, for example NEAT, is only reported on a quarterly basis it is challenging to engage clinical and local managers in improving such performance in a meaningful way. However, if information is available in real time or reported without significant lag time, incremental improvements are much more likely as there is meaning to the performance with local barriers and opportunities to improve strengthened. Additionally, there is a growing interest in a 'whole of health/hospital' approach where performance is measured across the patient journey that engages both management and clinicians in patient experience and systems improvement.

Incremental advancements aside, Australia's focus on understanding health system performance through data interrogation and reporting is still in the developing stage, and challenges remain in integrating data [10,16,17] and providing adequate resources to provide timely information to managers to support decision-making. [3] Despite the challenges from the Australian context, the international literature suggests that performance reporting is a useful tool for systems improvement; however there are lessons to be learned. These key lessons are now outlined.

Outcomes for management practice

Real health system improvement requires a change in approach for some healthcare organisations.

The evidence suggests that healthcare system performance may be improved with an emphasis on primary care, quality improvement and information technology. [18] While this seems obvious, it is much more difficult to achieve. For this to be achieved in Australia there is a need for different sections of the health system and state/national governments to co-jointly develop strategies and policies that drive real improvements. For those operating in secondary and tertiary health, there needs to be stronger linkages to communication flow and streamline patient/client access to appropriate services in the right setting in a timely manner. [17]

There needs to be a stronger emphasis on data analysis to drive organisational wide change.

The collection and interrogation of population data or 'big' data is becoming more important in understanding patterns of disease and health outcomes. The pursuit of greater efficiency, through data mining and analysis needs system wide support and partnerships.

What is evident in both the United States and United Kingdom is the close relationship between governmental bodies, non-governmental organisations and the world of academia in public data reporting. Although the same can be said to some extent for the first two components in New Zealand, the involvement of academia has been comparatively limited in Australia. The United States and United Kingdom have measurement systems where academic organisations take large roles. The example of the COMPASS project is clear proof of scope for this in New Zealand. [19]

What is reported needs to be meaningful and useful to the consumer as well as the manager.

While performance reporting is designed in part to demonstrate transparency and public accountability, studies show that the public '...do not search out performance reports, often do not understand them if they do, and make little use of them in their decisions as to where to seek healthcare. When there is a choice of hospital or doctor, the evidence suggests that the advice of friends and family, the long-term relationship with a doctor and the proximity of a hospital are more important than report cards of performance.' [20, p.5] Hospital managers and clinicians need to work collectively to improve patient care [3] through the development of agreed areas for service improvement and the information that needs to be analysed and reported both internally for staff, but also externally for patents and consumers.

System-wide improvement requires system-wide approaches

Don Berwick has been a strong advocate of the 'Triple Bottom Line' approach to systems improvement. [21] Improving the United States healthcare system requires simultaneous pursuit of three aims: improving the experience of care; improving the health of populations; and reducing per capita costs of healthcare. The role of healthcare organisations in this 'Triple Bottom Line' approach includes at least five components: partnership with individuals and families, redesign of primary care, population health management, financial management, and macro system integration. [21] What makes this approach somewhat different is the inclusion of improving the patient experience. This often gets forgotten in the pursuit of systems improvement. What is important to consider is while organisations report on local or internal performance, how does the performance of the organisation impact more broadly on the community it serves?

In recent years the literature has advanced the triple aim approach to include a fourth element, a focus on the workforce. [22-25] Without a committed, educated, efficient and multi-disciplinary workforce it is very difficult to achieve the triple aim, let alone implementing system wide improvements. Staff burnout and poor morale have been associated with lower patient satisfaction, reduced health outcomes, and may increase costs. [22,25] To be successful, organisations need to consider the well being of their workforce at the same time as focussing on patient outcomes. [24]

Make the patient the centre of care and of decisions regarding systems improvement

There is no point in improving the 'system' and reporting on improvements if they are detrimental to the patient or client. Berwick points to this when he talks to 'improving the patient' experience; however it goes further than that. Making the patient the centre of the decision-making process is fundamental to real systems improvement and reporting that makes sense to consumers.

