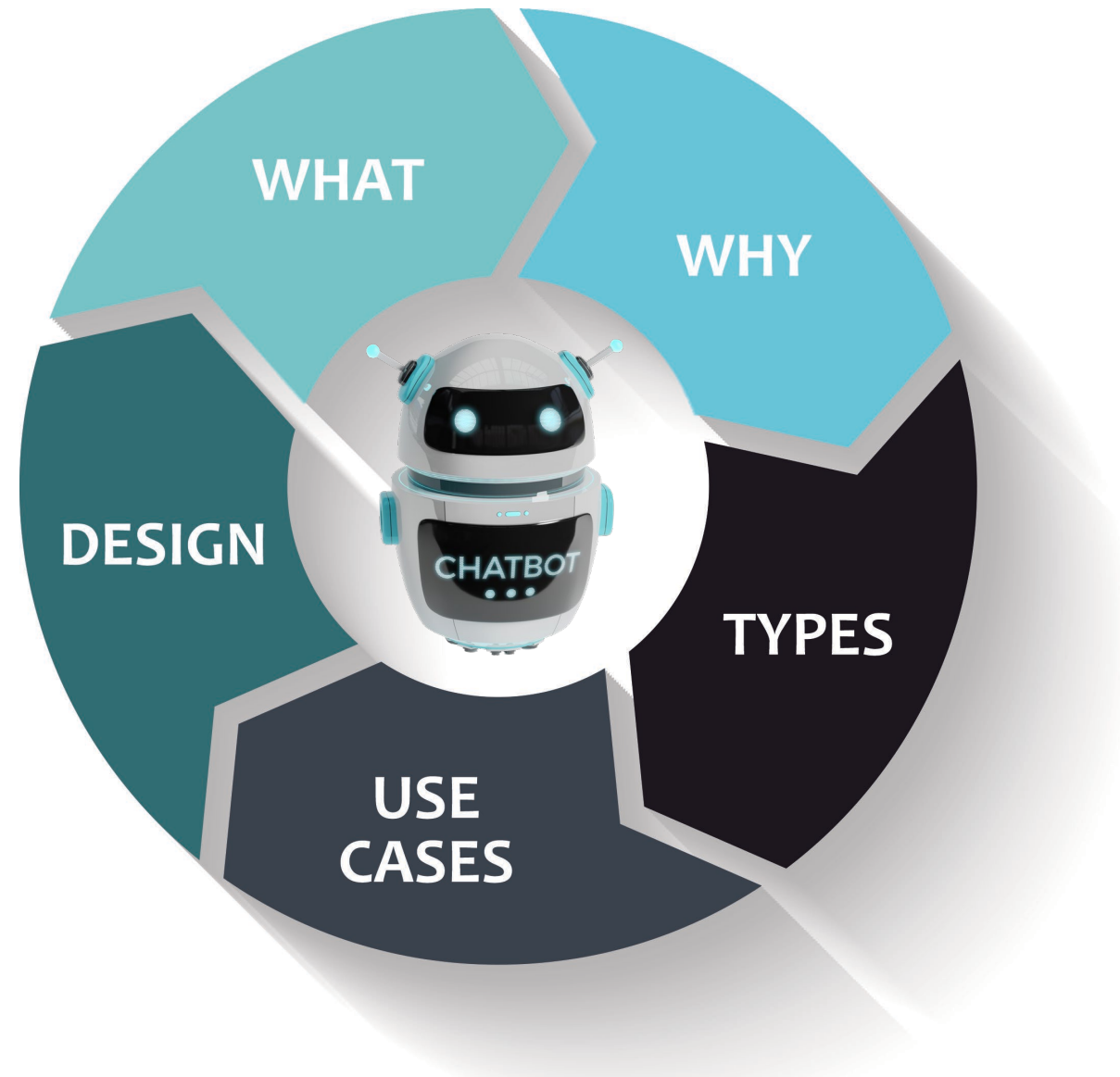




Designing Chatbots to Improve Patient Experience

Rachel Haviland, PhD

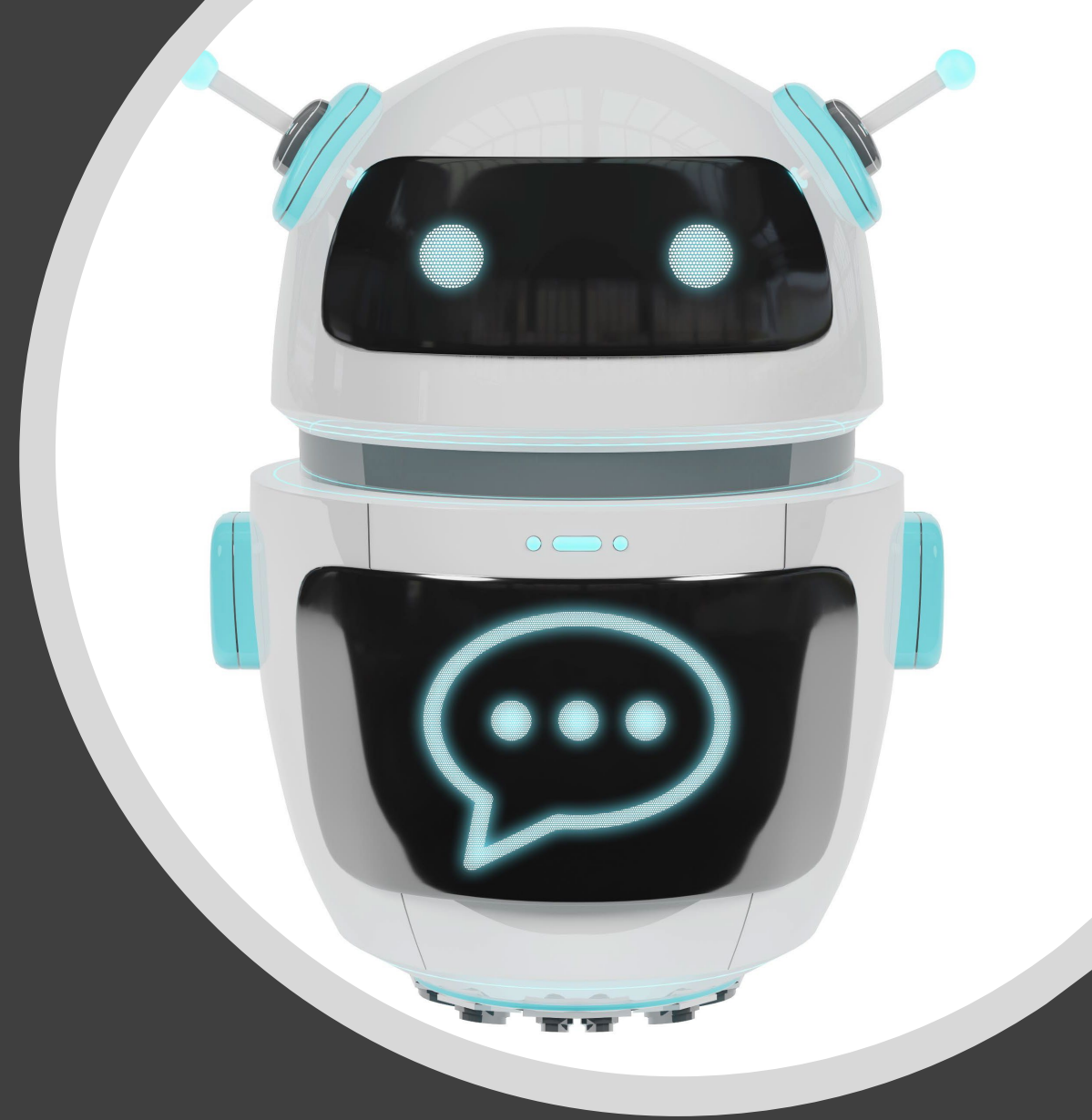
Agenda



What is a chatbot?

