

**mindray** 迈瑞

# AI applications in medical equipment integration

Weijia TAN



Mindray at a glance

# Strong business performance with increasing global presence and impact



Serving  
**190+**  
countries and regions

Over  
**21,000**  
employees from 30 countries

Over **60**  
international  
subsidiaries around  
the world

**\$5.13 B**  
revenue in 2024

**5,200+**  
R&D engineers worldwide

**12**  
R&D centers across  
the globe

**Europe** | **660+**  
teaching hospitals  
in Europe

**US** | **Top 20**  
hospitals in the U.S.

**9**  
of top 10 cardiac  
hospital in the U.S.

**China** | **99%**  
of Top Tier hospitals  
in China



our business segments

# Three global leading business units with a broad portfolio

## Patient Monitoring & Life Support



- Patient Monitoring Systems
- Defibrillator
- Anesthesia Machines
- Ventilators
- Infusion Systems
- Surgical Lights
- Operating Tables
- Medical Supply Units
- Laparoscopic Products
- OEM
- Electrocardiograph



## In-Vitro Diagnostics



- Hematology Analyzer and Reagents
- Chemistry Analyzer and Reagents
- Chemiluminescence Immunoassay Analyzer and Reagents
- Coagulation System
- Microorganism Analysis System
- Urine Analysis System
- Flow Cytometry
- Hemoglobin System



## Medical Imaging System



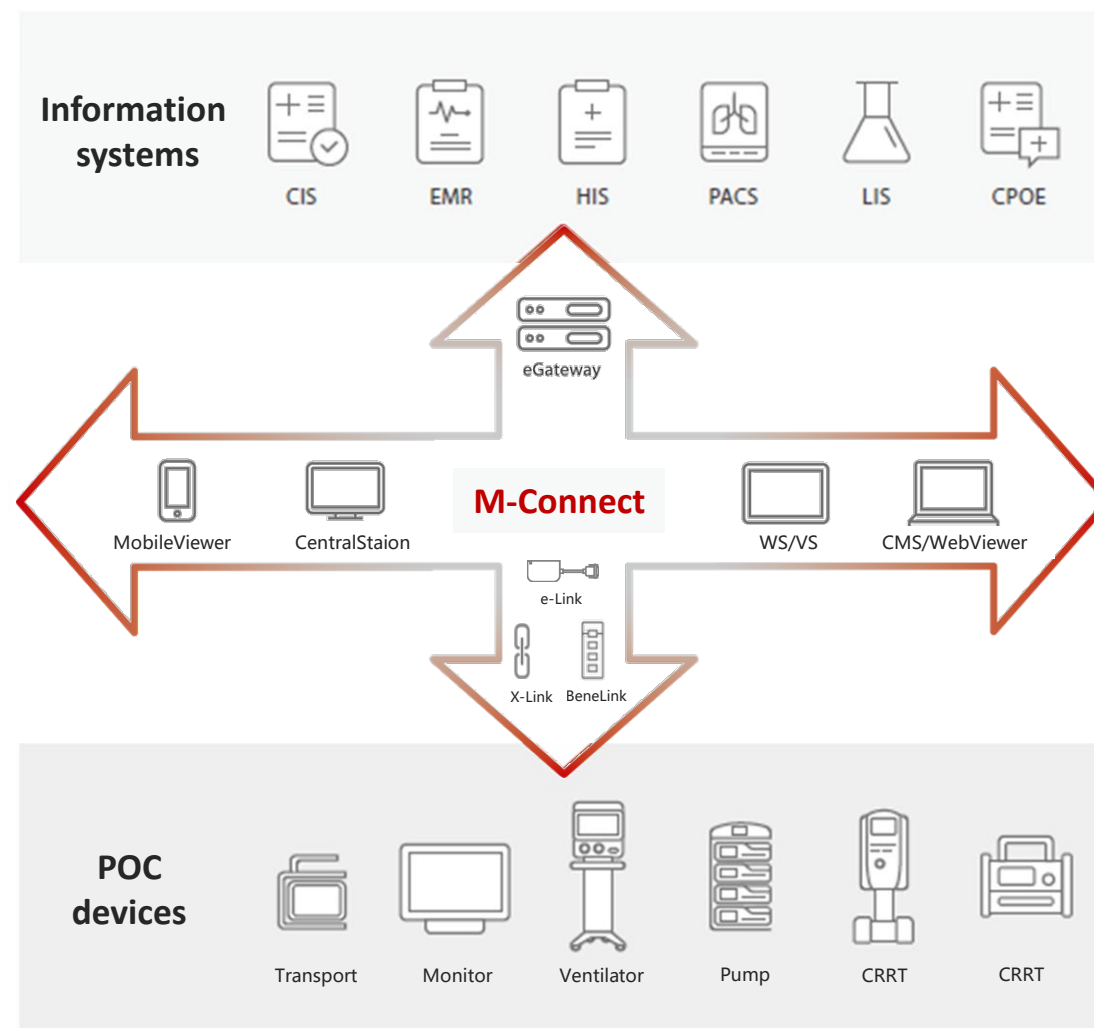
- Ultrasound
- General Imaging
- OB/GYN
- Cardiology
- Point-of-Care
- Primary Care



