



# VEGA

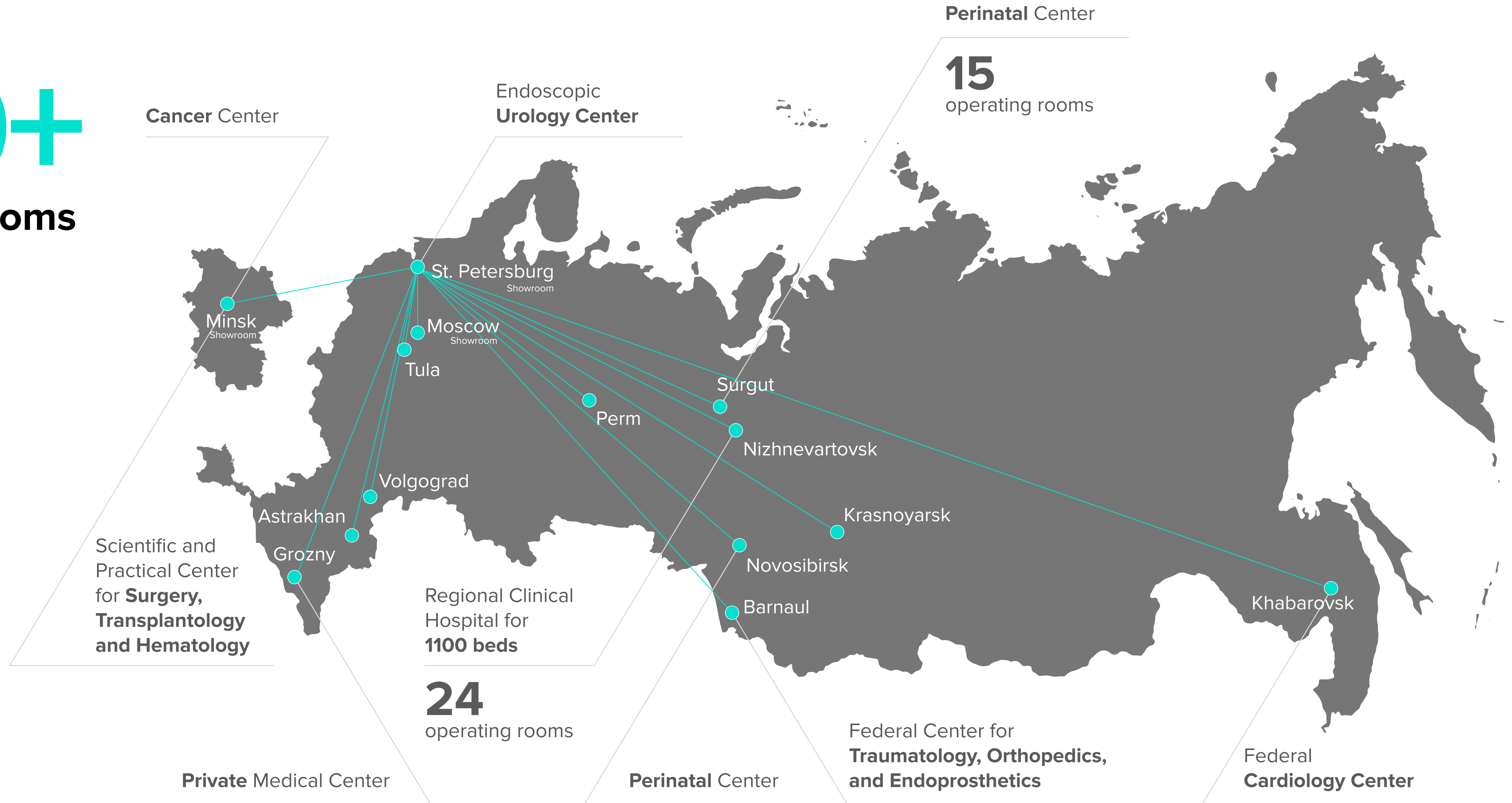
Solutions for documentation,  
telemedicine, workflow support and  
automation in clinics



