

Intelligent Ward Management System for Hospitals

Transforming Nursing Care with Digital Wards

Solution Suite

iWard-71A.Suite

iWard-72A.Suite

iWard-73A.Suite



- Nursing Control Stations enable patient data to be integrated with HIS/NIS records and enhance nursing care.
- Bedside Information Terminals streamline workflows by optimizing hospital processes.

ADVANTECH

Enabling an Intelligent Planet

intel.
partner
Titanium



Introduction Video

POWERED BY
ADVANTECH 
WISE PaaS

Introduction

Advantech's iWard solution is an innovative solution-ready package that supports cloud-based services, microservice architecture, statistical expansion, and AI applications and can be rapidly deployed to enable the realization of intelligent wards. Intelligent wards allow patient needs to be rapidly communicated to nursing staff, facilitating the delivery of quality nursing care that improves treatment outcomes and patient satisfaction.

iWard Solution Features



Rapid installation



Scalable integration



Flexible customization



Modularized expansion

Specialized Functions Improve Patient Care

Hospital Admission

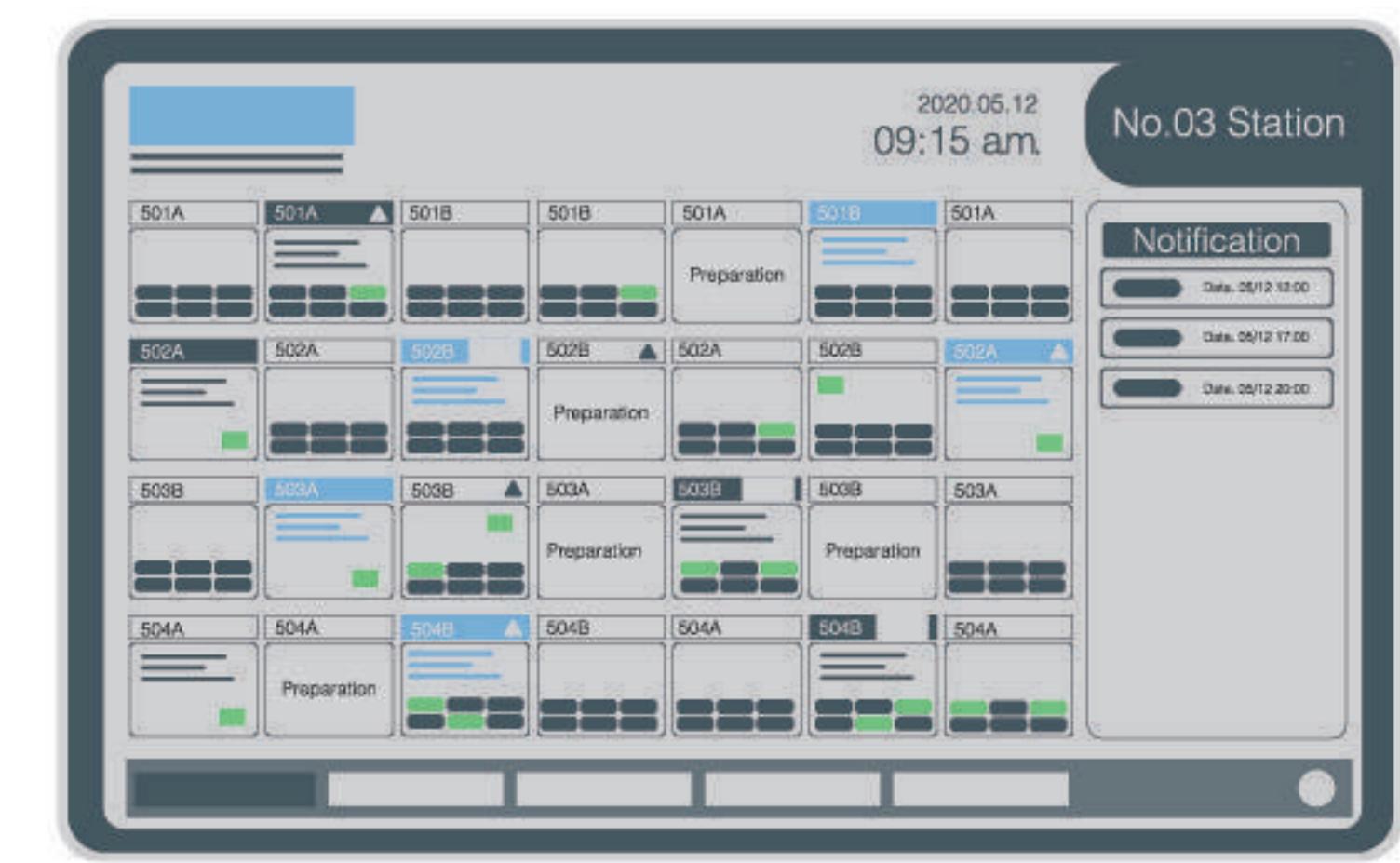


Nursing Control Stations enable staff to add or update patient data and bed information.

