TECHNIKA DLA ZDROWIA

CLINICAL INFORMATION SYSTEM

„In today's healthcare environment, digital transformation is no longer a vision of the future — it's a necessity.

At TDZ, we believe that the key to better patient outcomes lies in empowering clinical teams with intelligent, intuitive tools that simplify their daily work.

We take pride in building long-term partnerships with hospitals, providing each institution with dedicated attention, tailored solutions, and continuous support. Every collaboration for us is unique — based on trust, understanding, and a shared commitment to excellence.

Together, let's make the digital hospital a reality.

Let's all go digital."

Małgorzata Łazińska

Małgorzata Łazińska
CEO, TDZ

TDZ Technika dla Zdrowia Sp. z o.o. (est. 2011) is a Polish company specializing in medical equipment service and the development of high-end IT solutions for anesthesia and intensive care medicine.

With **more than 60** successful hospital implementations in Poland and an expanding international footprint across Europe, Africa, the Middle East, and an official partnership in Malaysia, TDZ **combines clinical expertise** with **technological innovation**.

OUR EXPERTISE:

- Seamless integration of medical device data from all manufacturers
- Digitalization of anesthesia and ICU documentation
- Integration with HIS systems for smooth hospital workflows

DISCOVER HOW **TDZ** CAN DIGITALIZE YOUR HOSPITAL, STREAMLINE WORKFLOWS AND EMPOWER YOUR CLINICAL TEAMS

TECHNIKA DLA ZDROWIA

www.technikadlazdrowia.pl

EKIT – CLINICAL INFORMATION SYSTEM FOR INTENSIVE CARE UNITS

OVERVIEW

EKIT is an advanced ICU Management System that automates patient monitoring, nursing documentation, medication administration, and reporting.

It ensures real-time synchronization of all data from ICU devices and provides a complete clinical view for physicians and nurses.

KEY CLINICAL FEATURES

Automatic Data Capture & Device Integration
- Direct connection with ventilators, monitors, infusion pumps, and CRRT systems.
- Real-time acquisition of ICU parameters:
- SpO_2, HR, Temp, NIBP, $EtCO_2$, FiO_2, Vte, Pinsp, PEEP, ventilation mode and others.
- Expandable to cardiac output monitors, regional oxygenation, and renal therapy devices.
- Dashboard view showing all ICU beds with live data and patient details.

Nursing & Patient Care Documentation
- Graphical patient body map for recording: wounds, bedsores, drains, catheters, vascular access, and urinary outputs.
- Automatic calculation of diuresis and fluid balance (hourly, shift, 24h).
- Alerts for overdue care actions (catheter change, wound dressing, etc.).
- Integrated observation forms for bedsores, drains, and wounds.
- Nursing panel summarizing all care interventions, timelines, and alerts.
- Medication & Treatment and procedure scheduling
- ICU dedicated medication ordering system (single dose, infusion, or drip).
- Authorized user verification (login or PIN) for each entry and confirmation.
- Integration with HIS medication libraries.
- Real-time view of infusions and drips on timeline display.
- Clinical Scoring & Risk Assessment
- Automated calculation of GCS, SOFA, APACHE II, SAPS, TISS-28, ROX and Others.
- Bedsores scales: Douglas, Norton, Waterlow, Braden, and CBO.
- Dynamic scoring view updated with real-time patient data.

Reporting & Integration
- Generates detailed ICU stay reports (daily, discharge, death, or epicrisis).
- Exports PDF documents directly to HIS/EMR.
- Imports lab results for automatic scoring updates.
- Multi-user web interface (1,000+ users) for review and report completion.

Added Value
- Full digital ICU documentation replacing paper charts.
- Supports both adult, pediatric and neonate ICU workflows.
- Enhances decision-making through continuous monitoring and analytics.

| EKZ – CLINICAL INFORMATION SYSTEM FOR ANAESTHESIA & OPERATING ROOMS

OVERVIEW

EKZ is a specialized Anaesthesia and Operating Room Information System that automates the entire perioperative documentation process — from preoperative assessment to post-anaesthesia recovery. It provides a real-time view of patient data, drug administration, and procedural events while automatically acquiring data from connected devices.