**170+**  
operating rooms

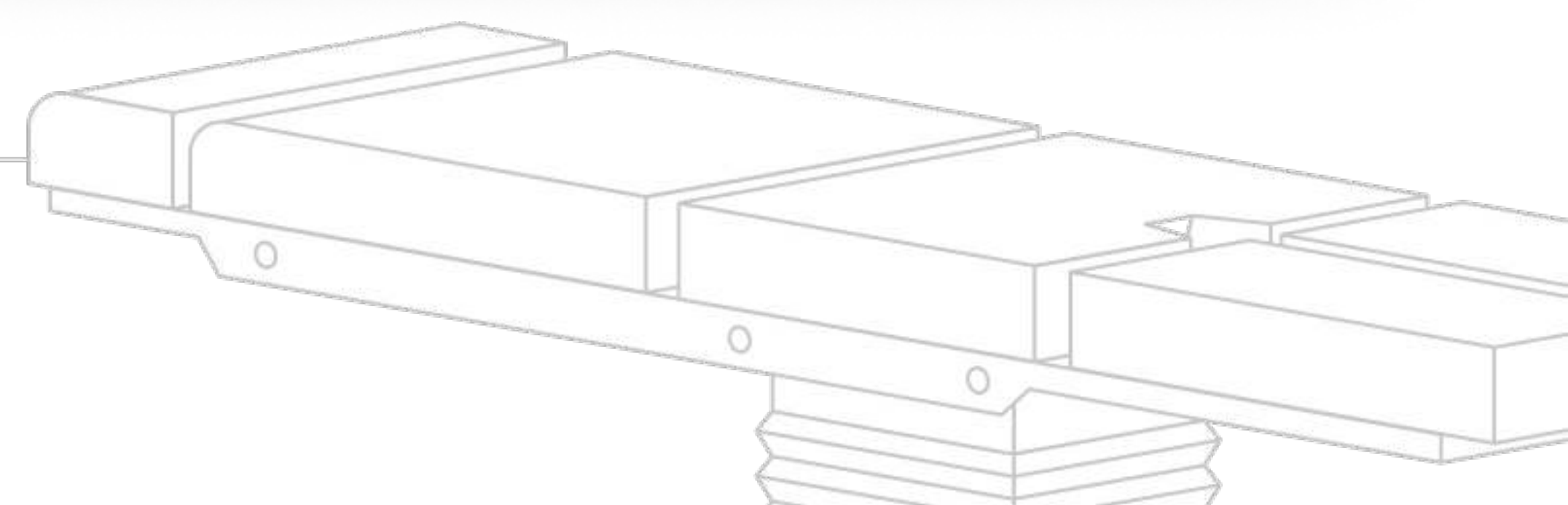
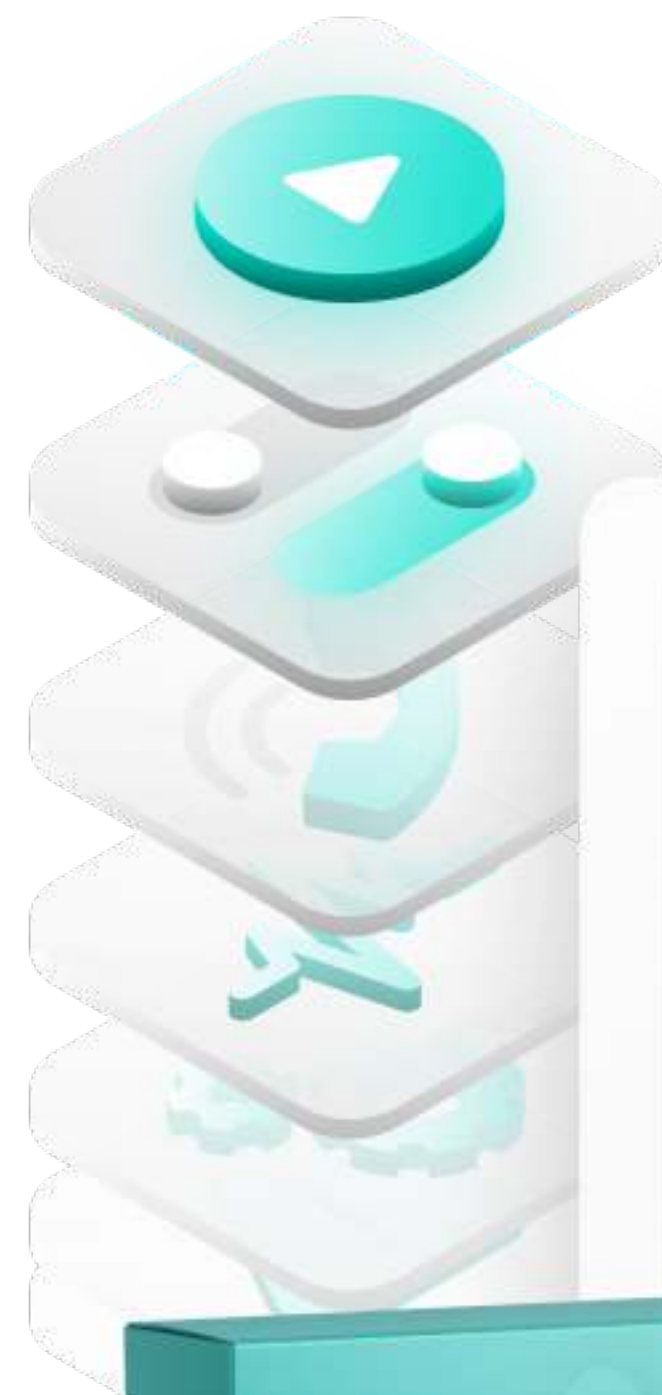
**40**  
clinics

**20**  
cities



# Integrated operating room

- Ergonomic solution for the comfort of surgeons and surgical teams
- Enhancing the OR efficiency
- Safety and security for doctors and patients





1 Digital information display



3 Video camera



2 Utility systems control screen



4 Main control monitor



5 Built-in monitor



6 Surgical monitor



7 Surgical monitor



8 Video camera



9 Large overview monitor

## BEFORE THE SURGERY

Tracking of surgeries on the smart online board and **notifying** the medical personnel when the OR and the patient are ready.

**Broadcasting** video streams to the monitors in the corridor and to any computer within the hospital.

2 4 **Customizing the OR environment** (lights, temperature, humidity) and creating presets to save time.

4-7 9 **Access and visualization** of the PACS, MIS, LIS and other required information on the monitors inside the operating room to provide better comprehension of the case.

4 **Start documenting** the surgery from different integrated information sources by pressing a single button.

4 The option to **quickly start** an urgent surgery or select a scheduled one.

## DURING THE SURGERY

4-7 9 **Routing video sources** (endoscope, microscope, ultrasound, C-arm, etc.) across monitors.

4 Possibility to **rewind** video and review the captured frames while recording in progress.

4 **Teleconsultations with peers** using two-way videoconferencing.

9 **Resident physicians can watch** the surgery on a monitor away from the operating table.

4 **Videoconferencing** with the possibility to broadcast all the available sources to the hospital conference room or to an external location.

4 Taking snapshots and short video clips to **quickly export the key events of the surgery**.

4 **Timers and stopwatches** with the start and stop time captured in the video stream.

4 Text markers to **quickly find marked events** in the recorded video.

2 4 **Control of the connected equipment** from any touch screen and alarm notifications.

**Synchronous recording** of all video sources with subsequent archiving.

## AFTER THE SURGERY

4 Completion of documentation and **automatic uploading** of data to the central video archive of the clinic.

Sending data about performed surgery to **HIS**.

1-9 **Safe and simple disinfection** of integrated OR components thanks to design solutions.

**Access to the surgery archive** to analyze challenging cases as well as for advanced and corrective training.

**Video editing and export** of selected segments.

Generating surgical **reports**.

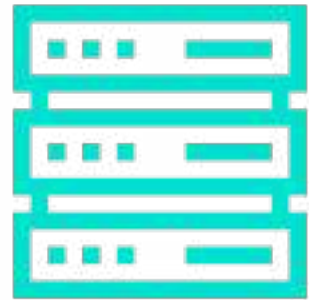
Ability to use the video archive to **protect** the medical staff and the patient in controversial cases.