Relationship Experience Technology

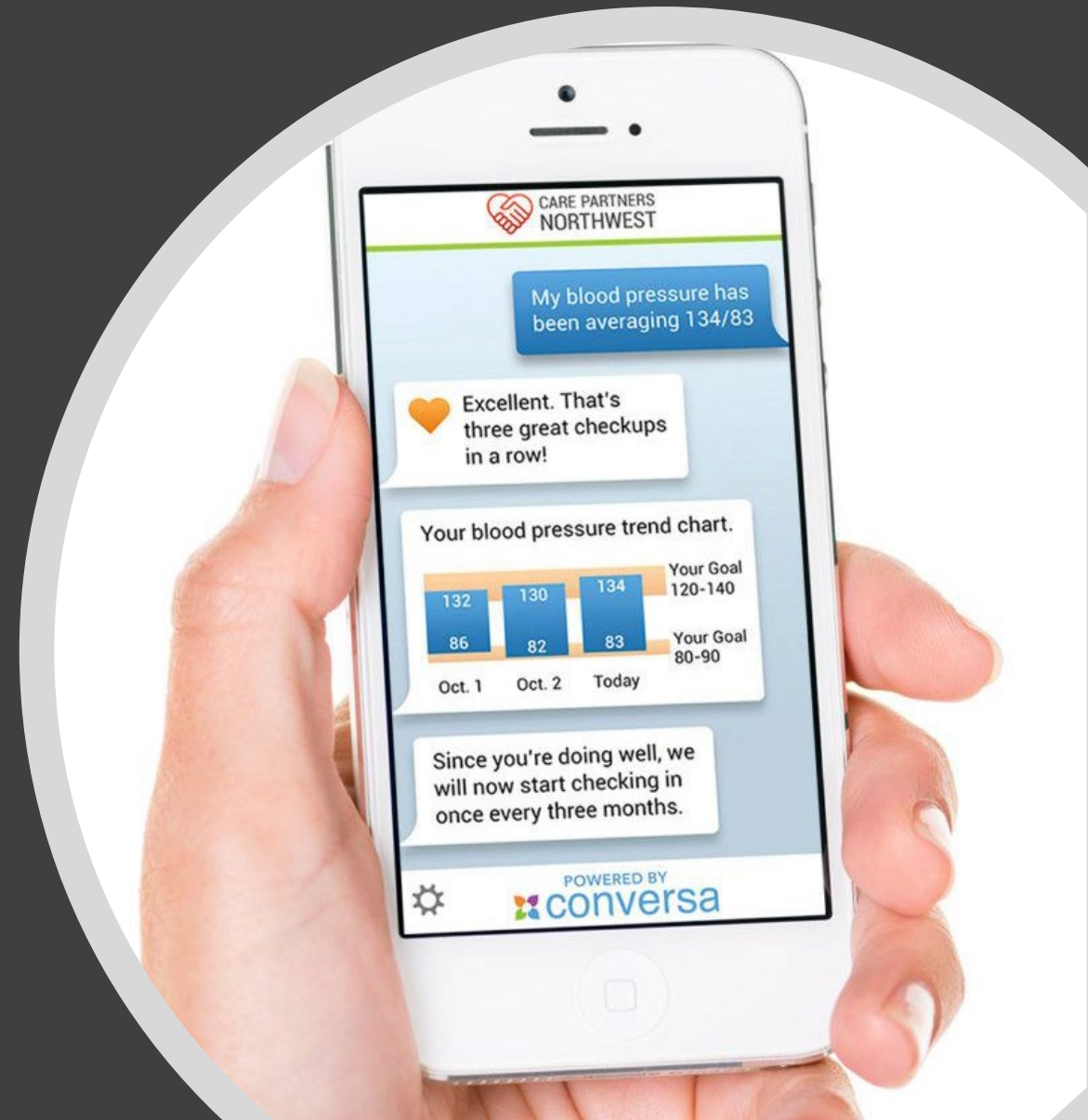
- ✓ Instant
- ✓ Intelligent
- ✓ Digital conversation



Software designed to:

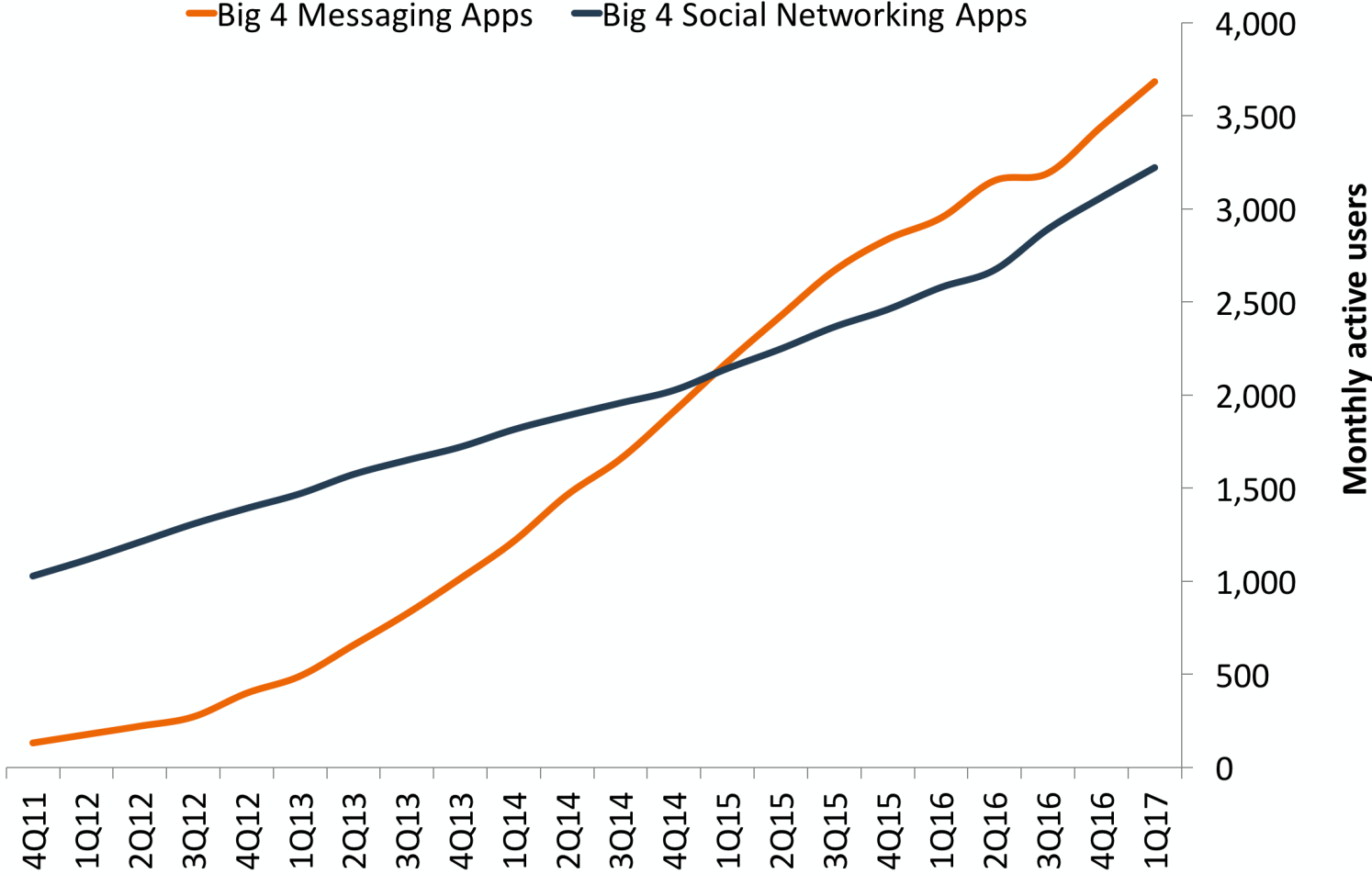
- simulate human conversation
- often powered by AI and machine learning
- designed to automate 1-on-1 interactions
- often eliminating the need for a human

Ogilvy.com



Messaging Apps Have Surpassed Social Networks

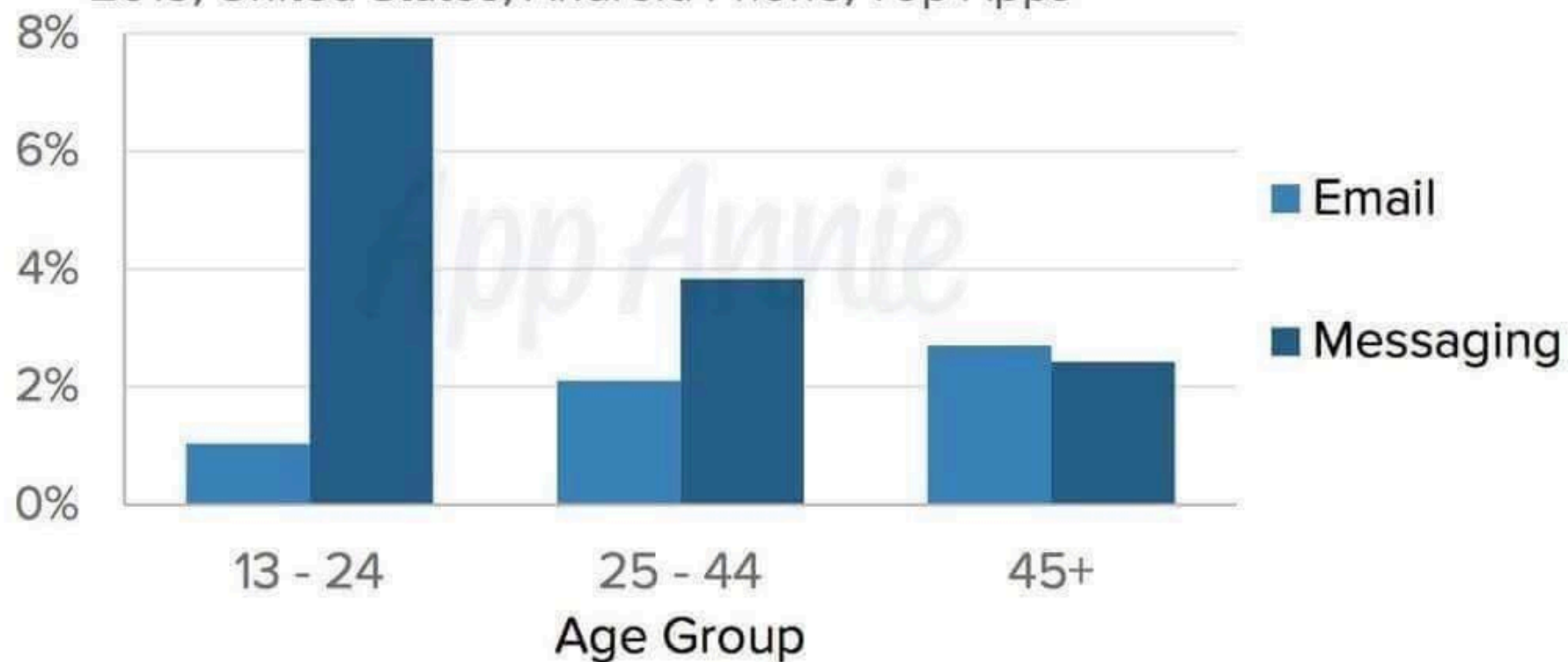
Global monthly active users for the top 4 messaging apps and social networks, In millions