KEY CLINICAL FEATURES

Automatic Data Acquisition
- Integration with anaesthesia machines and patient monitors.
- Real-time recording of vital and ventilation parameters: HR, SpO_2, NIBP, IBP, Temp (2 channels), RR, FiO_2, $EtCO_2$, N_2O, O_2, AA gases, MAC, Ppeak, PEEP, Vt, MV, BIS/Entropy and others.
- Adjustable data capture interval (5–600 seconds) and "On Demand" manual readings.
- Event-based data logging during alarms.

Comprehensive Anaesthesia Documentation
- Records all anaesthesia stages: induction, intubation, maintenance, extubation, and recovery.
- Supports general and regional anaesthesia (multiple simultaneous procedures with ICD coding).
- Graphical visualization of ≥4 parameters simultaneously.
- Marks surgical events (e.g., CPR, defibrillation, position change) with customizable icons.
- Editable drug library (1,000+ entries) with defined categories and routes of administration.
- Barcode-based tracking for blood transfusion and drug administration with automatic report generation.
- Generates printable PDF reports (anesthesia record, transfusion card, Surgical Safety Checklist).
- Calculates Aldrete, SOFA, SAPS, and APACHE II scores automatically.
- Secure user login and audit trail for all activities.
- Allows immediate procedure start without login in emergency situations.

Reporting & Integration
- Automatic export of anaesthesia and PACU documentation to HIS/EMR.
- Imports treatment orders, lab results, and patient data from HIS.
- Graphical and tabular reporting by procedure, station, or date.
- Report templates customizable to hospital standards.

Added Value
- Full compatibility with Mindray, GE, Dräger, Heyer, Philips, Maquet, Penlon, and other brands.
- Streamlines anesthesia workflow and reduces manual data entry.
- Ensures consistent, legally compliant documentation.
- Supports continuous recording even across device brands.

MULTI-VENDOR COMPATIBILITY

Both **EKZ** and **EKIT** are multi-brand interoperable systems capable of integrating with a broad range of international manufacturers, including:

Advance Integration capability:
Our system Supports Customized integration through HL7 protocol with a wide range of medical devices including Dialysis machines, and other medical equipment's.

BENEFITS OF COLLABORATION

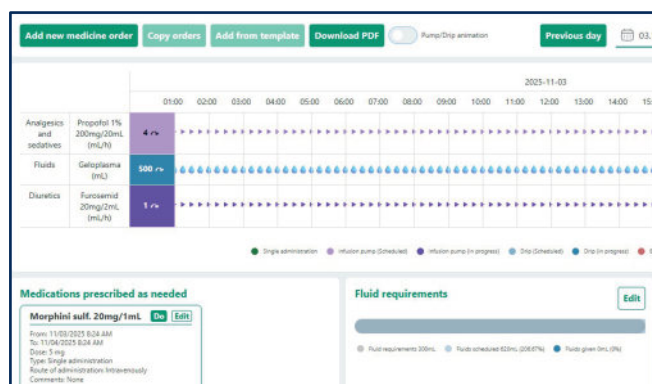| STAKEHOLDER	BENEFITS
Distributor	Expands portfolio to include advanced digital CIS software compatible with all brands and devices.
Hospitals	Gain interoperable clinical documentation for OR and ICU.
Clinicians	Reduce manual workload and improve patient safety through automation.
Patients	Benefit from faster, safer, and better-coordinated care.

