A Method to Implement POCT Devices and Connectivity within an Ideal Time to Achieve Full Laboratory Services to the Newly Established Heart Hospital in Qatar

Aim:
To achieve full connectivity for different Point of Care Testing (POCT) services and devices with the Central Control through a single and specific server. Cobas IT 1000 is well prepared for future HIS Cerner Connectivity.

Introduction:
The connectivity of different POCT devices was a major challenge for Qatar Heart Hospital. POCT is the main laboratory services for the newly established Herat Hospital. The devices that required the connectivity were the 50 blood glucose analysis units (ACCU CHEK INFORM II®), 6 units of blood gas analysis (COBAS B 123®), 25 units of Coagulation Tests for PT/INR (CoagChek XS Pro®, 25 units of Activated Clotting testing ACT by Hemochron Signature Ellite® and Urine analysis Urysis 1100®. The connectivity was through the Roche closed system Cobas IT 1000®. The project had to be implemented within an optimal duration to meet the clinical demands and achieve full connectivity of all of the devices across the whole of the Hospital.

Method:
The implantation process started with detailed Site Survey by POCCs (Point Of Care Coordinators), Engineering & HIS Team in Dec 2011. The Survey studied number of Departments & Sections, instrument type required, availability of power sockets & Net Ports. All data were collected in a specific sheet.

Requests were submitted to HIS team for issuing Internet Protocols (IP Addresses). Cobas IT 1000 server was installed in March 2012. This was followed by POCC advanced training. Different user profiles were created to insure security such as POCT Admin, POCCs, QC Reviewer, super operator & Ordinary Operator.

Furthermore, a 3rd party instrument Hemochron Signature Ellite was also connected in late phase by July 2013. The implantation of the system required the connectivity of the bedside POCT devices with the server in addition to training and controlling more than 1000 end users’ certifications. Instruments Quality Controls, Patients results archived successfully & easily accessible for clinical need.

Results:
- Cobas IT 1000 connectivity has provided positive benefits for all POCT program
- Implantation of this system increased operator compliance with the expected regulatory guidelines being met.
- The impact of this implementation for the POCT service was the standardization of the practice, ability to recall archived patient results and remote data management

Conclusion:
Cobas IT 1000 has achieved a prim level of an on-time troubleshooting, instrument Quality Control monitoring, sample analysis, data storage and user certifications through a remote base which reduce errors occurred in manual entry data & documentation. Cobas IT 1000 is well prepared for future HIS Cerner Connectivity.