Nursing Station



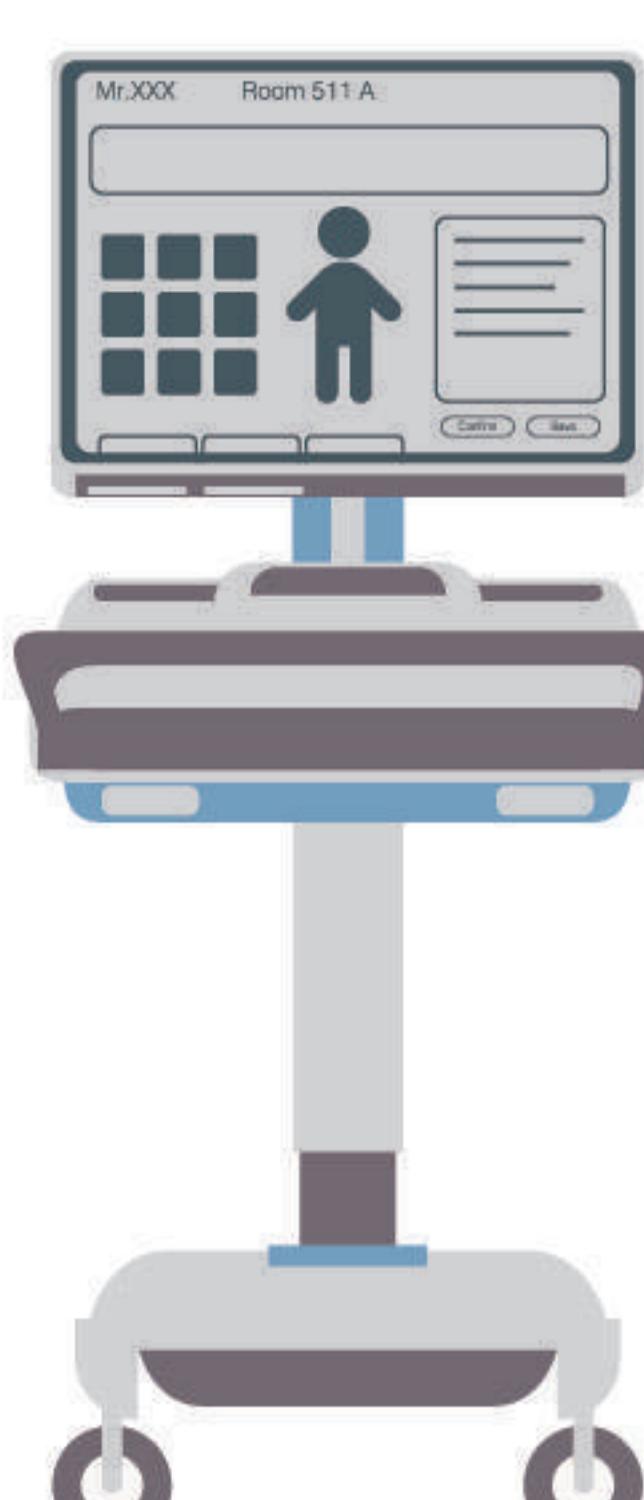
Nursing Dashboard provide patient information and allow nurses to receive patient requests from Bedside Information Terminal.



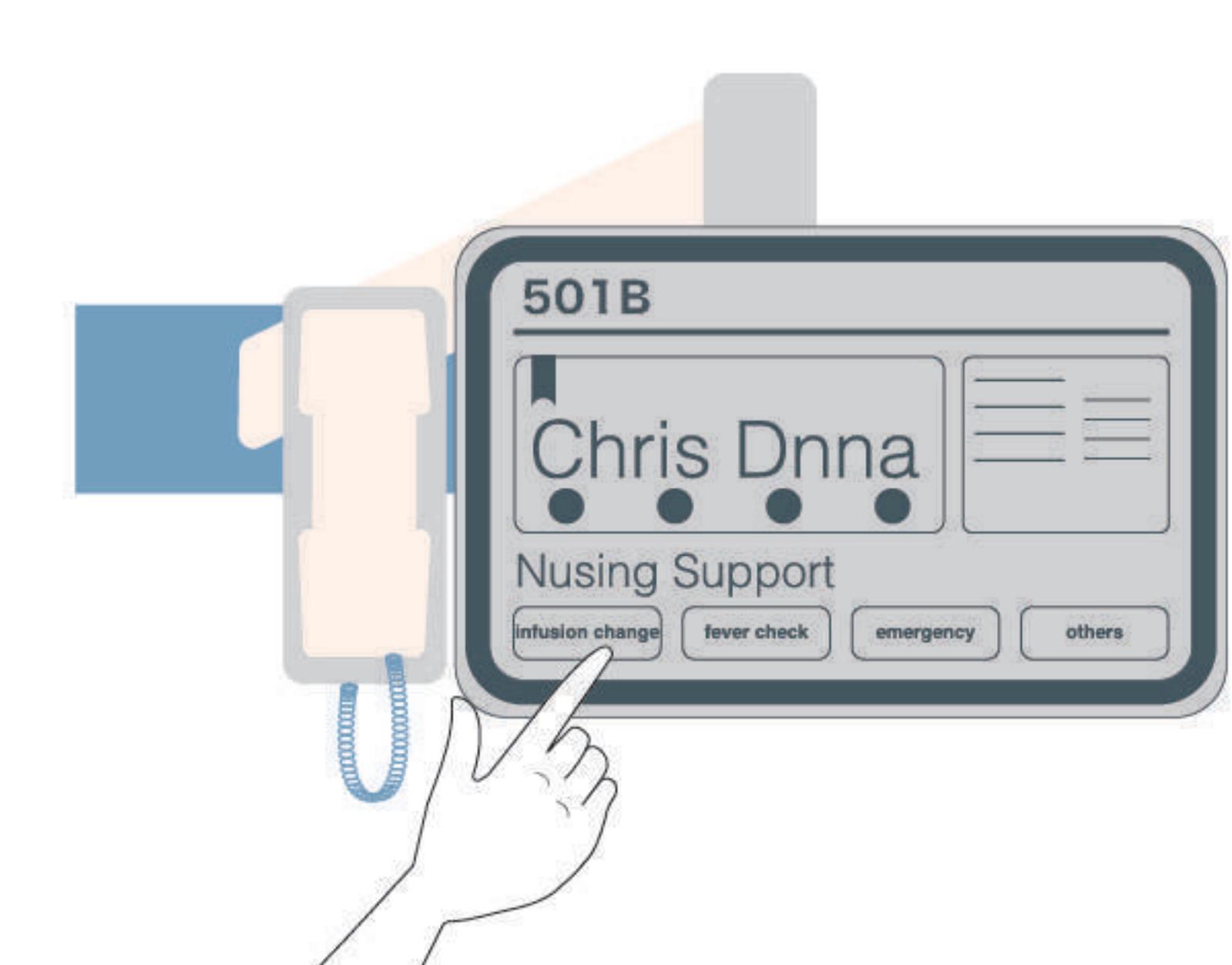
Patient Discharge



Mobile Nursing Stations allow patients' vital sign data and medical records to be conveniently updated and managed for efficient in-ward nursing care.

