An Israeli Data Ecosystem

ISRAELI DIGITAL HEALTH ECOSYSTEM IN 2018

537
innovative Digital Health companies

Over 25
years of digitalized accumulated EMR

Market players:
4 HMOs,
servicing the entire ~9M population

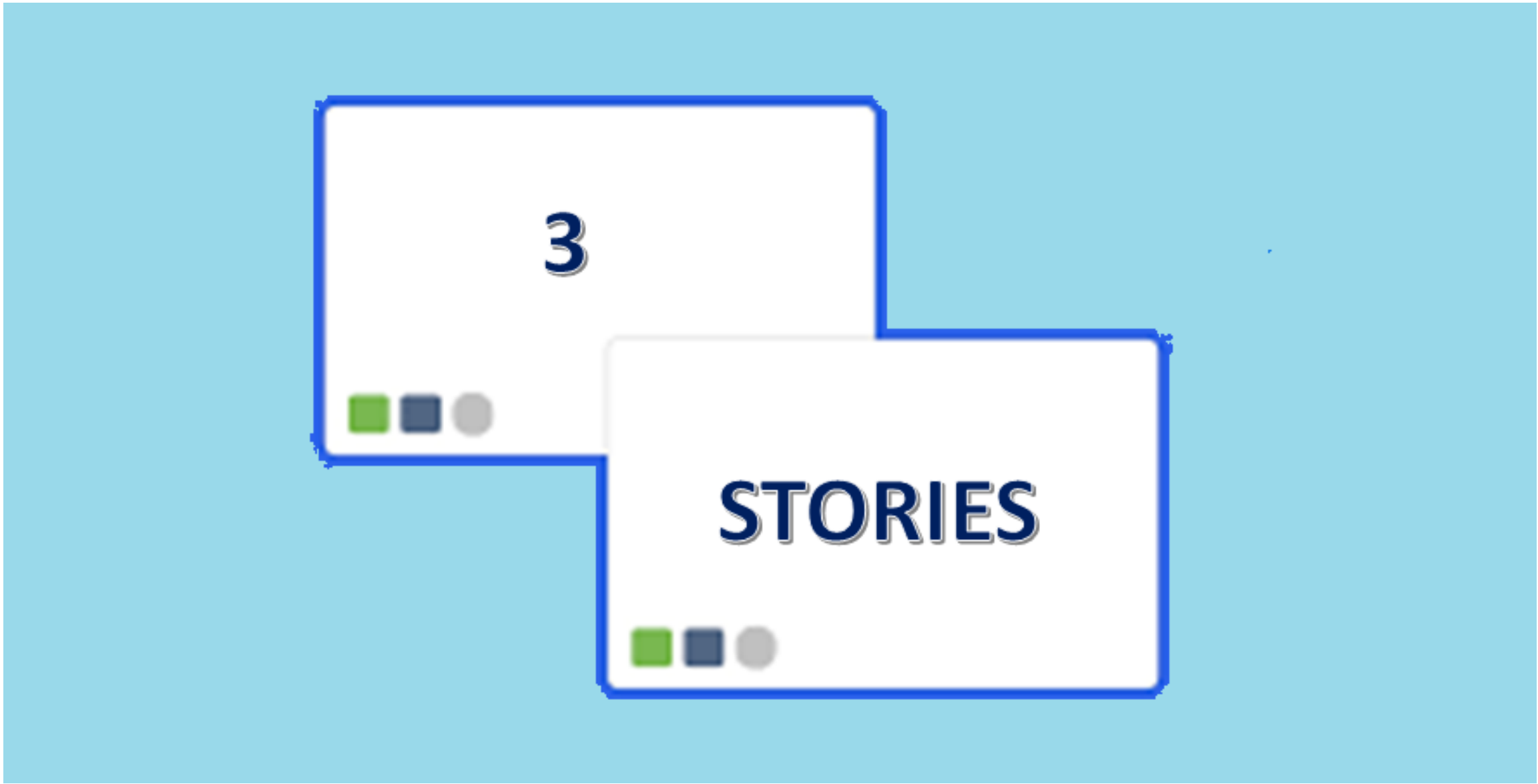
~100
active investors in the sector with an Israeli presence

Multinationals:
32
with exposure to Digital Health

Hubs, including hospitals & HMOs innovation platforms:
23 Digital Health hubs, including 11 accelerators

Incubators:
4
industry focused

Government:
~$300M National Digital Health Plan supports industry development


3
STORIES

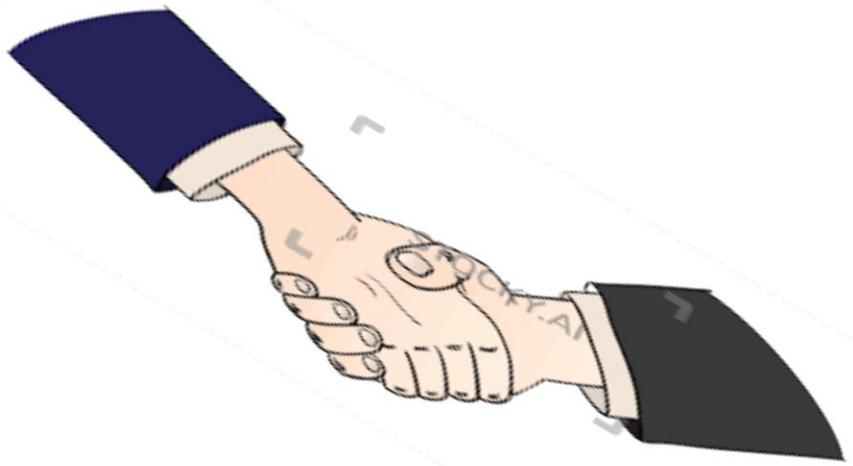
Assuta and Maccabi – Partners in CONNECARE

CONNECARE

an H2020 project on digitally supported integrated care with a joint consortium of 9 partners from 5 European countries

Collaboration for digitally enabled Integrated Care

Maccabi Healthcare Services

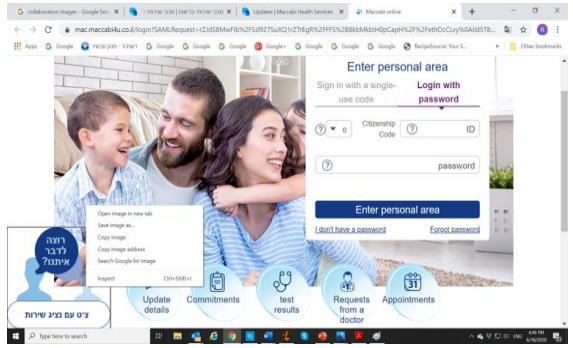


UNIVERSITY HOSPITAL Assuta Ashdod
TAKING CARE OF THE COMMUNITY

DIGITAL MATURITY

- Central Electronic Medical Record
  Every transaction computerized
- E - Laboratory
- E - Prescription
- E - Consultation
- E - visits
- Decision support - Alerts and Reminders
- Registries
- Patient portal – access to information, interaction with doctors, alerts, reminders, appointments