ICU PLATFORM SOLUTION

EKIT Platrofm is a comprehensive solution bundle that provides support for doctors and nurses in the area of documentation of the treatment process, conducted observations and procedures performed.
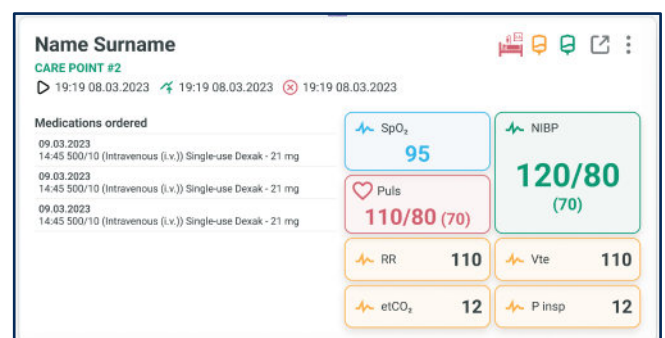
Automatic recording of parameters such as vital signs and ventilation values from medical devices to the EKIT introduces min. 36% time savings, while guaranteeing reliability and unambiguity of medical documentation.

Integration and automatic download of data from vital signs monitors, ventilators, renal replacement therapy devices, infusion pumps, hemodynamic monitors, regional oximetry from all leading manufacturers.

EKIT PLATFORM MAIN FEATURES:

- Automatic recording of data from medical devices

- Reliable documentation of nursing documentation

- Scale calculators (TISS-28, APACHE II, SOFA, MODS, PELOD, etc.).

- Automatic calculation of fluid balance

- Dedicated ICU medication ordering module (integrated with HIS)

- Event notifications like: replacement of catheter, change of position, administration of medication, etc.

- U-CARE module to predict the occurrence of AKI 2/3

EASY MEDICATION ORDERING AND PLANNING

AUTOMATIZED TISS-28 SCALE CALCULATION WITH SCORE EXPORT TO HIS

SIMPLE WEB BROWSER ACCESS TO THE SYSTEM FEATURES FROM ANY HOSPITAL COMPUTER

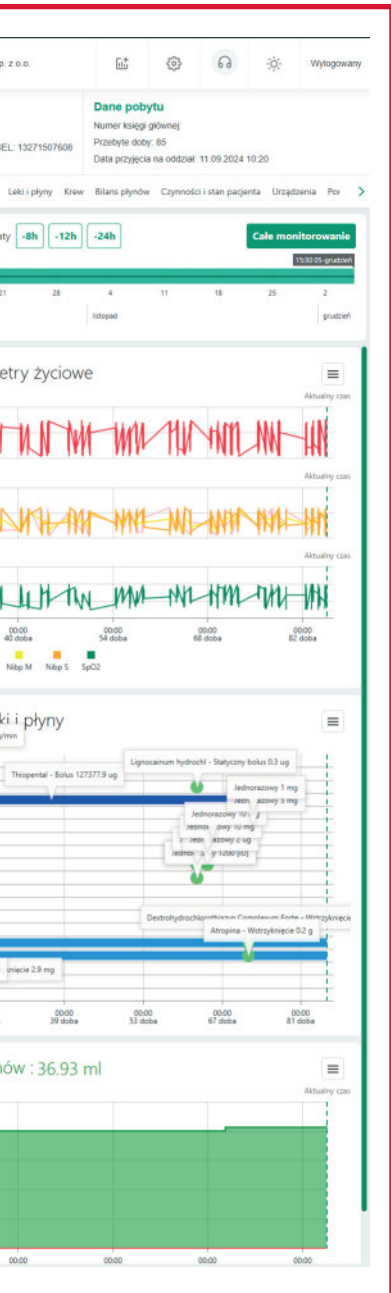**ANTIBIOTIC THERAPY VIEW**

REPORTS TEMPLATES

ACCESS TO LAB RESULTS

EKIT

Fully customizable interface allows to adapt the EKIT system to already implemented procedures and standards of care in the ICU Intensive Care Unit for all age groups, from neonates to adults, and any ward profile.

The bidirectional integration and automatic download of data from the HIS allows to maintain continous and full of documentation.