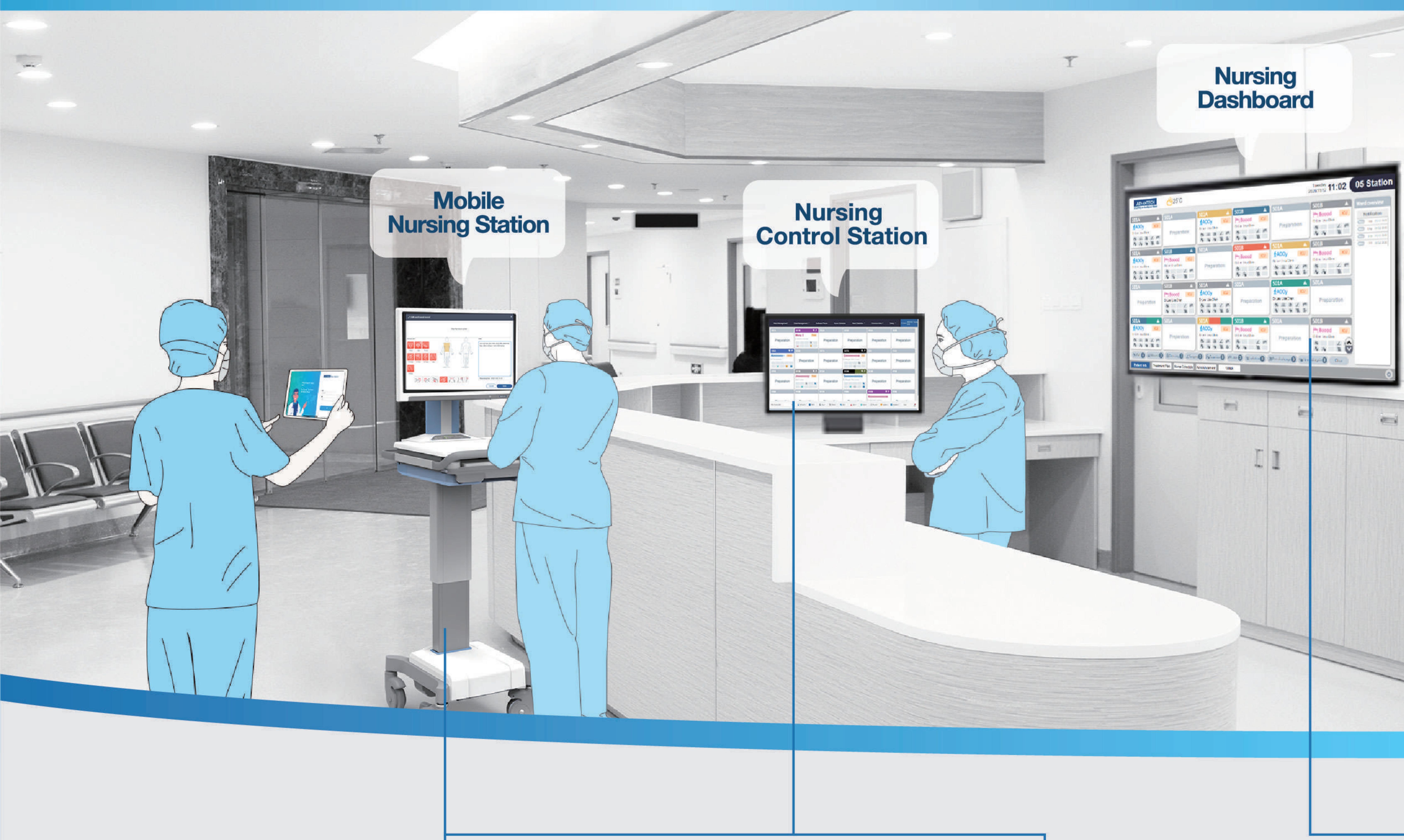


Patients can use Bedside Information Terminals to request assistance. Nurses can access the patient request notification list via the Nursing Dashboard.



iWard Basic

Nursing
Dashboard



Ward Management

This screenshot shows the 'Ward Management' software interface. It displays a grid of patient beds (e.g., 501A, 501B, 502A, 503B, 505A, 505B) with various status icons such as 'Preparation', 'Mooy', 'Fever', and 'ICU'. Below the grid is a toolbar with buttons for 'Inter Nursing Bed', 'No Touch', 'DNAR', and several medical icons.

Admission Information Setting

This screenshot shows the '501B Patient information' dialog box. It includes tabs for 'Basic information', 'Vital sign', 'Ward check record', 'Treatment plan', 'Drug information', 'Satisfaction survey', 'Notification', and 'Clock Setting'. The 'Basic information' tab is active, showing details like Name (David Lee), Gender (Male), ID number (M1625682), Medical record no. (C02764927), Language (English), Division (Urology), Admission Number (N1625682), Activity (Bedridden), Admission date (2020/12/06), Status (Please select), Admission status (Archedine), Attending physician (Dr. Butcher), Birthday (1992/03/13), and Special remark checkboxes for Hall, Isolation, No touch, Mask, Critical, Medicine, Check, and Anemia. A note field contains 'test'.

