



When a stand-alone QTS was used in the outpatient phlebotomy clinic, data from the QTS and the LIS were integrated using a novel algorithm we developed” Song et al (2018).

Abstract:

**BACKGROUND:** A queue ticket system (QTS) used in an outpatient phlebotomy clinic was unable to be directly integrated with the laboratory information system (LIS). To monitor patient’s waiting time and extended turnaround time (TAT) as patient-centered quality indicators for outpatient laboratory services, we developed an algorithm to integrate data between the QTS and the LIS.

**METHODS:** Between June 1 to September 30, 2017, data files were exported from a QSYS-8000 (HION Tech, Seoul, Korea). Each calling event from the QTS data was matched to a barcode of test requests from the LIS if the following conditions were met: (1) time interval between “call time” from QTS and “barcode printing time” from LIS <90 s; (2) "Counter Number" from LIS="Counter Number" from QTS. Extended TAT was estimated as the interval between pulling the queue ticket and the reporting of the test result. **RESULTS:** 82.66%±3.14% of the barcodes from the LIS were matched to issued tickets. Median waiting time (mean±SD) was 6.5±5.3 min. Median extended TAT was 84.7±11.2 min for non-STAT and 53.0±6.4 min for STAT. **CONCLUSION:** When a stand-alone QTS was used in the outpatient phlebotomy clinic, data from the QTS and the LIS were integrated using a novel algorithm we developed.

## You may also be interested in...

How to remodel outpatient phlebotomy services with simulation modeling

What are the three most common phlebotomy errors?

Effects of serial phlebotomy on vascular endothelial function

### Reference:

Song, Y.E., Kang, H. and Park, H. (2018) Algorithm to Estimate the Extended Turnaround Time Including Outpatient Waiting Time for Blood Specimen Collection when a Stand-alone Queue Ticket System not Connectable to Laboratory Information System Is Used. *Annals of Clinical and Laboratory Science*. 48(6), p.726-735.