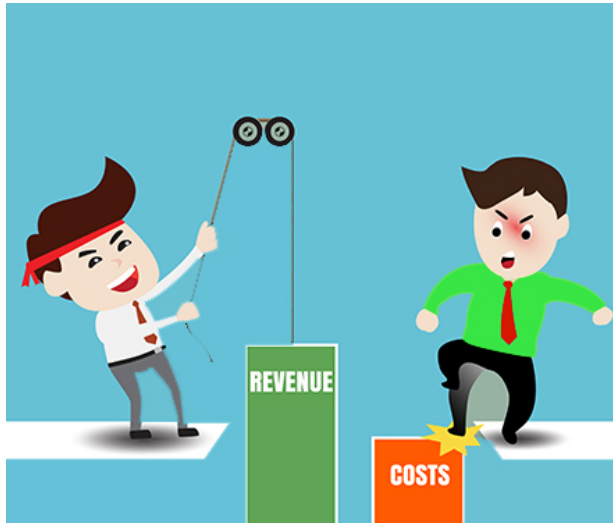
Note: Big 4 messaging apps are WhatsApp, Messenger, WeChat, Viber.
Big 4 social networks are Facebook, Instagram, Twitter, LinkedIn
Source: Companies, Apptopia, TechCrunch, BI Intelligence estimates, 2017

Share of Usage Time Spent in Top 5 Email & Messaging Apps

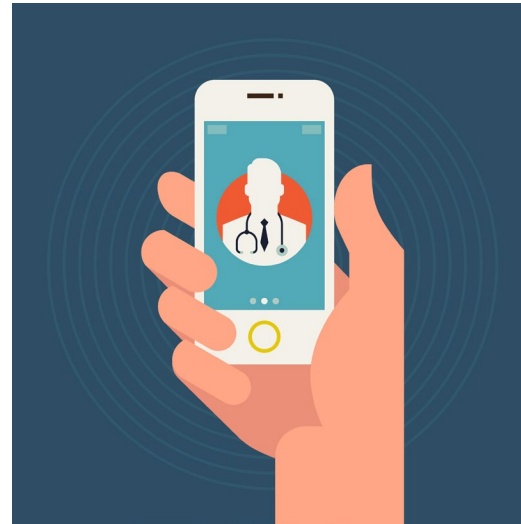
2015, United States, Android Phone, Top Apps*



Why now?



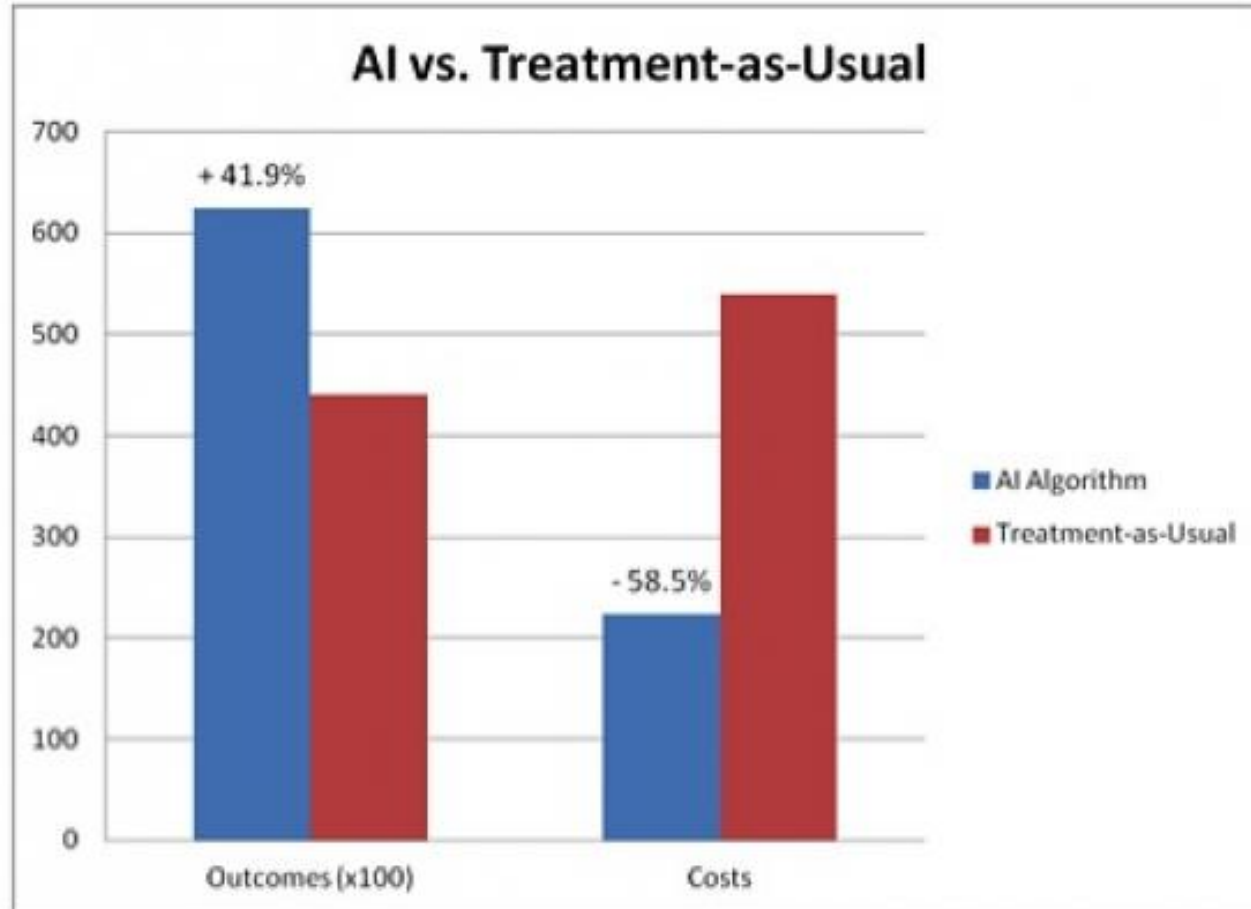
Pressure to Reduce Costs & Improve Efficiency



Provide Immediate Information



Provider Insights Between Visits



Bennett CC and Hauser K "Artificial intelligence framework for simulating clinical decision-making: a Markov decision process approach." [Artif Intell Med. 2013 Jan;57\(1\):9-19](#)

69% of healthcare organizations use patient engagement tools

Source: 2016 NEJM Catalyst Patient Engagement Survey

54% of patients feel a weekly or twice-weekly check-in from their provider would be valuable

Source: West Strengthening Chronic Care: Patient Engagement Strategies for Better Management of Chronic Conditions

80% of smartphone users want to use their smartphones to interact with health care providers

Source: 2014 FICO Survey

69% of smartphone users want to receive reminders to schedule appointments or take medication

Source: 2014 FICO Survey

Slides available at HealthMarketingAcademy.com/mcsmn

5 Features of Conversational Marketing

**REAL
TIME**

SCALABLE

ENGAGEMENT

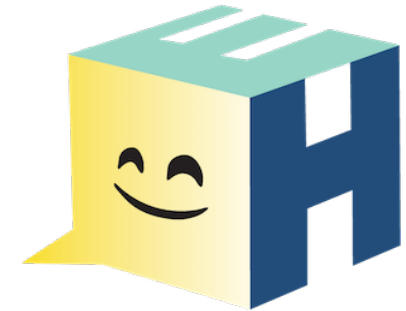
PERSONAL

FEEDBACK

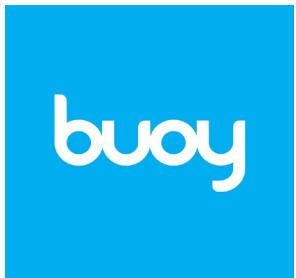
Where can I find them?