- Radiology
- Mobile Radiology
- Digital Radiology

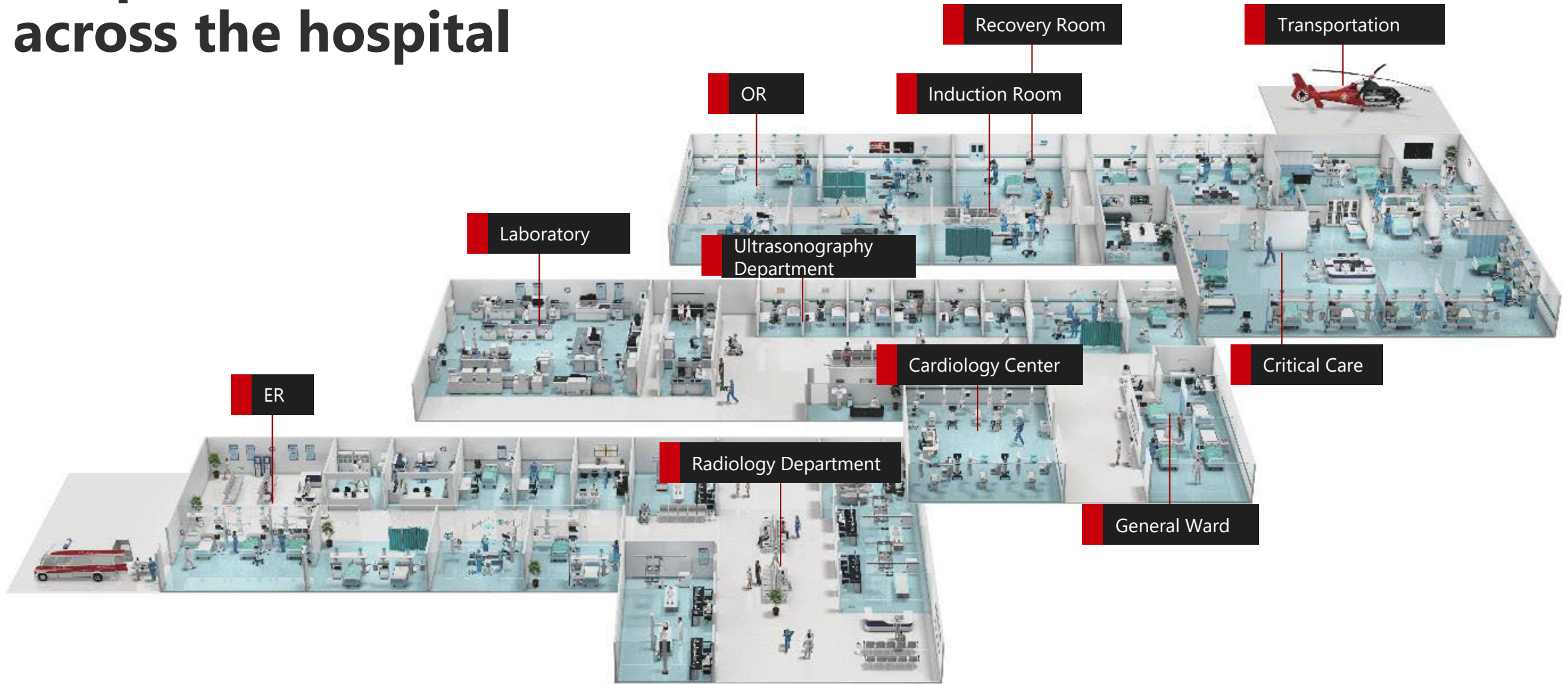


# M-Connect IT Solution



our business

# We provide holistic solutions across the hospital





# Our Position: Trusted by Global Top Hospitals



**All TOP 10** hospitals

**80+ of TOP 100** hospitals

**2/3**

medical institutions

**Top 20**

hospitals

**9** of top 10

cardiac hospital

**US**



**Europe**

**60%**

medical institutions

**660+**

teaching hospitals



**China**

**99%**

Tier 1 hospitals



# Leading in market value (vs global TOP 20)

5-yr avg market value (USD)

