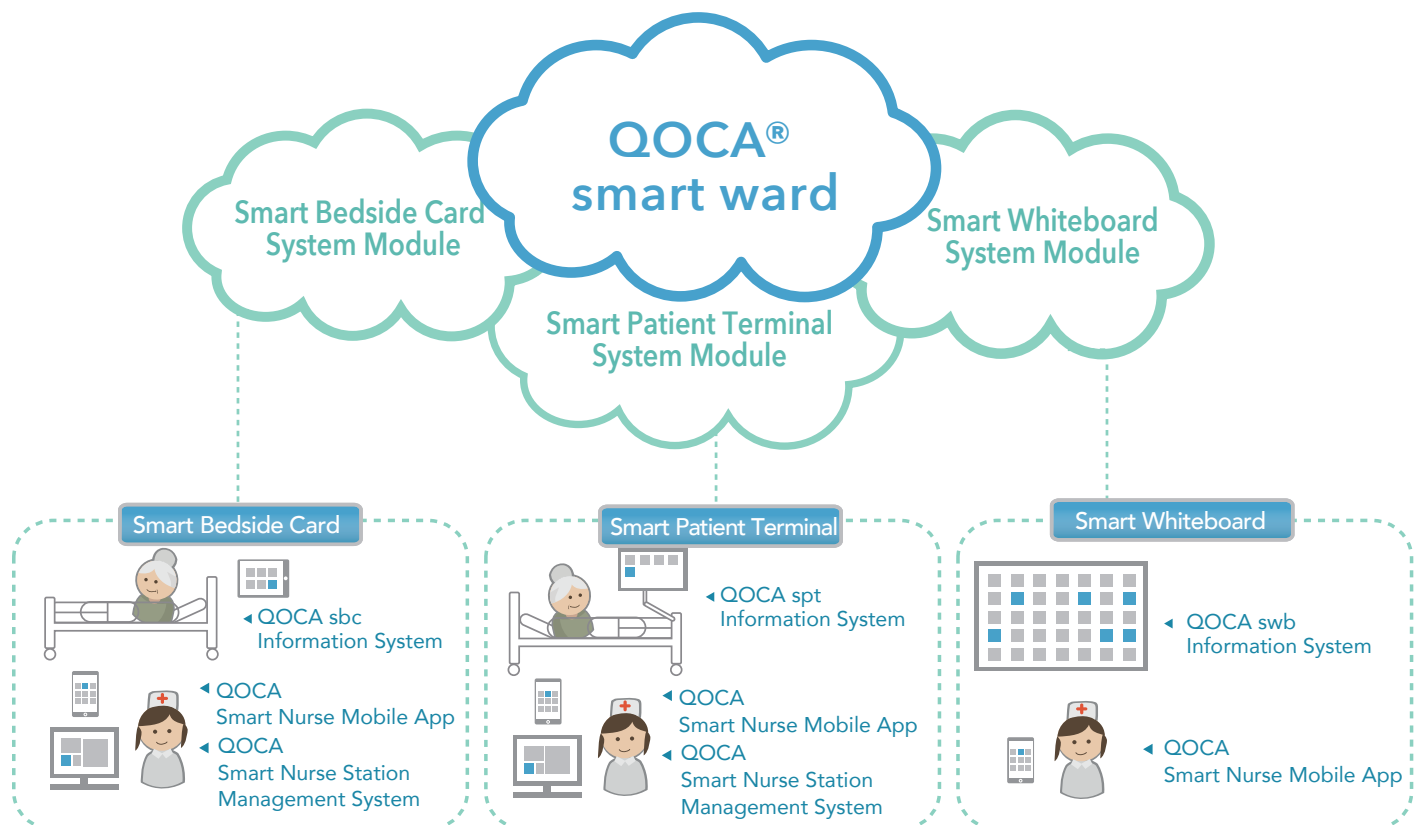


# QOCA® smart ward smart ward solution

QOCA® smart ward solution is designed to reduce hospital's workload and simplify management process. It consists of a bedside care system and Smart Whiteboard.



## The Smart Whiteboard

Informs nurses of bedside and nursing shifts in real-time to avoid repeated copying and writing, and helps to meet the requirements of hospital accreditation.

## The bedside care system

Is comprised of mobile care devices, nurse station and bedside terminals.

