

# MEDgical.ai

You save lives, we note it!

# The Problem

**50%**  
of medical working hours are  
dedicated to administrative tasks



**1** Low medical productivity and healthcare inefficiency

Portuguese NHS:  
annualy contracts **60 million medical hours**

▼  
**30 million hours wasted** in administrative tasks

costs: **600 million €** annually

**2** Deterioration of the doctor-patient relationship

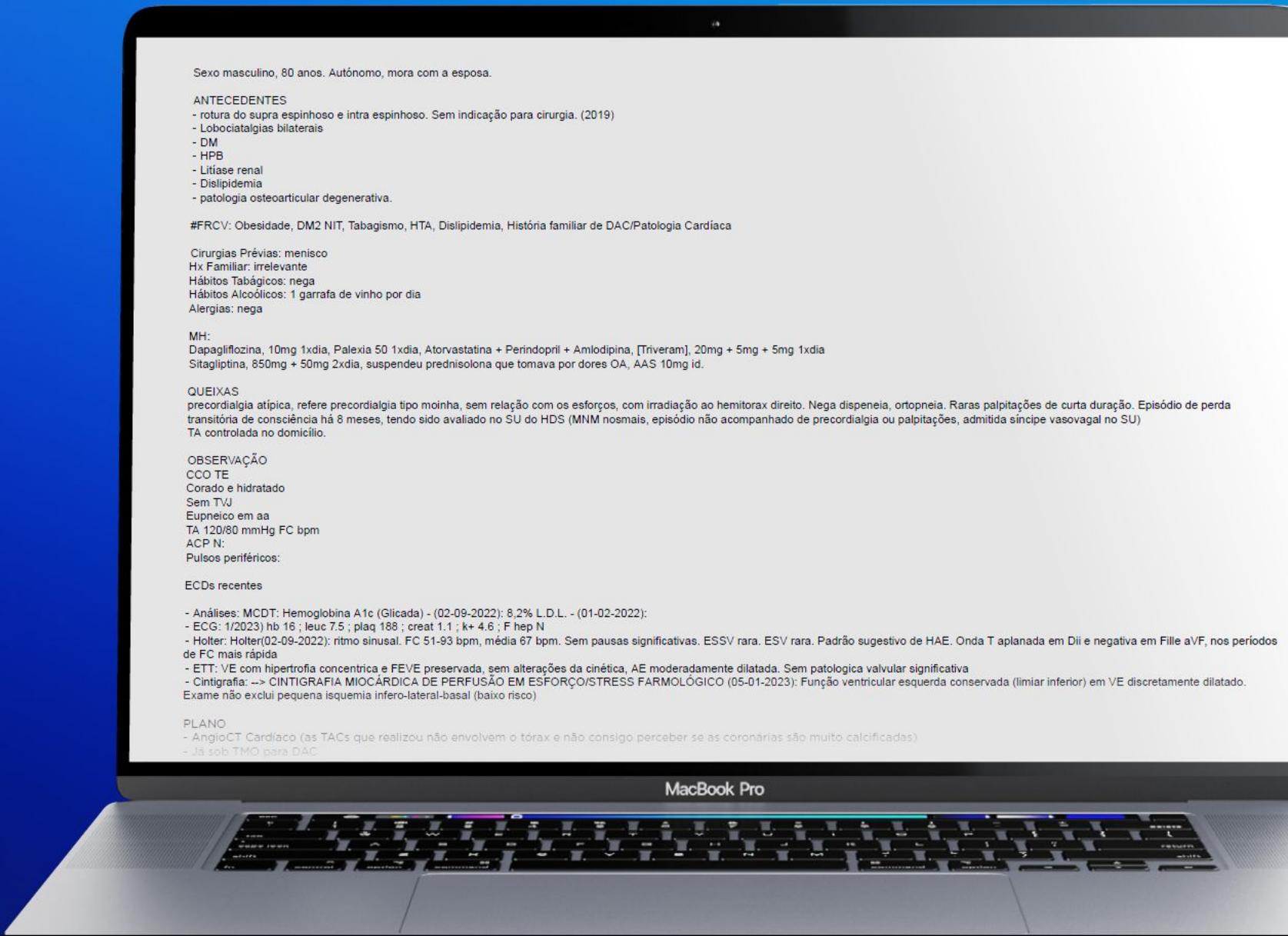
**3** Medical burnout leading to increased likelihood of clinical errors

## The Problem

Note writing time  
during **30 min** medical  
consultation: **> 10 min**

Daily cost after 1 day of  
consultation: **> 50 euros**

## Real-life example of medical consultation notes



Sexo masculino, 80 anos. Autônomo, mora com a esposa.