- **AUTOMATICALLY** GENERATED SHIFT/DAILY **REPORTS**
- **TRANSFUSION REGISTRATION** USING A BARCODE READER
- **INTEGRATION WITH HIS SYSTEM** OF ANY MANUFACTURER
- **INTEGRATED DEVICE TYPES**: MONITORS AND CENTRAL MONITORING UNITS, VENTILATORS, INFUSION PUMPS, INCUBATORS, CARDIAC OUTPUT MONITORS, RENAL THERAPY DEVICES.
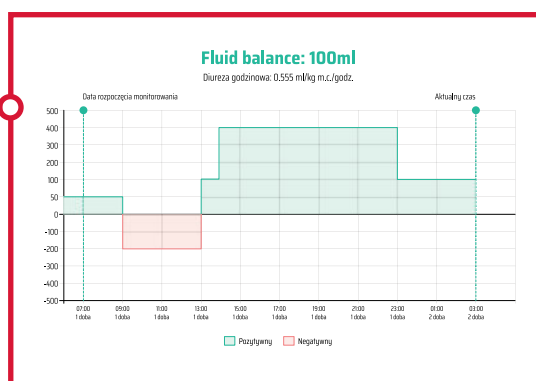
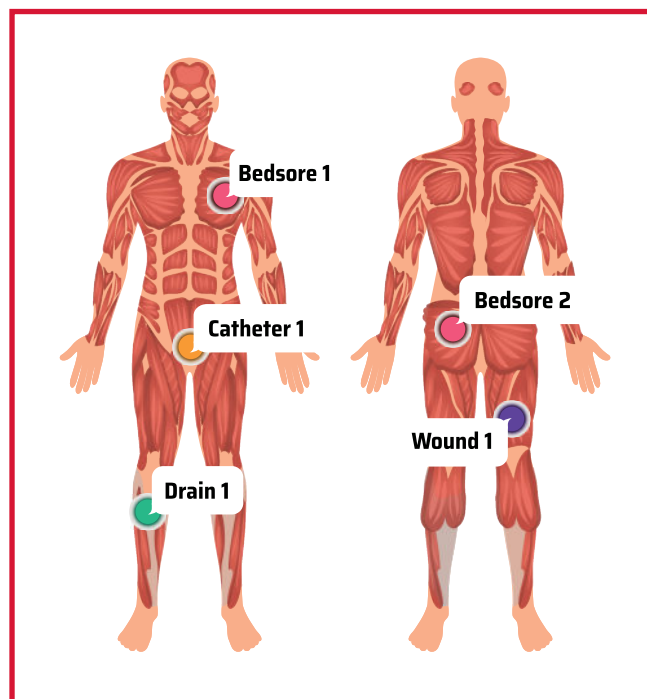**FAST AND LOGICAL MONITORING OF NURSING PROCEDURES**

NOTIFICATIONS OF UPCOMING MEDICATION ADMINISTRATIONS

AUTOMATIZED FLUID BALANCE CALCULATION WITH PERSPIRATION INCLUDED

CONFIGURABLE DAILY/SHIFT REPORTS

GRAPHIC PATIENT CONDITION OVERVIEW

NEW! **U-CARE MODULE**

U-Care Medical

35% reduction
in AKI 2/3
incidence

50% decrease
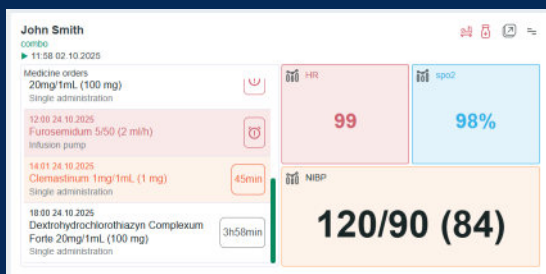of nephrotoxic drug
administration
per day

35% diminution
of hypotension and hyperglycemia
episodes

CLINICAL DECISION SUPPORTED BY CLINICALLY CERTIFIED AI.