**For the nurse**, it provides mobile nursing record and group broadcasts to reduce nursing workload. It can also arrange beds and schedule shifts, and deploy the hospital's existing system (e.g. meal order app) to simplify management process.

**For the patient**, an emergency button, reminder and entertainment are provided to improve patient-doctor relationship and facilitate a patient-centered environment.

QOCA smart ward solution is designed to reduce hospital's workload and simplify management process. It consists of a bedside care system and Smart Whiteboard.



### QOCA Smart Patient Terminal

- Information
- Patient Education
- Medication
- Communication
- Entertainment



19.5" Bedside Terminal

### QOCA Smart Bedside Card

- Inpatient information
- Care Reminder



10" Bedside Card



9.7"/13.3" QOCA E-ink

### QOCA Smart Whiteboard

- Ward status overview
- Job assignment
- Bed information
- Admission and discharge
- Statistics



Nursing Dashboard



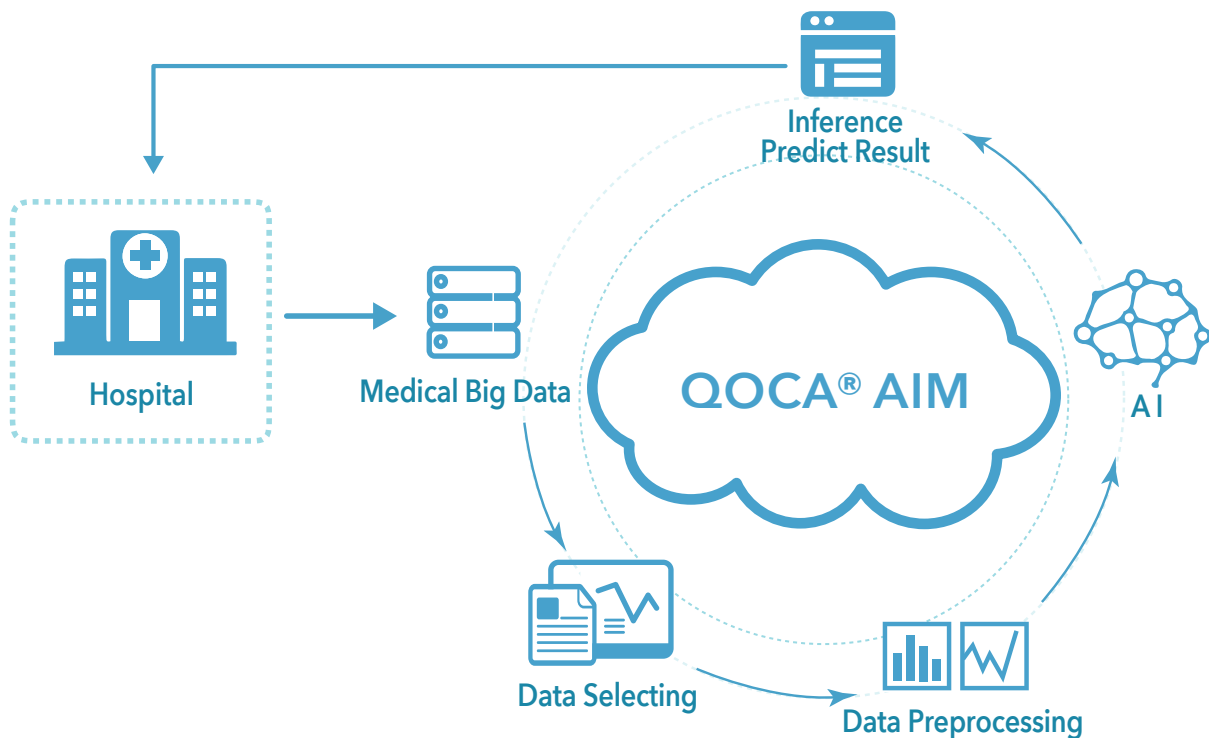
19.5" Nurse Station



13.3" Bedside Terminal

# QOCA<sup>®</sup> smart Hospital AI Medical Platform

QOCA<sup>®</sup> AIM, the AI aided medical imaging and automatic inference platform is now serving a crucial part in our Smart Hospital Solution, since within this platform physicians would be able to efficiently co-work to conduct data processing, data training and furthermore to generate clinical meaningful results for diagnosis.



