

## 115: USING CLINICAL INDICATORS TO SET PRIORITIES FOR RESEARCH AND QUALITY IMPROVEMENT

### Authors:

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### Objective:

The objectives of this study are to use the Australian hospital inpatient data and the clinical indicator data to determine the areas that have the greatest potential to improve the quality of care.

### Methods:

180 clinical indicators, CIs, defined by the Australian Council on Healthcare Standards, ACHS, for the four years 1998 – 2001, and seventeen CIs created from ten years of NSW in-patient data were used. Empirical Bayesian methods were required to determine the magnitude of the variation between hospitals in the CI rates and to estimate the rates for the 20<sup>th</sup> centiles<sup>1</sup>. The prioritisation of areas with the greatest potential to improve was defined in terms of the gains that could be made by moving the mean rate to the 20<sup>th</sup> centile rate. Trends were also reported.

### Results:

The in-patient data revealed satisfactory performance except for unusual variation in the procedure rates for myringotomy, hysterectomy, caesarian sections and the medical admissions of asthma, diabetes and heart failure. Thirty-four of the ACHS CIs had high potential gains and some of these that were associated with poor patient outcome are listed below, with the relative percentage change in rates that could be achieved being given in brackets:

- the proportion of patients who acquire bacteraemia, (75% reduction);
- thrombolysis initiated within 1 hour of presentation, for acute myocardial infarction (10% increase);
- the rate of episiotomy (34% reduction);
- attending to patients within the specified triage times in the emergency department (20% increase);
- reduce the number of inpatients having at least one episode of seclusion in an admission and the number of inpatients who assault in an admission (63% and 85% reduction); and
- unplanned transfers from the day procedure facility to an overnight facility (91% reduction).

Fourteen CIs showed improvements over the 4-year period, while waiting times in the emergency department deteriorated.

### Conclusions:

These results have been used to identify tasks for quality improvement teams in NSW and currently 48 projects are underway. Additional projects are being developed for episiotomy and myringotomy.

The use of CIs in this format, namely to identify the potential gains from moving to the 20<sup>th</sup> centile has created an acceptance that the appropriate role for CIs is to be a screening tool that identifies areas for improvement. This format also removes the feared approach of ranking hospitals. We see no gains in publishing rankings, either for the public or the science of improving the quality of health care.