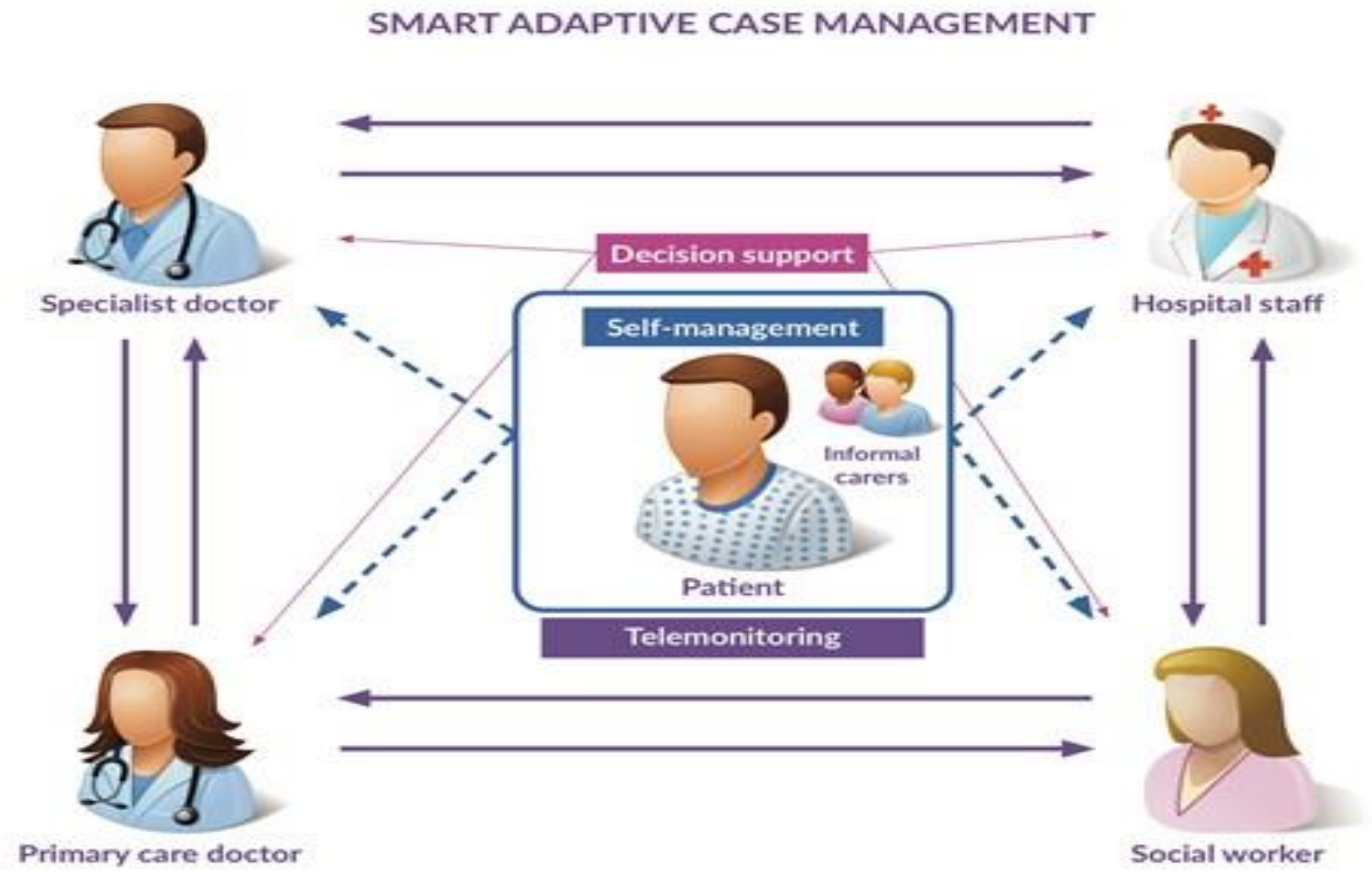
Maccabi Healthcare Services



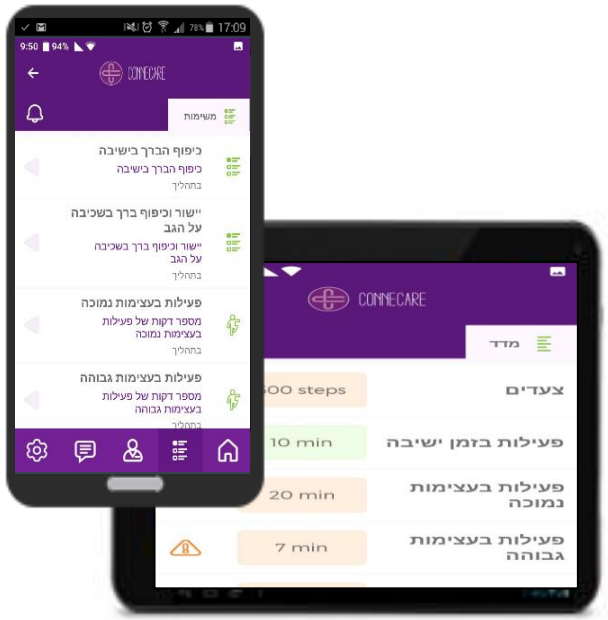
https://www.medscape.com/viewarticle/882873

UNIVERSITY HOSPITAL ASSUTA Ashdod
TAKING CARE OF THE COMMUNITY

THE CONNECARE INTEGRATED CARE MODEL



THREE MAJOR IT COMPONENTS



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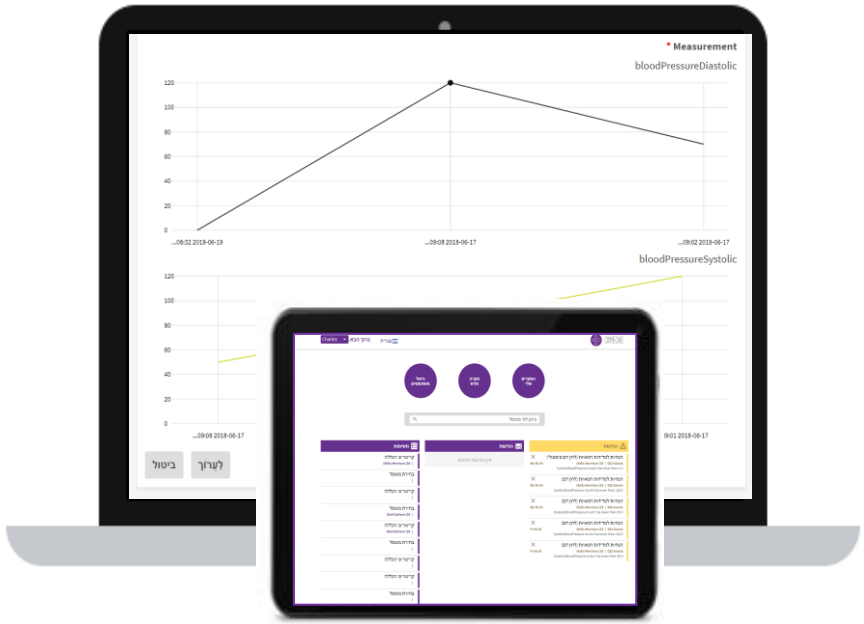


The patient's SMS application on a cell phone or tablet

Fitbit for measuring steps, pulse and sleep quality

The SACM system

in which the nurse, the physician or the physiotherapist will observe the data, and prescribe the tasks for the patient