- Websites
- Text Messaging app
- Social Networks
- Messaging apps

Industry	Brands that have deployed Messenger Bots			
Restaurants		Domino's		TGI Fridays
Travel		Kayak		Expedia
Finance		MasterCard		American Express
News		CNN		Fox News
Sports		Juventus FC		NBA



EMOJIHEALTH



Patient-Only, Patient-Clinician or Clinician-only



CUSTOMER SERVICE

ADMIN & INFORMATION

EDUCATION & SUPPORT

PATIENT ENGAGEMENT

CARE MANAGEMENT

Use Cases



CUSTOMER SERVICE

- Website concierge
- Location & directions
- Open hours
- Specialty doctors



CUSTOMER SERVICE

ADMIN & INFORMATION

- Schedule appointments
- Issue reminders
- Refill Rx
- Billing & Claims



CUSTOMER SERVICE

ADMIN & INFORMATION

EDUCATION & SUPPORT

- Health conditions
- Treatment & services
- Support between visits



CUSTOMER SERVICE

ADMIN & INFORMATION

EDUCATION & SUPPORT

PATIENT ENGAGEMENT

- Follow up
- Personalized plans
- Medication reminders

CUSTOMER SERVICE

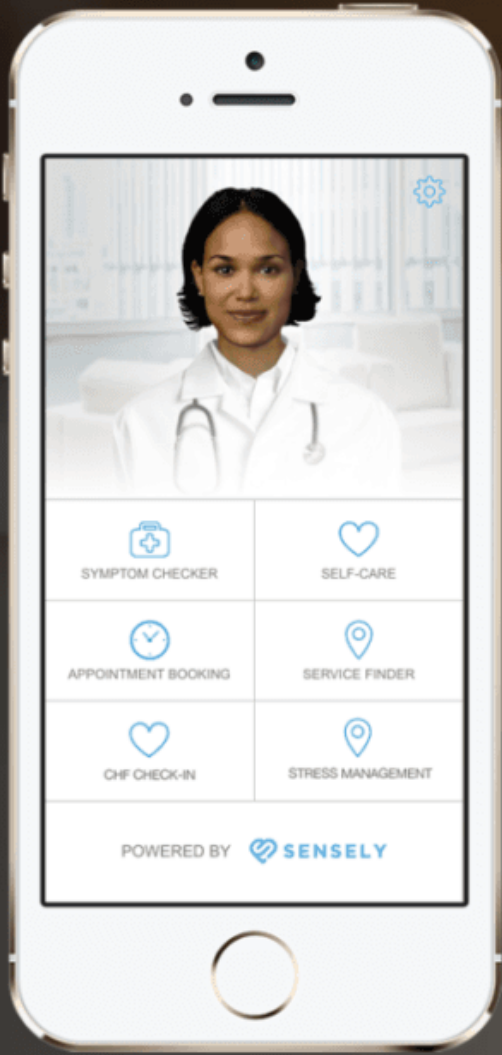
ADMIN & INFORMATION

EDUCATION & SUPPORT

PATIENT ENGAGEMENT

CARE MANAGEMENT

- Symptom checker
- Coordinated care
- Outreach
- Risk analysis



ENGAGE YOUR MEMBERS. EXTEND YOUR REACH.

Direct your health plan members to the healthcare resource they need, when they need it. Sensely intelligently connects people with clinical advice and services, enhancing access without compromising empathy.



Following app download, select the "sign in" option, and use "gpdemo" for both the username and password entries.

1. Report symptoms

2. Referral or advice

3. Track BP and weight

Meet Molly...



Speech Recognition

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



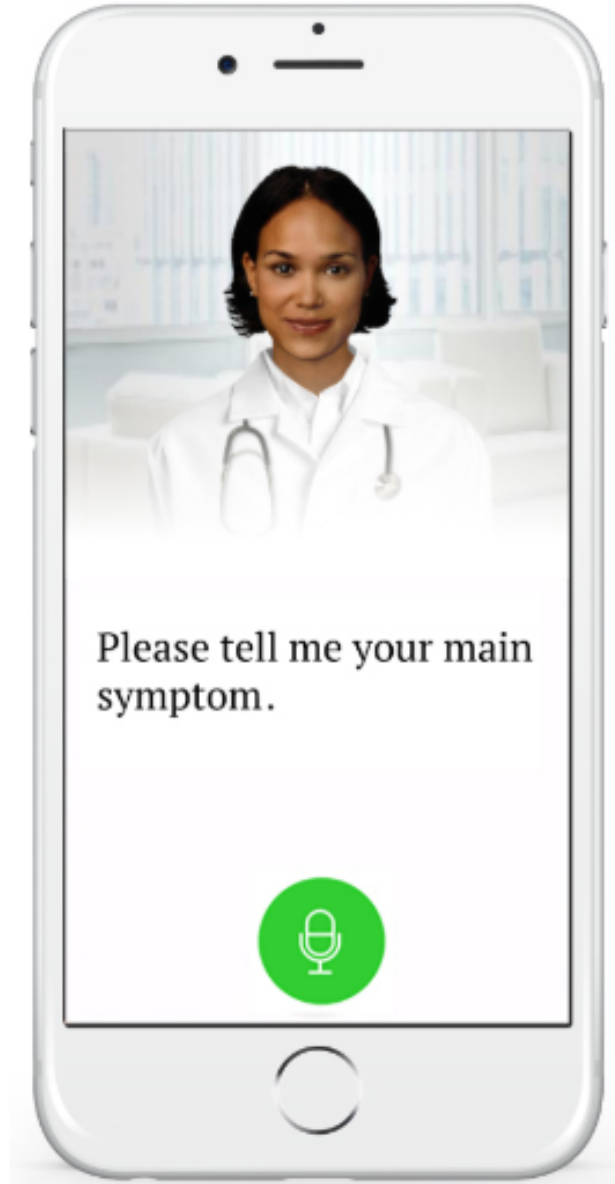
Text to Speech

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



Chatbot

Prefer texting? Text chat mode is available, allowing for a more private experience.