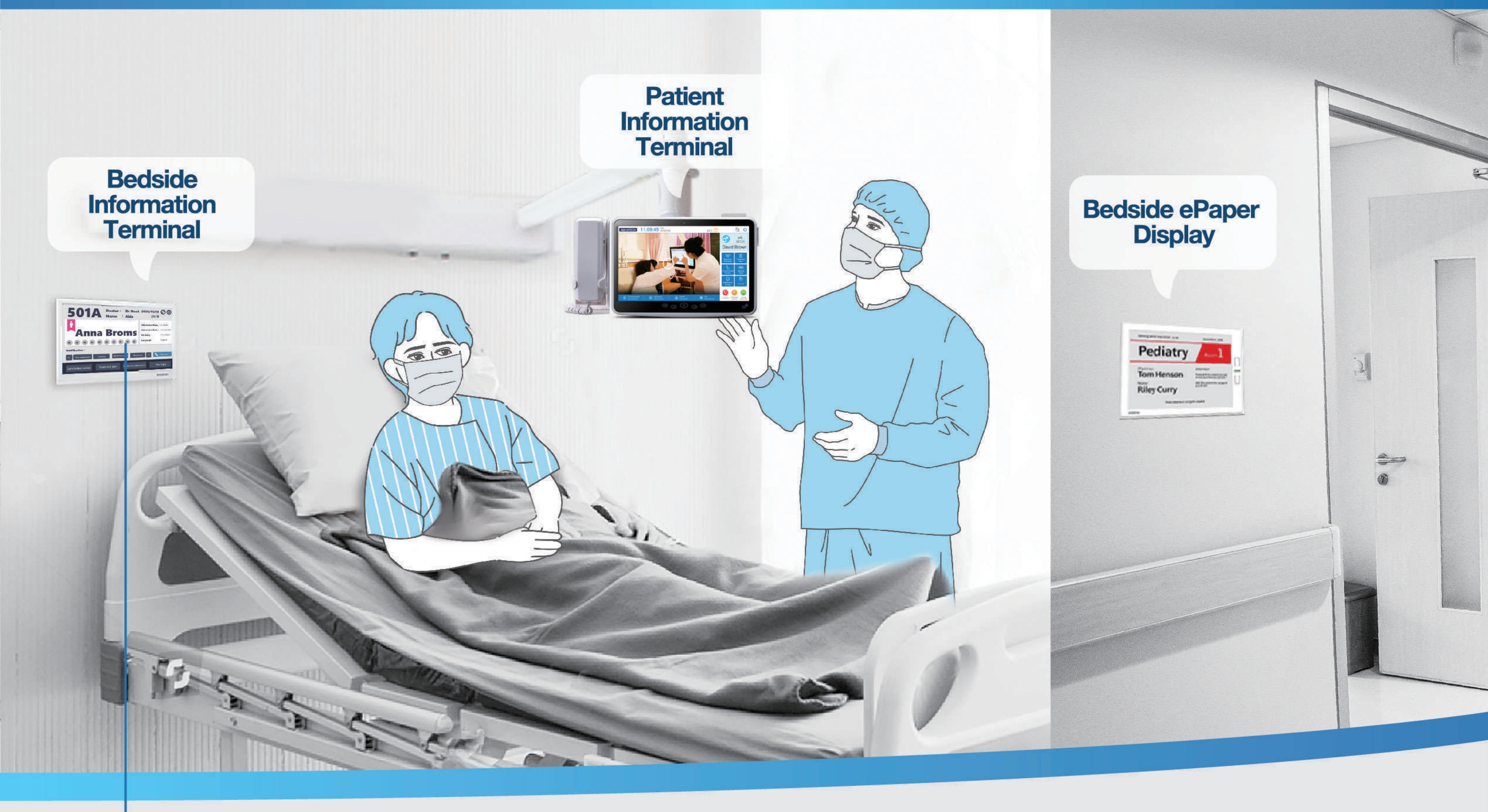
Ward Rounds Record

This screenshot shows the 'Edit ward round record' dialog box. It includes a file upload area ('Drop files here to upload'), a 'Marked part' section with icons for Head, L.Eye, Throat, R.Chest, R.Palm, R.Thigh, Ass, and B.Neck, and two human body silhouettes with specific body parts highlighted in orange. There is also a 'Note' text area and a recording timestamp ('Recording time: 2020/11/05 11:05').

User-Definable Parameters and Remarks

This screenshot shows two dialog boxes. The left one, 'Patient remark settings', lists items like DNR, Isolation, Fall, and Netouch, each associated with an icon and a status (e.g., ENR, Isolation). The right one, 'Status setting', lists items like Fever, ICU, Surgery, Death, and others, each with a status value (e.g., 1, 2, 3, etc.). Both boxes have 'ADVANTECH' branding at the bottom.

iWard Bedside



Card/Bed Assignment Information

The screenshot displays a hospital EMR interface with a grid of patient status cards and a detailed view for patient 1018-1.

