

# Disruption through Artificial Intelligence

Healthcare is way behind the digital innovation curve

In 30 mins, a taste of what is out there

Not about Paeds, nor about job security, it's about the future direction of health







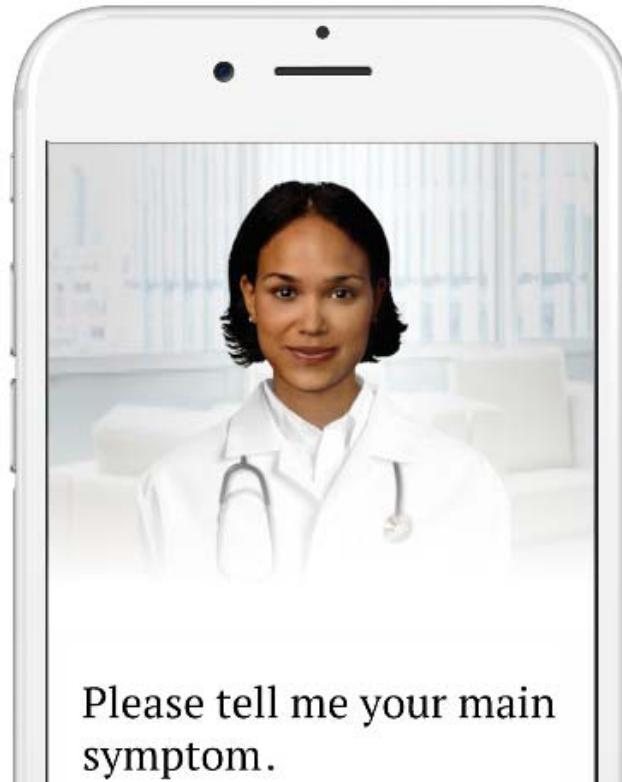
## Speech Recognition

Using a proprietary classification engine, Molly listens to your member and delivers an appropriate response.



## Text to Speech

Molly dynamically generates speech, creating a highly personalized lifelike experience.



## Images & Video

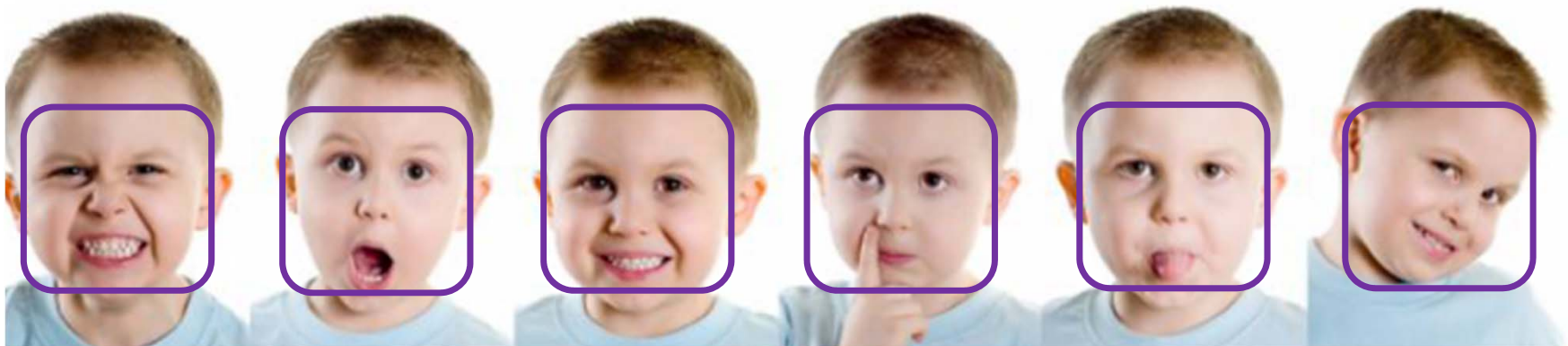
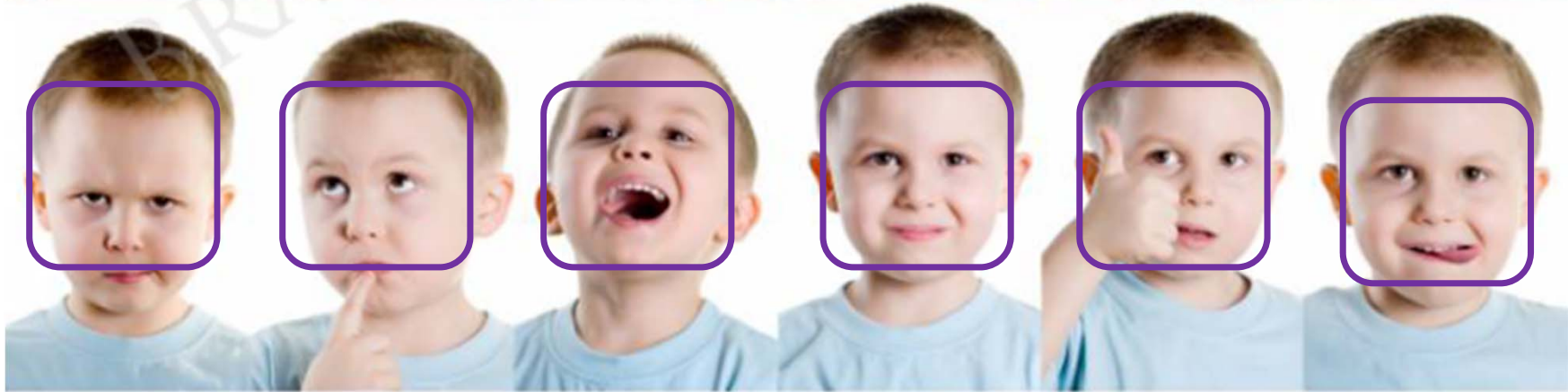
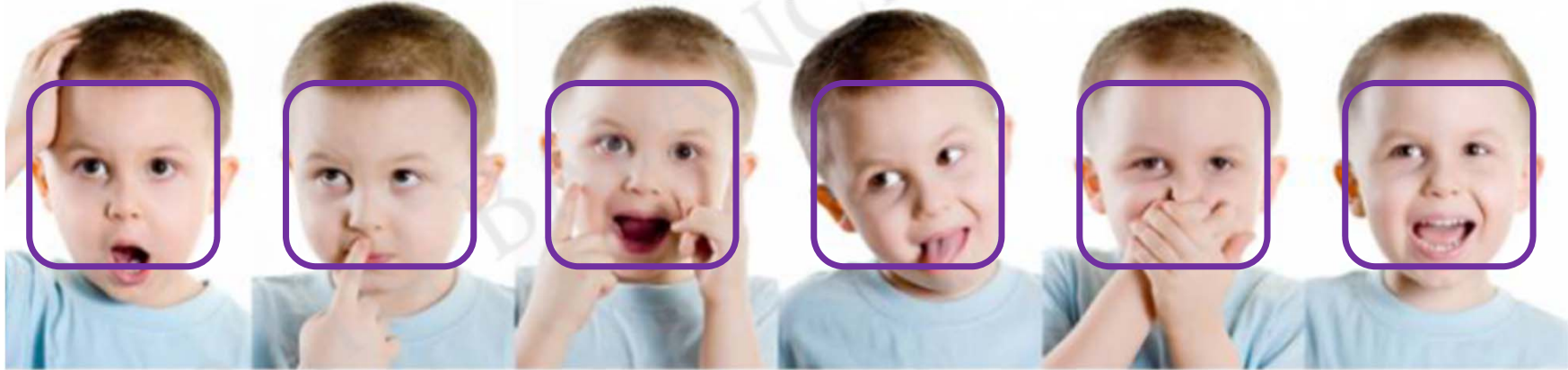
Members can send images back to Molly, allowing for intelligent routing back to the member services team.