2020-2024

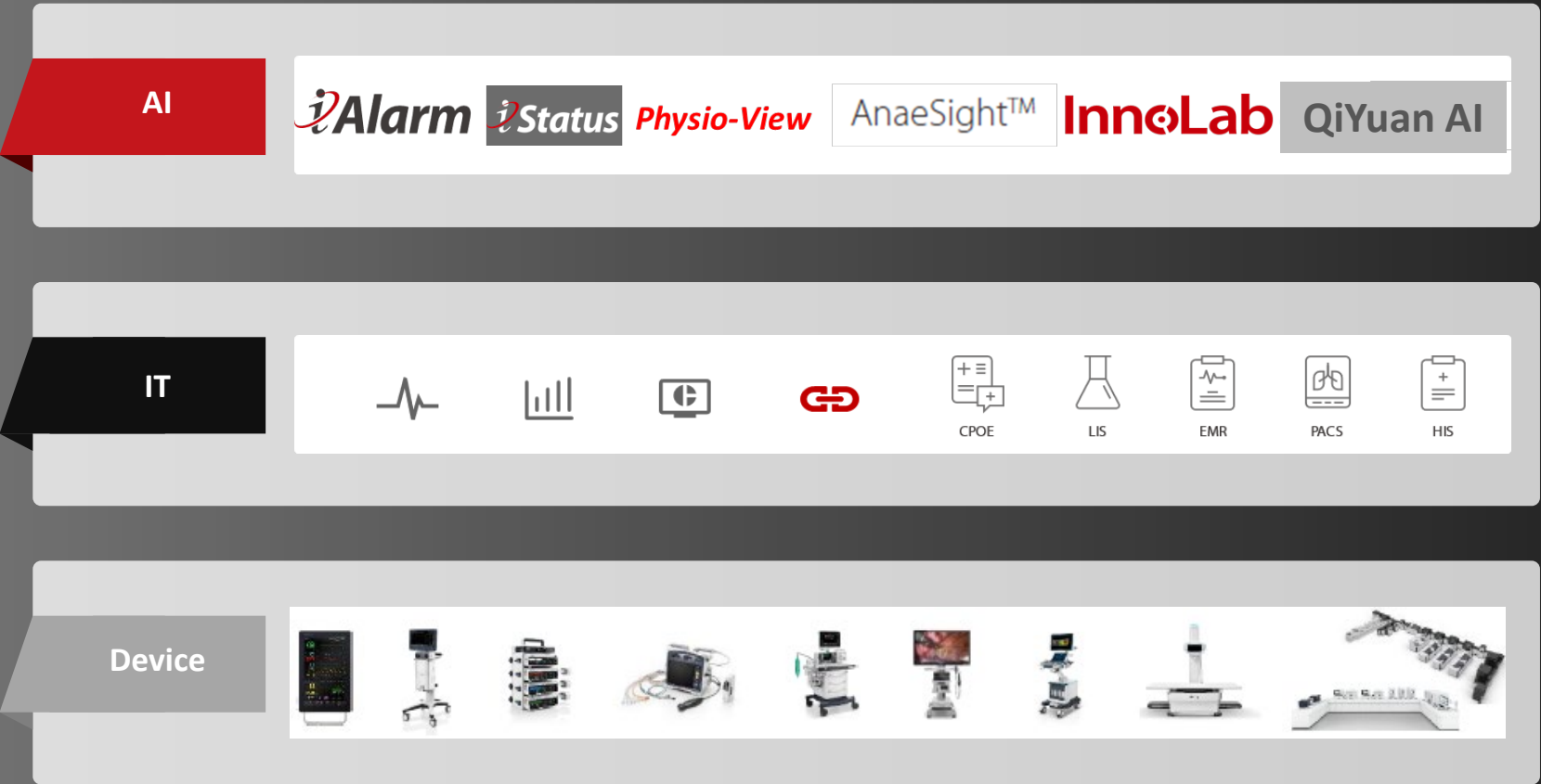
1 <sup>st</sup> -5 <sup>th</sup>	<div>Johnson&amp;Johnson</div> <div>\$410.5B</div>	<div>Roche</div> <div>\$274.4B</div>	<div>ThermoFisher SCIENTIFIC</div> <div>\$203.4B</div>	<div>Abbott</div> <div>\$194.8B</div>	<div>danaher.</div> <div>\$178.0B</div>
6 <sup>th</sup> -10 <sup>th</sup>	<div>Medtronic</div> <div>\$123.9B</div>	<div>INTUITIVE</div> <div>\$114.9B</div>	<div>stryker</div> <div>\$102.3B</div>	<div>3M</div> <div>\$78.9B</div>	<div>Boston Scientific</div> <div>\$75.1B</div>
11 <sup>th</sup> -15 <sup>th</sup>	<div>BD</div> <div>\$70.6B</div>	<div>SIEMENS Healthineers</div> <div>\$62.1B</div>	<div>mindray</div> <div>\$59.8B</div>	<div>Edwards Lifesciences</div> <div>\$55.3B</div>	<div>dexcom</div> <div>\$41.5B</div>