Images & Video

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



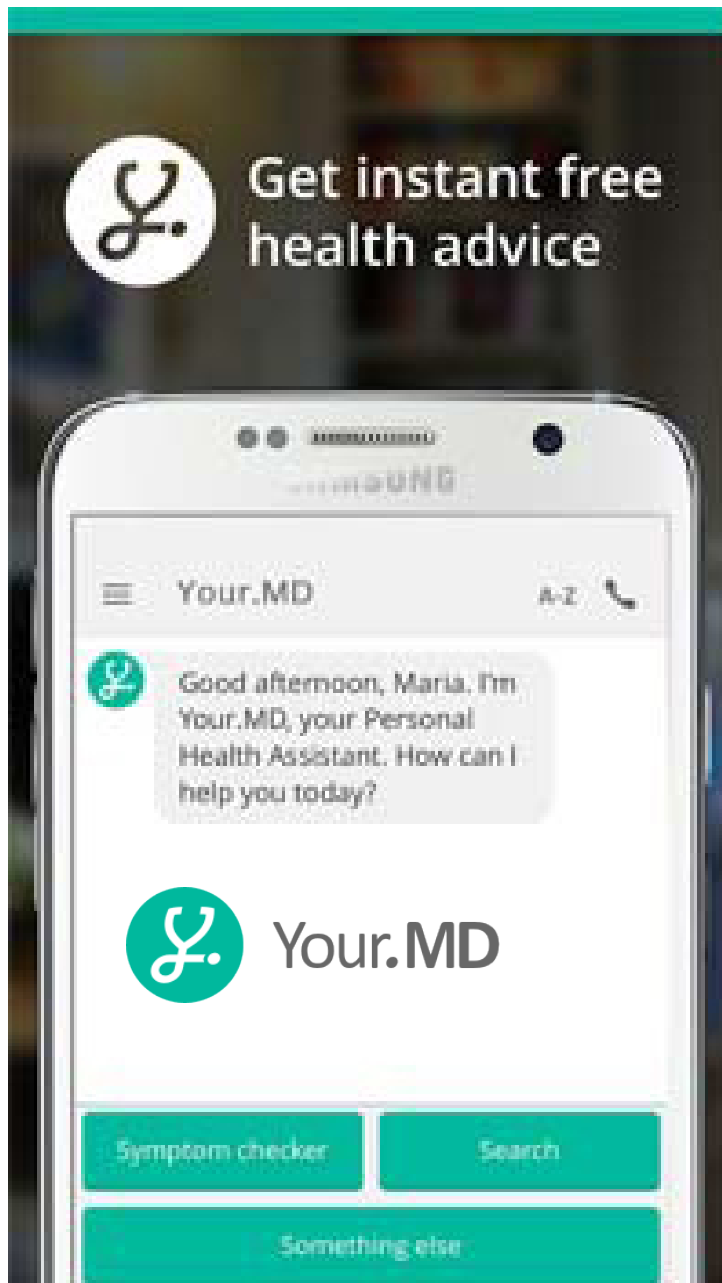
Data Integration

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

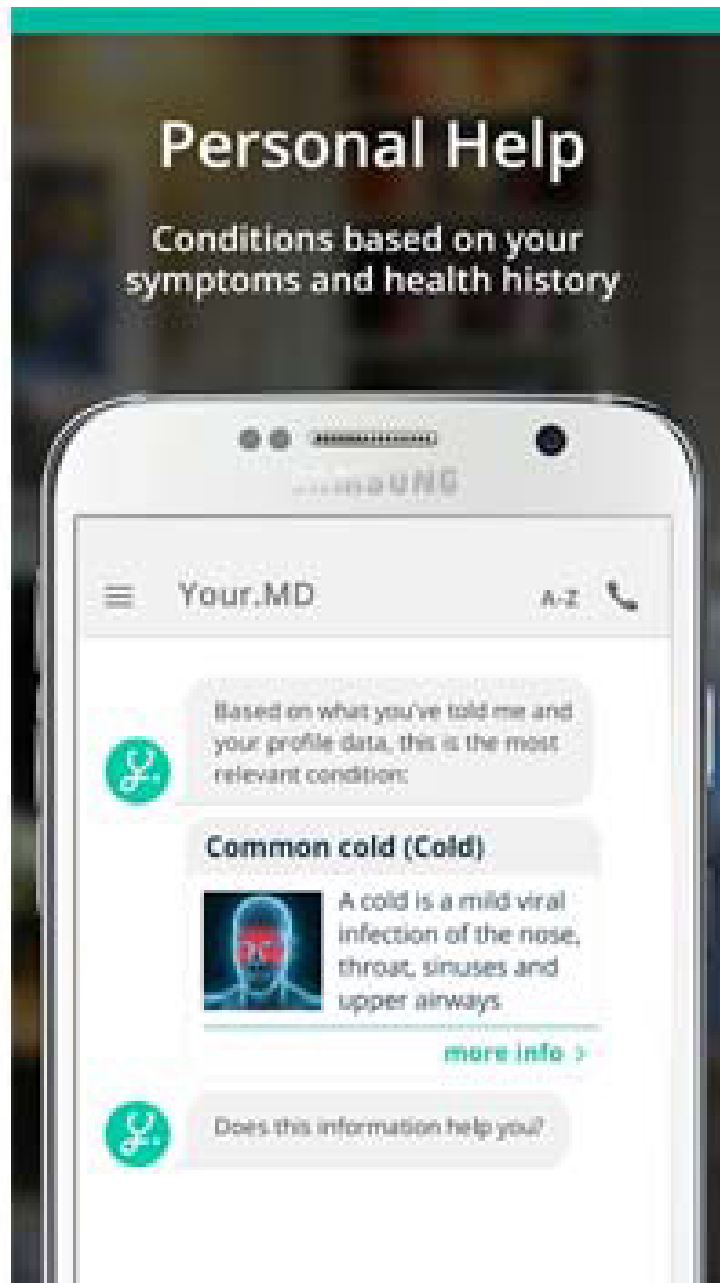


Device Integration

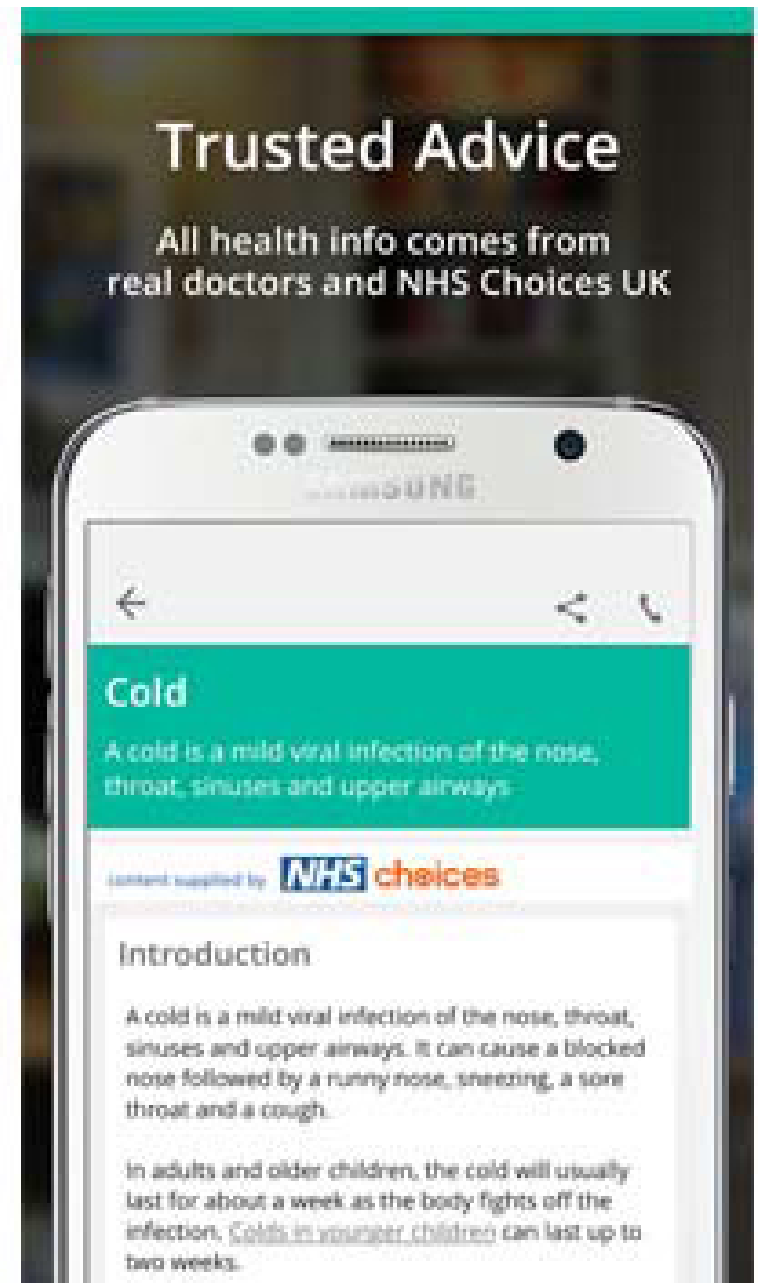
With optional remote patient monitoring program, connect with bluetooth devices.