## Data Integration

Member data can be seamlessly integrated with your existing data storage system.

















# AI IN HEALTH TOP TEN



## Top 10 AI Applications

	APPLICATION	VALUE*
	Robot-Assisted Surgery**	<b>\$40B</b>
	Virtual Nursing Assistants	<b>\$20B</b>
	Administrative Workflow Assistance	<b>\$18B</b>
	Fraud Detection	<b>\$17B</b>
	Dosage Error Reduction	<b>\$16B</b>

	Connected Machines	<b>\$14B</b>
	Clinical Trial Participant Identifier	<b>\$13B</b>
	Preliminary Diagnosis	<b>\$5B</b>
	Automated Image Diagnosis	<b>\$3B</b>
	Cybersecurity	<b>\$2B</b>
<b>TOTAL</b>		<b>= ~\$150B</b>

Source: Accenture analysis

\* "Value" is the estimated potential annual benefits for each application by 2026.

\*\* Orthopedic surgery specific

# INFORMATION OVERLOAD



LISTEN UP MEDICS

VIZEN



patient safety and improved efficiency in the production process.

HD Medi's VIZEN inspects the contents of the sachets on the basis of images produced by the system with the aid of a powerful dome light. The medication that is present is assessed by quantity, size, colour and shape, after which the contents are compared with the job from the pharmacy or the hospital information system (AIS/ZIS). Once the Vizen has marked potentially suspect sachets with a sticker they can be visually inspected in an efficient manner with the aid of the Vizen Viewer software.