**ANTECEDENTES**

- rotura do supra espinhoso e intra espinhoso. Sem indicação para cirurgia. (2019)
- Lobociatalgias bilaterais
- DM
- HPB
- Litíase renal
- Dislipidemia
- patologia osteoarticular degenerativa.

#FRCV: Obesidade, DM2 NIT, Tabagismo, HTA, Dislipidemia, História familiar de DAC/Patologia Cardíaca

Cirurgias Prévias: menisco

Hx Familiar: irrelevante

Hábitos Tabágicos: nega

Hábitos Alcoólicos: 1 garrafa de vinho por dia

Alergias: nega

MH:

Dapagliflozina, 10mg 1xdia, Palexia 50 1xdia, Atorvastatina + Perindopril + Amlodipina, [Triveram], 20mg + 5mg + 5mg 1xdia

Sitagliptina, 850mg + 50mg 2xdia, suspendeu prednisolona que tomava por dores OA, AAS 10mg id.

**QUEIXAS**

precordialgia atípica, refere precordialgia tipo moimha, sem relação com os esforços, com irradiação ao hemitorax direito. Nega dispneia, ortopneia. Raras palpitações de curta duração. Episódio de perda transitória de consciência há 8 meses, tendo sido avaliado no SU do HDS (MNM normais, episódio não acompanhado de precordialgia ou palpitações, admitida sincipe vasovagal no SU) TA controlada no domicílio.

**OBSERVAÇÃO**

CCO TE

Corado e hidratado

Sem TVJ

Eupneico em aa

TA 120/80 mmHg FC bpm

ACP N:

Pulsos periféricos:

ECDs recentes

- Análises: MCDT: Hemoglobina A1c (Glicada) - (02-09-2022): 8,2% L.D.L. - (01-02-2022):
- ECG: 1/2023) hb 16 ; leuc 7.5 ; plaq 188 ; creat 1.1 ; k+ 4.6 ; F hep N
- Holter: Holter(02-09-2022): ritmo sinusal. FC 51-93 bpm, média 67 bpm. Sem pausas significativas. ESSV rara. ESV rara. Padrão sugestivo de HAE. Onda T aplanaada em DII e negativa em FII e aVF, nos períodos de FC mais rápida
- ETT: VE com hipertrofia concentrica e FEVE preservada, sem alterações da cinética, AE moderadamente dilatada. Sem patologica valvular significativa
- Cintigrafia: --> CINTIGRAFIA MIOCARDICA DE PERFUSÃO EM ESFORÇO/STRESS FARMOLÓGICO (05-01-2023): Função ventricular esquerda conservada (limiar inferior) em VE discretamente dilatado. Exame não exclui pequena isquemia infero-lateral-basal (baixo risco)

**PLANO**

- AngioCT Cardíaco (as TACs que realizou não envolvem o tórax e não consigo perceber se as coronárias são muito calcificadas)
- Já sob TMO para DAC

MacBook Pro

# The Solution is **MEDgical.ai**

**an artificial intelligence  
platform capable of:**



Generating medical notes for  
a consultation based on audio  
recordings, automatically and  
in real-time



Analyzing, summarizing, and  
autonomously creating most of the  
relevant clinical documentation in  
medical practice



Mobile app + web page  
without the need for hospital  
healthcare software integration

Key Feature 1

# Auto-generating real-time medical consultation notes



Normal medical consultation, where a patient interacts with the doctor



MEDgical.ai captures audio during the consultation and transcribes it in real-time, using advanced voice recognition software



Consultation transcription is then imported into MEDgical.ai system for AI processing