Header: ADVANTAGE, 25°C, Tuesday, 2020/11/12, 11:02, 05 Station

Grid of Patient Status Cards:

- Row 1: S01A (Preparation), S01A (Prepared), S01B (Prepared), S01A (Preparation)
- Row 2: S01B (Prepared), S01A (Preparation), S01B (Prepared), S01A (Prepared)
- Row 3: S01B (Prepared), S01A (Prepared), S01A (Prepared), S01A (Prepared)
- Row 4: S01A (Preparation), S01A (Prepared), S01B (Prepared), S01A (Prepared)
- Row 5: S01A (Prepared), S01A (Prepared), S01B (Prepared), S01A (Prepared)

Detailed View for Patient 1018-1:

- Patient ID:** 1018-1
- Patient Name:** Mrs. Smith
- Location:** Surgery
- Status:** DNR
- Other icons:** Running, Stethoscope, Wheelchair, Person with stethoscope, Sun, Pill bottle, Walking person, Stethoscope, Person with stethoscope.

Bottom Navigation: Staff Info, Treatment Plan, Nurse Schedule, Announcement, COVID-19

Nursing Shift Information

The screenshot shows a nurse scheduling application with the following details:

- Header:** ADVANTECH, 25°C, Tuesday 2020/11/12, 11:02, 05 Station.
- Section Headers:** Nurse Schedule.
- Grid Layout:** 4 rows (Nurses) x 2 columns (Shifts).
- Row 1 (Sally Lucas):** A (Extinquishing), B (Extinguishing), C (Extinguishing), D (Extinguishing), E (Extinguishing).
- Row 2 (Elisa):** A (Extinguishing), B (Extinguishing), C (Extinguishing), D (Extinguishing), E (Extinguishing).
- Row 3 (ChenNi):** A (Extinguishing), B (Extinguishing), C (Extinguishing), D (Extinguishing), E (Extinguishing).
- Row 4 (David):** A (Refuge guide), B (Refuge guide), C (Refuge guide), D (Refuge guide), E (Refuge guide).
- Column 1 (Andrew):** A (Extinguishing), B (Extinguishing), C (Extinguishing), D (Extinguishing), E (Fire fighting).
- Column 2 (Dell):** A (Extinguishing), B (Extinguishing), C (Extinguishing), D (Extinguishing), E (Fire fighting).
- Column 3 (Hosa):** A (Extinguishing), B (Extinguishing), C (Extinguishing), D (Extinguishing), E (Fire fighting).
- Column 4 (Liya.Lo):** A (Extinguishing), B (Extinguishing), C (Extinguishing), D (Extinguishing), E (Fire fighting).

At the bottom, there are buttons for Day, Night, and Graveyard shifts, and a small navigation icon.

Patient Information

501A Doctor : Dr Root 2020/10/09 ⚡ 21:18

Nurse : Alda

Admission Num. : C124294

Admission Date : 2020/10/09

Birthday : 1992/08/01

Language : English

Anna Broms

Notification :

Drip replacement Cleaning Wheelchair rental Wheel chair Call nurse

Satisfaction survey Treatment plan Medication information Vital Signs

Patient Requests

The image shows a mobile application interface for a medical team. The top status bar indicates the time is 11:09:45 (FRI) 2018/07/06, the battery level is 25%, and there are various system icons. Below the status bar is a navigation menu with the following items: Medical Team, Patient Details, Jeremy Wong, Nurse Joanne Macquarie, Therapist Emily Miller, and Reminder. A large central area displays several blue buttons with icons and labels: Wound Dressing (bandage), Cleaning (broom), Ordering Meal (fork and knife), Out-of-Bed Assistance (person in bed), Assistive Device (wheelchair), DNR (do not resuscitate), Allergy, and Isolation. To the right, a modal dialog box is open, asking 'Are you sure you want to send "drip replacement"?'. It features a medical kit icon and two buttons: 'Cancel' and 'Confirm'. At the bottom of the screen, there are navigation buttons for Environmental Information, Addison, and Logout.

