USING INDICATORS: CAN PERFORMANCE MEASUREMENT BE EFFECTIVELY USED TO RANK HEALTHCARE PROVIDER PERFORMANCE?

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There is considerable difficulty in getting hospitals or the health system to act on the information provided by clinical indicators or performance measures.

Objective:
To show that providing comparative data across hospitals is important. However, ranking hospitals in terms of rates is not as effective as using the indicator data to provide the magnitude of the potential gains to the health system by moving to the rates obtained by the 'best' 20% of hospitals.

Methods:
Australian hospitals have access to a large number of indicators, involving quality measures. The reports have been comparative, but have not created motivation for change. The key to changing attitudes was:

- Recognise that CIs are screening tools that attempt to measure performance in one or more dimensions
- Provide explicit tests as to whether the CI results should be classified as either positive (requires further investigation) or negative (requires monitoring)
- A CI will be positive if any of three criteria are met:

1. Large variation between all areas or hospitals: requires improvement in the healthcare system
2. Large variation between strata (rural/urban, teaching and non-teaching, public private): requires action in the relevant stratum
3. Outlier hospitals: requires quality improvement in the individual hospitals.

Statistical methods are used to detect positive 'tests' and require two new techniques: Empirical Bayesian estimates to calculate 'shrunken' rates and the use of the 20th centile to determine the system areas for improvement. Quality is concerned with variation rather than the mean rates [1] [2].

Results:
For the 185 ACHS indicators, 55 CIs had significant system gains involving better outcomes for at least 1,000 patients per indicator. The equivalent figures for stratum gains and gains from improving the outlier hospitals were 23 and 36 respectively. Similar results were found for the NSW quality indicators. Overall, the system gains greatly out-numbered the stratum and outlier gains.
To turn these results into action, required 2 processes: development of a system-wide approach for the clinical areas showing variation across all hospitals, a major task, and providing quality tools to the outlier hospitals to review their data, a more achievable task.

Conclusions:
Indicators that measure healthcare processes should be reported in a comparative manner to encourage action. Ranking hospitals on rates is not as effective as highlighting the magnitude of the potential gains that could be achieved. It also allows priorities to be established, which in our experience tend to involve the larger units with the most to gain rather than the smaller units that may have higher rates, due to their larger standard errors.

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[1] Gibberd R., Pathmeswaran A., Burtenshaw K. Using Clinical Indicators to Identify Areas for Quality Improvement. Journal of Quality I Clinical Practice, December 2000 Vol. 20 Issue 4

[2] ***Determining the Potential to Improve the Quality of Care in Australian Health Care Organisations*** 2nd Edition, Trends in Quality of Care: Results of the ACHS Clinical Indicators 1998-2000 Version 1