MEDgical.ai automatically generates a structured consultation note



# THE PROTOTYPE

## A VIDEO IS WORTH A THOUSAND PICTURES!

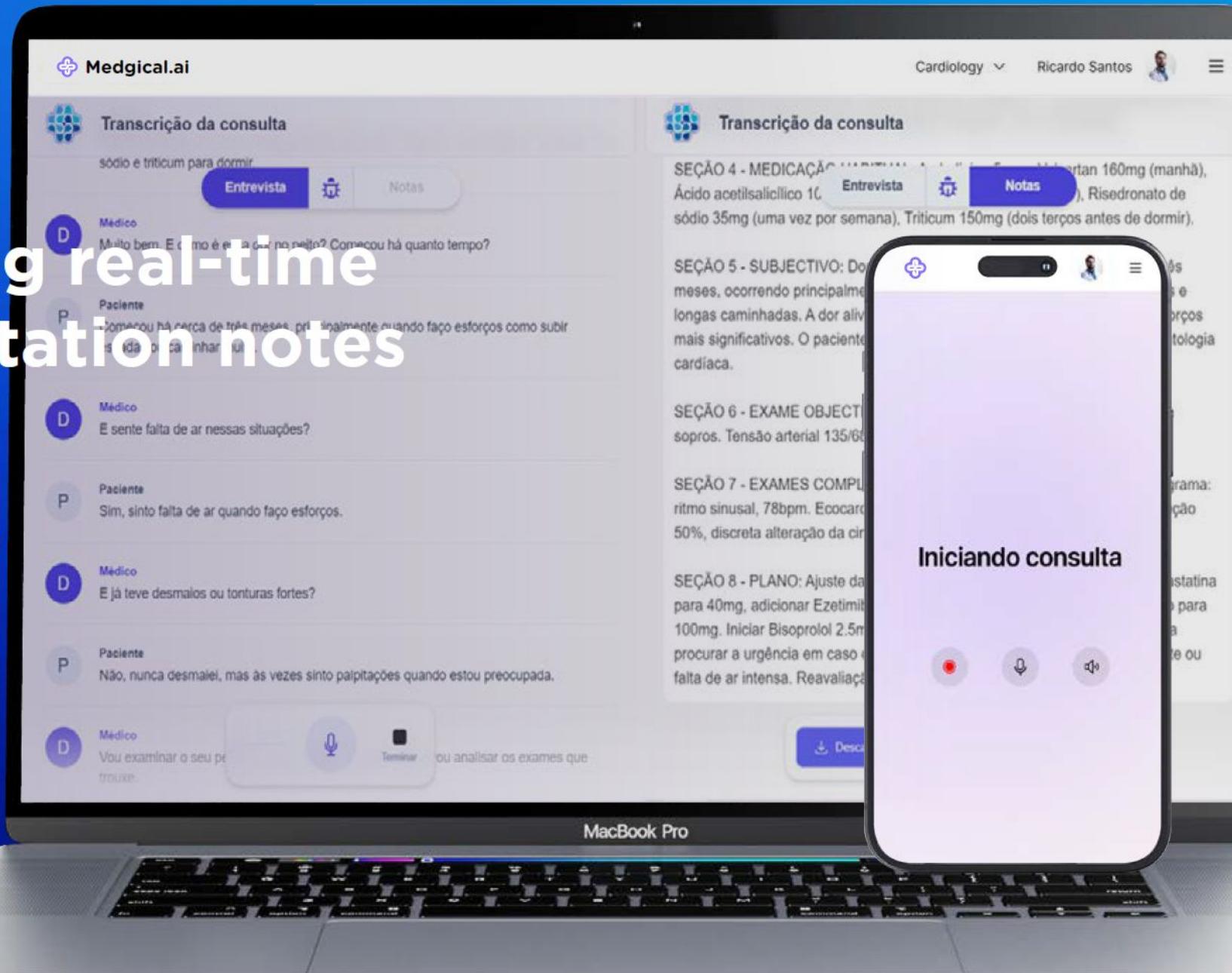


### Key Feature 1

# Auto-generating real-time medical consultation notes

<6% mistakes (minor - adding too much information, over/under citing symptom description...)

