Effective specimen management in AHNH Eye Clinic

Hung SY, Chan YH, Lee YY, A Tong MH, F Li CH, A Young
Ophthalmology and Visual Science Department, NTEC

Keywords:
Specimen Management

Introduction
Effective specimen management in eye clinic can minimize adverse healthcare events which lead to delayed, inaccurate diagnosis and misguided treatment. It is important for clinical decision and patient safety. During 2016, due to lack of effective checking system, four near miss incidents of patient mis-identification was found i.e. the identifiers of patient gum label stick on the specimen did not match with the 'job sheet' and barcode label. The root cause analysis revealed that doctors in consultation forgot to log out CMS from previous patient and wrongly issued 'job sheet' with an incorrect patient. Besides, due to only one specimen barcode scanner and printer installed in nurse station, the checking procedure became complicated with multiple staff involved, included doctors and eye care assistance in consultation room and nurses in nurse station. The barcode label could not be applied to the specimen bottle immediately and the risk of error increased.

Objectives
1) To develop effective CID checking system in handling of specimen. 2) To achieve zero incident in patient mis-identification during the whole process of specimen collection.

Methodology
1) Form a workgroup includes doctor and nurses to review the current workflow and recognize the loopholes 2) To develop effective CID checking system by related personnel: i) before & after taking the specimen, ii) before printing the barcode label & iii) before sending out to laboratory. 3) In order to further improve the checking system and streamline the checking workflow by limited stakeholders, barcode scanners and printers have been installed in 6 consultation rooms. Eye doctor in consultation room can generate ‘Job sheet’ and perform immediate CID checking with nurses before and right after specimen taking. The barcode label will be printed out immediately and directly stick on the specimen bottle. 4) The application of gum label on the specimen bottle would be aborted to avoid confusion and complicated checking workflow. 5) An audit was formulated and conducted in 4Q 2017 to evaluate the the effectiveness of the new workflow.
Result
Since the implementation of new checking system and revised workflow with barcode scanners and printers installed in each consultation room, correct specimen taken from correct patient has been enhanced. An audit was carried out to evaluate the compliance rate on accurate CID checking before and after specimen collection and immediate labeling of specimen bottle. Total 20 samples were collected and the overall compliance rate was 100%. The responsibility of involved staff is clear and so far there is no specimen-related error was found.