Introduction
Blood taking was one of the core services in Fanling Family Medicine Centre. About 200 patients attended blood taking service daily, with over two-thirds requiring fasting and having at least 4 different tests. The majority of patients attended blood taking between 08:00 and 10:00, resulting in long waiting time, overcrowding in the waiting hall, and frequent enquiries and complaints from patients during peak hours (from 08:00 to 10:00). Hence, a project on improving blood taking service by installation of an Electronic Queue Management System (EQMS) was initiated.

Objectives
1. To streamline workflow on blood taking service.
2. To reduce patients’ waiting time for blood taking.
3. To provide more queuing information to patients waiting for blood taking.
4. To decrease enquiries and complaints about long waiting time from patients during peak hours.

Methodology
1. Performed root cause analysis to identify the reasons for long waiting time for blood taking during peak hours.
2. Standardized all blood taking stations.
3. Designed and installed a user-friendly EQMS for blood taking service which included two display monitors in the waiting hall, one keypad in each blood taking station, and one queue ticket machine outside Treatment Room. The serving queue numbers and blood taking station numbers were shown in both English and Chinese on display monitors.
4. Developed information kit on the EQMS for staff easy reference.
5. Revised workflow, job description and staff role delineation for blood taking service using the EQMS.
6. Provided briefing and training for staff on the EQMS and revised workflow before trial run.
7. Designed and displayed bilingual signage and notices in the waiting hall to enhance
patients’ understanding of the EQMS.
8. Conducted trial run to refine the workflow on blood taking service using the EQMS.

**Result**
Positive outcomes were achieved from the project:
1. The EQMS improved patient flow for blood taking and enhanced operational efficiency.
2. Staff time was reduced for handling patients’ laboratory forms and going to Treatment Room to get patients’ laboratory forms and call patients for blood taking using microphone.
3. Patients’ average waiting time for blood taking was reduced by 10-15 minutes during peak hours.
4. Enquiries from patients were decreased as the EQMS allowed patients to view the queuing information on the display monitors in the waiting hall.
5. No complaint was received from patients about long waiting time for blood taking after installation of the EQMS.
6. The clinic environment was improved for both patients and staff by decreasing overcrowding and noise in the waiting hall during peak hours.