<1min of editing time

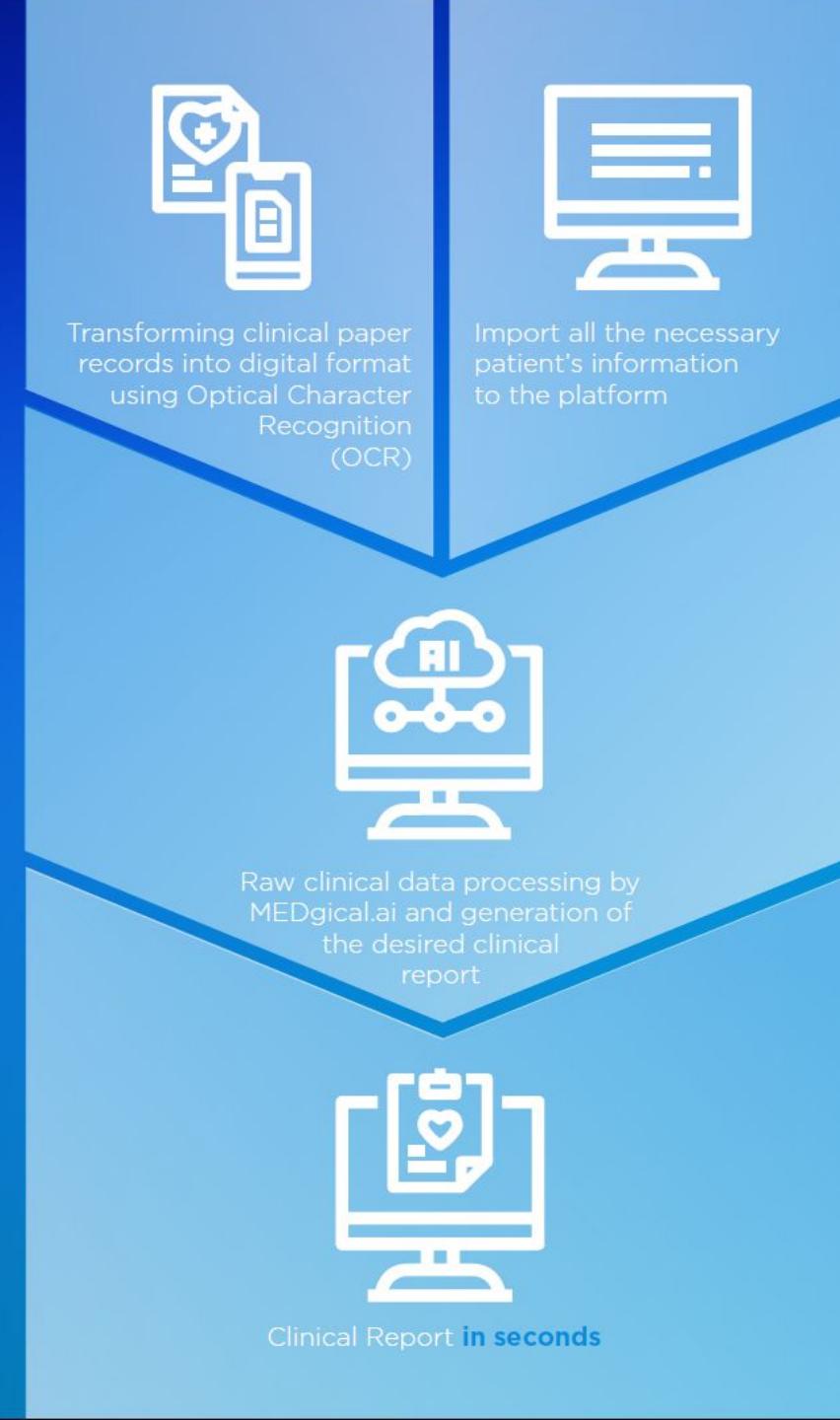


The image shows a laptop screen displaying the MEDgical.ai software interface. The interface is a digital medical consultation tool. It features a conversational format between a 'Médico' (Doctor) and a 'Paciente' (Patient). The doctor asks questions, and the patient provides answers. The software then generates a structured medical note. The note includes sections such as 'Transcrição da consulta', 'SEÇÃO 4 - MEDICAÇÃO', 'SEÇÃO 5 - SUBJECTIVO', 'SEÇÃO 6 - EXAME OBJECTIVO', 'SEÇÃO 7 - EXAMES COMPLEMENTARES', and 'SEÇÃO 8 - PLANO'. The generated note is highly detailed, reflecting the conversation. To the right of the laptop, a smartphone displays a simplified version of the app's interface, showing a button labeled 'Iniciando consulta'.

## Key Feature 2

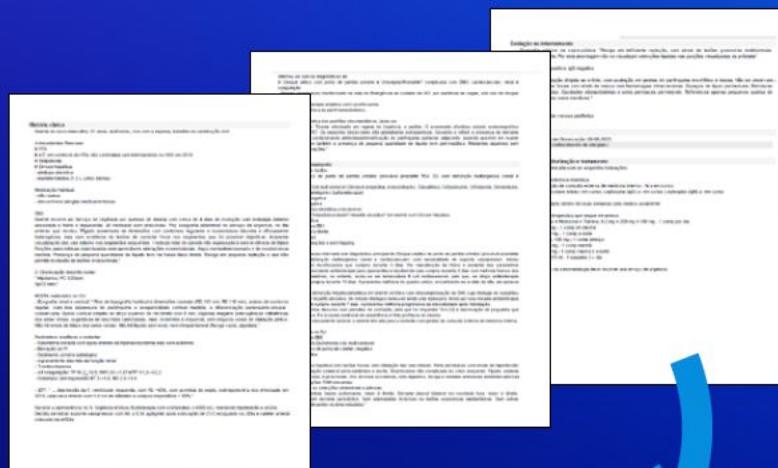
# Clinical Reports

Analyzing, summarizing, and autonomously creating most of the relevant clinical documentation in medical practice (discharge and admission notes, clinical reports, hospital referral notes...)



