

# Hi, I'm Ada. I can help if you're feeling unwell.



Empowering front-line health workers through an AI-powered infrastructure





## The Challenge

# 4 billion people

lack access to basic health services

Shortage of health workers

Geographical barriers

**Financial barriers** 

\*World Bank Group and WHO 2017 UHC Global Monitoring Report

#### Our Vision

## Our Vision

Everyone on earth has access to the healthcare they need and deserve





#### The World's Personal Health Guide



## 7 years of research and development

Our Reasoning Technology should be designed to solve the problem of health assessment

- for consumers and doctors
- once and for all.





#### 7 years of research and development









#### How Ada differentiates diseases



## Company Overview





#### User Feedback in General



mohamed ayman May 2, 2017 ★★★★

Great. It is like having a doctor in your pocket. Well done guys. 5 stars for your hard work. Keep it up.



Julie brassard April 30, 2017

Figured my health issues faster then my physician... Took him 12 years. ....

#### USA

😤 Love itttr

#### \*\*\*\*\*

#### i love this app!

i have been diagnosed with a few things.. before jumping into this app i decided to give it all of my symptoms and see what it thought i had. the top three answers were all three that i had. i was completely shocked bc the third one was a diagnoses that took my doctors years to find and was very rare! (multiple autoimmune diseases, fibromyalgia, etc)

without a doubt completely thrilled. Translate | View | Reply Show more... v2.4.1 From Over 80,000 Reviews Prosper Ibeabuchi May 2, 2017

This app is just one word, Awesome. I reside in a semi-rural community in Nigeria and my family runs a pharmaceutical store so naturally folks come asking for medical advice and it just feels wrong turning them away, it won't only ruin my family's business reputation, it could potentially close the business but thanks to this app, I can make informed judgements and give them accurate suggestions on what to do about the diagnosis I receive, I also like the fact that the app tells you to consult a doctor after certain analysis. Great app all round

#### Carla ★★★★★ by 74664754?? – Feb 20, 2017

Very good app!!! They were spot on... they said I might have Sjogren's Syndrome which I had already gotten a diagnosis for...

#### User Feedback in LMIC

#### \*\*\*\*

"This app is just one word, Awesome. I reside in a semi-rural community in Nigeria and my family runs a pharmaceutical store so naturally folks come asking for medical advice and it just feels wrong turning them away, it won't only ruin my family's business reputation, it could potentially close the business but thanks to this app, I can make informed judgements and give them accurate suggestions on what to do about the diagnosis I receive, I also like the fact that the app tells you to consult a doctor after certain analysis. Great app all round"

by Prosper Ibeabuchi on 2 May 2017



## Empowering CHWs with AI



## Empowering CHWs with Al





# ada

Hila Azadzoy, Ada Health Hila.azadzoy@ada.com



Thank you!



# Back Up



#### External validation

2017 we tested Ada in a large NHS GP clinic, with over 500 patients and 20 doctors participating. **Patients were asked to complete an Ada assessment whilst they waited to see the GP.** 





#### **GP Feedback**

"The real benefit of Ada is in empowering patients and keeping them away from the clinic in the first place"

"I generally agree with Ada's diagnoses and triage advice" "Patients are nearly all enjoying using Ada and find it useful"

## Detect Disease Outbreaks early

#### Ungewöhnlicher Ausbruch des Lassafiebers beunruhigt Experten

1. März 2018, 20:49 Uhr



Eine elektronenmikroskopische Aufnahme des Lassa-Virus (Foto: dpa)

- Das Lassafieber ist in Westafrika verbreitet. Doch der derzeitige Ausbruch in Nigeria hat ungewöhnliche Ausmaße.
- Die Krankheit ist mit Ebola verwandt und kann tödlich verlaufen.
- Es gibt nur ein mäßig hilfreiches Medikament und keine Impfung.

#### Von Berit Uhlmann

Nigeria erleht derzeit einen ungewöhnlich heftigen Ausbruch des Lassafhebers. 317 Fälle der mit Ebola verwandten Krankheit wurden seit Beginn des Jahres durch Laboranalysen offiziell bestitigt. Damit registrierte das westafrikanische Land nach zwei Monaten weit mehr Fälle als im gesamten Jahr 2017, 72 Patienten sind nach Angaben der Weltgesundheitsorganisation WHO bereits an einer Infektion mit dem Lassa-Virus gestorben.

Seit der Erreger 1969 in Nigeria entdeckt wurde, zieht er regelmäßig über das Land. Warum aber der aktuelle Ausbruch alle vorherigen übertrifft, ist noch unklar. Die

#### Constellation of findings that are typical for Lassa Fever



## External Validation (2)



"Ada got my diagnosis correctly and identified the most important rule-outs: acute angle closure glaucoma and viral infection."

Ranjani Ramamurthy, Principal Medical Researcher at Microsoft

	Ada	Babylon	Buoy	Your.MD
Based in	Berlin	London	Boston	London
Funding (US \$, millions)	~67	85	9	~17
Location served	UK (Private)	UK (NHS)	Providers, payers in the US	UK (Private)
Can you connect with a PCP?	Yes, with Ada physicians, for \$25	Yes, with an NHS PCP/ER/Pharmacy	Yes, with <u>Amwell</u>	Yes, via third parties
How many questions did it ask?	~33	~17 vs ~5*	~14 vs. 2*	6
Did it show a <u>"differential</u> <u>diagnosis</u> "?	Yes	No	Yes	No
Gives rule-outs?	Yes	No	No	No
Did it get the correct diagnosis	Yes. First on the list	No	No	No
Asked to seek medical help?	Yes	Yes.	No	No

## External Validation (1)

# WIRED

"Rating the AI doctors"

October 2017

# Ada is the leading symptom assessment

"Ada asks about the most important symptoms and gives the best diagnoses. Easy and intuitive user interface."

ada

	Babylon	S. YOUR.MD	ADA
Asthma	Hamish Fraser Overall decision was not bad, as it said, "go to A&E", but it often went down the path for cardiac disease.	David Wong Identified asthma from the starting point of "wheezy". It also provided another plausible diagnosis.	HF Generally good diagnoses, except bronchiolitis, which only affects children. The app asked about the duration of symptoms
Shingles	<b>DW</b> It identified a course of action, but never asked me about any of the more pertinent symptoms.	DW It advised me about chicken pox, but not shingles. I did received some practical advice to see a GP.	HF The only app to correctly diagnose shingles – and quickly DW Couldn't get a diagnosis; other viable options presented
Alcohol-related liver disease	<b>DW</b> I received information on recovering from an aortic- valve replacement in response to my "loss of appetite" query.	HF Suggested alcohol-related liver disease and jaundice as options. Also recommended that I see a doctor urgently.	<b>DW</b> Heavy drinking is not objectively defined here, even when the app is questioned about it.
Urinary tract infection	HF Asked questions relating to STDs rather than UTI. DW Able to parse common urine synonyms (pee, wee, etc).	DW Didn't ask about patient's sex and ended up presenting diagnoses that were impossible.	<b>DW</b> Diagnosed medullary sponge kidney and urinary tract infection with similar probabilities – impressive.
Overall	DW The least accurate of the three apps. Its symptom checker is an add-on to the business model, however.	HF Your.MD has a good user interface and questioning, but providing more than one diagnosis would be better.	HF ADA asks about the most important symptoms and gives the best diagnoses. Easy and intuitive user interface.