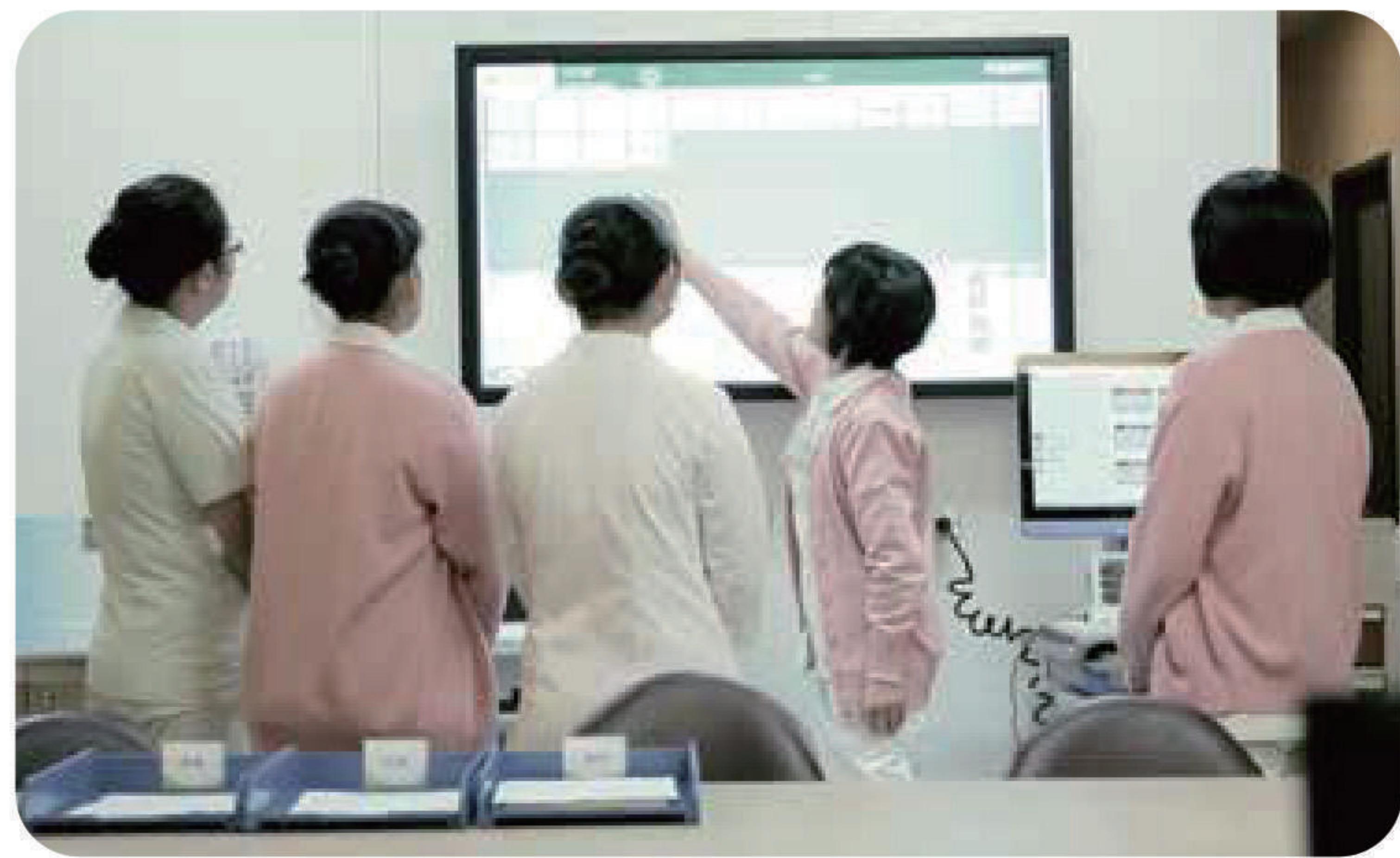
Application Story

Yuanlin Christian Hospital - A Benchmark for Intelligent Hospitals

Yuanlin Christian Hospital (YCH) is a new medical institution that is affiliated with the Changhua Christian Hospital and holds a significant place in the history of medicine in Taiwan. Specifically, YCH was the first hospital to realize intelligent patient services, medical procedures, and energy management. The hospital not only provides all the convenience and functionality of a modern healthcare facility, but also marks Taiwan's transition into an era of fully intelligent medicine.

Intelligent ward bring patients and nurses closer together

Traditional wards typically feature nurse call buttons or phones for patients to communicate with nurses. However, these buttons/phones do not offer instant notifications, which can lead to long wait times and patient mistrust of nursing staff. By contrast, YCH wards have been fitted with bedside information terminals that feature touch-controlled nurse call buttons for contacting nurses with a single touch. The electronic messaging system then notifies all on-call nurses, regardless of their location, of the request for assistance via an instant message sent to their hand-held device(mobile phone or tablet PC). Patients wishing to order a meal or adjust their medication no longer have to make in-person requests at the nurses station. With a simple touch of their nurse call button, they can send a message to the nurses' station. The electronic messaging system also reduces the risk of errors or forgotten requests.