**Streamline surgical workflow** basing on the collected data.



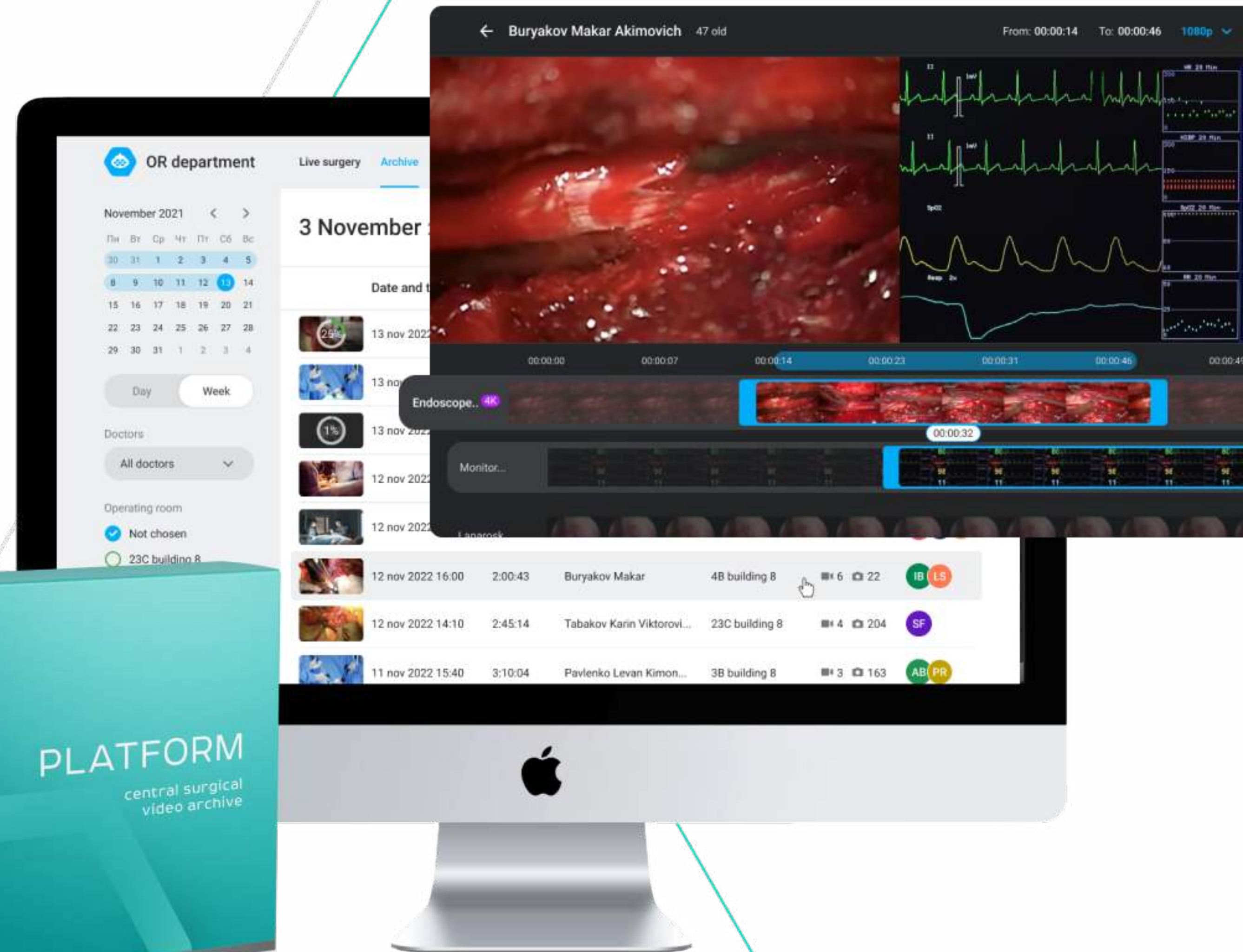
## Telemedicine cart

- Simultaneous recording and streaming of up to 4 video sources
- Two-way video teleconsultations
- Synchronization of recordings with central archive of the clinic