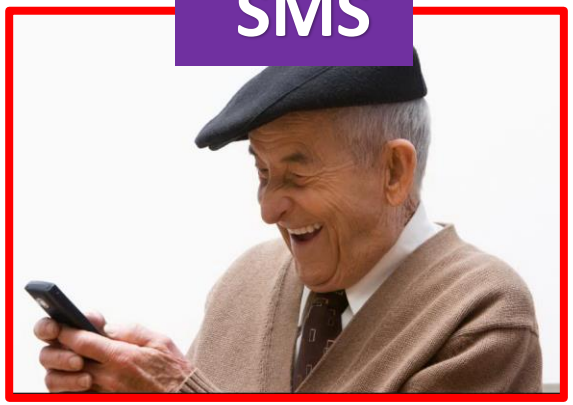
THE INTEGRATED CARE MODEL IN ISRAEL

HOSPITAL

EMR Assuta

SACM

SMS

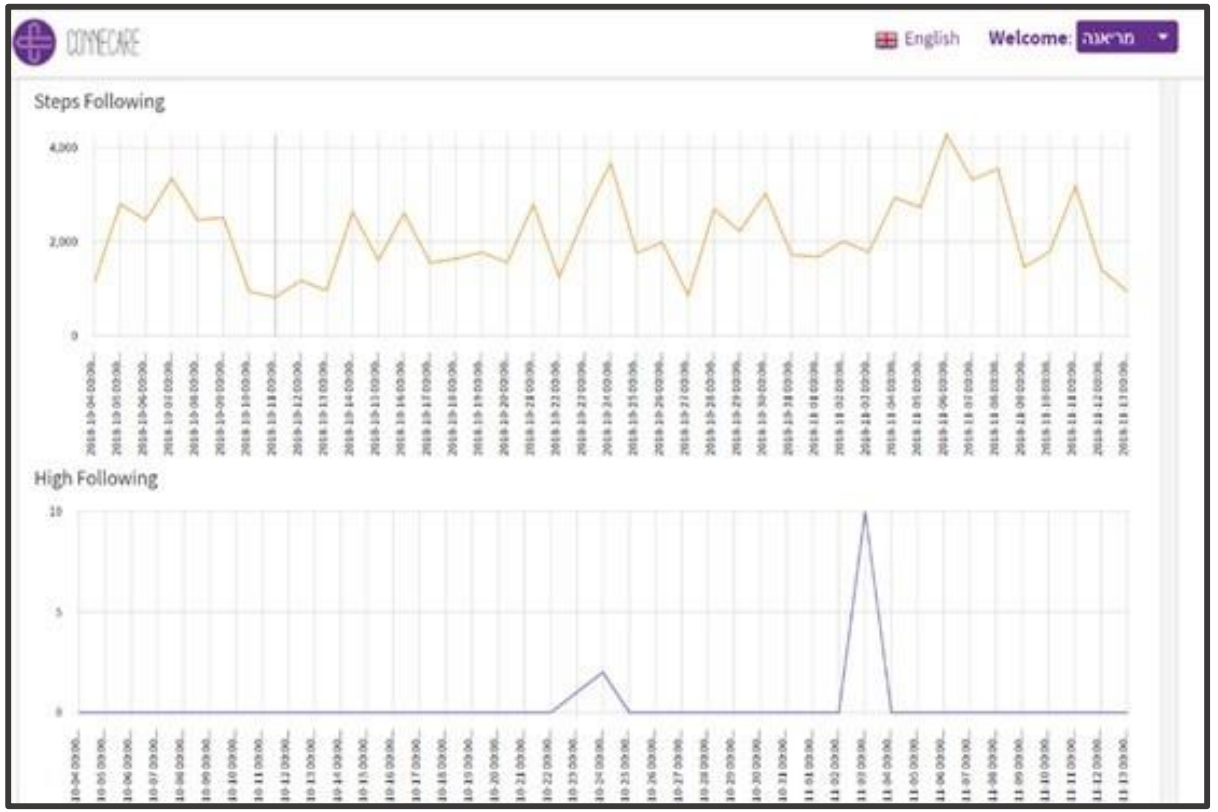


COMMUNITY

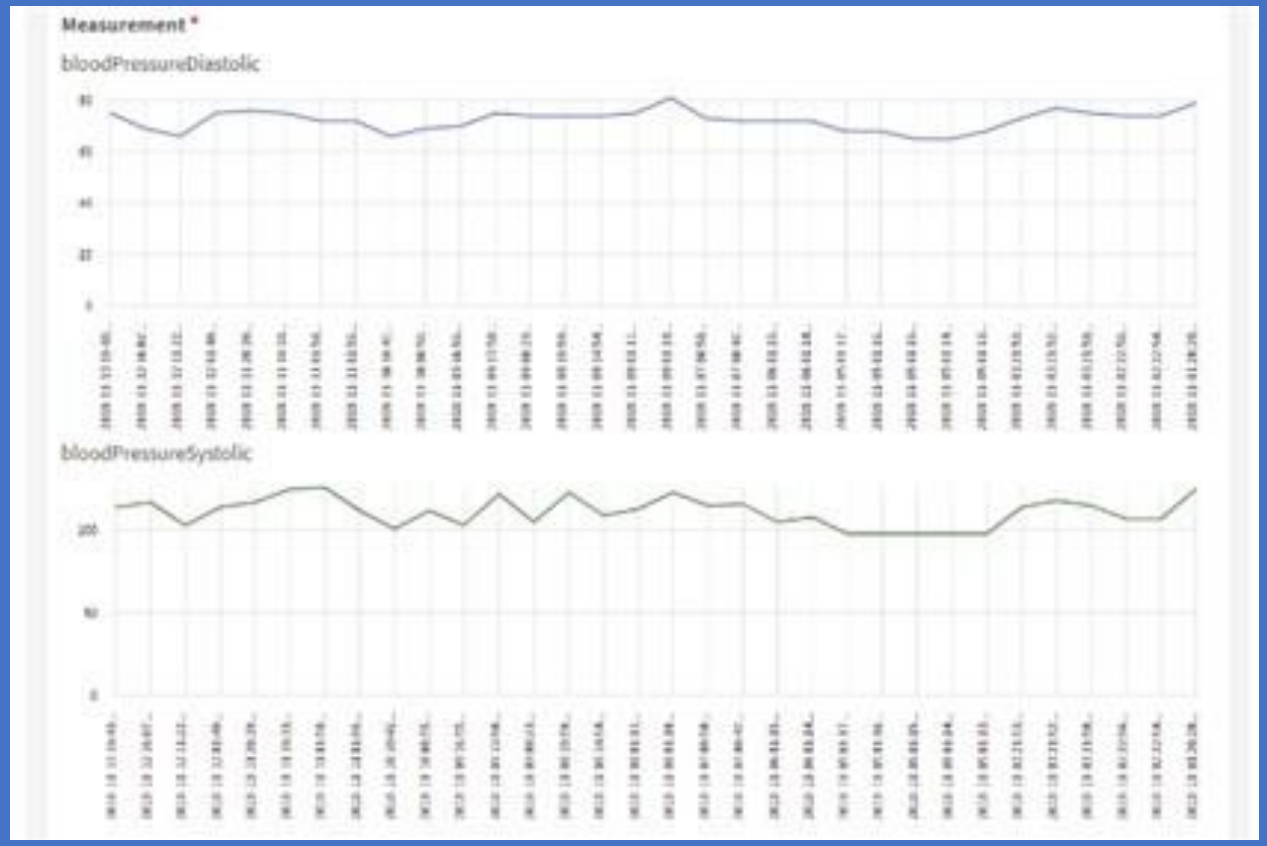
EMR Maccabi

Case and Care Managers

Patient App transmitting steps



Blood Pressure Trends



INTEGRATION IN PRACTICE

HOSPITAL

- Pre-Habilitation program
- Responding to the patient's questions and needs prior to elective surgery
- Building treatment and discharge plans integrated with the community

COMMUNITY

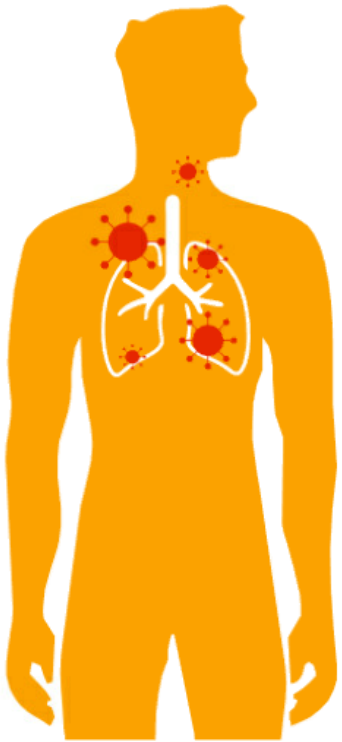
- Patient's discharge summary
- Input from the GP to the patient's treatment plan during the project
- CM-GP communication in case of need (by email or phone)

Patients

- Improving patients involvement and empowerment
- Continuing integrated care of a CM nurse for 3 months
- Facilitating timely appointments, reducing bureucracy