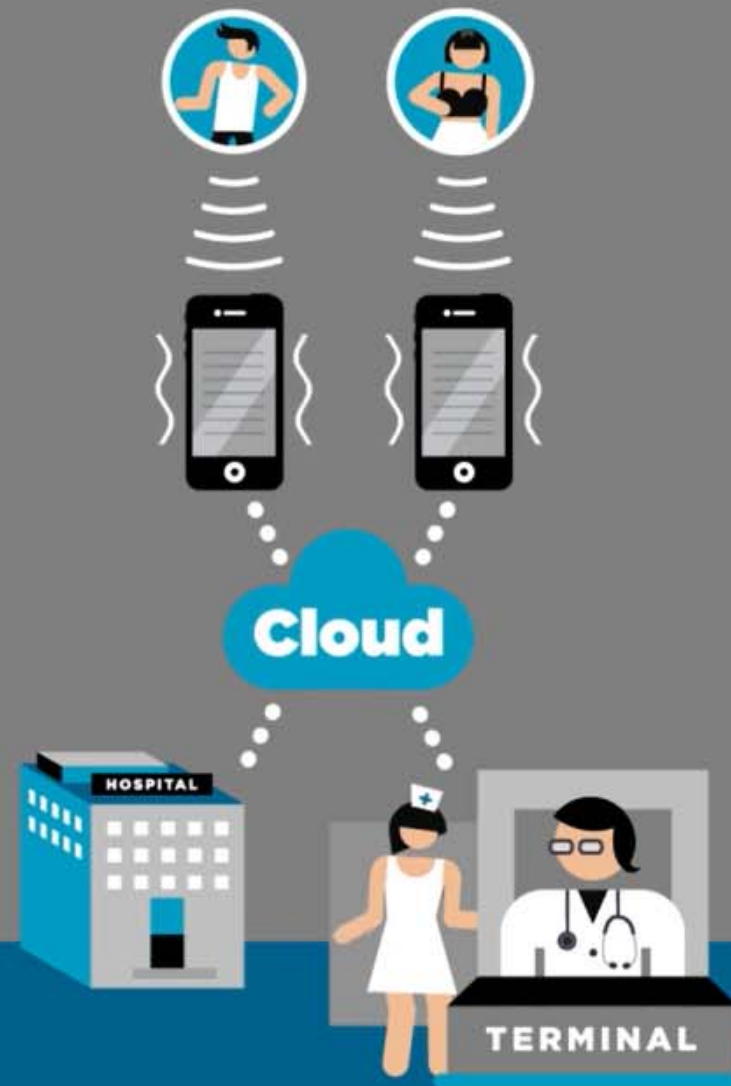
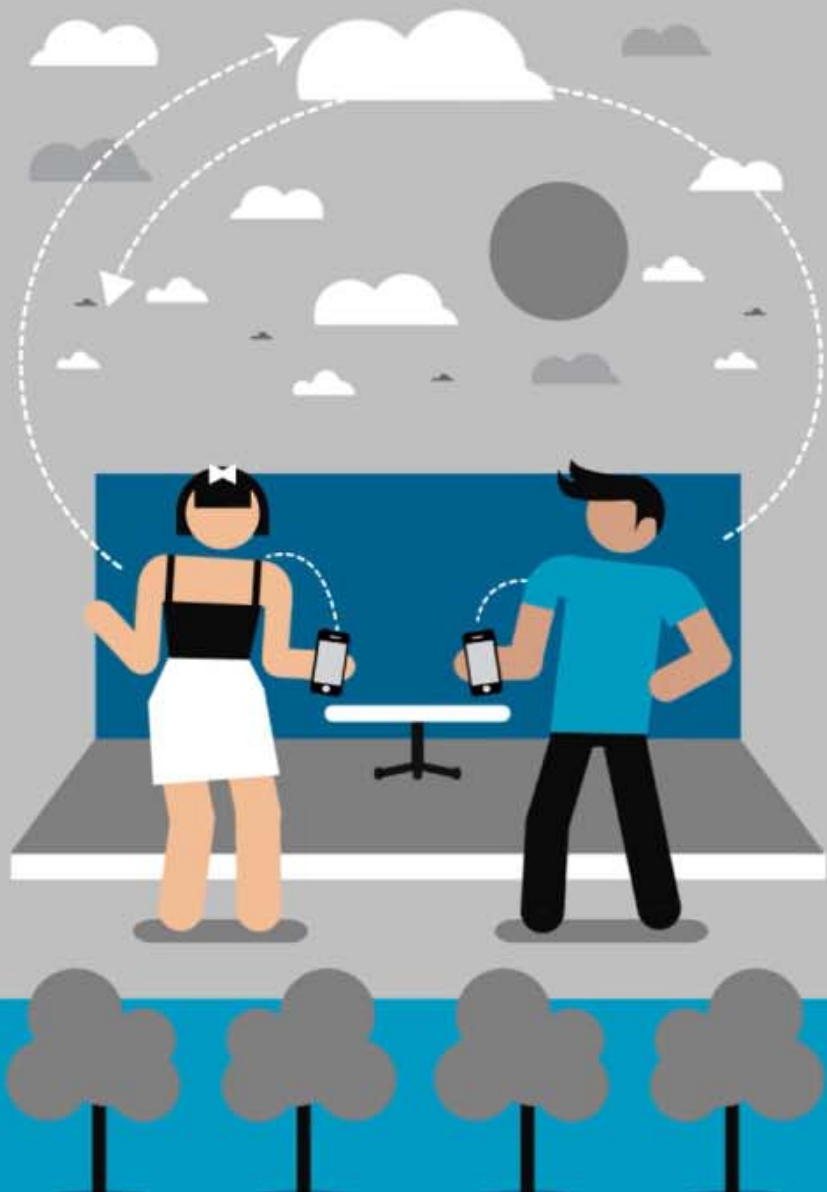
The information about the inspected sachets is accessible at any time, which means each sachet is fully traceable thereafter.