It is relatively easy to be distracted by the process and this can lead to a lack of focus on patient care. As has been clearly demonstrated, part of the issue identified in the Davies Inquiry into the Bundaberg Hospital, [26] and later in the Francis Inquiry into the NHS Mid Staffordshire Trust, [27] was the organisation's focus on chasing 'numbers' and arbitrary targets set by external agencies, often associated with funding, which largely forgot about the patient or client. Additionally, in reviewing the organisations as part of the respective Inquiries, both organisations had cultures that were not patient focussed. 'Performance targets and enforcement, although needed, is not the route to improvement. What is required is a change in culture to drive a system of care that is open to learning, capable of identifying and admitting its problems and acting to correct them, and where the patient's voice is always heard'. [28, p.106] The challenge for healthcare organisations is to create cultures that are patient and performance focussed. The critical success factor is having staff truly see the patient at the centre of care and ensure any performance improvement is aimed towards patient safety, quality and access.

Be judicious in what you measure and report

It could be argued that the current approach and promise of performance reporting does not live up to its potential. A United States analysis of '48 state and regional measure sets found that they included more than 500 different measures, only 20% of which were used by more than one program.' [4, p.2145] Similarly, a study of 29 private health plans identified approximately 550 distinct measures, which overlapped little with the measures used by public programs. [29] Some argue that organisations are in danger of '...measurement fatigue without commensurate results'. [4, p.2145]

Healthcare organisations are devoting substantial resources to reporting their performance to regulators and payers; with one United States health system, for instance, estimating that one per cent of its net patient-service revenue was used for reporting purposes. In addition to the problem of too many measures, there is concern that programs are not

using the right ones. Some metrics capture health outcomes or processes that have major effects on overall health, but others focus on activities. [4] What must be understood is that there is no single measure that will improve service delivery and patient outcomes, ensure financial sustainability and increase accountability and transparency in a health system. [30] Australia should be judicious in learning from the United States experience. Chasing systems improvement can be a costly exercise for only minimal gain. 'For every instance in which performance initiatives improve care, there are cases in which our good intentions for measurement simply enrage colleagues or incurred expenditures that produced no care improvements.' [4, p.2147] The guiding principle should be based on '... the understanding that performance improvement requires that clinicians and patients be enabled to make better healthcare decisions by giving them the best available information when and where they need it and making it easy to do the right thing'. [31, p.1953]

Conclusion

In conclusion, there are lessons to be learned, and avoided, in the international experience in the value and application of performance reporting. In Australia, we have seen that there is significant variance in approach and levels of maturity of performance reporting systems across public sector health delivery environments. However, encouragingly the strategies for engagement on improving performance hold a common theme. The 'whole of hospital/health' approaches with the provision of common performance data and reporting across the four broad domains, that engages both management and clinicians, and seeks genuine engagement on patient experience and systems improvement, is an achievable standard. This coupled with continuous improvement over time will no doubt improve transparency and help contribute to real health system performance improvement.

Competing interests

The authors declare that they have no competing interests.