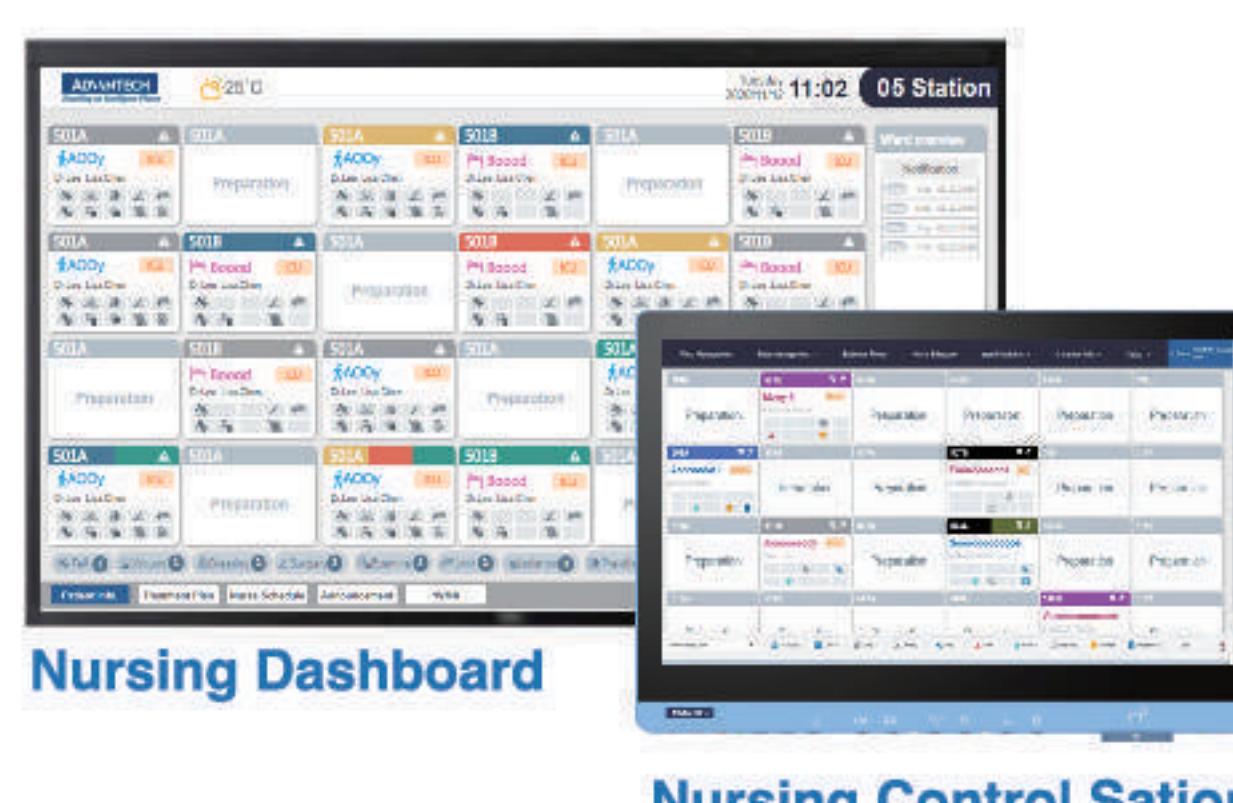
Intelligent Hospital Architecture



Ordering Information

Basic Suite

iWard-71A.Suite



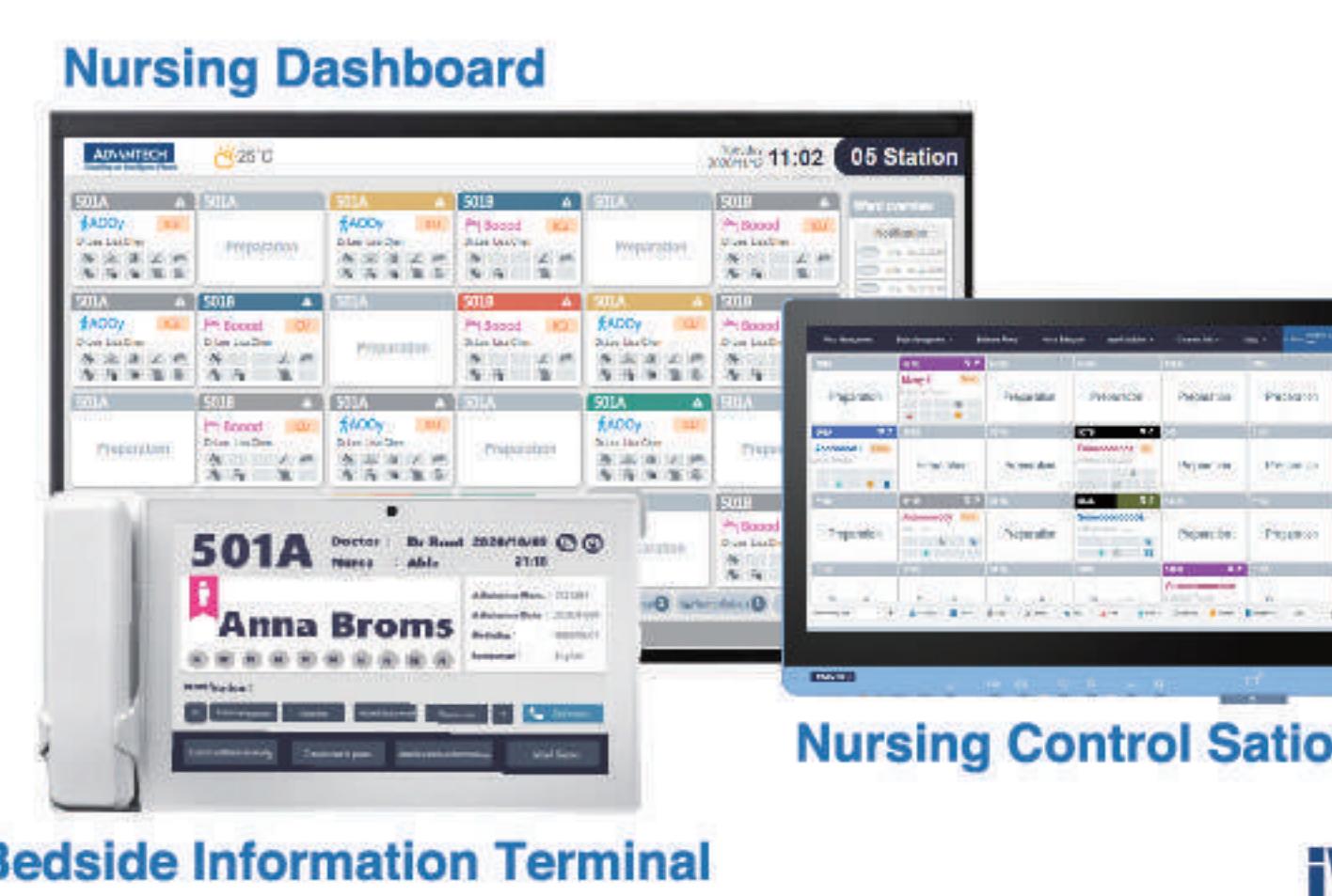
Nursing Dashboard

Nursing Control Station

iWard Server

Interactive Suite

iWard-72A.Suite



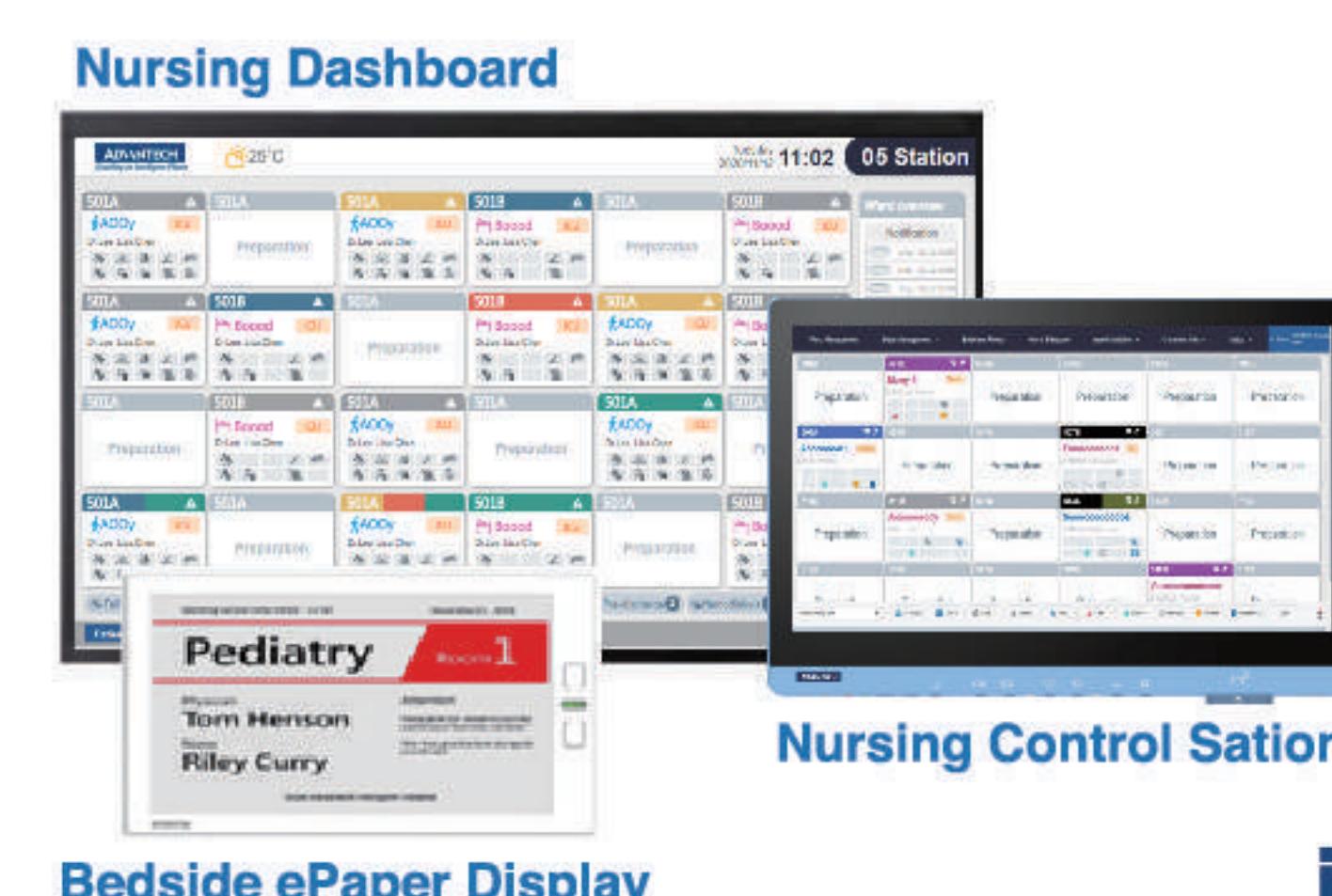
Nursing Dashboard

Nursing Control Station

Bedside Information Terminal

ePaper Suite

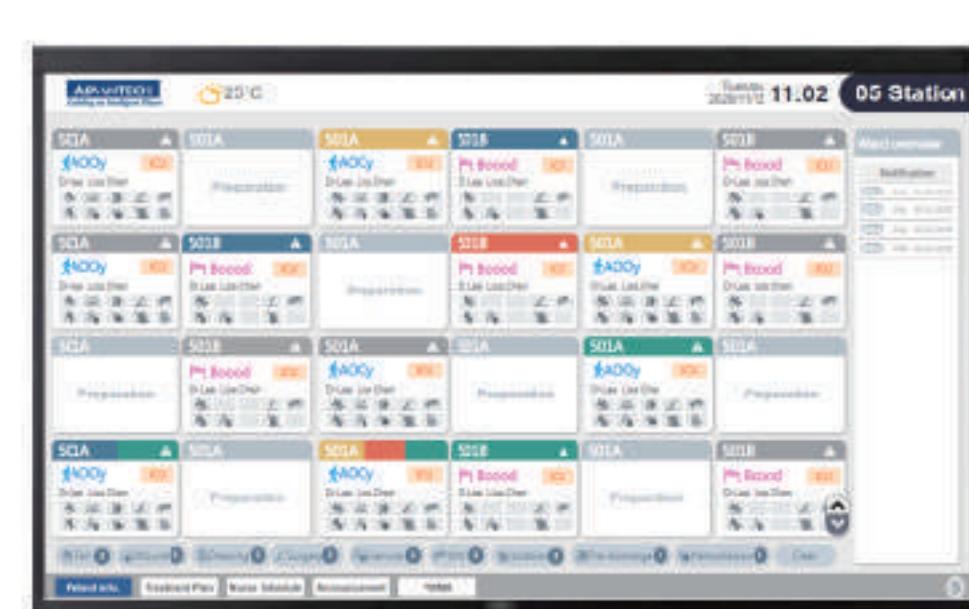
iWard-73A.Suite



Nursing Dashboard

Nursing Control Station

iWard Server



Nursing Dashboard



Mobile Nursing Station



Bedside Information Terminal



Patient Information Terminal

Edge Cloud

Edge-Cloud Solution Suite

WISE-STACK Edge100

Hardware: SKY-7221, 10 cores, 64 GB memory, 16 TB HDD, 1 TB SSD
Software: WISE-PaaS/IoTSuite E100



WISE-PaaS/IoTSuite



Training Video



Product Literature

Advantech Headquarters

No. 1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei, Taiwan 11491
Phone: 886-2-2792-7818 www.advantech.com

US/Canada: 1-888-576-9668
Europe: 00800-2426-8080/8081
Netherlands: 31-76-5233100
China: 800-810-0345

Taiwan: 0800-777-111
Japan: 0800-500-1055
Korea: 080-363-9494
Other countries: 0800-777-111

8600000553

ADVANTECH

Enabling an Intelligent Planet