16 <sup>th</sup> -20 <sup>th</sup>	<div>Alcon</div> <div>\$37.0B</div>	<div>GE HealthCare</div> <div>\$34.0B</div>	<div>Canon CANON MEDICAL</div> <div>\$32.3B</div>	<div>ResMed</div> <div>\$31.3B</div>	<div>PHILIPS</div> <div>\$28.6B</div>

Average total value of 2nd to 10th in A-shares: **\$59.4B**  
(2020-2024 every half-year end values)

mindray

# More to Explore: Smart Hospitals Ecosystem

Device + IT + AI  
For an intelli-digital future





# QiYuan Intelligent Doctor Assistant

The worlds' first critical care AI



QiYuan Large Language Model

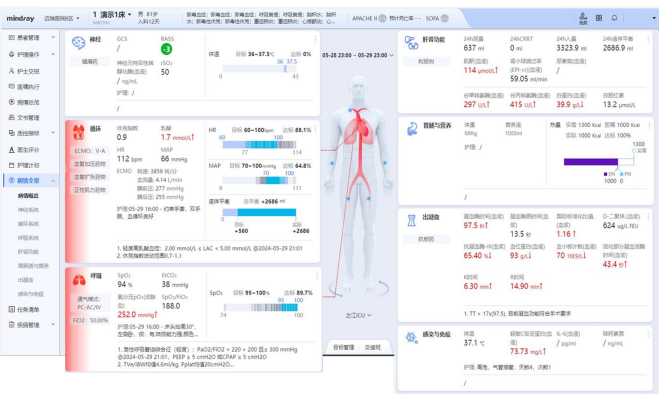
## Intelligent critical care physician assistant