# NANOWEAR TEXTILES

# NANOWEAR'S SIMPLECG







# NANOSENSOR APPLICATIONS



**CARDIAC**



**NEUROLOGICAL**



**IMPEDANCE**



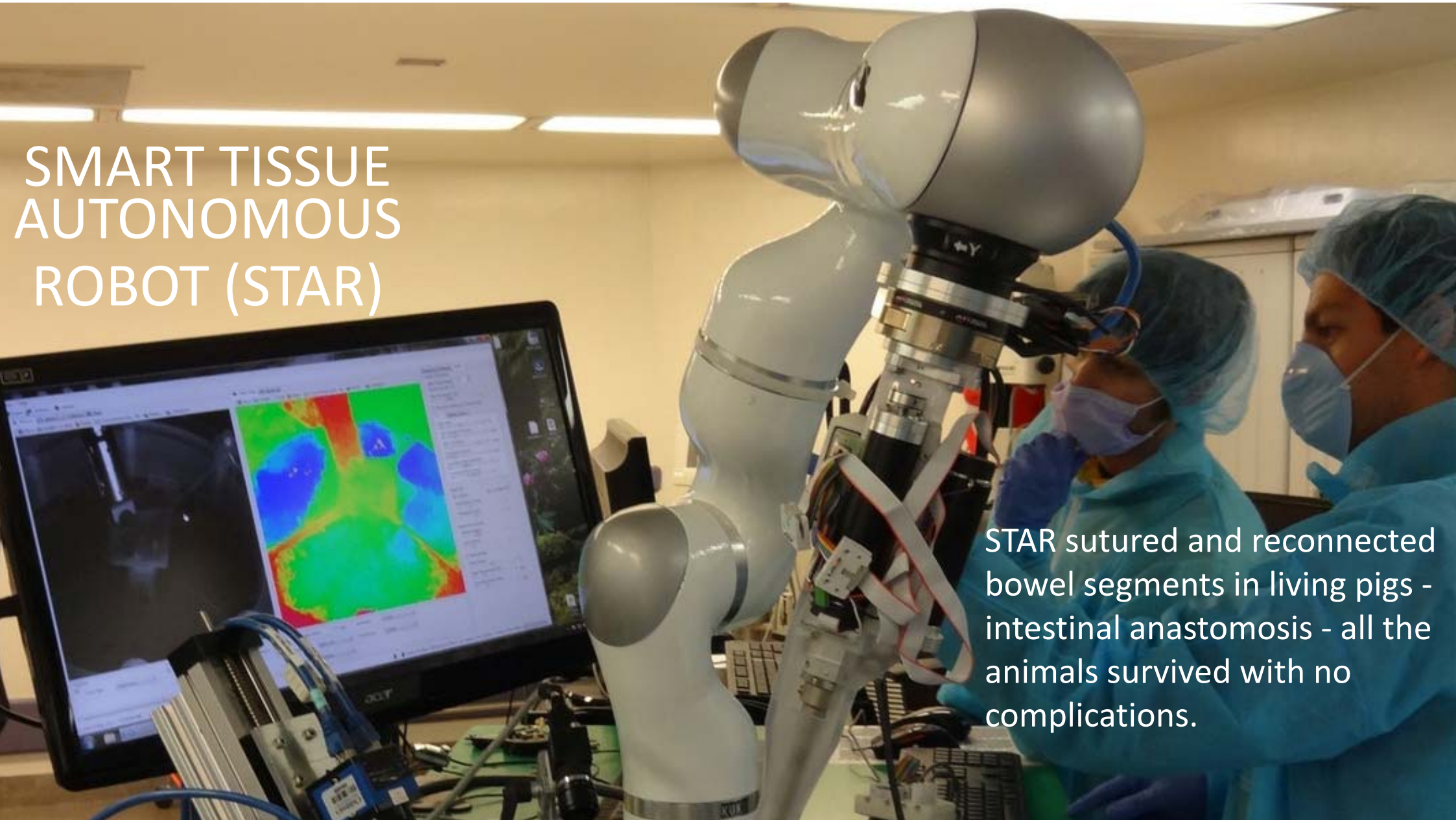
**SLEEP  
MONITORING**

STAR



# SMART TISSUE AUTONOMOUS ROBOT (STAR)

STAR sutured and reconnected  
bowel segments in living pigs -  
intestinal anastomosis - all the  
animals survived with no  
complications.



BABYLON

# See a GP in minutes 24/7

Instant medical advice. Anytime, anywhere.

