



**Response to the discussion paper
'Better Data—the benefits to the profession
and the public'**

New Zealand Medical Association

Submission to the Medical Council of New Zealand

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"Perhaps the culture of accountability that we are relentlessly building for ourselves actually damages trust rather than supporting it. Plants don't flourish when we pull them up too often to check how their roots are growing: political, institutional and professional life too may not go well if we constantly uproot them to demonstrate that everything is transparent and trustworthy." – Onora O'Neill¹

About the NZMA

1. The New Zealand Medical Association (NZMA) is the country's largest pan-professional medical organisation with a membership of over 5,000 members. Our members come from all disciplines within the medical profession and include specialists, general practitioners, doctors-in-training and medical students. The NZMA aims to provide leadership of the medical profession, and promote professional unity and values, and the health of New Zealanders.
2. The key roles of the NZMA are to:
 - provide advocacy on behalf of doctors and their patients
 - provide support and services to members and their practices
 - publish and maintain the Code of Ethics for the profession
 - publish the *New Zealand Medical Journal*.

Summary

3. The NZMA welcomes the Medical Council's discussion paper on the value of performance and outcome data.² This subject is of great importance to our association, with important ramifications for the profession, the health system and the public (and indeed, for public policy). We congratulate the Council on initiating a formal discussion within the profession and wider stakeholders on this area. Our feedback on this subject has been informed by input from our Advisory Councils, Ethics Committee and the Board.
4. Our association recognises the value of high-quality (reliable and accurate) data in informing clinicians, and influencing planning and investment in health systems. As a professional body, we are keen to work constructively with the Ministry of Health and other agencies to ensure the development of robust systems that can generate meaningful data. We agree with the underlying principles (if not the full detail) of the Council's view that—if gathered accurately, used correctly and explained well—qualitative data down to individual clinician level could benefit clinicians, administrators and regulators.² We remain unconvinced, however, of the benefits of releasing these data to the public.
5. We are seriously concerned about any moves to report 'raw' or partially-adjusted performance and outcome data to the public. We hold that the role of data in clinical improvement and Quality Assurance (QA) is incontrovertible, but that the public release of such data is not. The Bristol case accelerated moves in the UK to provide patients with data on the performance of doctors and hospitals³ and, in that context, was arguably a good outcome. Identifying, gathering and interpreting the relevant data are not easy, however. It is also our view that such data are best used as a source of knowledge for improvement rather than for judgement.⁴

6. Our concerns with the public reporting of outcome/performance data are based on a number of reasons, including:

- variation in the type and quality of outcome data collected
- multiple confounding factors
- failure to recognise the impact of systems, processes and infrastructure
- failure to take into account the contribution of the multidisciplinary team
- risks of false complacency
- promoting the practice of risk-averse medicine
- limitations of observational data
- advantages of reporting at an aggregate level
- undue emphasis on surgical specialities
- undermining the environment that is most conducive for quality improvement
- overlooking the performance outcomes of executive managers
- issues extending beyond the health sector, requiring a higher-level debate
- failure to recognise professionalism and the doctor-patient trust relationship
- cost considerations.

We elaborate on these reasons below and provide some suggestions for further consideration.

Specific concerns

Variation in the type and quality of outcome data collected

7. The type and quality of outcome data being collected across the country varies widely. Reporting poor quality outcome data without identifying the necessary limitations (and adjusting for confounders—see below) is likely to lead to meaningless debate and generate spurious conclusions about apparent variations. The consequences of false identification of poor performance can negatively impact on clinicians and patients.

Multiple confounding factors and failure to recognise the impact of systems, processes and infrastructure

8. When collecting clinician-specific raw outcome data, a number of potential confounding factors need to be recognised and adjusted for. These long-established factors⁴ include:

- patient factors (eg, age, comorbidities, ethnicity, socioeconomic deprivation, health literacy, diagnostic validity, complexity/severity of condition)
- system factors (eg, diagnostic/interventional facilities, healthcare team factors, supervision, resources vs competing demands, management and governance)^{3,5}
- clinician factors (eg, volume of procedures,⁶ training, experience, and case-mix).