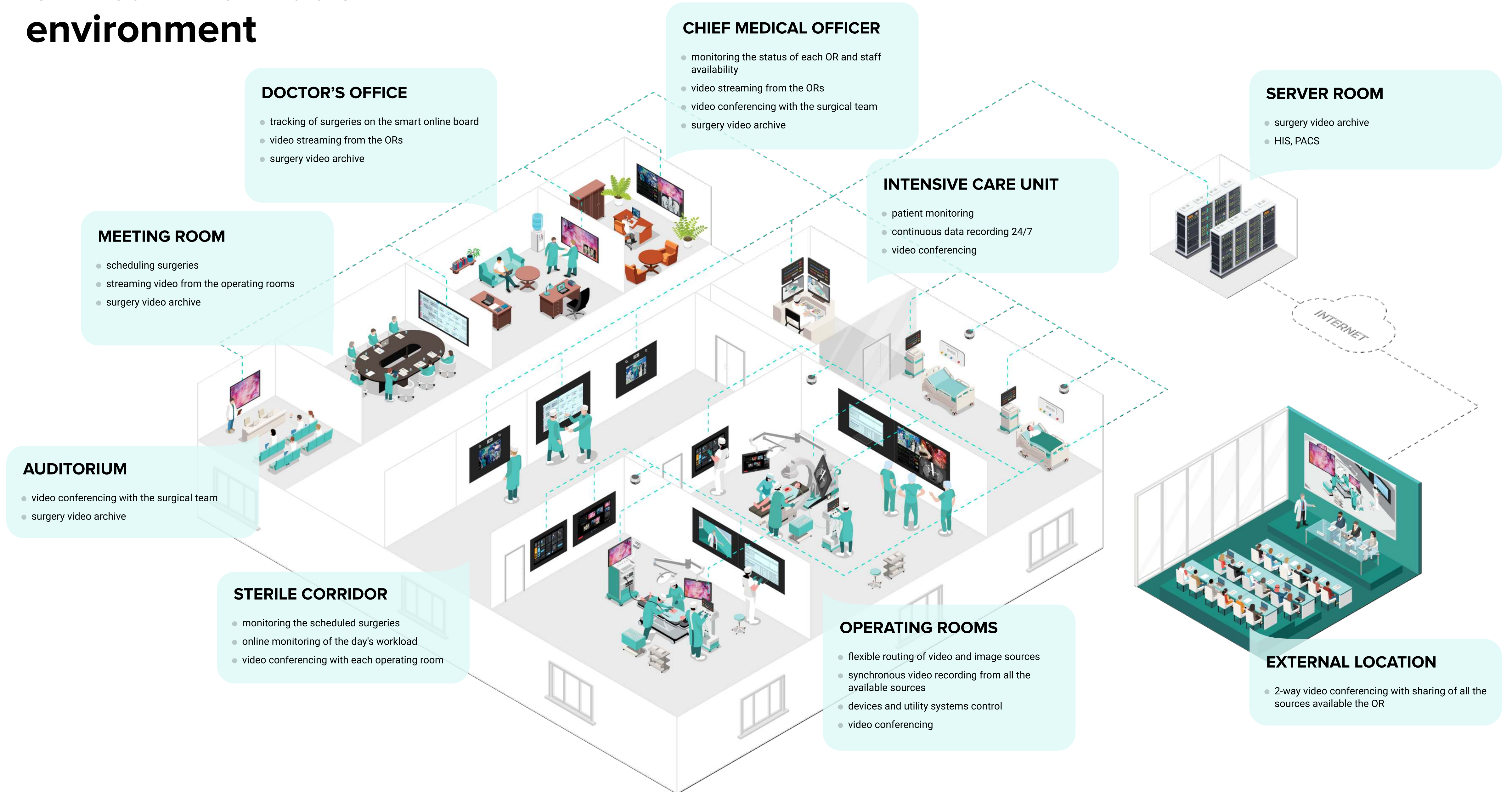


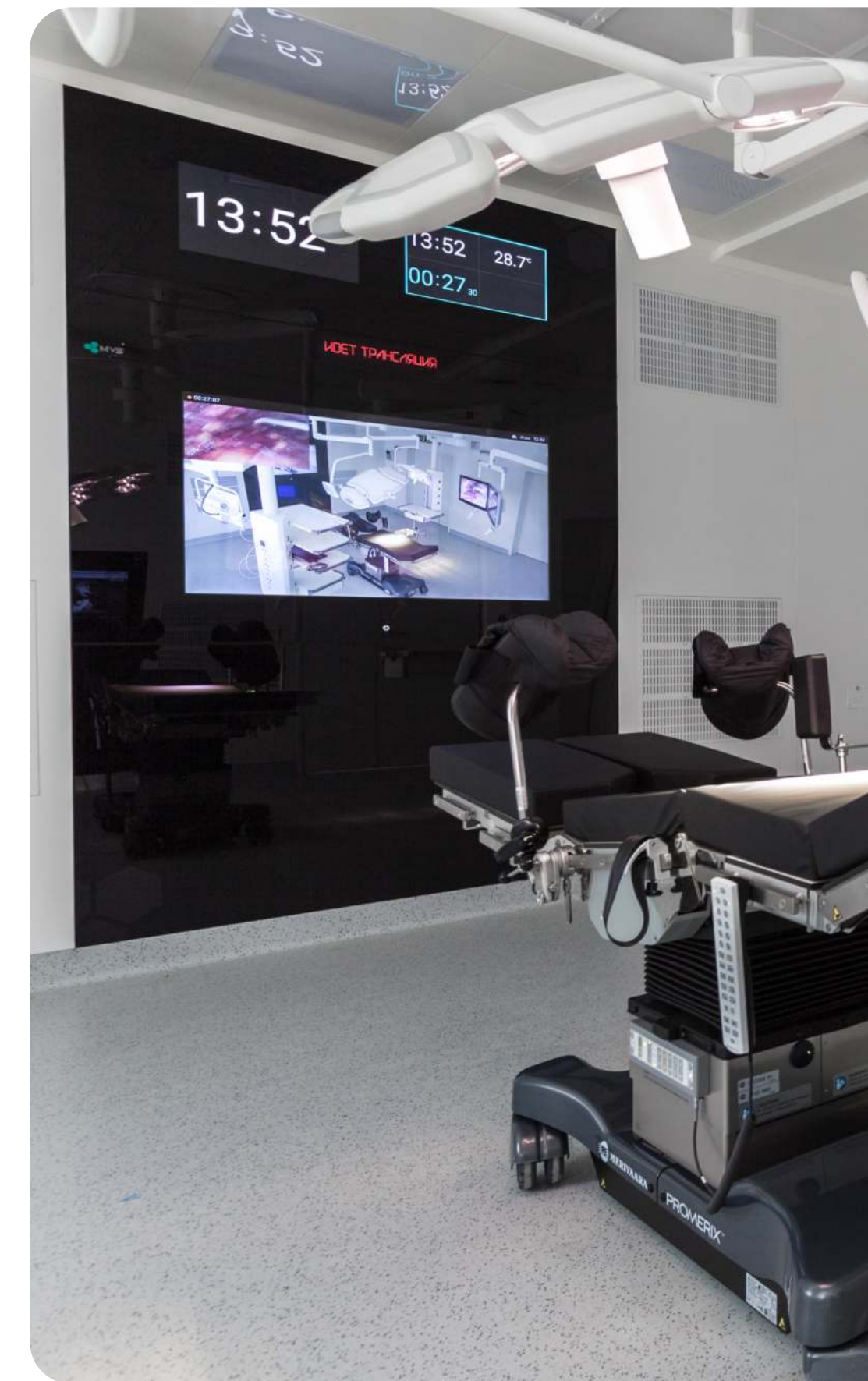
# Surgical video archive

Data from the terminals is uploaded and stored in the central archive of the clinic



# Clinical information environment





*Everything is extremely functional, everything is logical, everything is well thought out. Functionality that is used 100%. Ergonomics is amazing, too. I believe this should be promoted as the standard for the entire country. I am absolutely thrilled!*



**Eduard Galliamov**

Honored Doctor of the Russian Federation, MD, Professor

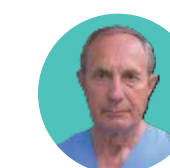
*It took us quite a while to choose a solution to have the operating rooms in our clinic integrated, and in the end we opted for a product by a domestic manufacturer, the MVS Company, and we have never regretted it!*