Book an appointment

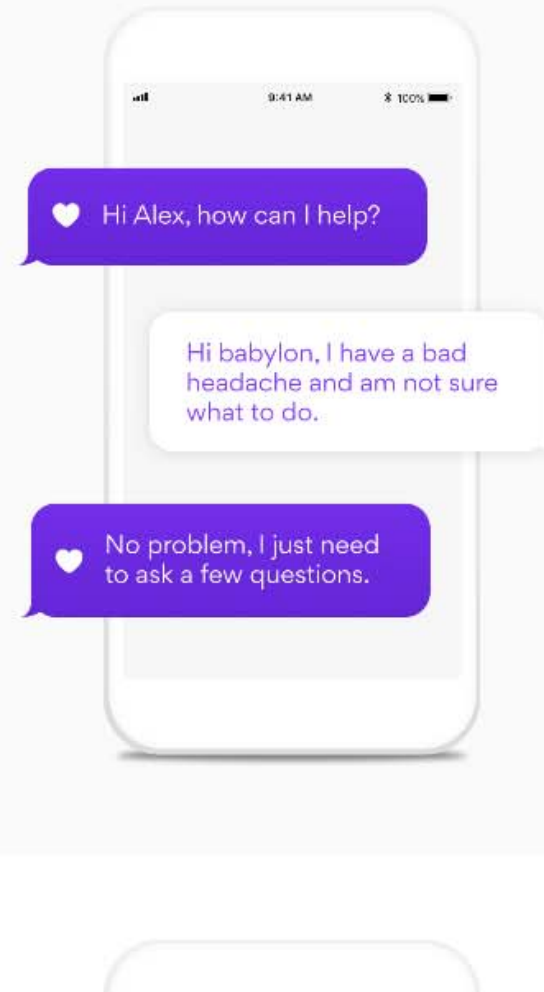
Download the app



ASK BABYLON

# Health advice in a flash

Not feeling yourself? Chat to babylon for fast advice on what to do next if you're feeling unwell. GP appointments are available 24/7 from your phone.





APPOINTMENTS

# GP video chat

Dial a doctor in a jiffy. GP appointments are available 24/7 and can easily be arranged from your phone.

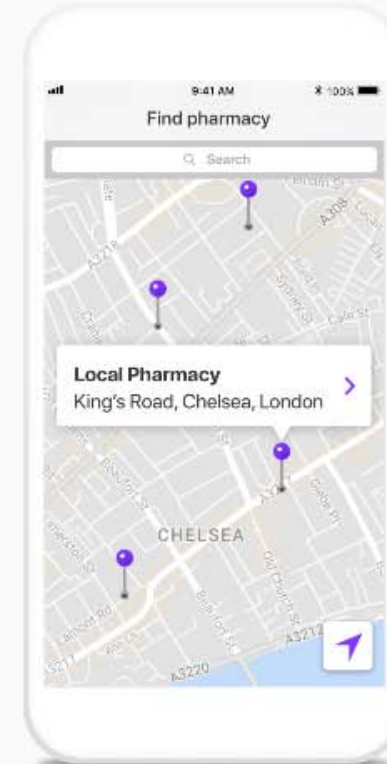


PRESCRIPTIONS

# Put the hiking boots down

babylon sends prescriptions to your front door, office or local pharmacy. Choose next day delivery UK-wide, or same day delivery if you're in London. We'll even get it to you when you're abroad.

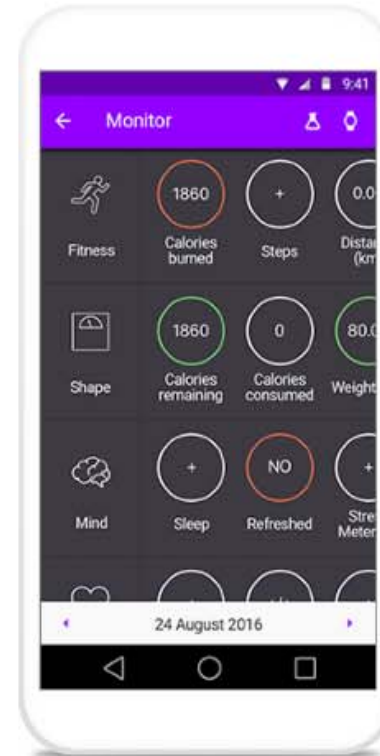
[More Info](#)



HEALTH TRACKING AND TESTS

# Check yourself before you wreck yourself

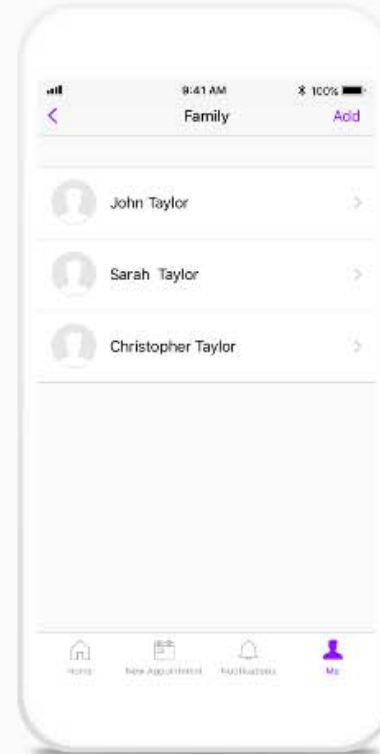
babylon lets you track test results, activity levels and health info. So you always have an up to date picture of how you're doing.



FAMILY ACCOUNT

# Keep it in the family

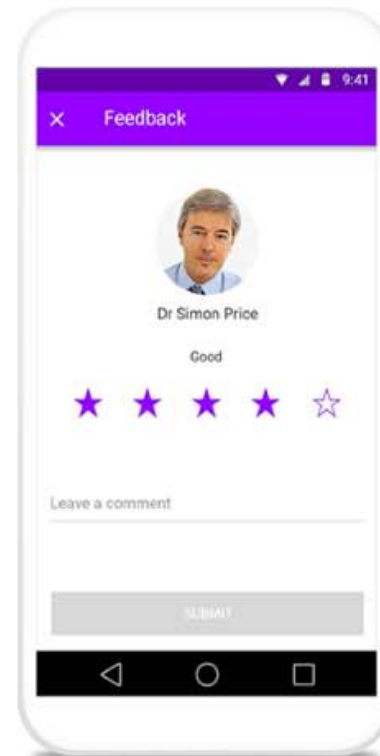
Add family members to your account so you can all enjoy instant medical advice and easy GP appointments.