FOR COMPREHENSIVE, EARLY DETECTION AND PROACTIVE MANAGEMENT OF COMPLICATIONS OF RENAL CARE.

- **DETERMINATION OF AKI PHASE** WITH WARNING ABOUT INCREASING RISK

- **KDIGO** BUNDLE **ALGORITHM**

- **AKIRA MODULE** PREDICTING THE OCCURRENCE OF AKI 2/3 IN ADVANCE OF 24H

- AI GUIDANCE ON **DRUG MENAGEMENT**

John Smith
combo
► 11:58 02.10.2025

Medicine orders
20mg/1mL (100 mg)
Single administration

12:00 24.10.2025
Furosemidum 5/50 (2 ml/h)
Infusion pump

14:01 24.10.2025
Clemastinum 1mg/1mL (1 mg)   45min
Single administration

18:00 24.10.2025
Dextrohydrochlorothiazyn Complexum
Forte 20mg/1mL (100 mg)   3h58min
Single administration

HR **99**

spo2 **98%**

NIBP **120/90 (84)**

- Configure your own dashboards with most important patient parameters.

- Easily check the next medications to be given.

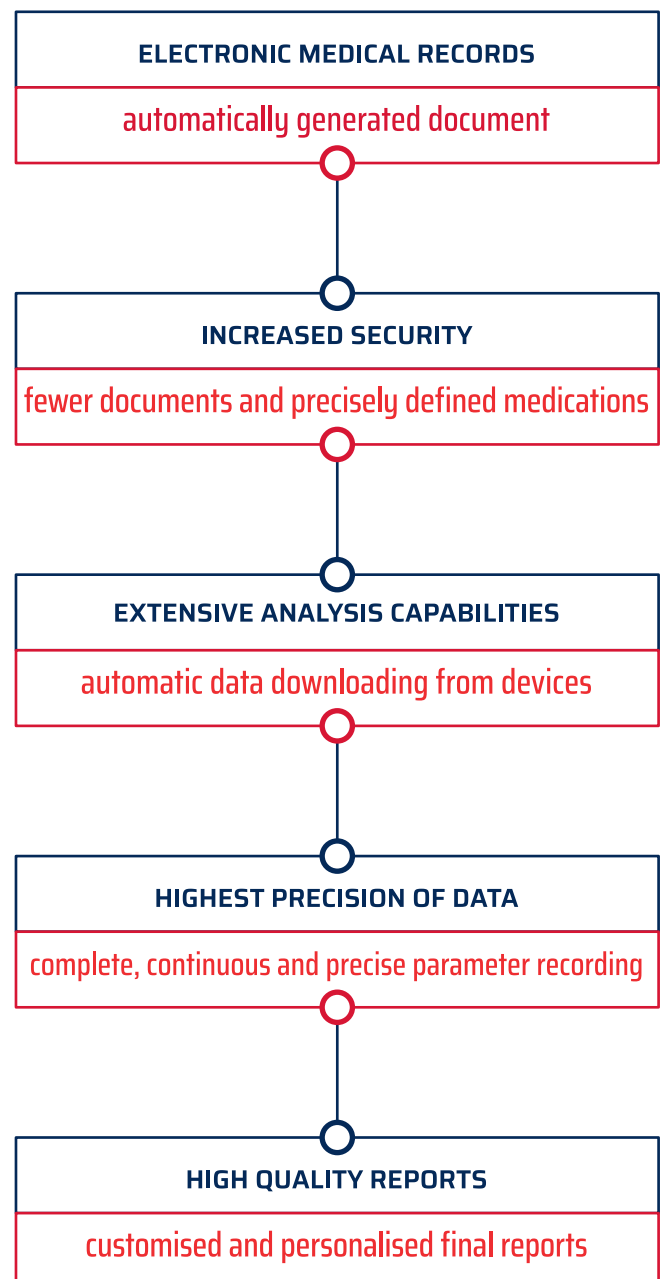- See all notifications on main screen.