**Sergey Popov**

Chief Doctor St. Luke Clinical Hospital

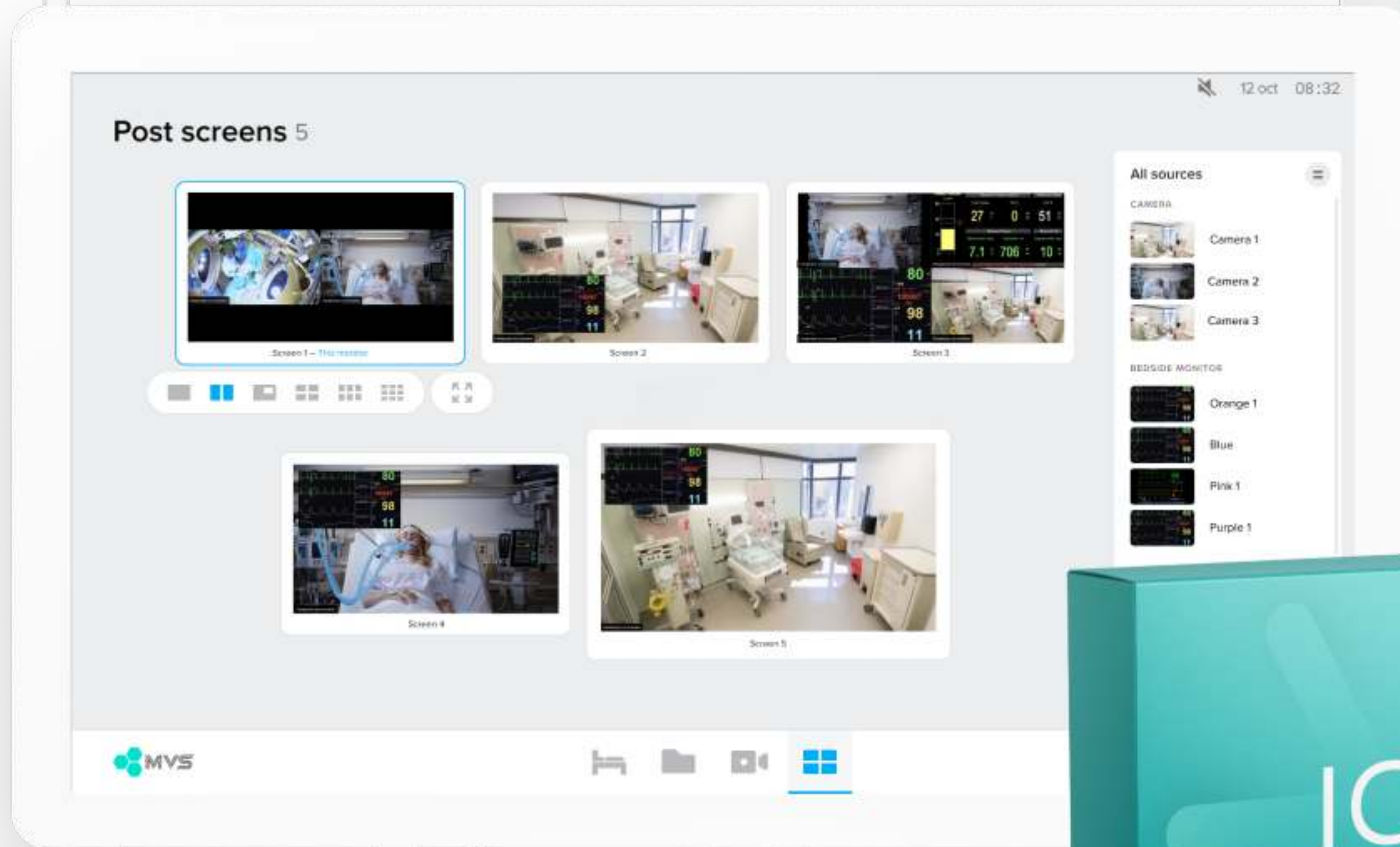
*This is a European-level solution, all our wishes have been taken into account. I am impressed with the high quality of the work done. Everyone will feel comfortable working here: medical staff, surgeons, support personnel, engineers, medical technicians.*



**Nikolay Grekhovodov**

Chief Maintenance Manager, Federal Center for Cardiovascular Surgery (Khabarovsk)



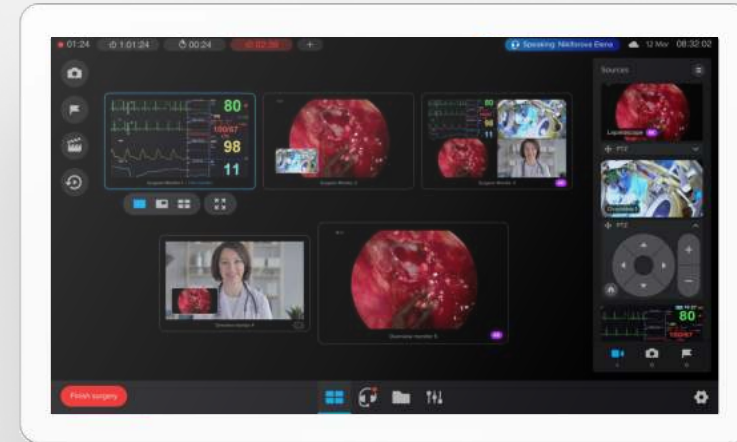


# Digital intensive care unit

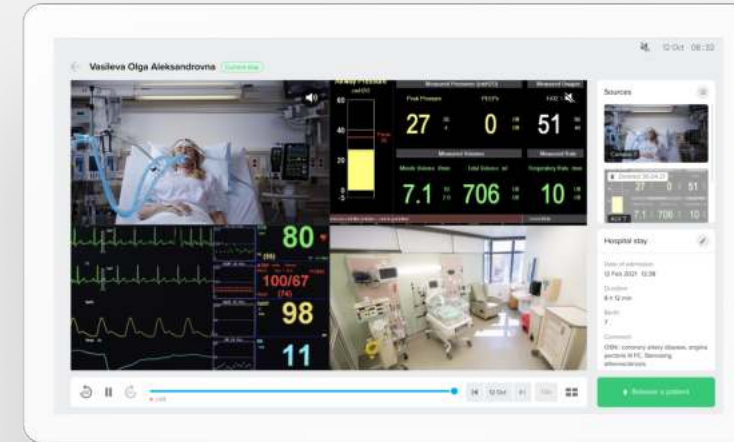
- Continuous data recording 24/7
- Interactive nurse's station
- Quick access to patient's history
- Two-way video conferencing
- Integration with hospital information systems