## USER RATINGS

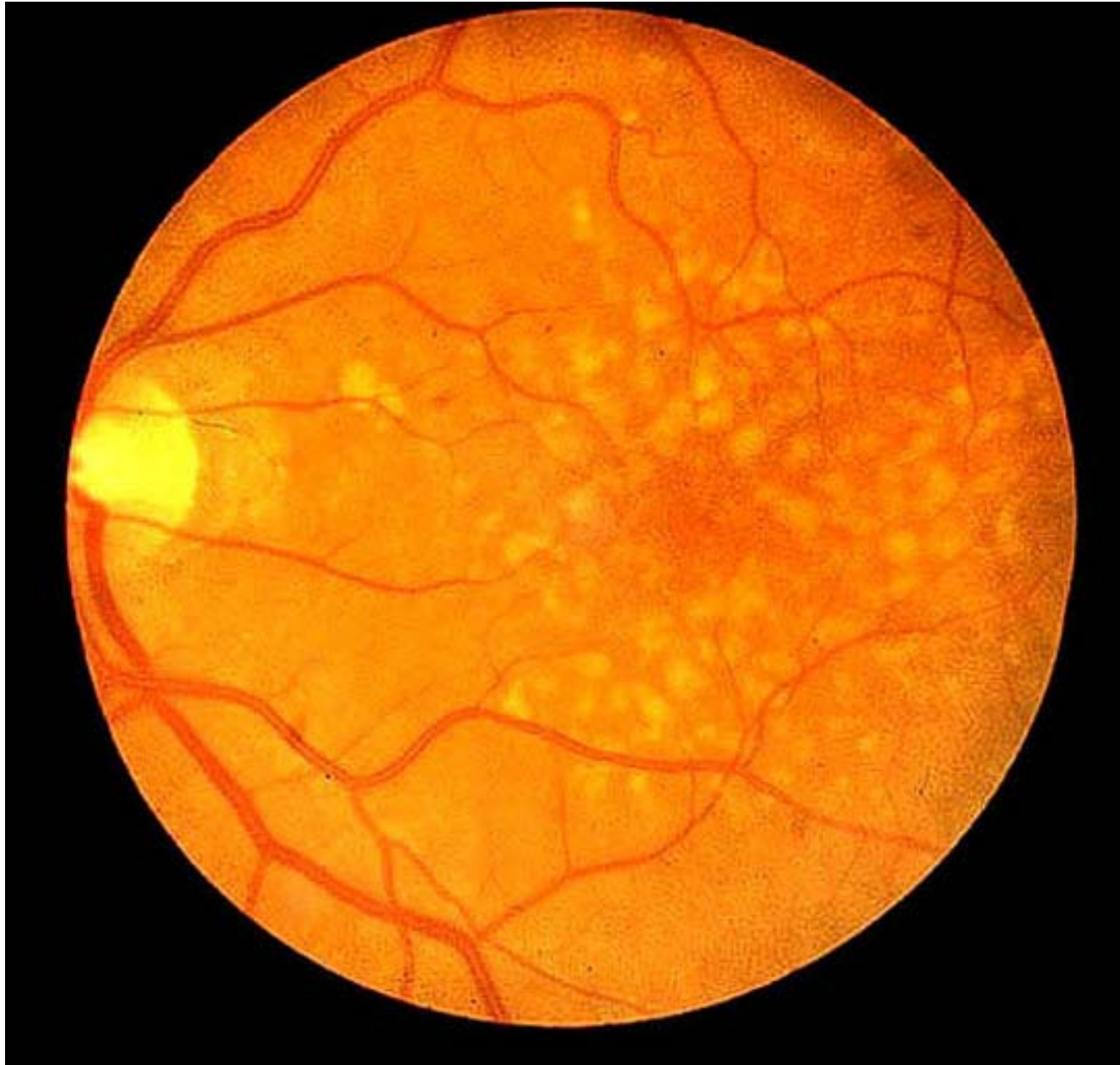
# Total satisfaction

94% of our users give us 4 or 5 stars out of 5.  
Tell us what you think, we don't mind if it's bad  
and we take all feedback very seriously.



# DEEP MIND STREAMS







# DeepMind and Moorfields Eye Hospital NHS Foundation Trust

[Our work with Moorfields Eye Hospital NHS Foundation Trust \(Moorfields\) began in mid-2016](#) after Pearse Keane, a consultant ophthalmologist at the hospital, approached us to ask whether our technology could help provide a better understanding of eye disease.

Over 600,000 patients enter Moorfields' doors every year, and they carry out more than 3,000 optical coherence tomography (OCT) scans every week. These scans require highly trained, expert analysis in order to interpret the result, which can cause huge delays in getting to diagnosis and treatment.

We believe that the AI and machine learning technology within DeepMind Health can succeed in reducing the time required for experts to go through all aspects of the scan by spotting patterns and categorising results for faster diagnosis. So we are working together to analyse one million de-personalised eye scans using machine learning, to explore the impact it can have on our understanding and treatment of eye diseases.

