Introduction
Timely specimen sample delivery to laboratory is essential for diagnosis of patients’ medical condition and treatment. However, there were repeated incidents happened in other hospitals in Hong Kong this year related to delay specimen samples delivery. Then the specimen samples were expired and unfit for analysis. Consequently, all the patients involved were called back to repeat blood taking. It would definitely increase suffering of patients, delay treatment and endanger patients’ safety. Factors related to the delay of specimen delivery include: (1) missed specimen collection from the collection box by porter; (2) miscommunications among healthcare professionals on the order of specimen collection by porter; (3) unaware of the specimen in the collection box, etc.

Objectives
To ensure timely specimen delivery to laboratory after taken from patients so that timely medical diagnosis and treatment can be provided for patient.

Methodology
A specimen detector system is designed to alert ward staff for the presence of specimen sample in the collection box through visual and audio cues. When a specimen is put in the collection box, a GREEN light indicator would be automatically activated until the specimen sample is removed. When the specimen remains in the box beyond the time set, e.g. 30mins (ranged 1-60mins), a RED light indicator and a buzzer would be activated to alert ward staff.

Result
After the reliability and stability test for the specimen detector, there were 54 episodes of specimen safeguarded among different period of time: 9a-5p 10 times; 5p-00a 27 times; 00a-9a 17 times in the period from 1/8/2017 to 15/8/2017. The specimen detector was reliable and effective in safeguarding timely specimen delivery. The system was in use afterwards and no delay specimen was happened so
far.