# MVS solutions

## SMART OR

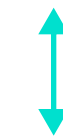


## SMART ICU



## PORTABLE MEDIA CENTER

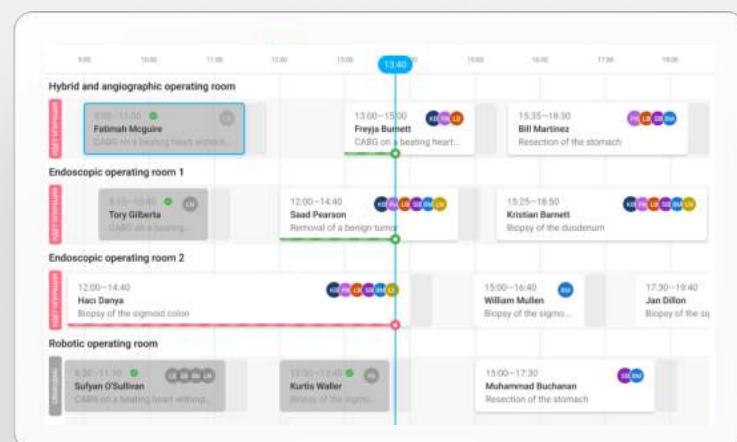
Preliminary



## MVS PLATFORM



## REAL-TIME PROGRESS BOARD



## TELEMEDICINE CART



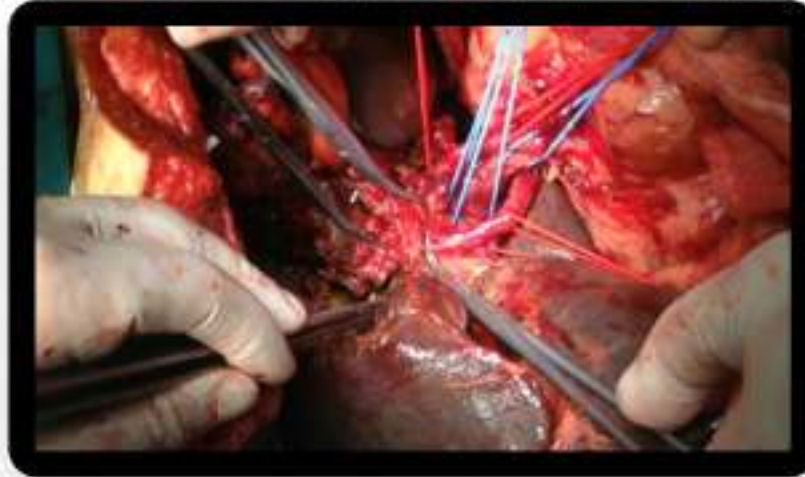
## AMBULANCE TERMINAL

Preliminary



# Complete data capture and documentation

Head-mounted camera



Built-in surgical light camera



Surgical microscope



Endoscope



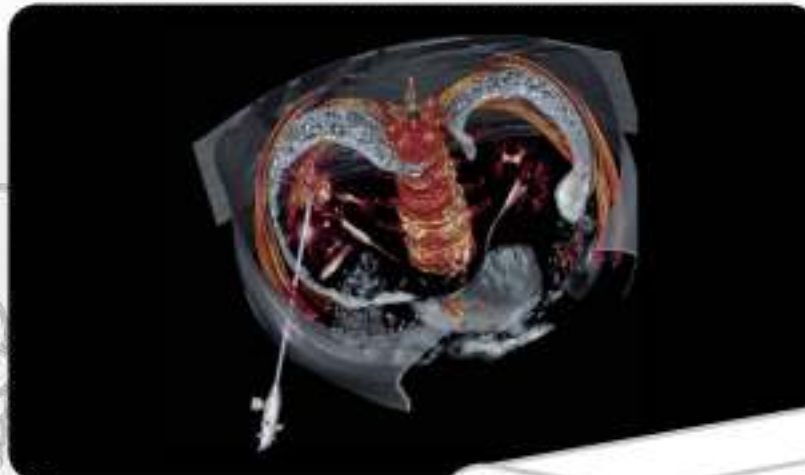
Overview camera



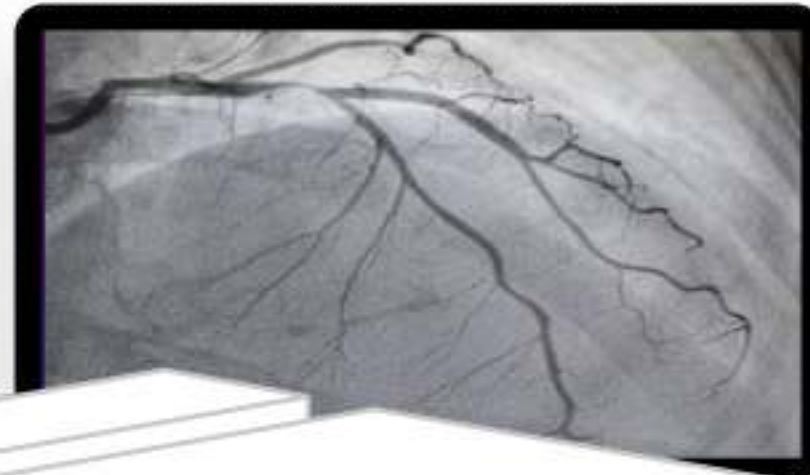
Patient monitor



CT-scanner



Angiography



C-Arm



Ultrasound

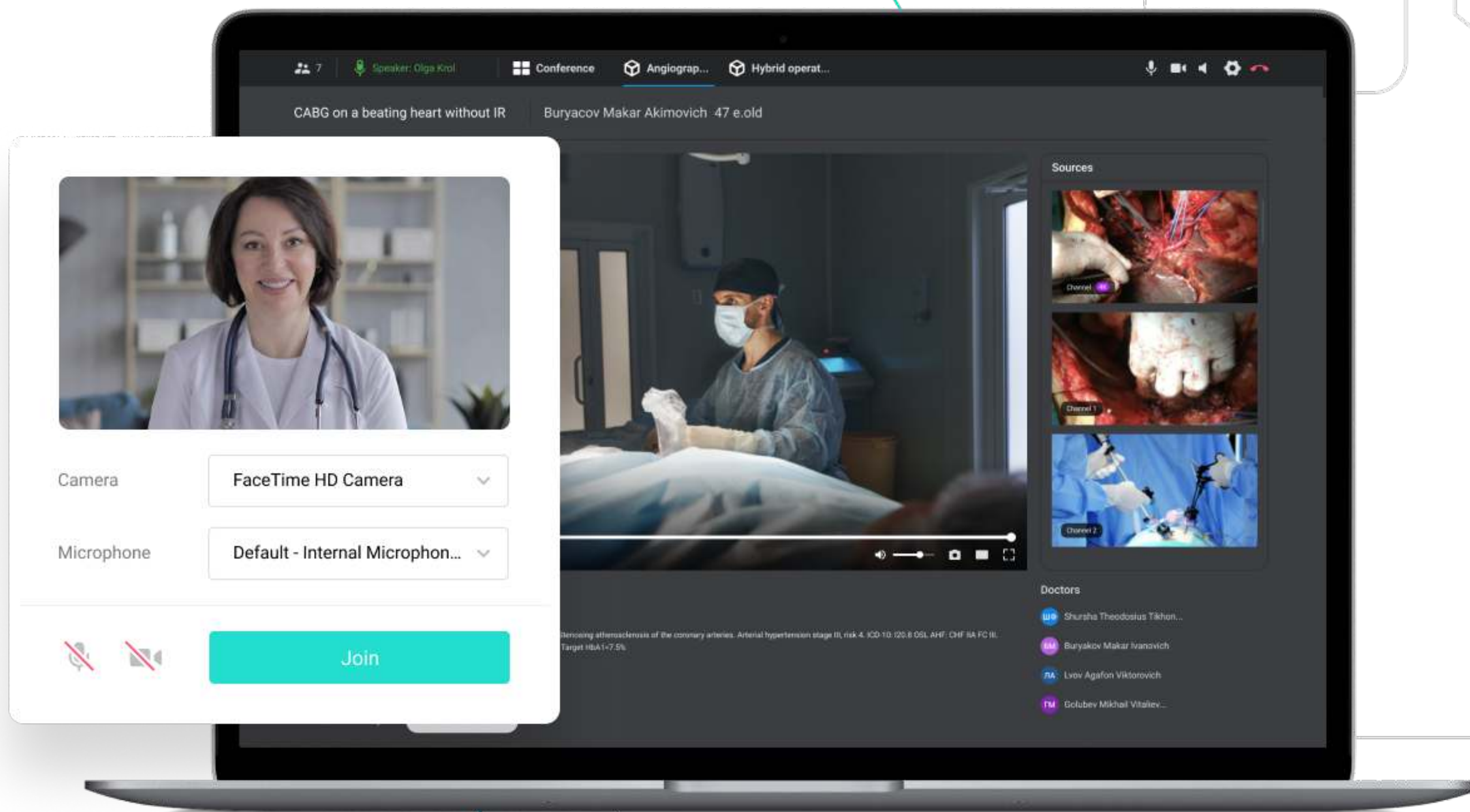


Recording of all the data available during the surgery

# Centralized devices control

- Intuitive customization of the operating room workspace
- Control of utilities and medical equipment
- Customized presets
- Alarms and events documentation