COVID-19 Dashboard

COVID-19 קורונה



Population Management

Visits Dashboard

HR Dashboard

Corona Pandemic Dashboard

Reports

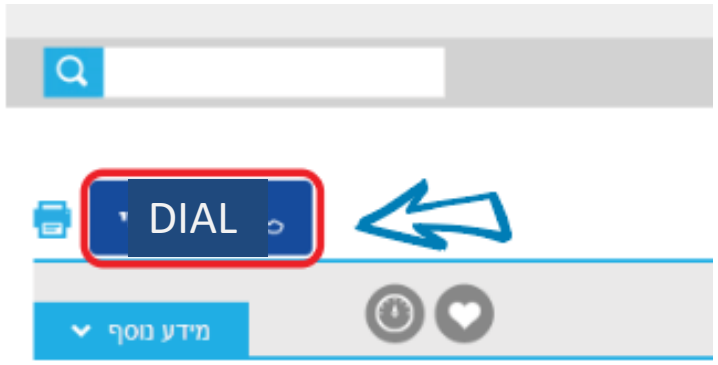
GIS Map

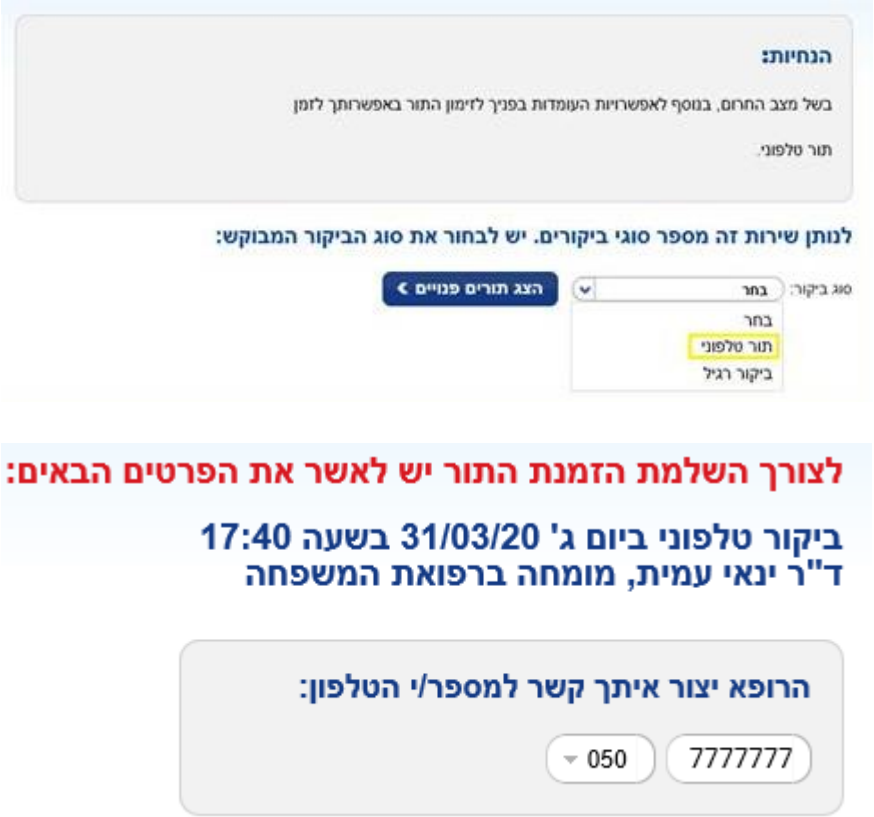
Medical manager Dashboard

Corona Manager Dashboard

http://maccabi-bi/bidashboard/Corona

Maccabi Healthcare Services





Telephone visits

Telephone Visits for Family Physicians and Pediatricians

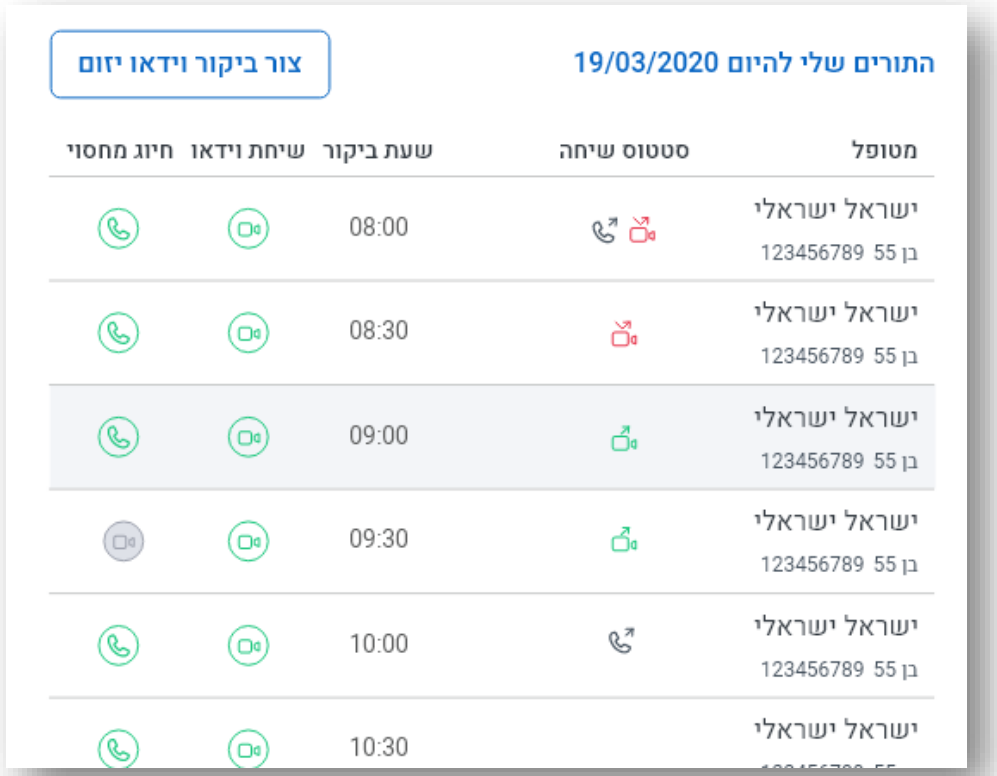
- New type of visit in the doctor's schedule
- Possibility to dial directly from the EMR

Additional Solutions

- The patient sees the option of a telephone visit when he is making an appointment
- Management of the telephone visits in QFLOW
- Patient can update his telephone number in the process of making the appointment
- The doctor automatically dials the updated phone number when he clicks on the "hidden dial" button
- The patient sees he is receiving a call from the doctor but the phone number is hidden

Maccabi Healthcare Services

Maccabi “Hybrid”



- New Infrastructure for video visits between doctors and patients
- The solution enables the doctor to initiate a video call and to change a telephone visit to a video visit

Maccabi Healthcare Services

Monitoring and Caring for COVID Patients at Home

- Regional Telemedicine Centers
- Patients are contacted daily
- Patients have an app – Proms and biomeasures
- App transmits to the Telemedicine Center monitoring system
- Care managers monitor and respond
- Saturation levels and fever automatically entered into the Family doctor's EMR