## The Solution

# Key Feature 2 Clinical Reports



Time to write  
a discharge note

**> 25 min**

Estimated time to complete  
a discharge note with MEDgical.ai

**< 10 min**

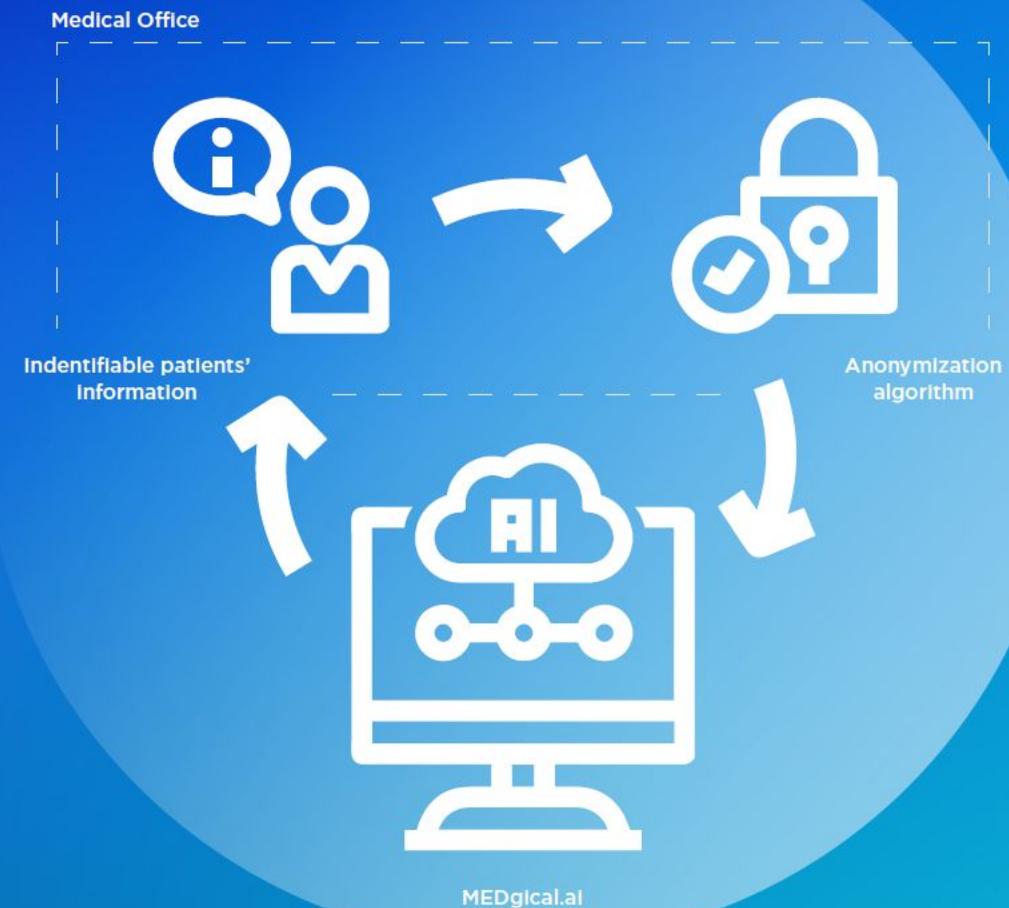
## The Solution

# Security Assured

**MEDgical.ai will not store any data**  
(audio, transcript or final notes)

### Anonymization algorithm

Identifiable patients' information will always be anonymized before leaving the office for AI processing



## The Solution

### Other Core Features

## Deep Learning

**Adapt the software** to each doctor's unique style and build **customer loyalty**.

Continuous software improvement.

## Ask the Guidelines

MEDgical.ai will be able to answer questions based on **relevant international guidelines and NOCs** (Portuguese clinical guidelines)

### Upcoming Features

## Diagnostic Test Requisition

Integrate with the institution's software to **voice prompt exam and test requests**. Example: Request profile 1 analysis and a cardiac CT.

## Other Professionals

**Expansion to other professionals** with a high bureaucratic burden and clinical notes (psychologists, nutritionists, nurses...)