Failure to adequately take these confounding factors into account could lead to misleading information that does not reflect the actual competence of any individual named as lead clinician. If reported in its raw format to the public, unadjusted outcome data could also undermine confidence in the public health system.

9. We wish to expand on the pitfalls of reporting raw surgeon-specific outcome data and draw attention to selected literature on this issue. Post-operative outcomes (including mortality) relate to many factors other than the operative skill/competence of the surgeon. These include patient factors as well as healthcare team factors (eg, the quality of postoperative care, the quality of nursing care, etc). Reporting surgeon-specific mortality data

may obscure wider failings in the delivery of safe surgical services. For example, a UK study of cardiac surgical patients that evaluated the circumstances of deaths reported that most deaths were related to high-risk status, age, frailty, comorbidity and urgency.⁷ Most deaths could not have been prevented by the operating surgeon but occurred as a result of patient comorbidity or failures in process/infrastructure. The authors concluded that their findings cast serious doubt on using surgeon-specific mortality data as a tool for quality improvement.

Failure to take into account the effects of the multidisciplinary team and the risks of false complacency

10. Other authors have described how reporting outcomes for individual surgeons ignores the effect of the multidisciplinary team and the context in which surgery is done.⁶ They draw attention to the consequences of erroneous identification of poor performance (ie, false positives, which can exacerbate unnecessary alarm in patients—in itself a health impact). It also risks false complacency, an unintended result of outcome reporting for individual surgeons who perform low numbers of procedures, where statistical power is insufficient to detect poor performance (ie, false negatives). It is important to keep in mind that a lack of evidence of poor performance is not evidence of acceptable performance.⁶ Many, if not most, inter-clinician analyses of mortality/complication rates are likely to be insufficiently powered to distinguish between the ‘better performers’ and the ‘worse performers’.

Promoting the practice of risk-averse medicine

11. The public reporting of performance/outcome data may contribute to the practice of risk-averse or defensive medicine. Because of fears of a negative outcome, a range of negative impacts may be associated with this—from unnecessary investigations (and associated costs) to reduced learning opportunities for trainees, to a disincentive to provide treatment for the most seriously ill patients. Evidence from international literature shows these effects do occur. In the UK, publication of surgeon-specific data (SSD) has coincided with a decrease in both the proportion and variety of cases performed by trainees, with the authors suggesting that the publication of SSD provides a disincentive for consultants to provide surgical training.⁸ In a large North American study of patients with acute myocardial infarction, public reporting was associated with reduced rates of percutaneous revascularisation and increased in-hospital mortality.⁹

12. The best surgeons may take on the highest risk cases and, therefore, may have worse outcomes. As alluded to above, public reporting may lead to the selection of lower risk patients.¹⁰ This occurred in New York state when a cardiac surgical register was introduced and surgeons stopped operating on patients with cardiogenic shock,¹¹ a condition associated with an approximately 20% absolute increase in mortality. Clearly, patients were disadvantaged by the introduction of the register. A partial solution was to report outcomes for patients with cardiogenic shock separately from those without this condition.

Limitations of observational data

13. We recognise that much of the above evidence⁶⁻¹¹ is non-experimental observational data (SIGN level 3 evidence). While attempts have been made to control for confounding via risk-adjustments, confounding is inherent in the methods used to generate this type of evidence. This is precisely the problem with the use of surgeon-specific data; the low-grade evidence may be of use in generating hypotheses but is inadequate for robustly testing these. The Medical Council’s discussion document² suggests that the use of a risk-assessment-based system “allows comparison of actual outcome against predicted outcome over time”, as opposed to raw outcome data. Although an improvement over raw outcome data, we contend

that such analysis still understates the complexity, and so may in itself compound the issue. The data are at best still observational. As such, it is not possible to rule out the effects of unknown confounders—something only blinded randomisation in experimental controlled trials can achieve—and could again lead to false positive and false negative results.