References

- 1. Hanson R. Good health information an asset not a burden! Aust Health Rev. 2015;39(1):9-13.
- 2. Nadathur SG. Maximising the value of hospital administrative datasets. Aust Health Rev. 2010;34(2):216-233.
- 3. Garling P. Final Report of the Special Commission of Inquiry into Acute Care Services in NSW Hospitals. Sydney: NSW Department of Attorney General and Justice; 2008.
- 4. Cassel CK, et al. Getting more performance from performance measurement. N Engl J Med. 2014;371(23):2145-7.
- NHPA. National Health Performance Authority. 2011 [cited 2015 Aug 15]; Available from: http://www.nhpa.gov.au/internet/nhpa/ publishing.nsf/Content/home-1.
- 6. Hafner JM, et al. The perceived impact of public reporting hospital performance data: interviews with hospital staff. Int J Qual Health Care. 2011;23(6):697-704.
- Veillard J, Tipper B, Allin S. Health system performance reporting in Canada: bridging theory and practice at pan-Canadian level. Canadian Public Administration. 2015;58(1):15-38.
- 8. Saitz R. Does public reporting of performance data improve quality of care? NEJM Journal Watch. General Medicine. 2008.
- 9. Pearse JMD. The impact of the public release of health performance data on effectiveness and efficiency. Sydney: The Sax Institute; 2010.
- 10. Productivity Commission. Efficiency in Health. Canberra: Productivity Commission; 2015.
- Walley P, Silvester K, Mountford S. Health-care process improvement decisions: a systems perspective. Int J Health Care Qual Assur. 2006;19(1):93-104.
- 12. Krumholz HM. Does public reporting of PCI outcomes improve patient care? Journal Watch. Cardiology. 2012.
- Independent Hospital Pricing Authority. Pricing Framework. 2016 [cited 2016 Jan 2]. Available from: https://www.ihpa.gov.au/whatwe-do/pricing-framework.
- 14. SA Health. Our Hospital Dashboard. 2015 [cited 2016 Jan 2] Available from: http://www.sahealth.sa.gov.au/wps/wcm/connect/ public+content/sa+health+internet/about+us/our+performance/ our+hospital+dashboards/our+hospitals+dashboards
- 15. Hendra P. What matters gets measured, and what we measure is what ends up mattering, in Remarks by UN Women Deputy Executive Director Policy and Programme John Hendra, at the CSW58 side event on 'Indicators for monitoring gender equality: lessons learned from the MDGs'. 2014 March 12, UN Women.
- Connor M, Day GE, Meston D. Successful linking of patient records between hospital services and general practice to facilitate integrated care in a hospital and health service in south-east Queensland. Aust Health Rev. 2015. - DOI: 10.1071/AH15048.
- Nicholson C, Jackson CL, Marley JE. Best-practice integrated healthcare governance - applying evidence to Australia's health reform agenda. Med J Aust. 2014;201(3 Suppl):S64-6.
- Gauld R, et al. Healthcare system performance improvement: a comparison of key policies in seven high-income countries. J Health Organ Manag. 2014;28(1):2-20.
- Chaudhry M, Gauld R, Horsburgh S. Hospital quality-of-care performance measurement and reporting: what New Zealand can learn from the United States and United Kingdom. N Z Med J (Online). 2012;125(1366):51-63.
- Seddon ME. Reporting hospital performance a balancing act between accountability and quality improvement. N Z Med J (Online). 2012;125(1366):5-8.
- 21. Berwick DM, Nolan TW, Whittington J. The triple aim: care, health, and cost. Health Aff (Millwood). 2008;27(3):759-69.

- 22. Bodenheimer T, Sinsky C. From triple to quadruple aim: care of the patient requires care of the provider. Ann Fam Med. 2014; 12(6):573-576.
- 23. Earnest M, Brandt B. Aligning practice redesign and interprofessional education to advance triple aim outcomes. J Interprof Care. 2014;28(6):497-500.
- 24. Spinelli WM. The phantom limb of the triple aim. Mayo Clinic Proceedings. 2013;88(12):1356.
- 25. Day G, Minichiello V, Madison J. Nursing morale: predictive variables among a sample of Registered Nurses in Australia. J Nurs Manag. 2007;15:274-284.
- 26. Davies G. Queensland Public Hospitals Commission of Inquiry Report. Brisbane; Government of Queensland; 2005.
- 27. Francis R. Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry Volume 1: Analysis of evidence and lessons learned (part 1), in Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry. London: The Mid Staffordshire NHS Foundation Trust; 2013. p. 689.
- 28. Russell L, Dawda P. Lessons for the Australian healthcare system from the Berwick report. Aust Health Rev. 2014;38(1):106-8.
- 29. Higgins AVG, McKown L. Provider performance measures in private and public programs:achieving meaningful alignment with flexibility to innovate. Health Aff. 2013;32:1453-1461.
- 30. Partel K. Can we improve the health system with performance reporting? Canberra: Deeble Institute; 2014. p. 20.
- 31. Blumenthal D. Performance improvement in healthcare-seizing the moment. N Engl J Med. 2012;366(21):1953-5.