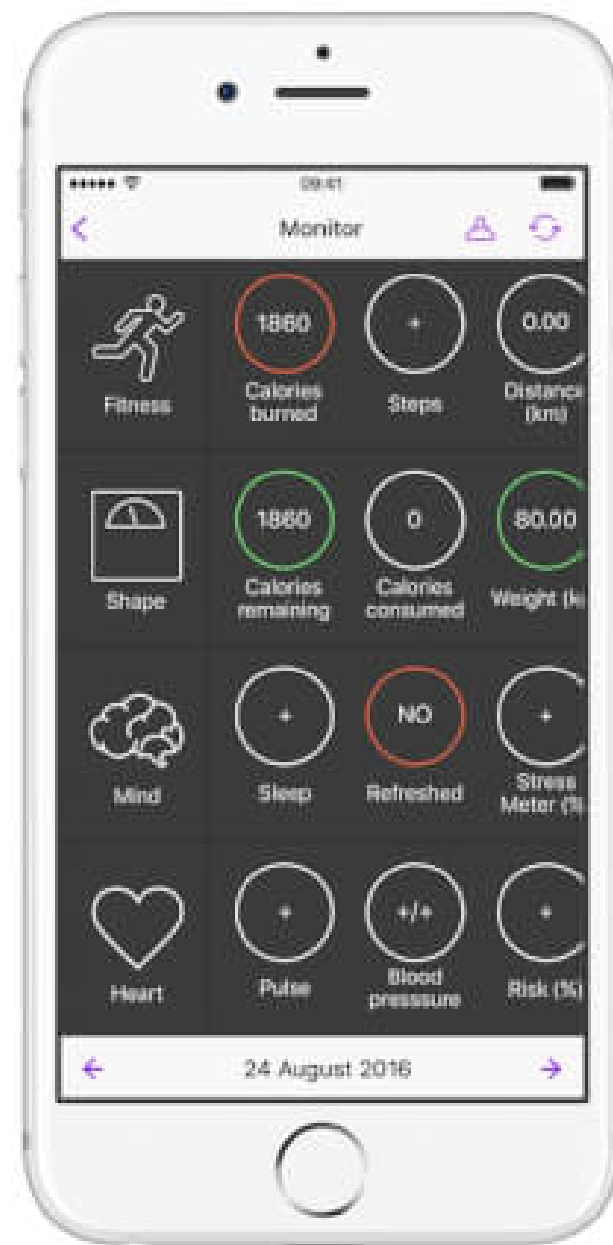
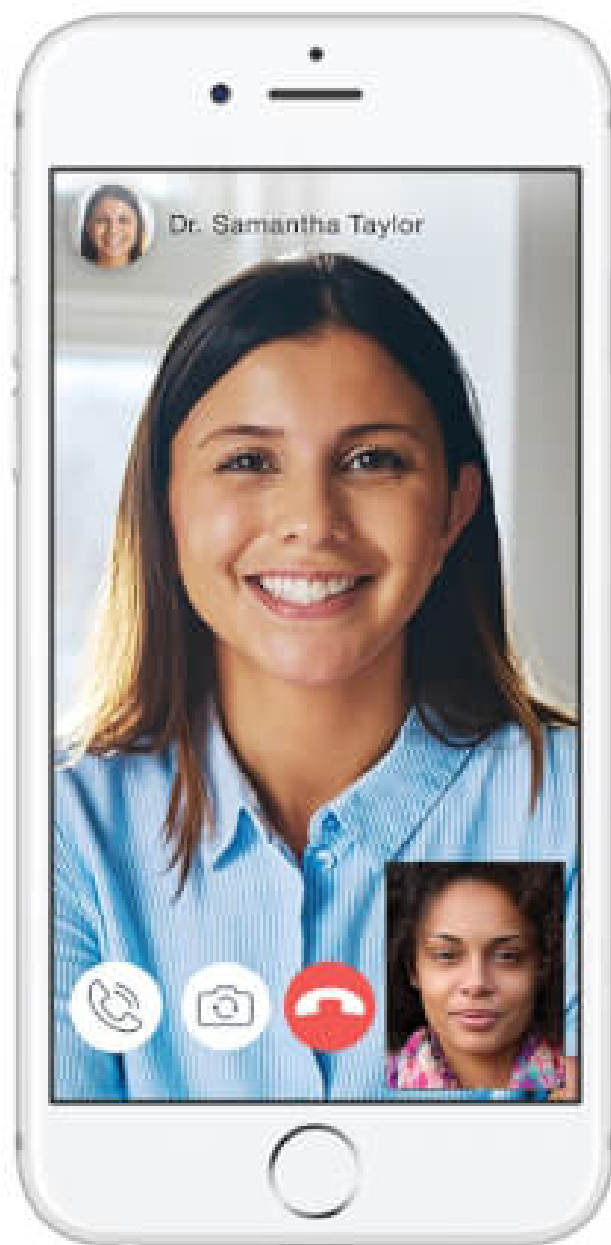
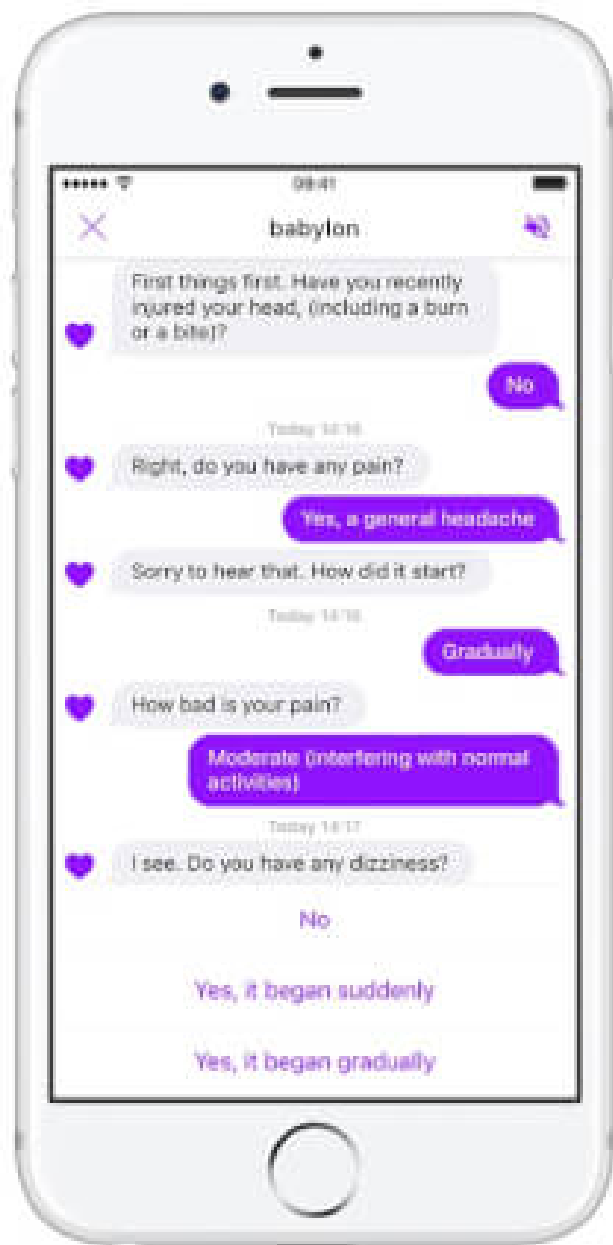
1. Understands what's wrong

