





- Holo4Med was established by the TenderHut group to implement the TenderHut (one of the largest technological capital groups in Poland <a href="https://tenderhut.com/en">https://tenderhut.com/en</a> ) expertise in the medical field.
- Strong interest in innovative telemedical solutions allowed Holo4Med to strike a prestigious contract for telemedical platform early on.







### **MediXR**

Mixed Reality Solution



**Patients Monitoring Platform** 



### **MediCR**

Managing of Clinical Research



#### **MediLis**

**Laboratory Information System** 

## MediHelp Suite – Main Goal

Patients with a milder course can be treated at home, remotely monitored with a pulse oximeter. This will reduce bed occupancy in hospitals.



A pulse oximeter is provided to each patient diagnosed with SARS-Cov-2 and with a condition requiring monitoring.





Patient monitoring is carried out in a self-service model, under the supervision of a doctor, using a mobile application integrated with the device.

## HOW it works

## MediHelp Suite – complete solution



- Pulse oximeter + MediHelp mobile or web browser application.
- Measures pulse and saturation.
- The data is automatically sent to the monitoring centre.



 Decides whether to pass information to a doctor or send an ambulance.



- Uses mobile application for the doctor.
- Can contact the patient by phone and provide medical advice.

## **MediHelp Suite**

#### Mobile application for the patient

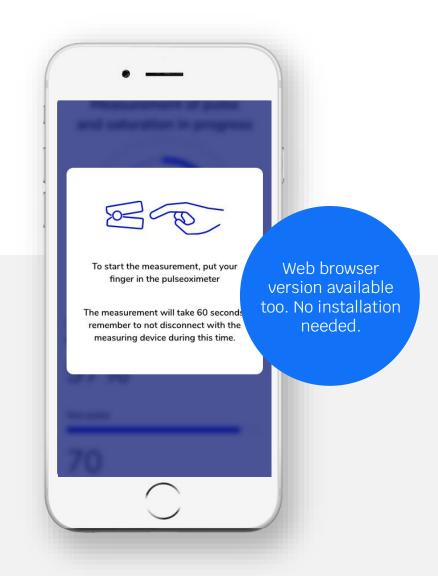




01

Widely available from official Apple and Google Play stores, for free, for quick download. 02

Instructions in the app - everything is understandable, no training is needed, everyone should be able to handle it.



## **MediHelp Suite**

#### Mobile application for the doctor

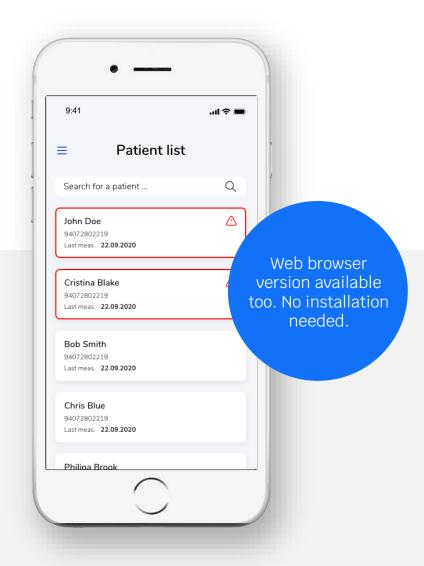




01

Widely available from official Apple and Google Play stores, for free, for quick download. 02

The most important data at hand to give the doctor the opportunity to supervise many patients without much involvement.



## **Azure Cognitive Services**

- Voice Bots to support older people
- Plan to extend voice recognitions services within MediHelp platform



## MediHelp Suite – New devices

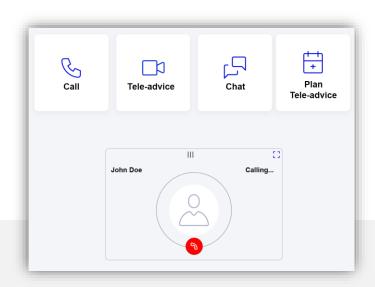
The telemedicine platform for remote monitoring is expanded to include additional mobile devices – medical smart band, glucometer, pressure blood meter, estethoscope, ECG and others

Patient monitoring is carried out in a selfservice model, under the supervision of a doctor, using a mobile application integrated with the device.

Solution based on Azure with Cognitive Services Azure Bot Services and ACS. We are ready to fast implementation, agile approach and flexibility.