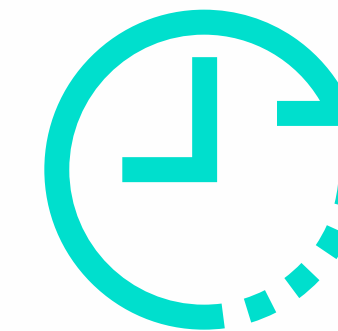


# OR telemedicine

- Two-way video communication with the OR from any location
- Streaming from all active sources is available to the conference participants
- Invitations via secure external links
- Recording of the conferences along with the surgery

The screenshot shows a mobile application interface for patient history. At the top, there's a header with the title "History" and filters for "12-19 Dec 2020" and "Berth 1". Below the header is a table with columns: "Date of admission", "Discharge date", "Dur...", "Patient", "Comment", and "Berth". The table contains several rows of patient records. A date selection calendar is overlaid on the table, showing "December 2020" with days 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19 highlighted. The calendar has "Reset" and "Choose" buttons at the bottom.

Date of admission	Discharge date	Dur...	Patient	Comment	Berth
16 Nov 2020 19:10	21 Nov 2020 14:03	57 min	Doris Huffman	Necrectomy	5
14 Nov 2020 12:33	22 Nov 2020 11:23	8 h 12 min	Charis Middleton	H40.1	
16 Nov 2020 19:10	22 Nov 2020 11:23	18 d 21 h	Anisa Haney	Necre	
14 Nov 2020 12:33	22 Nov 2020 11:23	8 h 12 min	Esha Valencia	Ultras	
16 Nov 2020 19:10	23 Nov 2020 11:23	57 min	Amira Matthams	Necre	
14 Nov 2020 12:33	23 Nov 2020 11:23	8 h 12 min	Colin Riley	H40.1 open-t	
16 Nov 2020 19:10	23 Nov 2020 11:23	18 d 21 h	Amna Carr	Necre	
14 Nov 2020 12:33	24 Nov 2020 11:23	8 h 12 min	Abby Alvarez	Ultras	
14 Nov 2020 12:33	24 Nov 2020 11:23	8 h 12 min	Wade Watson	Ultras	
16 Nov 2020 19:10	24 Nov 2020 11:23	57 min	Hannah Dillon	Necre	



# Patient history

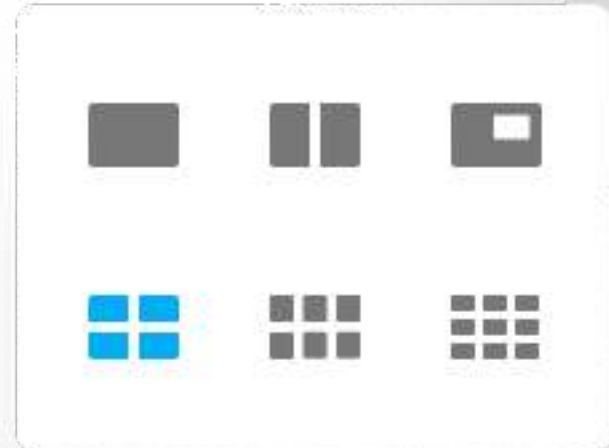
Quick access to archive data via browser or touchscreen



# Intuitive player

Synchronous playback of multiple video sources in a user-friendly interface

8.0x  
4.0x  
2.0x  
1.5x  
1.0x



Vasileva Olga Aleksandrovna Current stay 12 Oct 08:32

Airway Pressure		Measured Pressures (cmH2O)		Measured Oxygen	
Peak Pressure	27	PEEP	0	FiO2	51
Measured Volumes		Measured Rate			
Mucosa Volume l/min	7.1	Tidal Volume ml	706	Respiratory Rate l/min	10