# The Impact

**1 shift**  
on average before  
clinicians start  
using autoscribe  
for every visit

- 2 hours  
of  
administrative  
work daily

75%  
of doctors  
report higher  
quality medical  
notes

25%  
reduction in  
consultation  
time

**Less**  
dependence  
on overtime

**More**  
quality of work and  
satisfaction (patients  
and doctors)

+ 2.5M  
consultations/year

+ 3M  
hours dedicated to  
patient care/year

60M €  
in savings

Results  
attainable with a  
20% market  
share of the  
Portuguese NHS



# Understanding Our Competitors

	MEDgical AI	Nabla	Deepcura	Abridge	Deepscribe
English/US Health TEC Companies					
Real time medical consultation notes	✓	✓	✓	✓	✓
Other clinical reports (e.g., Referral and discharge notes...)	✓	✗	✗	✗	✗
Customized reporting	✓	✓	✓	✗	✗
Portuguese Language / Market Fit for non-US/UK markets	✓	✗	✗	✗	✗
AI to answer clinical questions based only scientific guidelines	✓	✗	✗	✗	✗
Integration with current electronic medical records	✗	✓	✓	✓	✓
No clinical data storage	✓	✓	✗	✗	✗
Price	<u>25-30€/month</u>	119\$/month	90\$/month	200\$/month	Undisclosed
Funding	Seed: ongoing	Series A: 20.6M	Undisclosed	Seed: 5M A Series: 20M	Seed: 7.2M A Series: 30M

# Competitive Advantages

## We are pioneers!

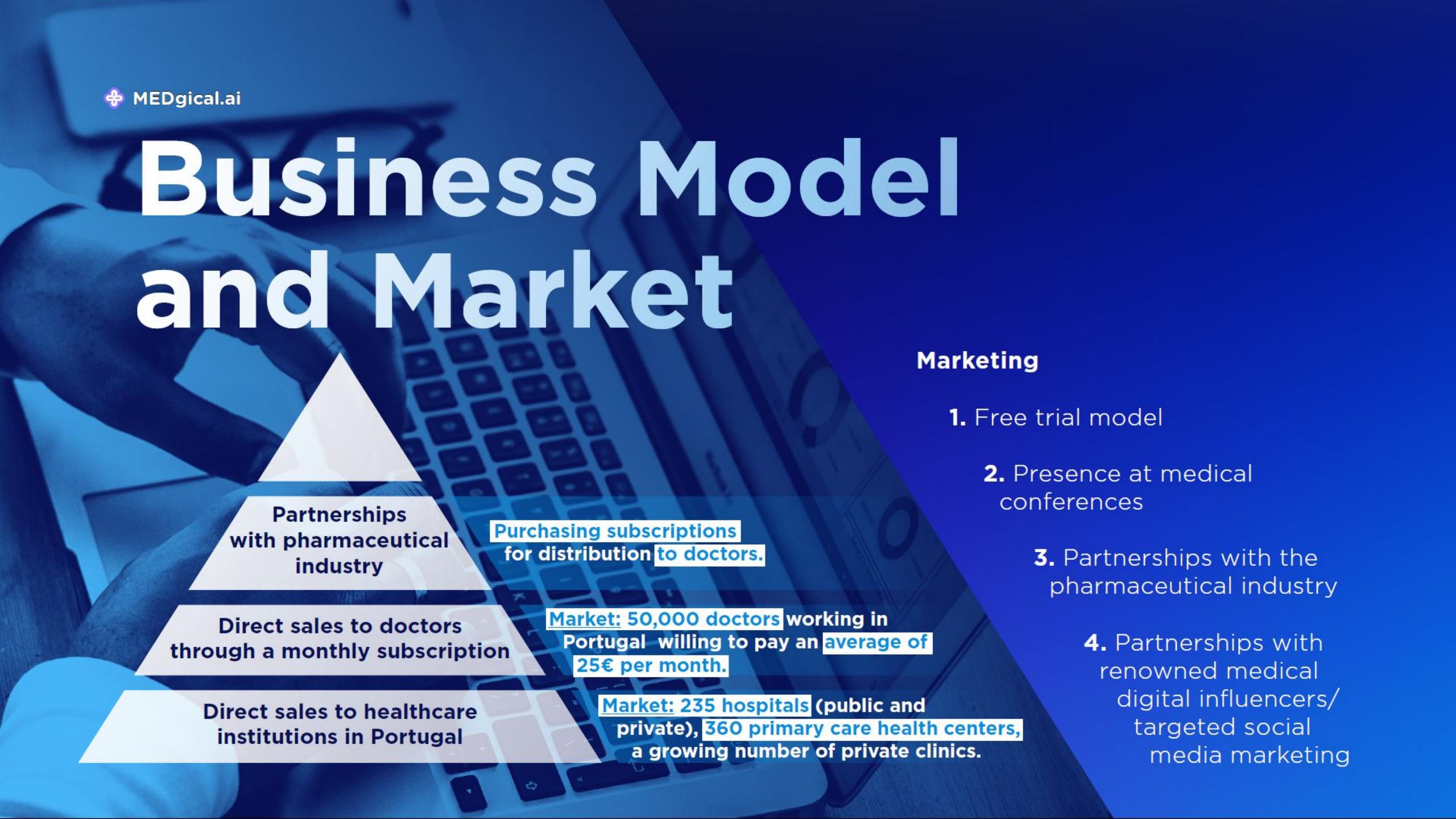
Greenfield Project: There's currently no product specifically designed for the Portuguese-speaking market.