#### Telemedicine services based on ACS

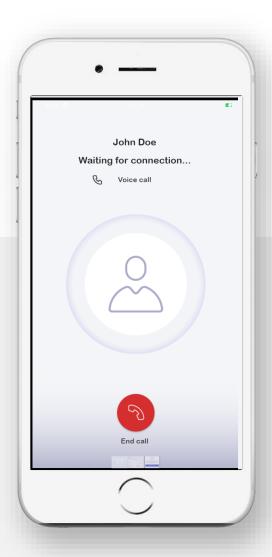




01 02

ACS allows to make tele- and video- consultation through Doctor Web App. and Patient Mobile App.

Quickly and accurately transcribe audio to text in more than 85 languages and variants for deaf people



## **MediHelp Suite**

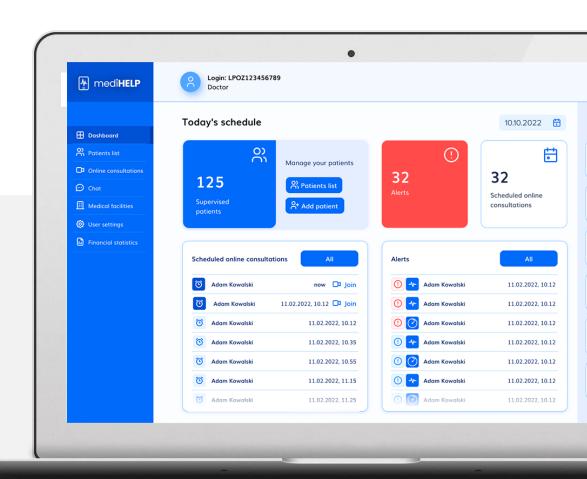
Central panel for the monitoring team

01

Available on any computer connected to the Internet as a web application supported by a web browser.

02

Data security, high speed, reliability and scalability - a solution based on Microsoft Azure Cloud.



## MediHelp Suite targets

01

High risk patients with comorbidities.

02

Patients with more severe course, but still not requiring hospitalization.

03

Other patients, except for Covid-19 patients, to whom remote monitoring using a pulse oximeter would be helpful for the attending doctor (the solution will also be useful after the end of this pandemic).

## Advanced predictive algorithm



Based on the analysis of data from the MediHelp Suite system, a complex algorithm can **predict situations of potential deterioration** of the patient's condition on the next day.

This allows you to prepare for possible hospitalization in advance and may save the patient's life.



The algorithm analyzes as many as several dozen factors in 5 risk groups.

It can also **intelligently modify its alert levels** based on the updated knowledge
about the patient taking different types of
drugs which may cause disturbing changes in
the measurements.

## Main features and benefits

#### FOR PARTNERS

- Easy to distribute Quick implementation throughout the country.
- Customized for differents market
- and customer expectation.
- Manageable
- Unique advanced algorithm

#### FOR CUSTOMERS

- Time and cost-effective Operating in a self-service model, where monitoring is performed by the patients themselves, supervised only remotely by a doctor.
- Easy to use So that almost every patient with a smartphone would be able to handle it on their own.
- Scalable Ready to monitor hundreds of thousands of patients.
- Reduction of beds occupancy.
- Better prediction of the pandemia situation.

# MediHelp Suite is based on cutting edge solutions by









- A trusted cloud platform that is tested and ready to implement large-scale projects with the highest level of data security.
- Ease to manage and scale up if needed.
- Azure gives stronger and faster PaaS capabilities than many other solutions.

- MediHelp Suite uses innovative reporting tools of Power BI supported by AI and machine learning.
- Al solutions are implemented, among others, in the following areas:
  - Classifying patients into risk categories
  - Verify the correctness of the pulse oximeter test

# Polish case in figures

# Success case from Polish project following 12 months:



Over 30% of the patients infected with COVID use a monitoring system



Only less than 1% of the total number of monitored patients needed the medical intervention in the hospital



Around 99% of the total number of the monitored patients went through the illness at home without causing the costs of the hospitalisation. The number of the hospital beds was used in the optimized way for the patients who really needed it.

# Statistics from the Polish project following 12 months:



Over 4,0 milion measurements have been generated from pulseoximeters



care services
Consultants provided
200,000 mobile care
services to patients
included in the
program.

200,000 remote



## MoH telemedicine platform still extended

The platform is constantly extending – new devices added to the system – eg ECG, medical wristband, spirometer and others

# Further Development of MediHelp

## MediHelp Suite – further development

MediHelp platform be extended for hospitals with MediXR Hospital Round Asistance Module





## MediXR ENABLES PATIENTS REGISTRATION PROCESS

- ID scanning and processing
- Access to Hospital Information System



#### HOSPITAL ROUND ASSISTANCE

- Instant access to Hospital Information System
- Keyboard and voice input
- Access to PACS systems (Picture Archiving and Communication System).