"Medical Sentinel"

"Treatment Assistant"

"Document Assistant"

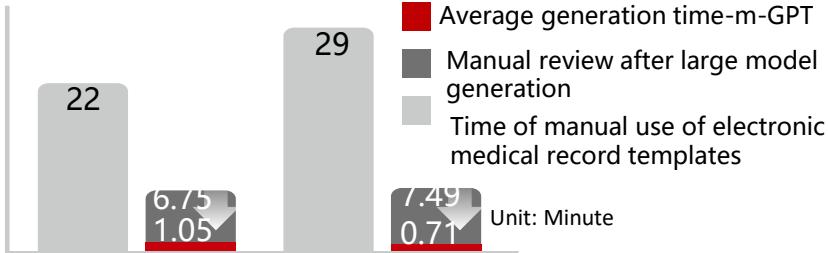
24-hour continuous dynamic monitoring  
Early warning, early detection, early treatment



**Standardization:** The world's leading bundled treatment management  
**Individualization:** Ask about the condition and provide treatment suggestions within 5 seconds



Automated medical record output in 1-minute over 30 times more efficient



Record of first illness

Discharge Summary

\* Clinical validation data

# Medical Sentinel

## Early warning of deterioration



Neurology



Cardiovascular



Respiratory



Hepatic



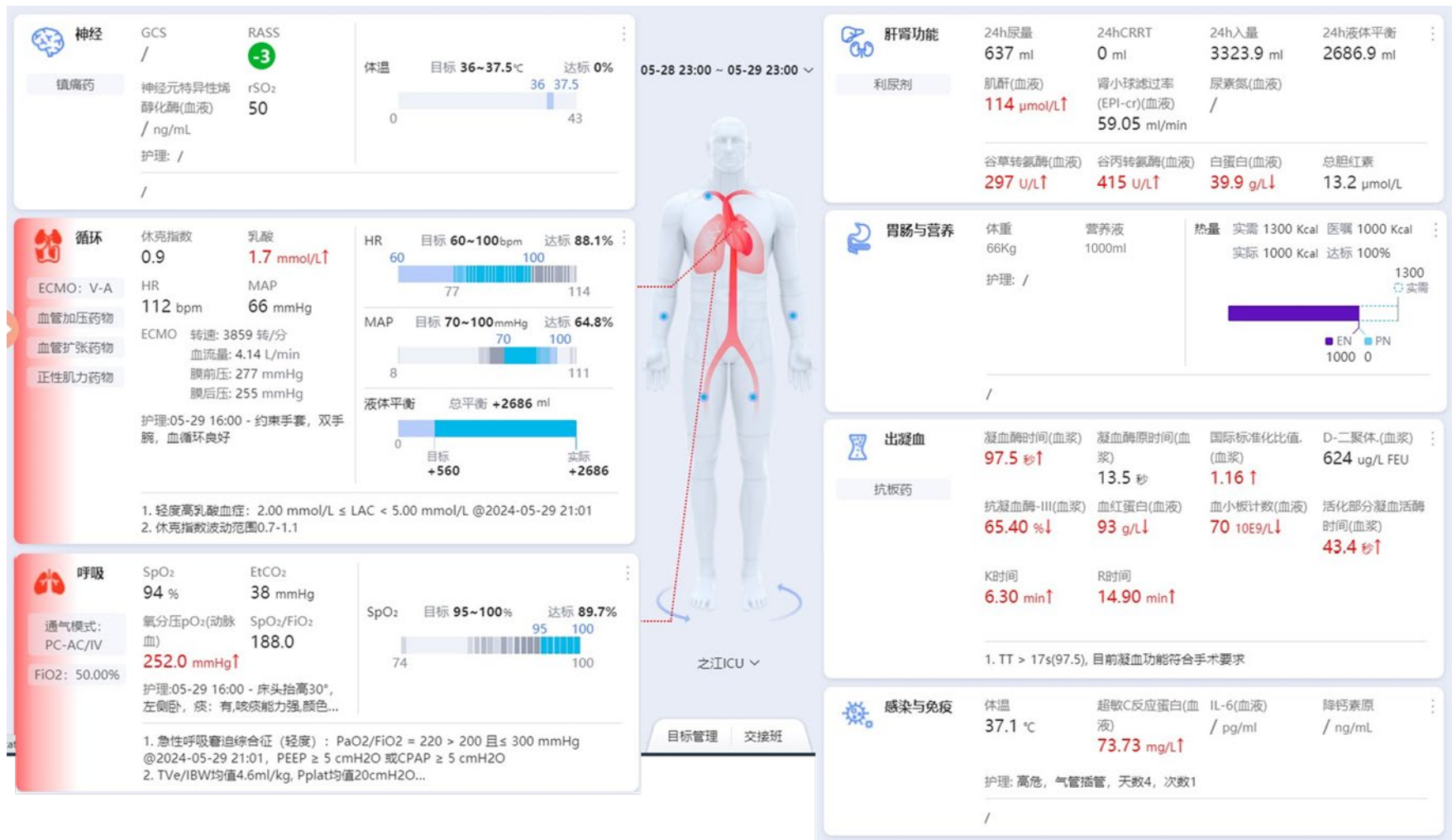
Gastrointestinal



Infectious Diseases



Hemostasis and Coagulation



# Treatment Assistant

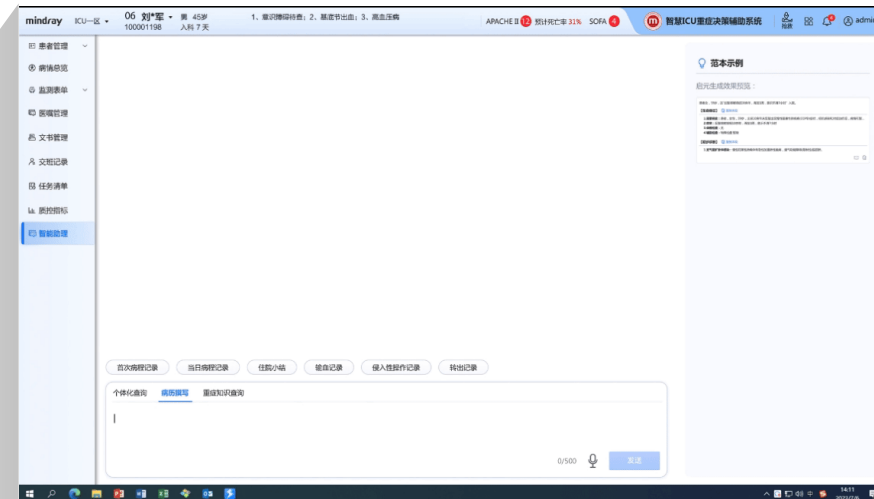
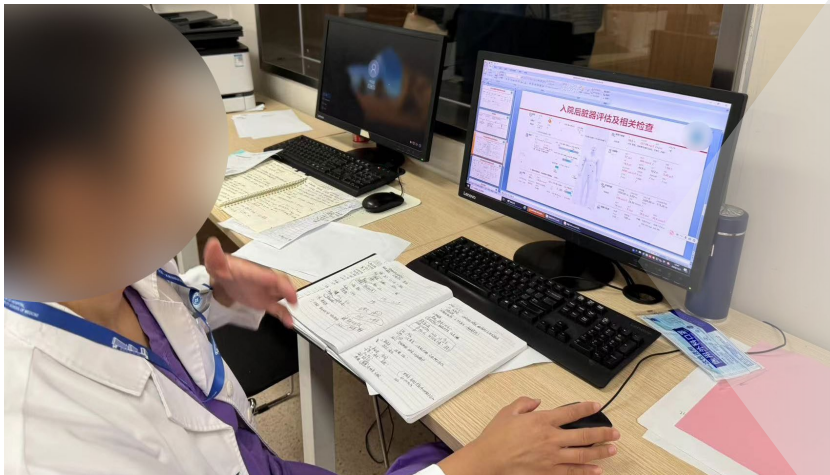
*Access patient's individualized disease profile*