Maccabi Healthcare Services

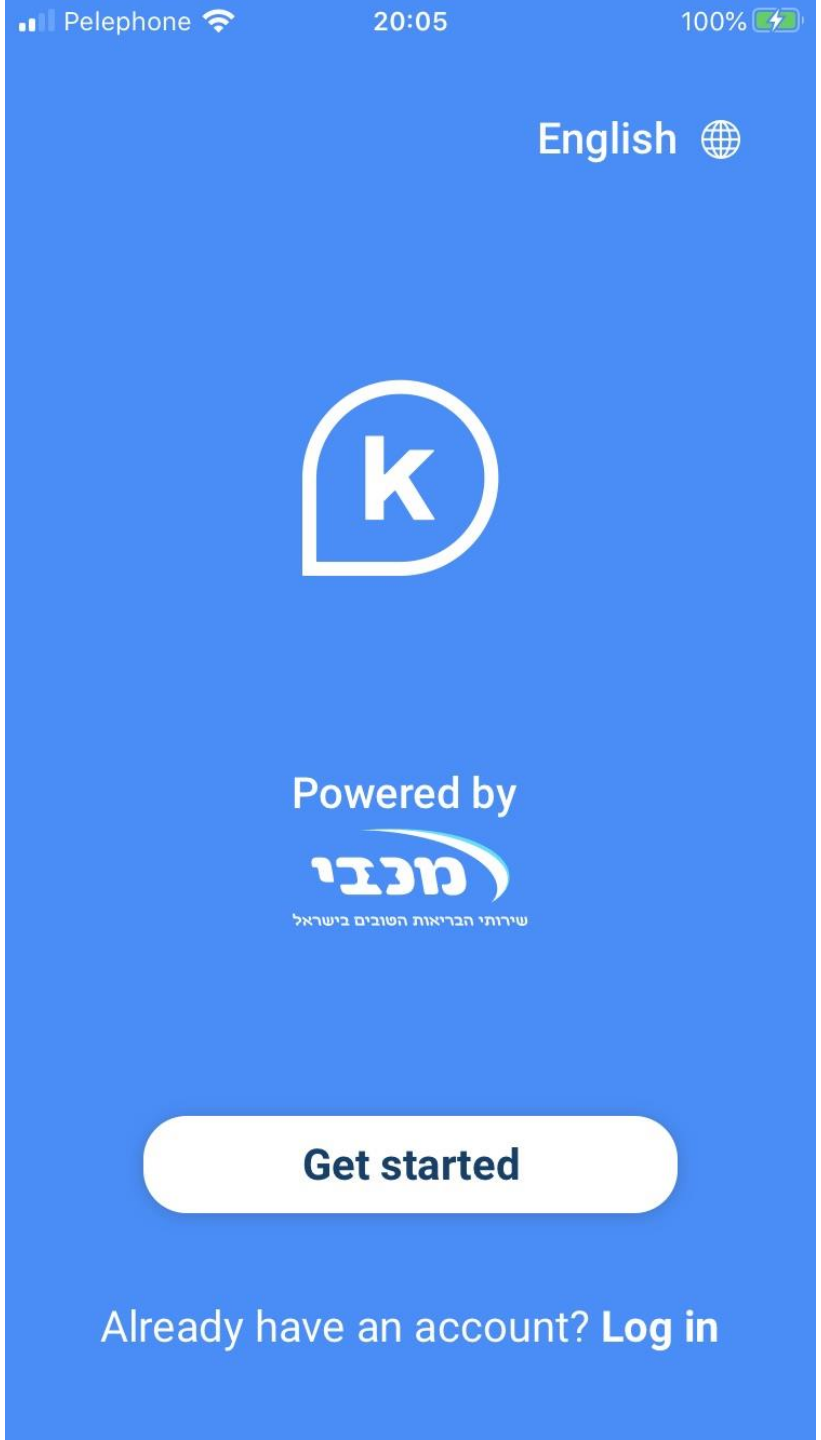
Meet K – the game-changing new application that replaces health search engines.

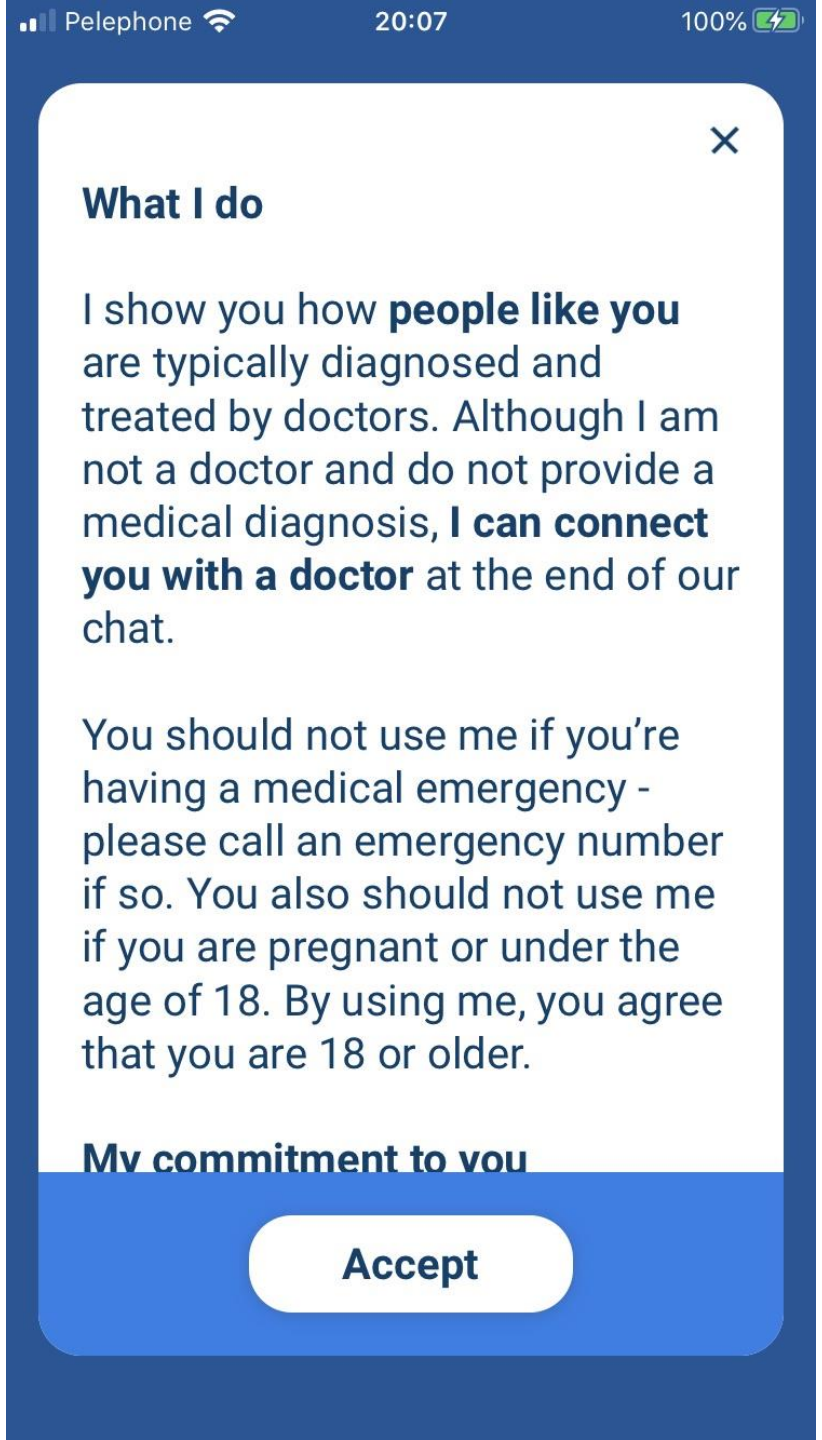
- The latest innovation by the MK&M (Morris Kahn & Maccabi) Big Data Science Institute. Cutting through a massive amount of data, collected during hundreds of millions of doctor visits over the last 25 years, it offers users a personalized and highly reliable reading of what their symptoms might be saying..
- Based on a sophisticated algorithm developed by a wide team of mathematicians and physicians that has been fed information from millions upon millions of doctors visits, and as a smart system, it is learning and improving itself all the time.
- With each additional use, it perfects its knowledge and further refines the questions to be presented to the next user.