Advantages of reporting at an aggregated level

14. We agree with the HQSC that there are compelling arguments to focus on performance at relatively aggregated levels rather than at the level of individual practitioners.¹² Overall, it is much more appropriate to look at a unit, service or DHB-level analysis, which includes the total team effect and not just one participant in the care. For example, comprehensive multidisciplinary team-based geriatric assessment confers demonstrable survival and other health gains.¹³ In New Zealand, the active involvement of geriatrician-led medical input to orthopaedics has been associated with lower mortality in hip fracture, demonstrating the contribution of cross specialty care towards outcomes.¹⁴ We also agree that when outcomes are less frequent (and statistical power is, therefore, insufficient) the unit of reporting could be the hospital.⁶

Undue emphasis on surgical specialties

15. Interestingly, most of the debate on performance data appears to be focused on surgical outcomes—where these outcomes are ostensibly relatively easy to ‘count’. In the same way as many headline-grabbing health funding opportunities relate to surgical procedures, there is a tendency to develop league tables and similar reports for surgical specialties, while completely avoiding attention on other specialties. While not intending to detract from the importance of general and subspecialty surgery in overall health services, we note that undue concentration on surgery is to the detriment of the extensive impact of other branches of medical practice and health services. Surgical practice itself encompasses the gamut of professional attributes necessary for all medical practice,¹⁵ which brings to mind aphorisms around measuring the wrong things:

- “*We tend to overvalue the things we can measure and undervalue the things we cannot*” – John Hayes
- “*For every complex problem there is an answer that is clear, simple, and wrong*” – paraphrasing of HL Mencken’s “*Explanations exist; they have existed for all time; there is always a well-known solution to every human problem — neat, plausible, and wrong*”.

Undermining the environment that is most conducive for quality improvement

16. We consider that the best environment for quality improvement is one where clinicians feel safe to disclose adverse events and near misses, openly and frankly. Provisions built into the old Medical Practitioner Act and enshrined in the Health Practitioners Competence Assurance Act with the Protected Quality Assurance Activities (PQAA) were based on these principles,¹⁶ and are maintained in other high-risk/high-harm professional environments such as aviation. Publicly reporting incomplete, confounded outcome/performance data—in an attempt at transparency—could undermine the very environment that is most conducive for quality improvement. Furthermore, we contend that stronger legislative protections around PQAA are necessary to ensure that clinicians feel safe to disclose adverse events and near misses without the fear that such information could be used against them.

Overlooking the performance outcomes of executive managers

17. We agree with the Medical Council's suggestion for executive managers to be held as accountable as clinicians for health outcomes that matter, rather than simply assessed on their quantitative managerial-performance volumes. Indeed, this was precisely the issue with the Mid Staffordshire situation,⁵ where failings in hospital management and overall systems were found to be major contributors to the adverse health outcomes. The medical profession might, eventually, become more comfortable with publicly reporting on individual clinicians' outcomes when there is similar reporting of:

- individual managers' outcomes—over time and regardless of location
- health funders for the populations they serve—measuring opportunity costs and health benefits forgone by the mix of decisions made to fund some things and not others.

This approach would ensure a system-wide responsibility for outcomes that also ascribes the impact of fiscal constraints.

Issues extending beyond the health sector

18. We are concerned that judgement will too readily occur even with some risk adjustment to the data. Performance and outcome data are still likely to be too confounded by case selection, severity, risk and co-morbidity, and will therefore remain fundamentally misleading. This underlying issue extends to the wider public service. We note the close similarities with other sectors in New Zealand (eg, league tables of operator/site-specific outcomes within Education's school sector) that experience many of the same limitations and associated misuse.¹⁷ We suggest wider debate at a higher level is needed on the best generic public policy instruments.

Failure to recognise professionalism and the nature of the doctor-patient trust relationship

19. The NZMA believes that discussion on this issue should explicitly recognise the professionalism that underpins the degree of autonomy granted to the medical profession via the original societal contract. Analogies between doctors and pure service providers are unhelpful and fail to acknowledge the unique nature of the doctor-patient trust relationship. The provision of raw performance data to the public, without context, would appear to run contrary to the professionalism that is at the core of being a doctor.

