

## INTRODUCING STATISTICAL SAMPLING AND QUANTITATIVE ANALYSIS TO THE AUDIT OF CLINICAL CODING



In October 2019, I presented a research paper on the introduction of statistical sampling and quantitative analysis to the audit of clinical coding to a group of 200 Health Information Managers at the 2019 HIMAA/NCCH National Conference held in Paramatta, NSW, Australia. HIMAA is the Health Information Management Association of Australia while NCCH is the National Centre for Classification in Health, The University of Sydney.

*Summary: Introduction: As part of the preparations for the introduction of a Social Health Insurance Scheme (SHIS) and a move to Activity Based Funding (ABF), we conducted an audit of clinical coding accuracy and compliance with mandatory Patient Minimum Data Set (Patient MDS) requirements.*

*Method: The audit tested a sample of 1,829 discharges selected at random from an unstratified population of 171,827 cases. The sample was calculated at a 99% confidence level with a margin of error of 3%.*

*Results: The overall accuracy of clinical coding was 66%, i.e. coding errors were detected in 623 of the 1,829 encounters audited.*

*A total of 1,301 coding errors were detected in these 623 encounters audited, giving an average of 2.088 coding errors per encounter with errors. The rate of incorrect AR-DRG assignment was 7.5% including a 1% rate of invalid admissions.*

*28% of the sample had major coding errors and these accounted for 71% of all errors found.*

*12% of the sample had incorrect principal diagnosis and 44% of all major errors were found in this group.*

*Of the eight Patient MDS items tested, significant non-compliance was detected in three.*

*Discussion: This was the first audit of clinical coding accuracy and Patient MDS compliance to use statistical methods for sample selection and results analysis. Accordingly, there are no comparative data available. However, the results indicate clearly areas that need improvement and provide a benchmark against which future audits can be measured.*

*Conclusion: The study introduced statistical sampling and auditing of clinical coding to a major healthcare provider. The results show clearly the areas where improvement is most needed to support the preparations for the introduction of insurance and/or Activity Based Funding.*

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Comments are welcome below. If you would like to know more about the application of statistical sampling and quantitative analysis to large populations of data, please let me know

## The Power of Statistical Sampling and Quantitative Analysis In Clinical Coding Audit

in the comments.