ELECTRONIC ANAESTHESIA CARD

TRADITIONAL METHOD OF ANAESTHETIC RECORD KEEPING BECOMES HISTORY

The use of the Electronic Anaesthesia Card saves time, makes documentation more precise and expands the range of parameters documented. The automatic reading from anaesthetic machines, cardiac monitors and other devices allows greater focus on observing the patient's condition and reduces the number of steps required during surgery.

TDZ Technika dla Zdrowia Sp. z o.o. has developed a revolutionary application Electronic Anaesthesia Card based on many years of experience, long-term consultations with practising anaesthesiologists and anaesthesia nurses and extensive knowledge of the staff of biomedical engineers and our IT specialists.

The programme allows continuous recording of the course of anaesthesia, including administered drugs, blood products and infusion fluids, automatically reading out the measurement values and making them available for the patient's records.

ELECTRONIC MEDICAL RECORDS

automatically generated document

INCREASED SECURITY

fewer documents and precisely defined medications

EXTENSIVE ANALYSIS CAPABILITIES

automatic data downloading from devices

HIGHEST PRECISION OF DATA

complete, continuous and precise parameter recording

HIGH QUALITY REPORTS

customised and personalised final reports

PRE-ANESTHESIA INTERVIEW

ADMISSION TO OPERATING THEATHRE

PERIOPERATIVE CHECK CARD

START OF ANAESTHESIA

VITAL SIGNS:
HR, SPO2, NIBP, TEMP, IBP

ADDITIONAL MONITORING:
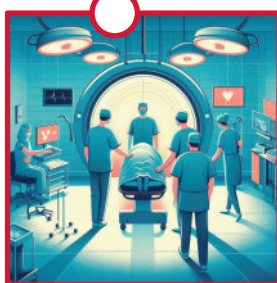**BIS, TOF, RSO2, CO, SV**