Further details of this work can be found in our [published research protocol](#).

## Why are we looking at eye disease research?



The plan is that the robot can compare your retina with 1 million retinal images and alert the ophthalmologist in the twinkling of an eye. By contrast, the ophthalmologist has never seen 1 million retinal images and could not recollect them anyway.




# VIRTUAL ASSISTANTS




# Amelia


Your first Digital Employee



amazon alexa



Siri



# MEDICAL EDUCATION

APPS

LEARN

SUPPORT

ABOUT



**3D4MEDICAL**  
Transforming Medical Learning

We build the world's  
best  
medical software  
platforms.



**Complete Anatomy**  
Award-winning under- and post-graduate level anatomy for students




**Complete Ortho**  
The revolutionary patient education platform for Orthopedic practices



**Complete Heart**  
A fully interactive beating heart in stunning 3D

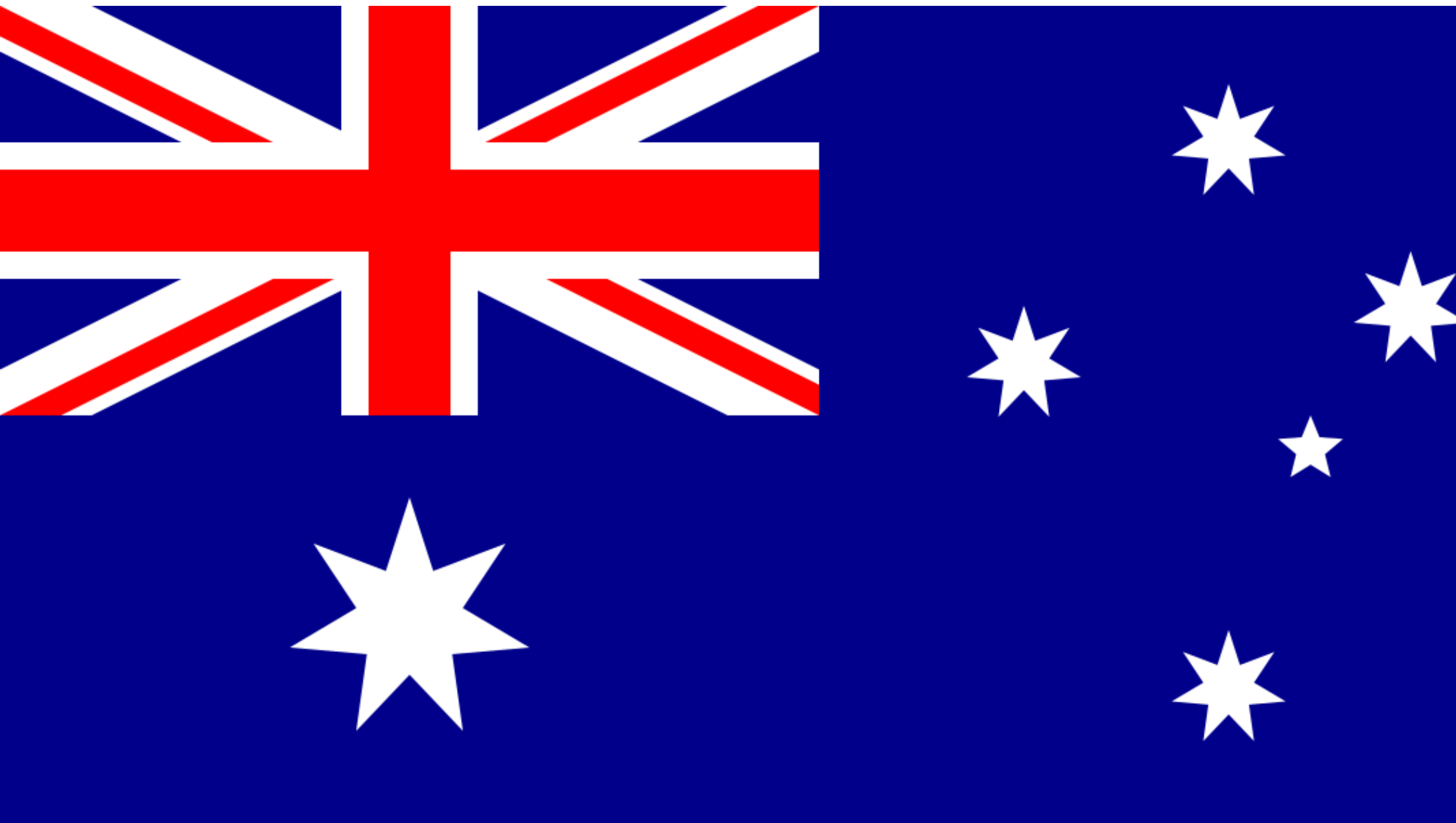
**iMuscle 2**  
The essential workout companion for fitness enthusiasts