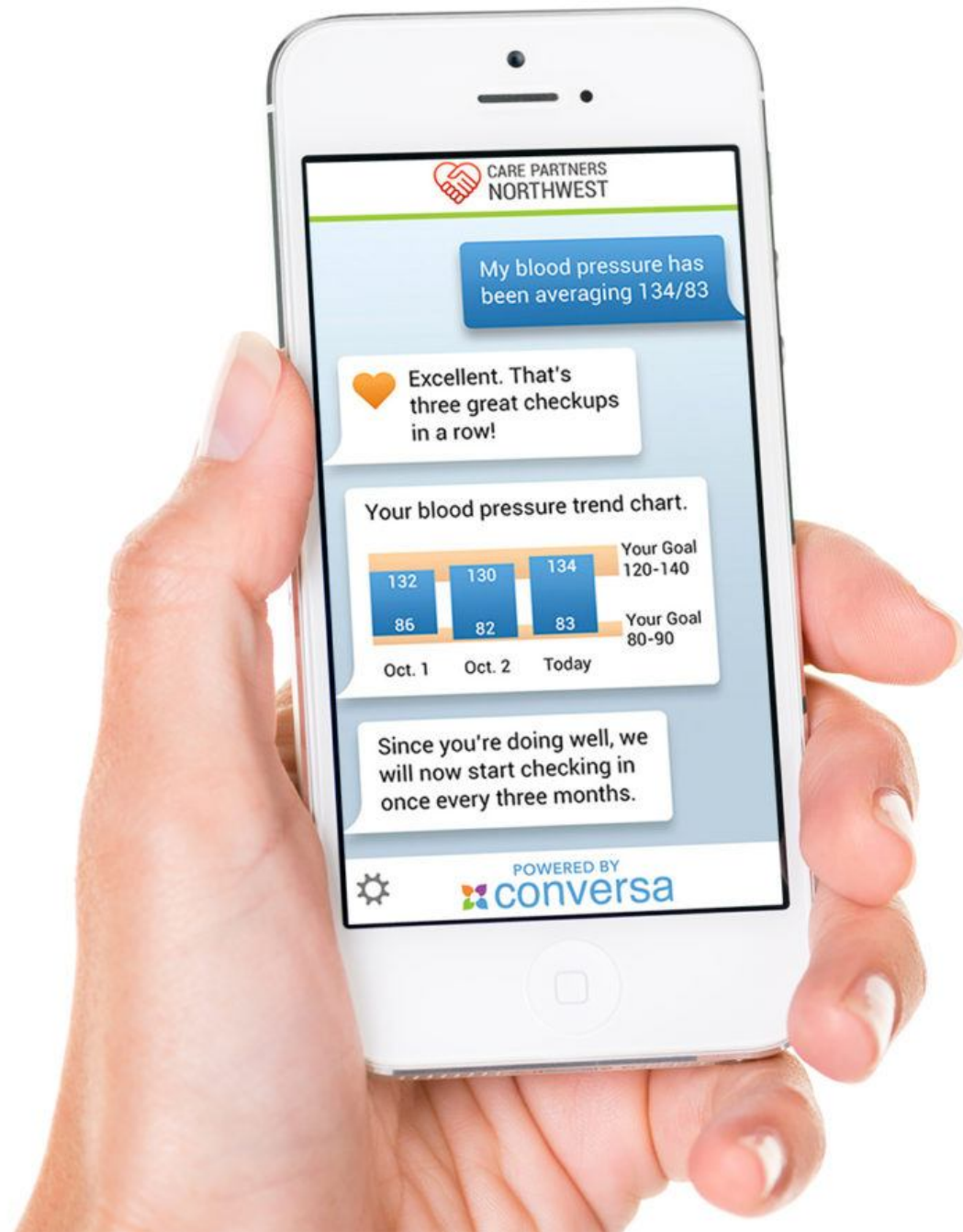


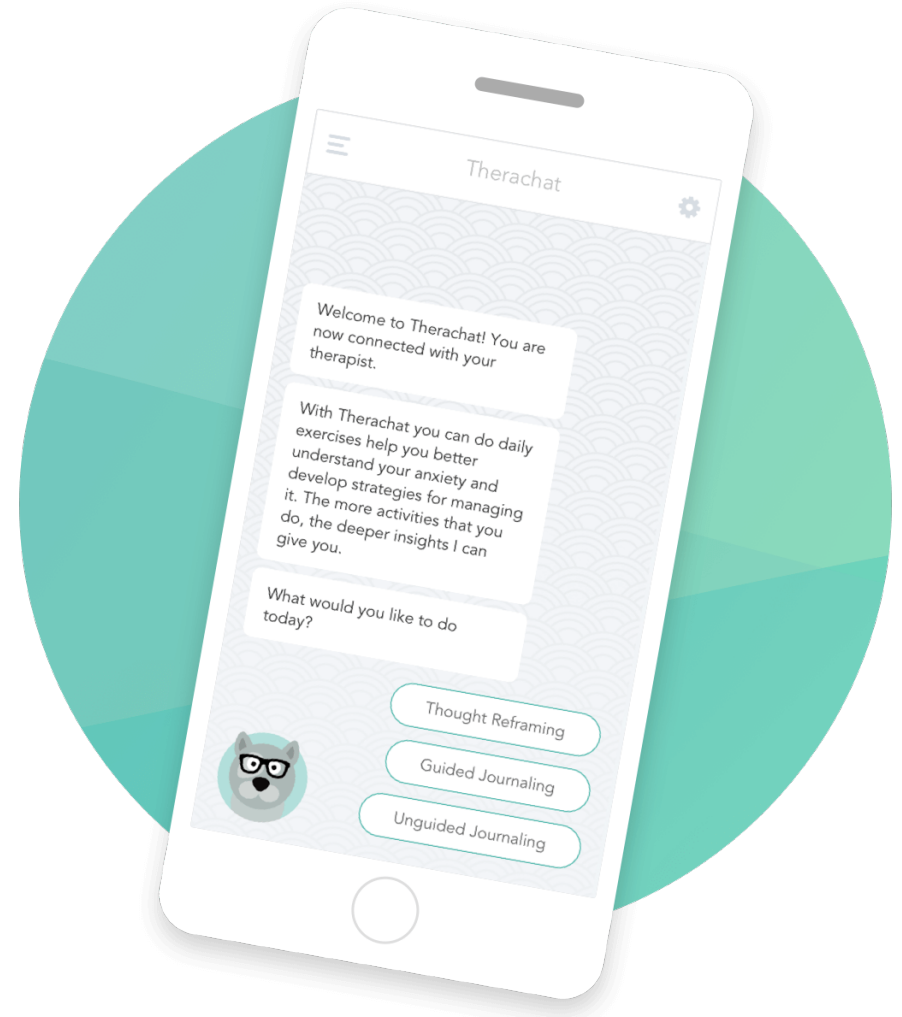
2. Provides relevant information



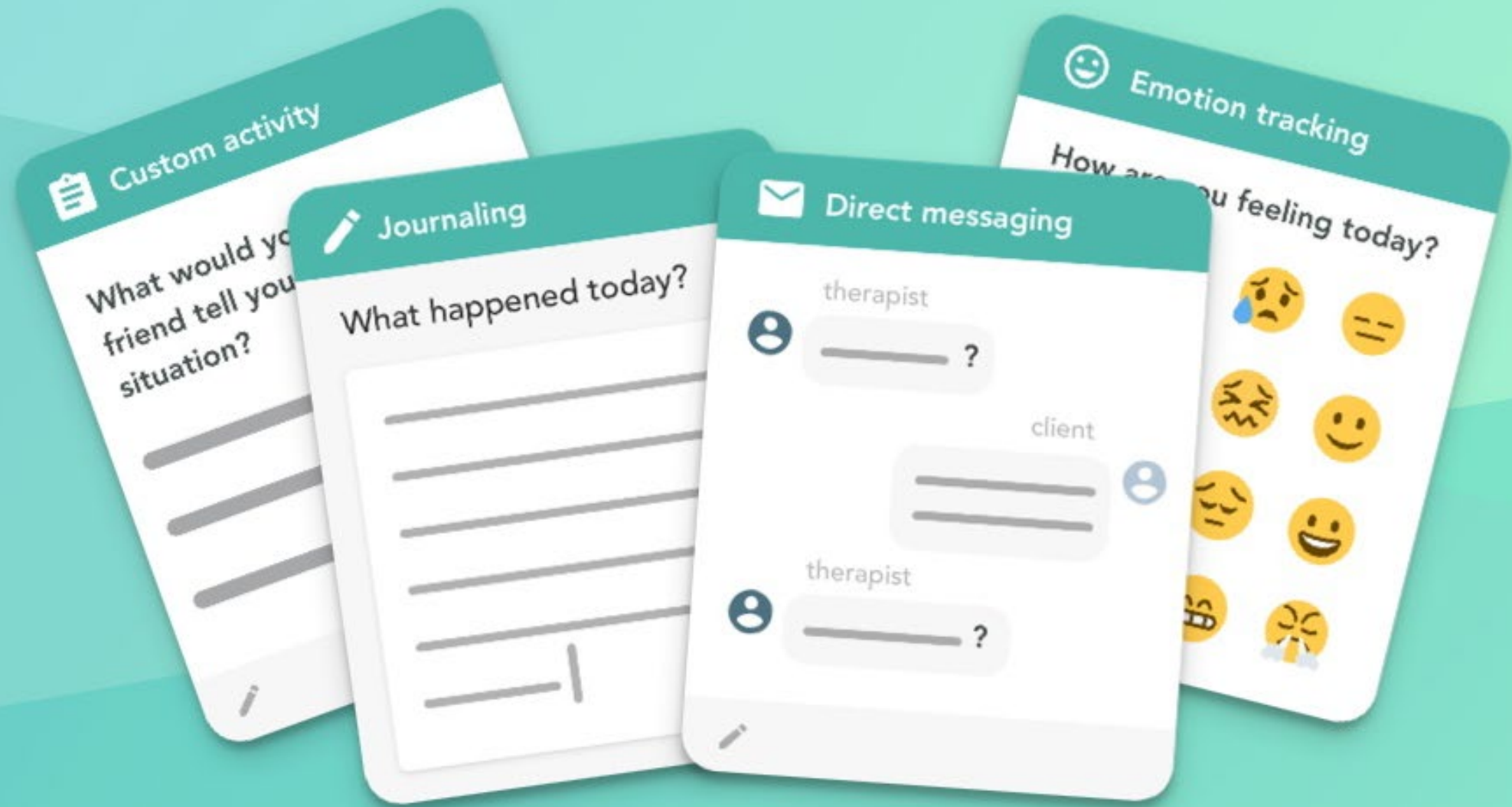
3. Suggest solutions





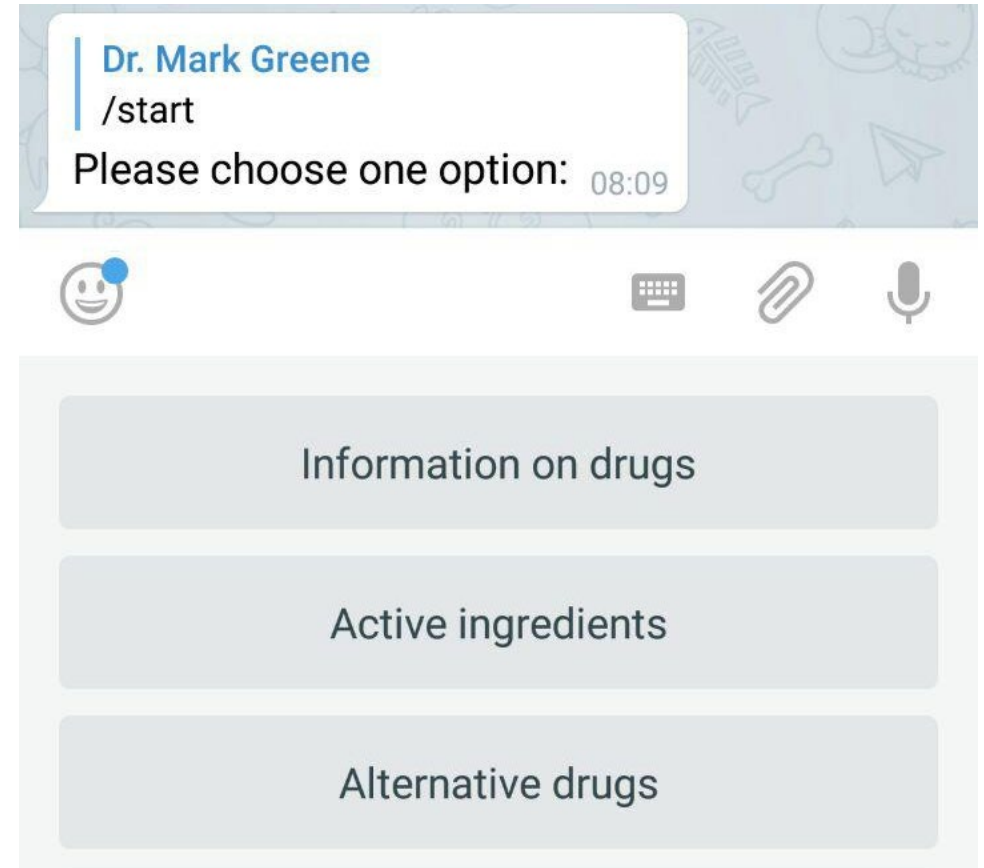


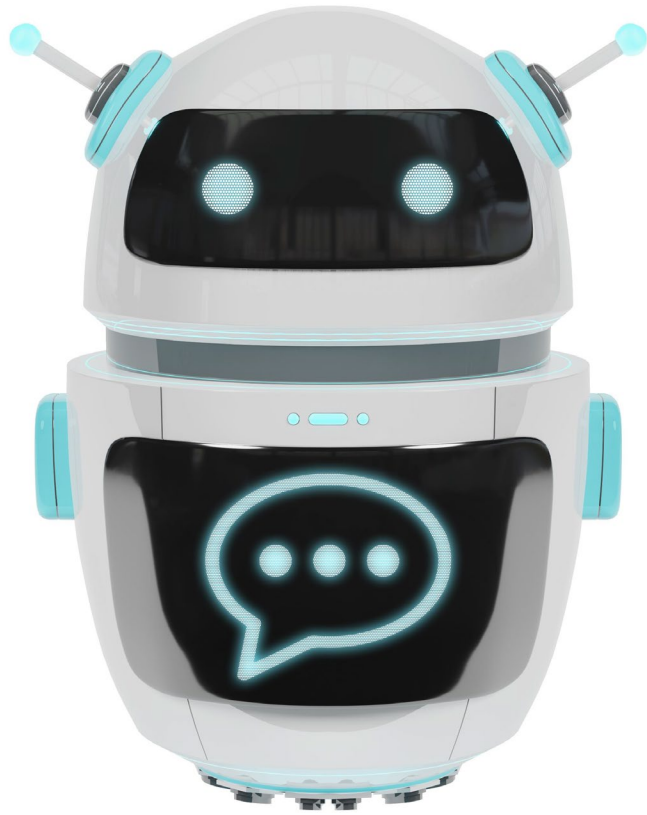
<https://www.therachat.io/>





SafeDrugBot



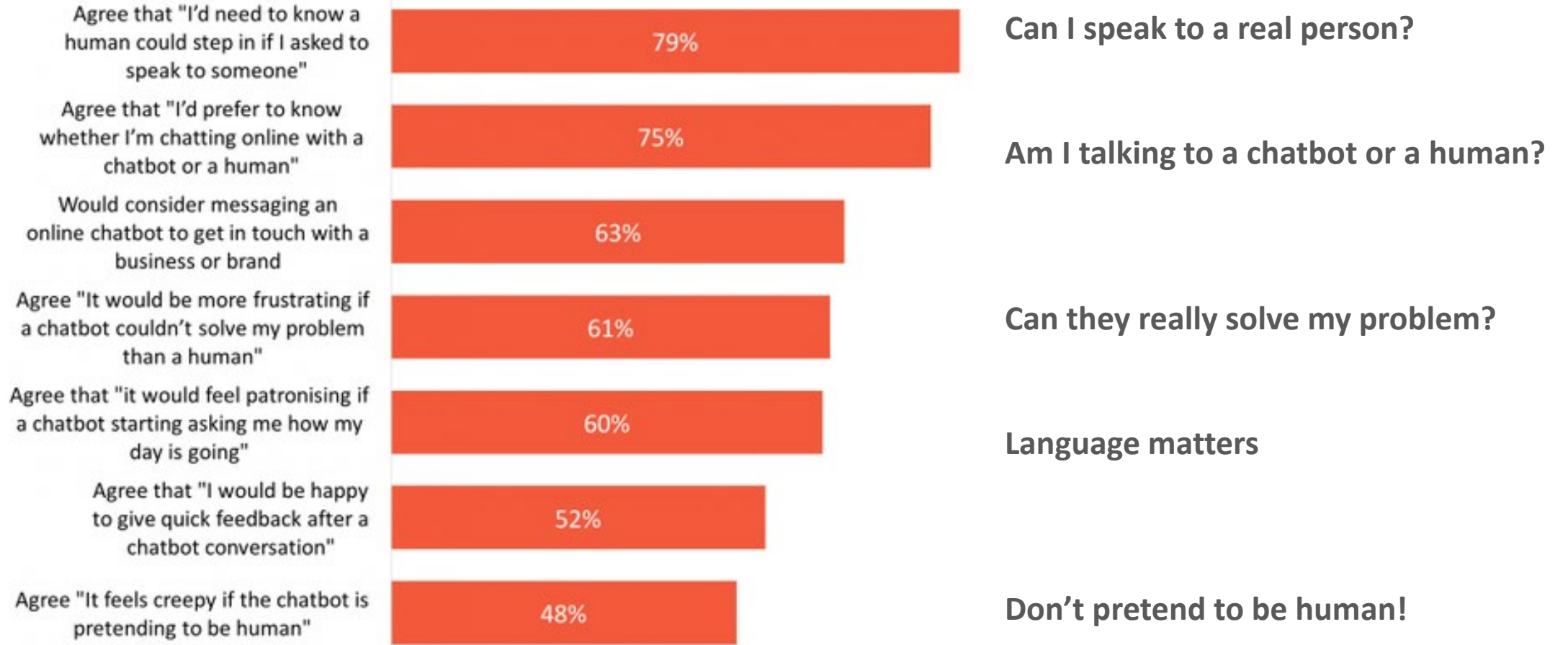


**Thinking about using a
chatbot?**

Consider user experience first

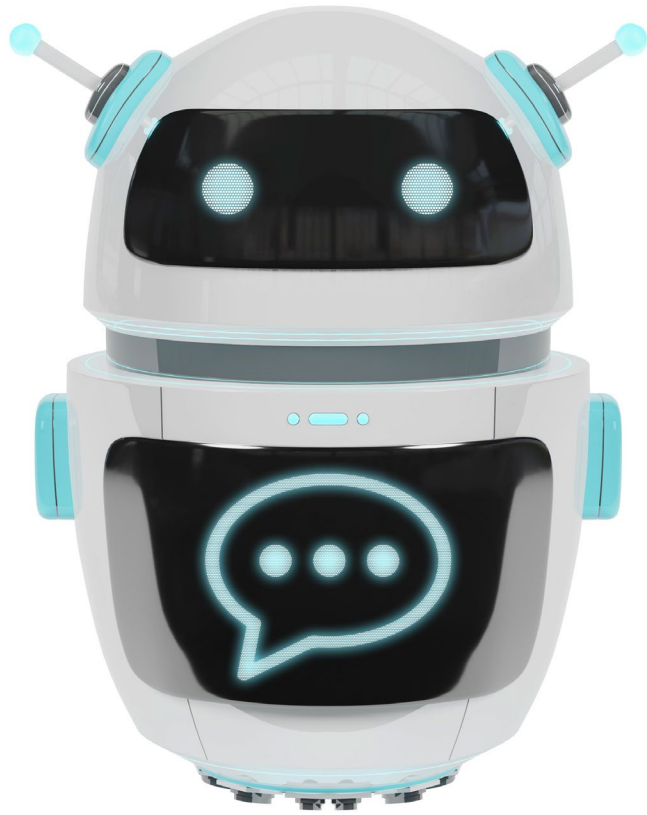
Smartphone Users' Attitudes Toward Chatbots

UK, 2016



Source: Mindshare, n = 1,000

BI INTELLIGENCE



6 Steps to Designing Chatbots

1. Decide the purpose, goals & KPIs
2. Choose your platform (HIPAA)
3. Determine your customer journey
4. Map out your campaign
5. Write your copy
6. Build the bot!



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@rachelhaviland

Slidedeck available at:

HealthMarketingAcademy.com/mcsmn