Enhancing Renal Transplantation efficiency with CMS GCRS T&I module

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Introduction
Kidney transplantation, as known as renal transplantation is widely considered as the choice of treatment for patients with end stage renal disease. Patients who are awaiting renal transplantation would need to have periodic HLA (Human Leukocyte Antigen) antibodies screening quarterly. The Division of Transplantation and Immunogenetics (T&I) of Queen Mary Hospital is the tertiary laboratory for HLA typing in the Hospital Authority. It is also an internationally accredited laboratory for HLA typing, antibody and crossmatch testings for tissue and organ transplants. Renal Centers of Hospital Authority are responsible in collecting and delivering blood samples to the laboratory for periodic HLA antibody screening. GCRS-T&I Task force, with members from HI and HAITS, Central Renal Committee and QMH T&I laboratory was set up in Jan 2011. The task force was formed to consolidate user’s requirement on the T&I blood specimen collection process and aimed at developing a corporate module to facilitate T&I request process. Manual laboratory test request forms were used before the development and implementation of CMS-GCRS T&I in 2012. This paper evaluates the user satisfaction and outcome after the implementation of GCRS-T&I module since January 2012.

Objectives
(1) to evaluate clinical user satisfaction for requesting T&I services through CMS-GCRS T&I; (2) to evaluate the electronic request process in terms of efficiency, safety and effectiveness; (3) to collect feedback from clinical user for future improvement and development

Methodology
Questionnaire survey was distributed to 13 renal centers, 7 transplant coordinators and QMH T&I laboratory of Hospital Authority. Analyses on the questionnaire data as well as the responses to the open-ended questions were done for evaluation and future system improvement.

Result
Users were highly satisfied with CMS GCRS-T&I module and there were no differences between user groups: ordering providers and service providers. Results also show that all parties including renal centers colleagues, transplant coordinator and QMH T&I labs are satisfied with different aspects of GCRS-T&I. The system improves the efficiency and safety of the request process.