**Content Builder**  
The ultimate teaching tool for anatomy educators



**Essential Anatomy**  
The first stop for all students of anatomy



STETHEE





SILVER CHAIN

THE HOLOGRAM WILL SEE YOU NOW

**DIGITAL HEALTH TECH VISION 2017**

← 128 Shares  Print  Do

WEBCAST

**TOP** DIGITAL  
TRENDS IN  
**HEALTHCARE**

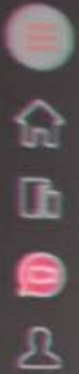








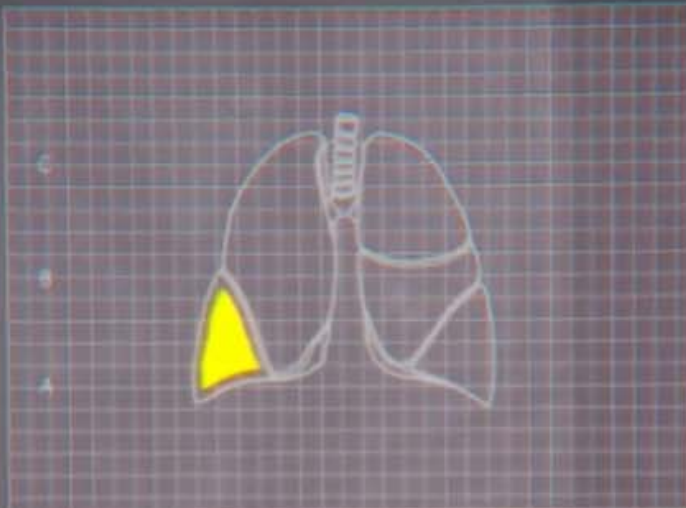
I S O B A R



**PATIENT NAME:** Robert Johnson  
**DATE OF BIRTH:** 12/29/1952

**GENDER:** Male | **AGE:** 66 | **HEIGHT:** 1.72 m | **WEIGHT:** 94 kg

**RELATIVE CONTACT:** Florence Johnson



- HOSPITAL AT HOME
- FEELING YOUR USUAL SELF
- FEELING SICK / HARD TO BREATHE
- NOT FEELING WELL
- CRITICAL CARE PLAN

SP02

92

**HISTORY**

Patient enrolled in respiratory program.  
Daily monitoring started.  
06/11/2019

ACUPE - Inactive/Teacher  
16/07/2018



**NIBP**

130/70

**SP02** 92 | **PR** 89 | **RR** 18

**PULSE:** 89 bpm | **RESPIRATORY RATE:** 18 breaths/min | **BODY TEMPERATURE:** 37.5 °C | **BLOOD PRESSURE:** 130/70 | **OXYGEN SATURATION:** 92%



Area of infection

POSTERIOR  
View from rear

DOSE ME

# Precision dosing: A smarter way to dose

Leave behind the laborious manual calculations,  
spreadsheets, and complex tools.

[BOOK A DEMO](#)

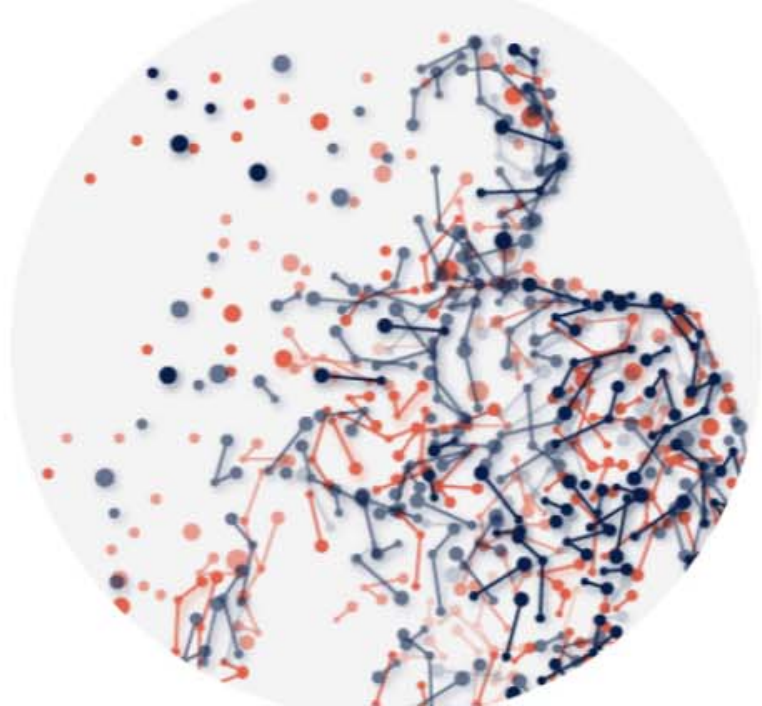
[WATCH VIDEO](#)





## What is DoseMe?

The DoseMe platform is the world's first easy-to-use, real-time precision dosing software designed for clinicians to predict the optimal dose of medications that require therapeutic drug monitoring.



### How does DoseMe work?

From as little as one assay result a virtual model of your patient is digitally constructed from using thousands of data points from published population models.

[SHOW ME HOW](#)

# PERSONALISATION & EXPERIENCE



Robots can sing, dance and ride motorcycles but they can't make choices that patients are willing to trust with their lives, so go back to work in the knowledge that you really are indispensable.

IAN MANOVEL  
INNOVATION DIRECTOR  
Accenture

Phone: 0415 84 84 30

Email: [ian.manovel@accenture.com](mailto:ian.manovel@accenture.com)

Twitter: [@ManovellInnovate](https://twitter.com/ManovellInnovate)