LABORATORY TESTS RESULTS:
HB, HT, K⁺, NA, L, PLT, APTT

GAS PARAMETERS:
CO2, %AA, O2, MAC

PATIENT DATA:
NAME, SURNAME, ID NUMBER, BLOOD GROUP

VENTILATION PARAMETERS:
VT, PPEAK, PEEP, MV, RR, VENTILATION MODE

SURGERY

END OF
ANAESTHESIA
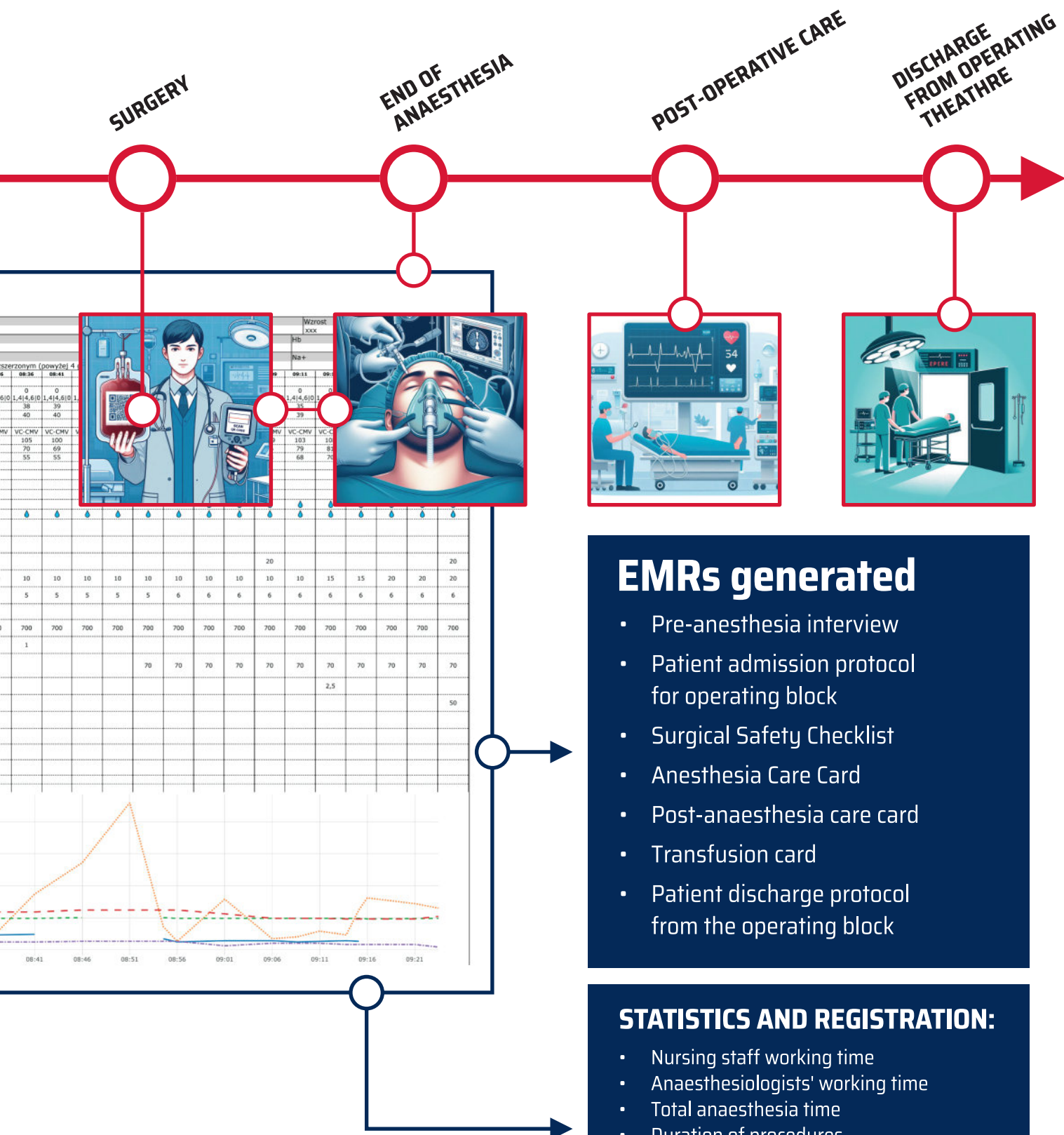
POST-OPERATIVE CARE

DISCHARGE
FROM OPERATING
THEATHRE

EMRs generated

- Pre-anesthesia interview
- Patient admission protocol
  for operating block
- Surgical Safety Checklist
- Anesthesia Care Card
- Post-anaesthesia care card
- Transfusion card
- Patient discharge protocol
  from the operating block

STATISTICS AND REGISTRATION:

- Nursing staff working time
- Anaesthesiologists' working time
- Total anaesthesia time
- Duration of procedures
- Number and type of procedures
  performed
- Medication consumption
- Transfusions

SCM

Spot Check Monitoring

Collect single measurement for non-continuosly monitored patients.
Module of Maximus system that allows to store data from spot-checks of Patient at any department or hospital ward. Web browser based intercafe allows to access the system hospitalwide.