**Competing companies set their prices too high** (\$1,500 to over \$10,000 annually) - **Our software's price will be 4 times lower!**

**Introducing deep learning** - that will adapt the software to each doctor's unique style and build **customer loyalty**.

**Specifically designed for Portuguese language speaking doctors and customized for various medical fields**, delivering far superior results compared to generic notes in english.

# Business Model and Market



Partnerships with pharmaceutical industry

Direct sales to doctors through a monthly subscription

Direct sales to healthcare institutions in Portugal

Purchasing subscriptions for distribution to doctors.

Market: 50,000 doctors working in Portugal willing to pay an average of 25€ per month.

Market: 235 hospitals (public and private), 360 primary care health centers, a growing number of private clinics.

## Marketing

1. Free trial model
2. Presence at medical conferences
3. Partnerships with the pharmaceutical industry
4. Partnerships with renowned medical digital influencers/ targeted social media marketing

# Financial Projections

We anticipate having a **15% share of the Portuguese medical doctors' market** within 1 year

**15%**  
of Portuguese doctors  
**25€ monthly per doctor**  
**2.25 million €**  
annual revenue

**Profit for the employer/doctor**  
(example Portuguese NHS):  
**> 25% productivity = 45 million € annually**

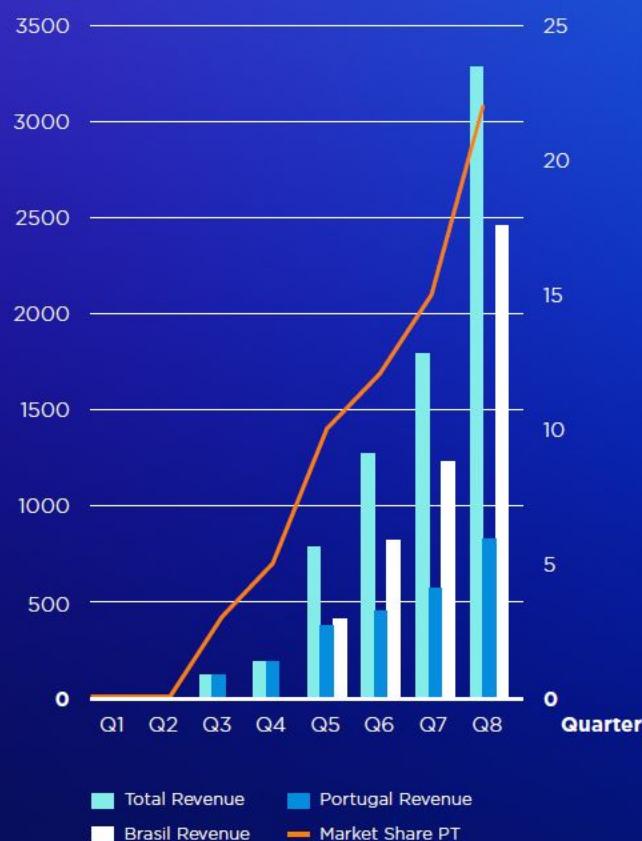
**30%**  
of Portuguese doctors  
**30€ monthly per doctor**  
**5.4 million €**  
annual revenue

**Brazilian market**  
  
545 000 doctors  
  
4 500 hospitals  
**5% share of the market**  
**20€ monthly per doctor**  
**6.5 million €**  
annual revenue

