00411   Case-finding Data Automation for a Renal Cell Carcinoma Registry at a Tertiary Hospital - A Singapore Experience

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Aims: 10 traditional case-finding sources were used to search for eligible cases at Renal Cell Carcinoma (RCC) Registry at Singapore General Hospital (SGH). These were a) positive histopathology notification, b) genitourinary tumour board meeting, c) uropathological meeting, d) patients' casenotes from the clinic, e) operation theatre management system, f) radiation oncologists' correspondence, g) abnormal radiology notification, h) outpatient administrative system, i) x-ray conference, j) hospital inpatient discharge summary. The eligible cases were RCC that met the criteria of the US Commission on Cancer (CoC) standard and were diagnosed and/or treated at SGH Urology.

An automation process has been established recently to retrieve data from our hospital electronic medical records system. We aim to evaluate the completeness, accuracy and efficiency of using automation against the traditional system for 2015-2016 new RCC cases.

Methodology: Cases from institutional electronic data warehouse were retrieved using Oracle Business Intelligence Enterprise Edition based on various codes such as surgical procedure, SNOMED international, drug name, and ICD-10 codes. A final list (n=355) of eligible RCC cases from automation was compared against the traditional list (n=348) for completeness and hospital electronic medical records checked for accuracy.

Result: Automated case-finding provides 1.9% more completeness than traditional case finding sources.

Data retrieved from the automated case-finding system was 97% accurate.

The efficiency is increased by 12% upon the completion of the automated case-finding system development which combines the automation together with traditional case-finding sources not covered by automation which are g, h, i and j.

Conclusion: A new case-finding system can be implemented combining this automated system with traditional case-finding sources not covered by automation.