20. The HQSC's article has a statement that is telling: "*in an age less deferential to health care professionals, the risk of reduced trust is countered by increased transparency*";¹² ie, moves to publish outcome data could be signalling a failure of the trust and professional autonomy established over the last 200 years, or a change in the fundamental relationship between a doctor and their patient. While we understand that the massive change in healthcare delivery worldwide over the past 50 years has already irrevocably changed that basic relationship, the NZMA remains committed to the professionalism that forms the basis of the doctor-patient trust relationship. We draw the Council's attention to a series of lectures on the issue of trust by Onoro O'Neill that we believe articulate a number of pertinent points.¹ We have reproduced a quote from this lecture series at the start of our submission.

Cost considerations

21. The discussion paper does not allude to the cost considerations that generating and managing performance/outcome data are likely to entail. We assume that any such costs will come out of Vote Health. Accordingly, we believe a cost-benefit analysis is needed to ensure this money is well spent. It is worth considering whether the limited health dollar and resources could be put to better use to improve the health of New Zealanders and to reduce health disparities.

Suggestions for further consideration

22. To mitigate some of the above concerns, we propose various measures for further consideration. Addressing issues around data quality and consistency are essential as a first step. To this end, we submit that it is vitally important to have clinicians, preferably those with statistical expertise, involved at all stages of all processes intended to collect performance/outcome data. This should include identifying appropriate and reliable variables for speciality-specific outcomes, as well as the opportunity to critique any process that purports to assess performance. It should also extend to the opportunity to appraise and comment on raw data before they are used to inform decision making.

23. We submit that there is an urgent need for greater statistical literacy¹⁸ across society,¹⁹ and particularly among policy and decision makers in the health sector. In this regard, lessons should be drawn from the failure to screen donated blood products for Hepatitis C in the 1990s. The official inquiry into this matter attributed the failure partly to the fact that “the concepts of sensitivity and specificity of tests were not well understood [by officials]” and went on to recommend that “steps should be taken to ensure appropriate medical and technical input into health policy”.²⁰

24. Given the potential negative implications of reporting performance/outcome data, we also suggest the establishment of a medical data watchdog to ensure the appropriate collection, analysis and reporting of these data. We note that the HQSC takes considerable care to consult with providers before publishing data (to allow them to question or verify their reliability) and to provide interpretative and contextual information with the published measures and indicators.¹² However, even the data reported by the HQSC often do not fully address all confounders. Consequently, reports such as the Atlas of Healthcare Variation are useful in generating hypotheses but are not intended (or able) to provide definitive conclusions.

25. We contend that there is the need to clearly identify the specific purpose for which any information being collected will be used. This objective should be supported with evidence showing that collecting and/or releasing the particular information will actually make a difference. Ensuring against the potential misuse of data, intentional or otherwise, is also necessary. We also suggest that further thought needs to be given to what a patient can realistically do with clinician-specific outcome/performance data, particularly as most New Zealanders rely on the public hospital system. The notion that such information can facilitate a patient’s informed choice of clinician is neither tenable nor ethical (if the only choice available entails a choice between public and private health care).

26. In conclusion, the NZMA welcomes this important discussion document. While we support using high-quality data to inform and improve practice, policy and systems, the public reporting of clinician-specific raw outcome/performance data is fraught with difficulties and associated with various unintended negative consequences. We believe that what patients and the public want to know is that the doctors caring for them are competent; public release of inadequate data inadequately explained will not achieve that. Furthermore, even if high-quality clinician-specific data became available, publically releasing these would be associated with a number of adverse consequences. These include defensive medicine, reduced learning opportunities, risk aversion and the creation of an environment not conducive to openness about adverse events and near misses. Accordingly, unless all the

concerns we have identified can be satisfactorily addressed, we remain opposed to the public release of clinician-specific outcome data.

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