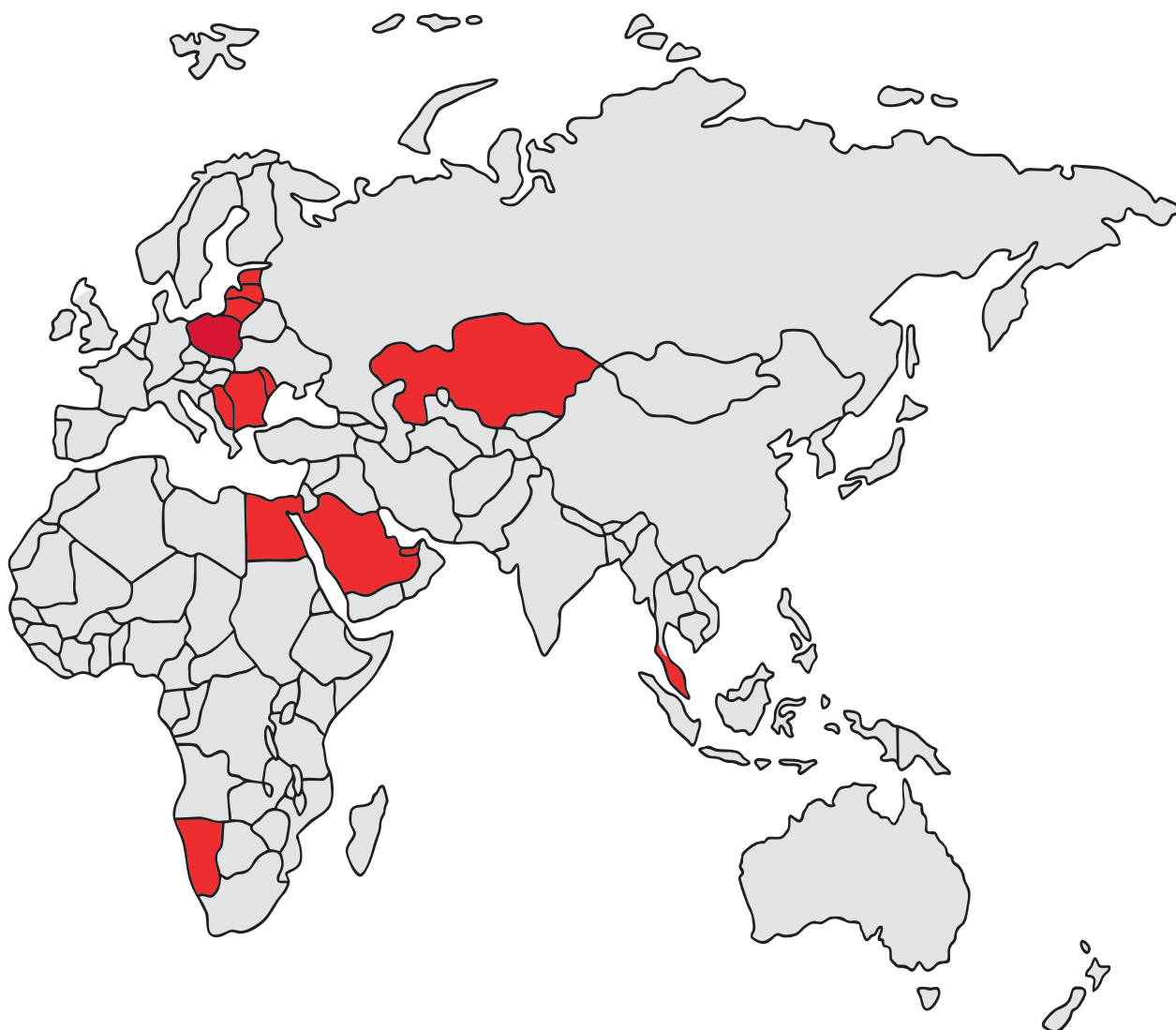## RRT

Rapid Response Team

Increase the Patient safety by monitoring the EWS calculated by Maximus or external monitoring device.

TelMed

Bringing the hospital home

Integrate homecare devices and see all data in you Clinical Information System via 3g or internet connection

HEADQUATERS:

- Poland

PARTNERS:

- Latvia
- Lithuania
- Estonia
- Romania

- Moldova
- Serbia
- Egypt
- UAE
- Saudi Arabia
- Namibia

- Kazakhstan
- Malaysia
- Bahrain
- Jordan

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TECHNIKA
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LET'S ALL GO DIGITAL!