# Document Assistant

*From 30-minutes to 1-minute*



Automatically generate 70% of documents

- First medical record
- Daily medical record
- Invasive operation record
- Blood transfusion record
- Transfer/discharge summary
- .....

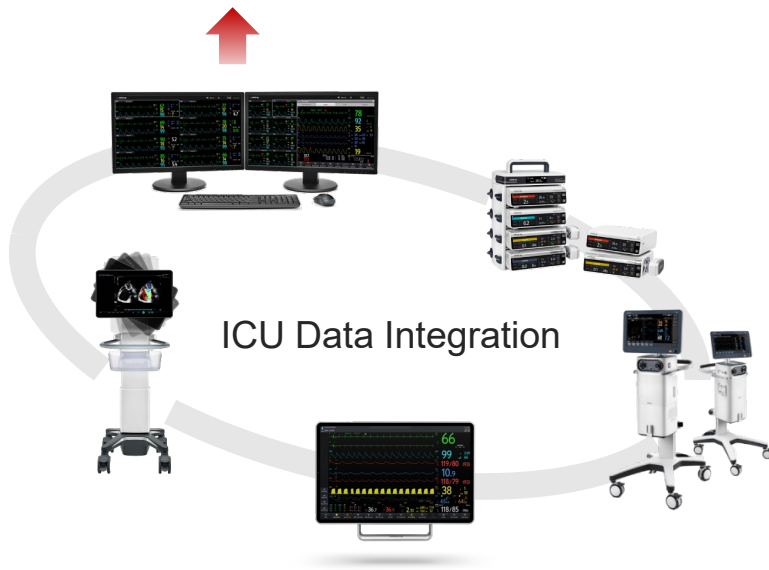


Generate consultation Slides with one click

# QiYuan Intelligent Doctor Assistant

## *The worlds' first critical care AI*

- The First Affiliated Hospital of Zhejiang University
- Renji Hospital of Shanghai Jiaotong University School of Medicine
- Peking University Shenzhen Hospital
- The Affiliated Suzhou Hospital of Nanjing Medical University



## Digital twin for ICU

Developed with The First Affiliated Hospital, Zhejiang University



# Transition to Smart Hospitals Unlocks High Value Creation Potential



## - Significant Cost Control

For most OECD countries, adoption of digital technologies in healthcare delivery has brought about **> 10% cost savings** of overall annual national healthcare expenditures.

adapted from McKinsey research, *Finding the Future of Care Provision*, 2019

### Better Patient Safety

Mayo Clinic



AI-enabled Patient Blood Management

- Enhances rehabilitation, hospital stay **down by 15%.**

### Optimized Hospital Workflow

Johns Hopkins Hospital



Hospital Capacity Command Center

- ER beds allocation **30% faster.**

### More Efficient Devices Management

China-Japan Friendship Hospital



Equipment Management System

- Procurement budget **down by \$ 1.1million.**



A full-page background image showing three people (two men and one woman) running away from the camera on a beach towards the ocean. The sun is low on the horizon, creating a bright, golden glow and long shadows. The sky is filled with soft, white clouds. The water is splashing around the runners' feet.

## VISION

**Better healthcare for all**

## MISSION

**Advance medical technologies to make  
healthcare more accessible**

## CORE VALUES

**Align with our customers  
Value and enrich our people  
Be precise and practical  
Always forge ahead**

**THANK YOU**