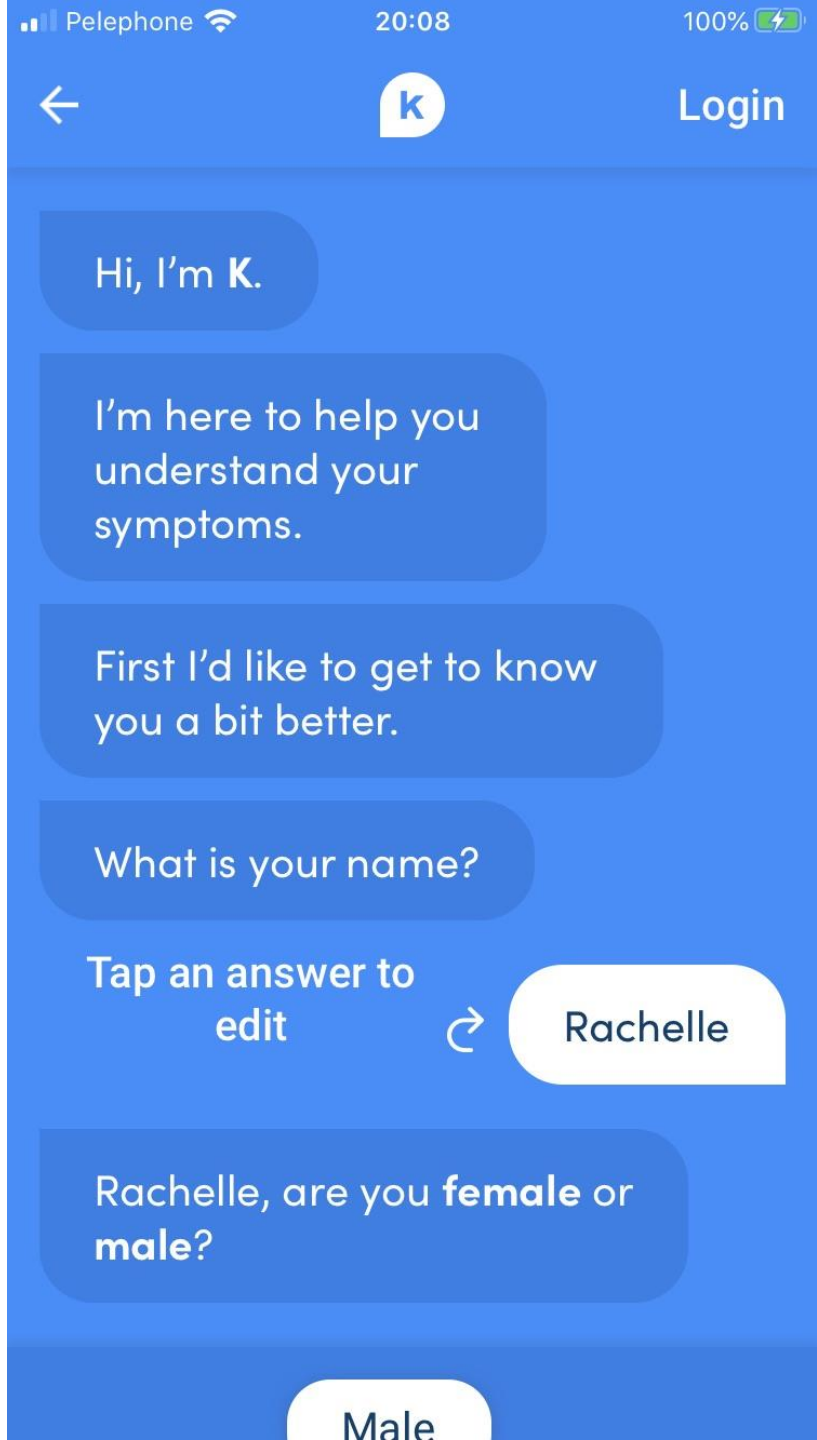
Download on the App Store

https://www.maccabitech.com/big-data/k-app/

GET IT ON Google Play


Pelephone
20:05
100%
English
Powered by
מכבי
שירותי הבריאות הטובים בישראל
Get started
Already have an account? Log in


Pelephone
20:07
100%
What I do
I show you how people like you are typically diagnosed and treated by doctors. Although I am not a doctor and do not provide a medical diagnosis, I can connect you with a doctor at the end of our chat.
You should not use me if you're having a medical emergency - please call an emergency number if so. You also should not use me if you are pregnant or under the age of 18. By using me, you agree that you are 18 or older.
My commitment to you
Accept


Pelephone
20:08
100%
Login
Hi, I'm K.
I'm here to help you understand your symptoms.
First I'd like to get to know you a bit better.
What is your name?
Tap an answer to edit
Rachelle
Rachelle, are you female or male?
Male

Pelephone 20:09 100%

Login

1,121,091 people of your age and sex. I'll be comparing your symptoms to theirs.

What's your email address? You can use it to log in and review your medical history.

example@email.com

I Hi If

Q W E R T Y U I O P

A S D F G H J K L

Z X C V B N M

123 space @ . return

Pelephone 20:11 100%

Headache

47K people like me

Let me ask you a few questions about your **Headache**.

How long have you had your headache?

Today

Less than a week

A month or less

1-3 months

More than 3 months

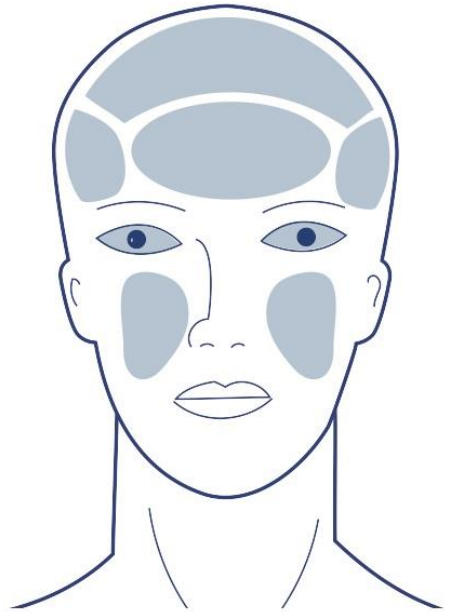
Years ago

Pelephone 20:12 100%

Headache

Tap where it hurts:

Front Side Back



Don't know

See diagram

Headache

< 50 people like me

Hoarseness, Post-nasal drip

Are you currently experiencing any of the following symptoms?

Jaw joint pain

Chills

Plugged ears

None of the above

Pelephone 20:24 100%

Headache

No

Why are you telling me about these symptoms?

I don't know what I have and wanted to learn from K

Ok, the results I'm about to show you **are not a diagnosis or medical advice**. Please seek immediate medical care if your symptoms seem serious.

Ok, show me

Pelephone 20:24 100%

Headache

Ok, show me

Based on what you told me, this is how **59,567** cases like yours turned out:

81% **Upper Respiratory Infection**

< 50 people had this

19% **Acute Sinusitis**

< 50 people had this

Learn more

Upper Respiratory Infection

223315 females age 75

Concerning symptoms

People like you seek medical care in person if:

- They develop shortness of breath or difficulty breathing
- They develop chest pain or chest pressure
- They begin to cough up blood
- They develop a fever over 100.4 F

Symptoms you reported

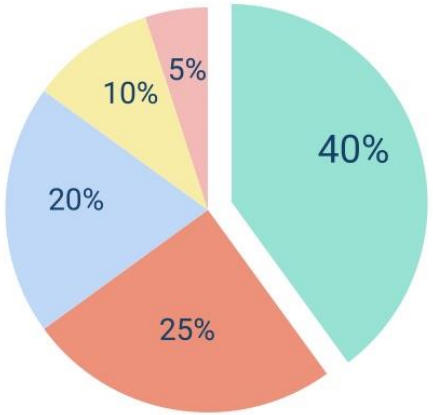
Keep an eye on your symptoms, which are common with Upper Respiratory Infection.

Cough

Acute Sinusitis

108867 females age 75

Of the **80%** of women who were **prescribed medicine**, here's what they took:



1

Ibuprofen **40%**

Brand Names: Advil, Adex, Nurofen
Category: NSAIDs

Relieves pain and reduces fevers by stopping the synthesis of chemicals in

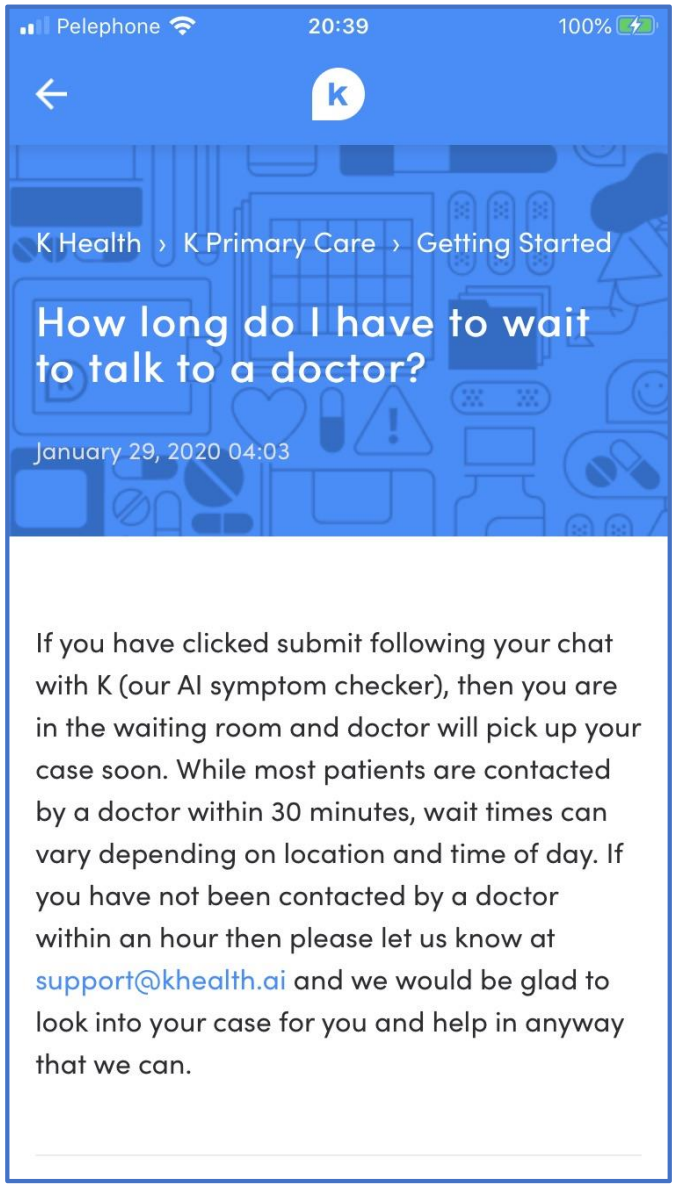
K Health › K Primary Care › Getting Started

What hours are doctors available?