## Data System Integration

- HIS/PACS auto-manual data exchange mechanism
- DICOM auto-manual exchange mechanism
- DICOM standard protocols for image exchange
- RDB auto-manual data exchange mechanism
- Support for importing MAT/ROI/NII format
- Support for exporting NII format

## Data Processing

- Visualization of feature engineering
- Data preprocessing (missing data, one-hot encoding, filtering)
- Target value chosen
- Keep feature engineering steps
- Descriptive statistics
- Data distribution
- Data preprocessing steps sharing

## Collaborative image annotation

- Image polygon annotation
- Auto adjustment annotation
- Organ and tumor auto segmentation
- Multi-person collaborative annotation
- Label and annotation feedback mechanism
- Label and annotation management
- MAT/ROI/NII format visualization

## High availability

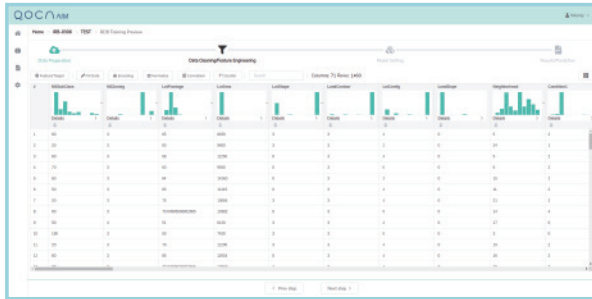
- Multiple data format supported
- AI model quick start wizard
- Highly flexible in Python development mode
- Medical image and RDB data application integration
- GPU/CPU server management

## High stability, reliability and security

- High scalability
- Container migration easily
- Image/RDB data usage and sharing control
- Role-based authorization
- Custom user roles

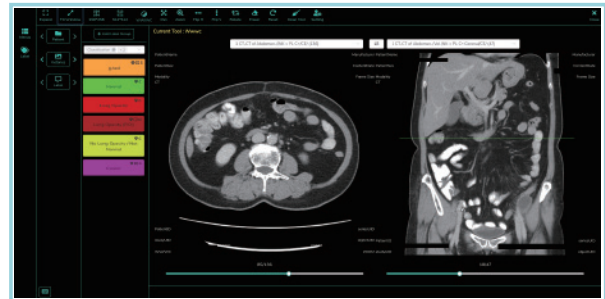
## AI model training and development

- AI model auto training mode
- Python development mode
- Multiple programming language supported
- Popular framework supported
- Jupyter Notebook supported
- Data loading/splitting/augmentation
- Hyper parameters/AI model version control
- Varied ML/DL algorithms supported



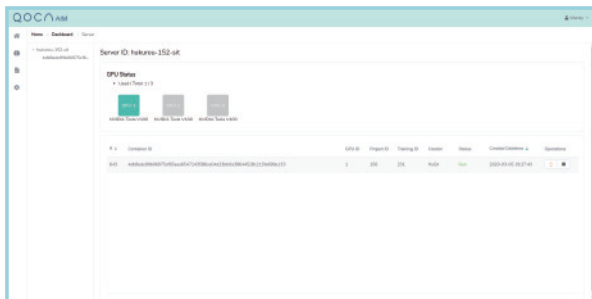
### Data Preprocessing

- Visualization of feature engineering
- Descriptive statistics
- Data distribution



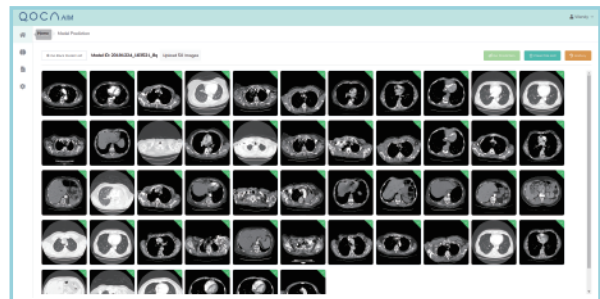
### Collaborative Image Annotation

- Image polygon annotation
- Multi-person collaborative annotation
- Label and annotation management



### Server Management

- GPU/CPU server management
- GPU/CPU usage rate



### AI Model Prediction

- Model deployment
- Inference management