Sources

- Camera 7
- Deleted 30.04.21
- ALV 7

Hospital stay

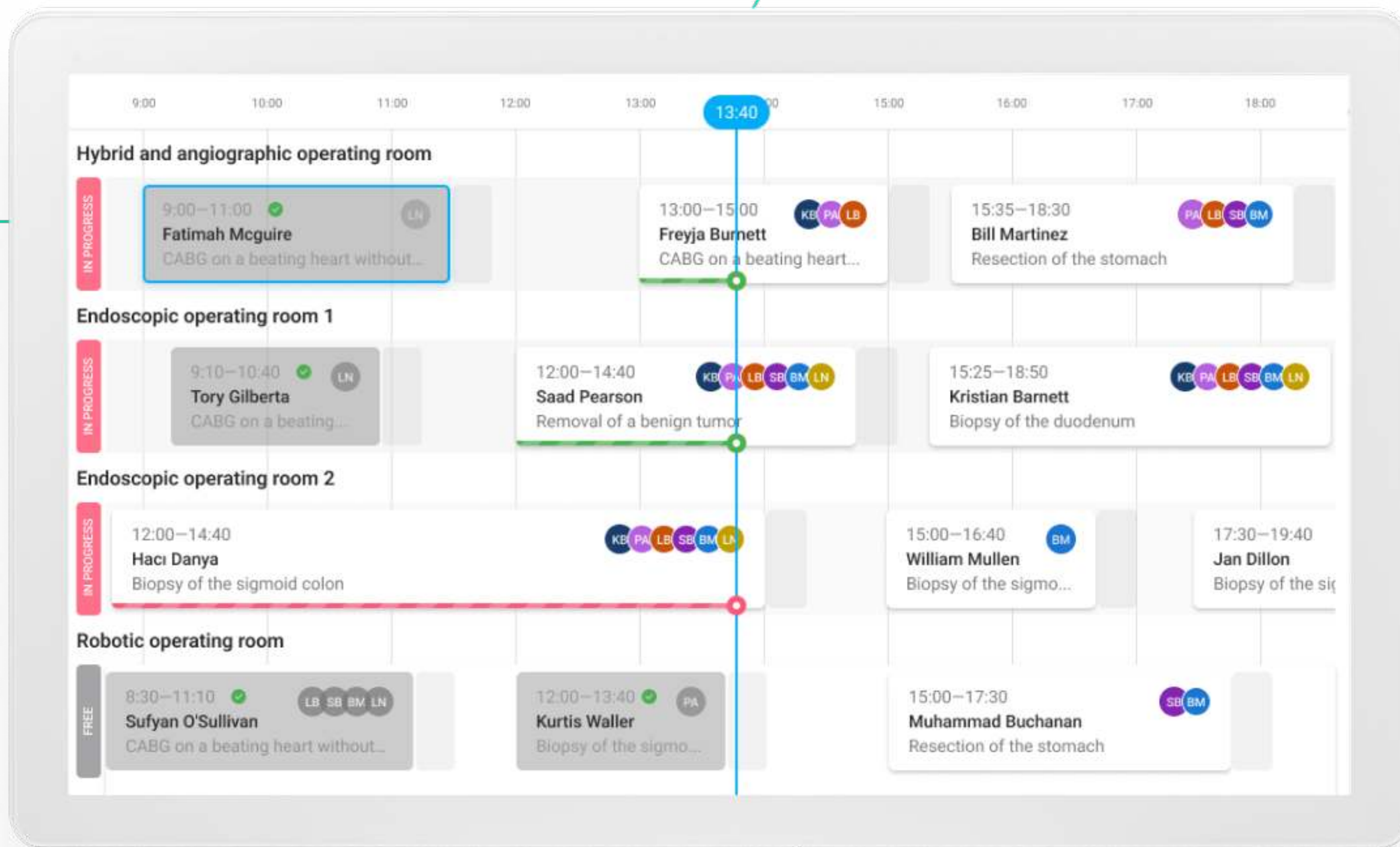
Date of admission: 12 Feb 2021 12:38  
Duration: 8 h 12 min  
Berth: 7  
Comment: OSN: coronary artery disease, angina pectoris III FC. Stenosing atherosclerosis

Release a patient

12 Oct 1.0x

10 [play] 10

Archival record 11 Oct 08:32:51

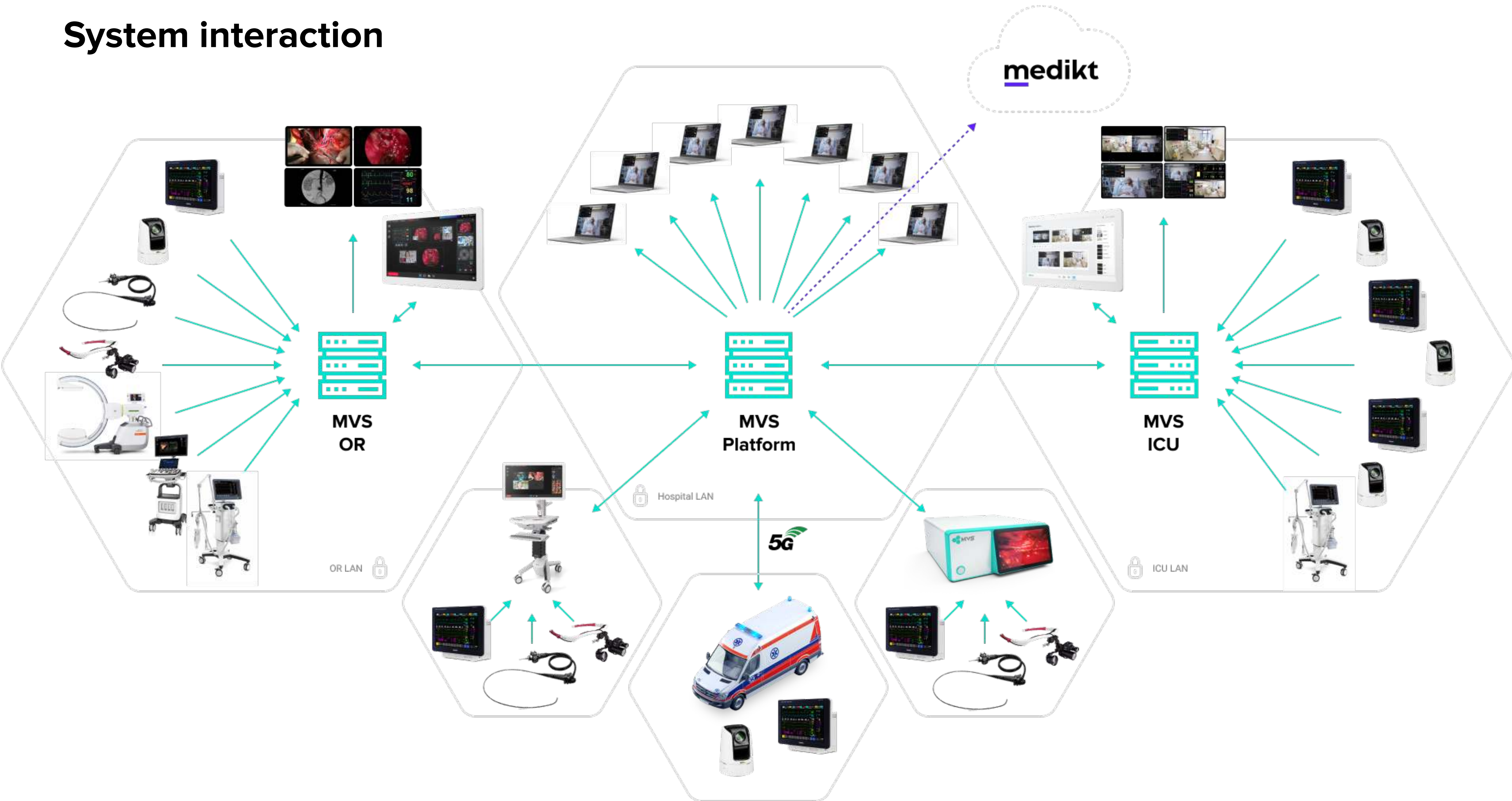


# Surgeries progress monitoring

- Clean visual overview of all planned and ongoing surgeries
- Real-time coordination
- Easy scheduling and rescheduling of surgeries



# System interaction



# Showrooms

**MOSCOW**  
pr. Vernandskogo, 96

**ST. PETERSBURG**  
Levashovskiy Avenue, 12

**MINSK**  
Krasnaya Street, 13



## FUNDS AND GRANTS