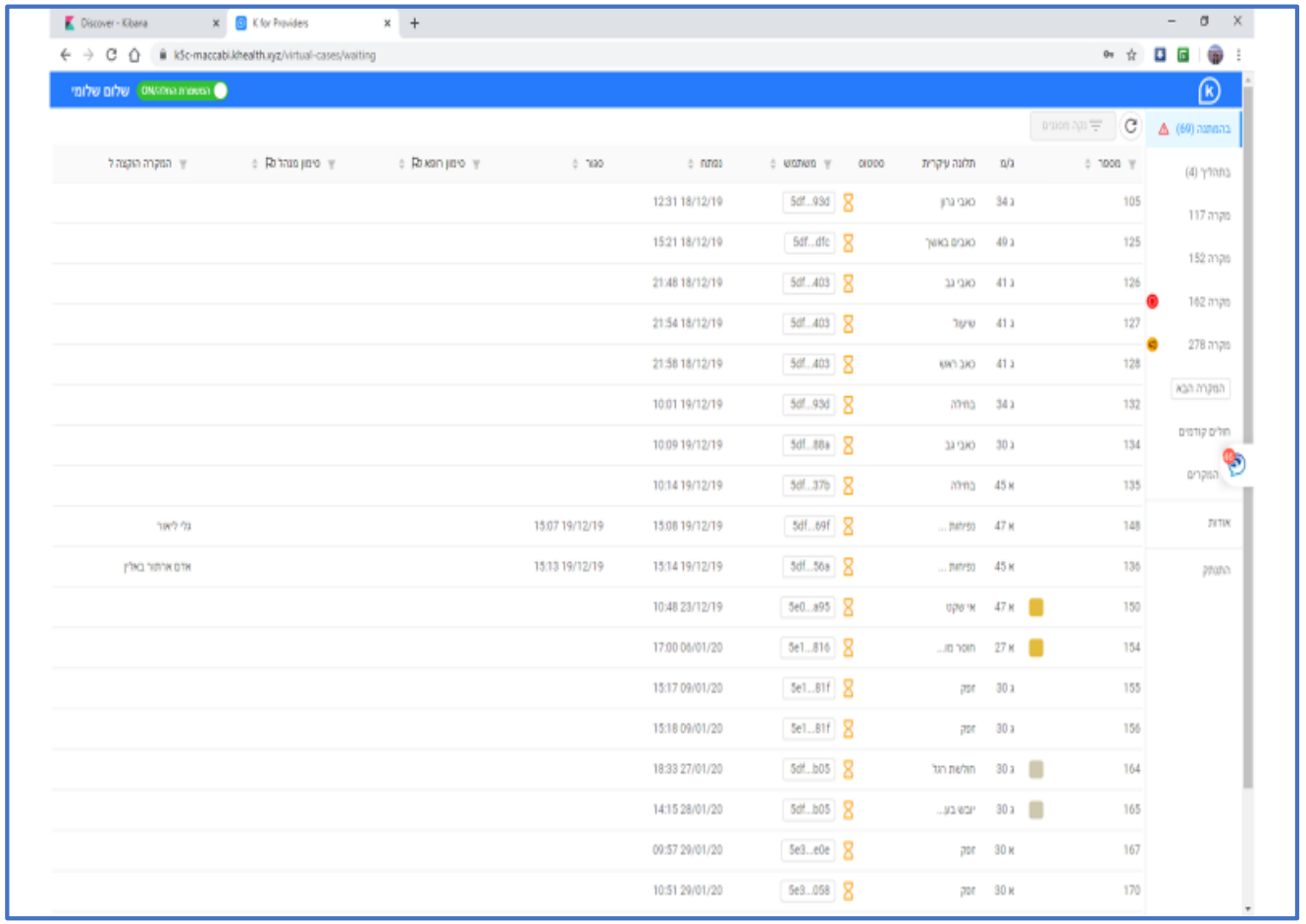
February 10, 2019 17:52

Chatting with a Doctor is available from 11am to 11pm ET, 7 days a week, in select states. Hours and availability may change, but the most up to date hours will always be presented in the app when you choose to share your report with a doctor.

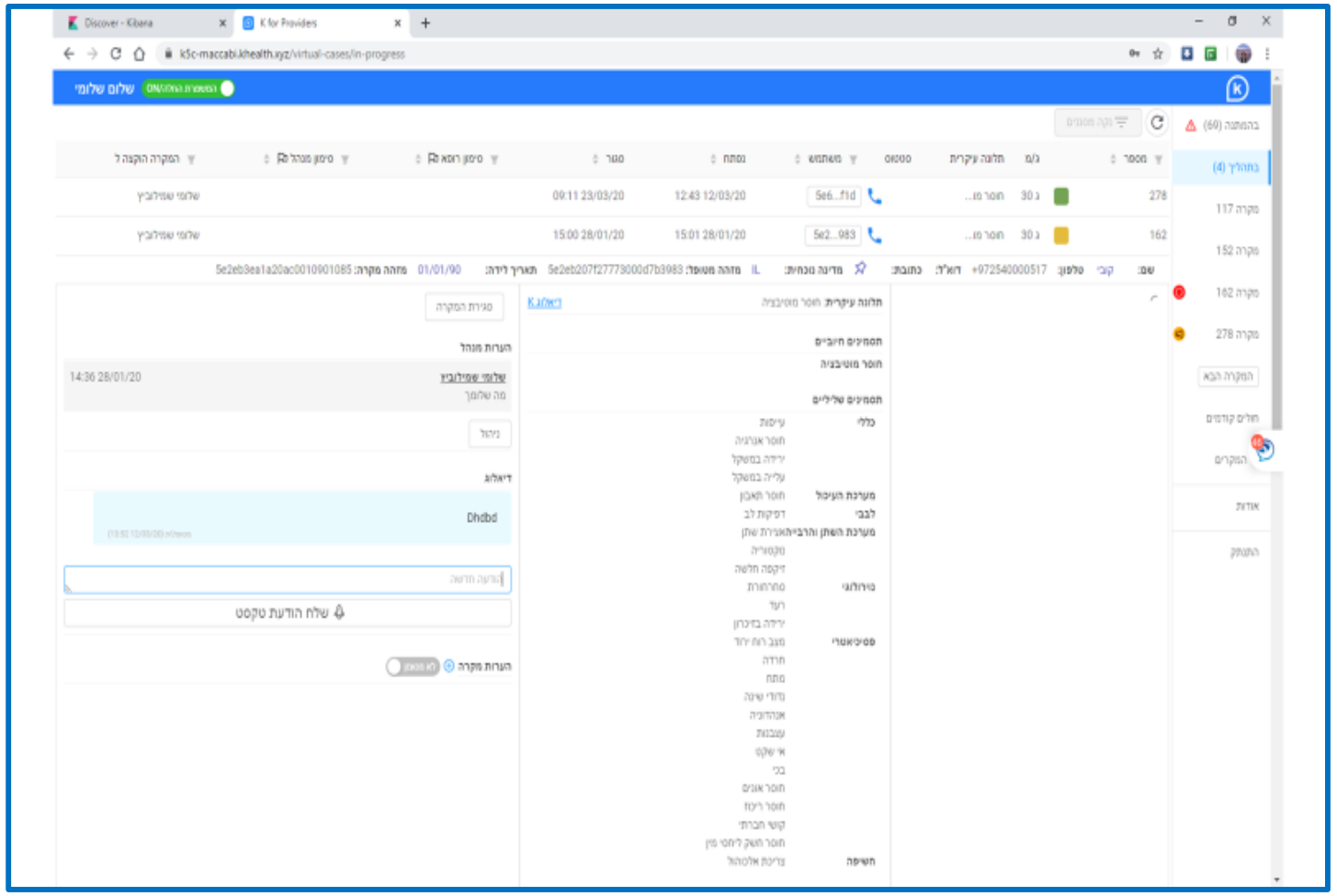
Please note that cases that are submitted within 30 minutes of 11pm may not be addressed until the following morning depending on patient volumes.