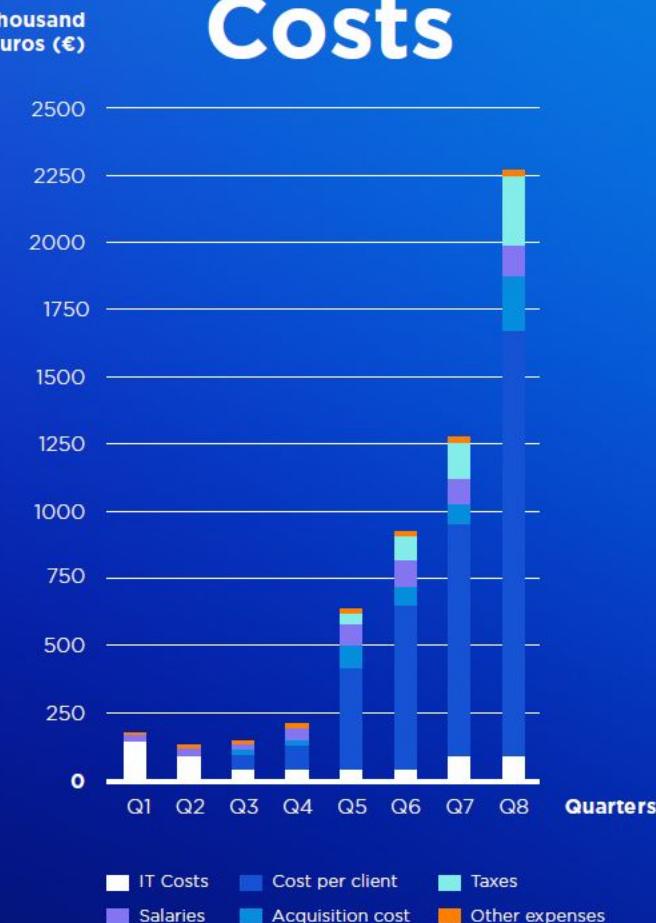
Improved quality of care and greater satisfaction among both clinicians and patients

## Business Model and Market

### Revenue



### Costs



**250.000€**

Implementation Budget

#### Legal advisory

Fine-tuning voice-to-text transcription software for specific medical terms

Recruiting individuals to record hours of selected medical vocabulary

#### Medical advisory across various specialties

Internal medicine, general and family medicine, pediatrics, general surgery, psychiatry

#### Tech team and software platforms

Backend engineer, data scientist, front-end engineer

#### Marketing and others

# Meet the Team



**Bruno Miranda Castilho**

CEO and Founder

Medical doctor, Cardiology.  
Contributor to the app  
Echocardio Notes



**Armando Vieira**

CTO, co-founder

PhD, Data Scientist, Head of Data Science at Hazy, researcher in the field of artificial intelligence and artificial neural networks, author of the book "Business Applications of Deep Learning."



**Eduardo Noronha**

Co-founder

Computer Engineer – Instituto Superior Técnico



**Filipa Fernandes Cordeiro**

Co-founder

Medical Doctor, Child and Adolescent Psychiatry.  
Postgraduate in Legal Medicine and Forensic Medicine

# Timeline & Milestones

## Prototype

- 1. Automatic consultation notes
- 2. Clinical reports
- 3. Ask MEDgical AI

## Prototype 2.0

- 1. Merge clinical audio transcript with written information
- 2. Improved results

## Investment



## Clinical testing

- Partnerships with hospitals already established

1st April 2024

## New features, new medical specialties



## First round of tests

- Mock consultation
- Difficult scenarios
- (frail patients, patient and caretaker)

## Testing on primary care

31st December



## Improved version of MVP

- 5 medical specialties
- Cyber secure

1st March 2024



## Medgical AI 1.0 market release

1st May 2024



## Medgical AI Brazil

January 2025

# Join MEDgical.ai and be part of the solution!



"Family Doctors are faced daily with an excess of bureaucracy that diverts their attention away from the patient, often to the detriment of the doctor-patient relationship. With MEDgical AI, there will be an improvement in the efficiency of these processes, giving back to the doctor time and focus, essential for providing the best care to those who need it."

## **Dr. Maria João Nobre**

**MD, Specialist in General and Family Medicine**  
**Member of the Digital Health Study Group of the Portuguese Association of General and Family Medicine (APMGF)**  
**Consultant in continuous improvement**  
**Entrepreneur**



"Bureaucratic tasks occupy a very significant portion of doctors' time. A software like MEDgical AI will certainly free doctors from many administrative tasks, redirecting that time to what is most important: patient care."

## **Dr. Vítor Baltazar Martins**

**MD, specialist in Cardiology - expert in arrhythmology and cardiac pacing**  
**Director of the cardiology service of Hospital de Santarém, Portugal**  
**President of Ribatejo's Cardiological Association**

# Join MEDgical.ai and be part of the solution!

## 3rd Prize - BI Award for innovation in healthcare 2023



# Join MEDgical.ai and be part of the solution!

## PARTNERS / INVESTORS

Microsoft for Startups

**Founders Hub**

**Partnership:**  
\$5.000 in credits, up to \$150.000

**void<sup>®</sup>**

SOFTWARE

**Investor:**  
100.000€

# MEDgical.ai

You save lives, we note it!

Contact us:

[bruno.castilho@medgicalai.com](mailto:bruno.castilho@medgicalai.com)

+351 917713427

[www.medgicalai.com](http://www.medgicalai.com)