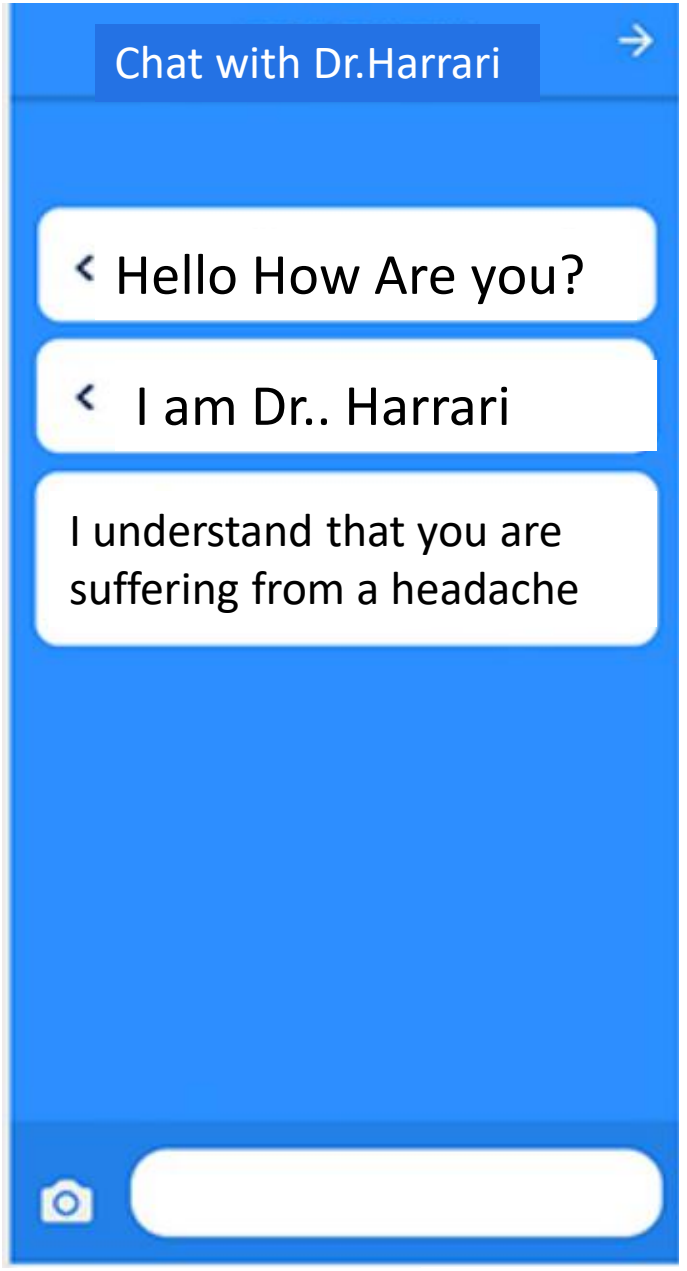


The doctor sees all of the patients who have requested a chat in the “K” Portal

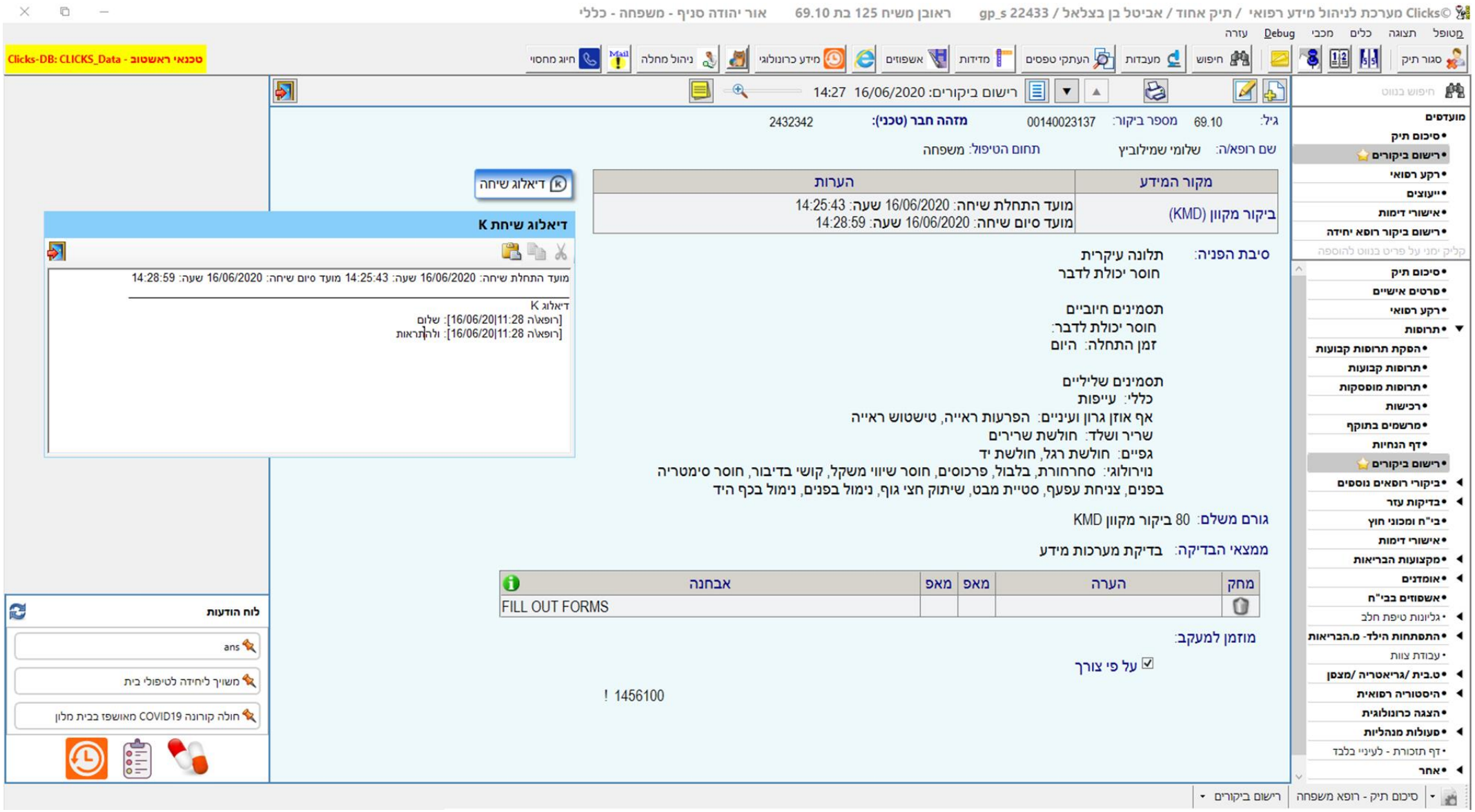


The doctor sees all of the problems and symptoms that the patient has chosen using the “K” app and initates the chat with the patient





All of the information from the K portal is automatically transmitted to the Maccabi EMR for the patient including the doctor's decision for treatment/follow-up



Some Observations

- We are progressing toward digitally enabled integrated care
- Technology is not really a barrier
- Organizational culture and processes, clinical staff attitudes and values, inter-organizational relationships, interpersonal relationships
- Crisis such as COVID- is a great accelerator
  - Telemedicine has flourished
  - The barrier between the EMR and Patient reported data is changing
- Will these changes continue and be sustainable post-COVID?

THANK YOU