

Straight from the source

Incorporating Patient-Generated Health Data
into clinical workflows

Today's speakers



John Halamka, MD
Chief Information Officer
Beth Israel Deaconess Medical Center



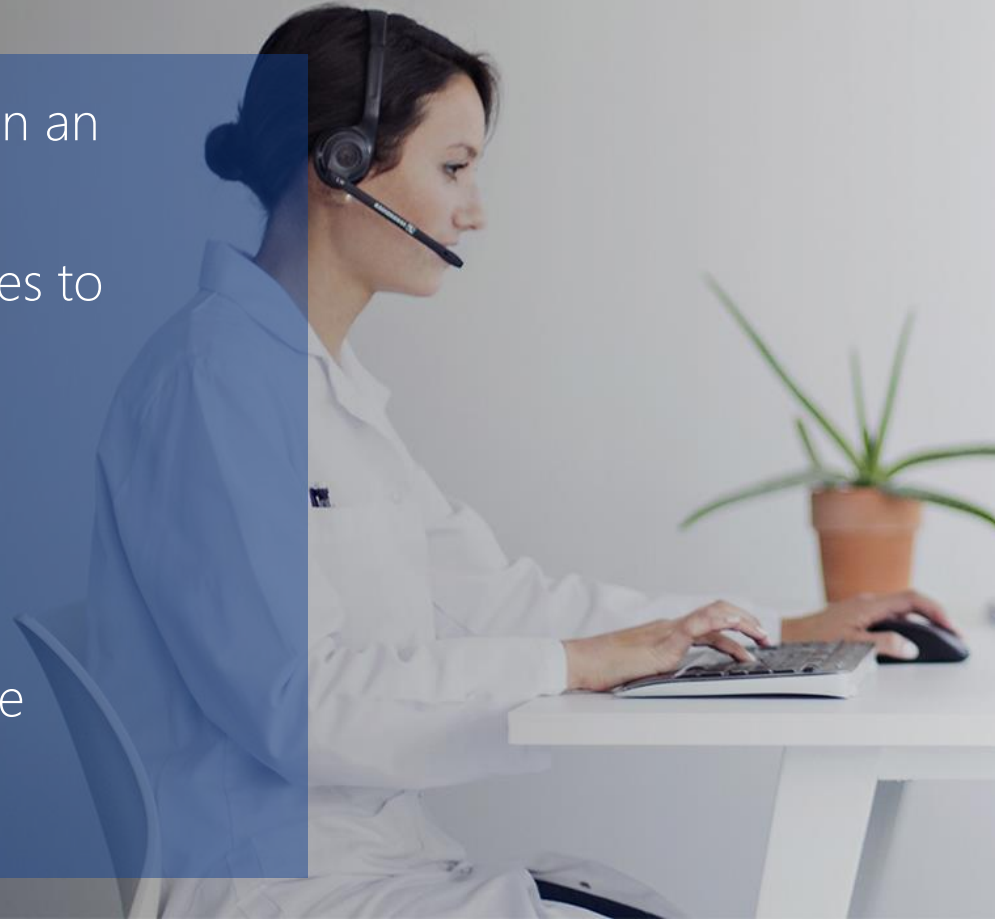
Alexis Normand
Director of Healthcare Business
Nokia Technologies

Part one

Connecting providers, patients and payers

The problems to be solved

- Ever increasing healthcare costs in an aging society
- Poor tools for patients and families to navigate the healthcare system
- Caregiver burden with EHRs
- Lack of enabling infrastructure to exchange data
- Significant variations in healthcare quality



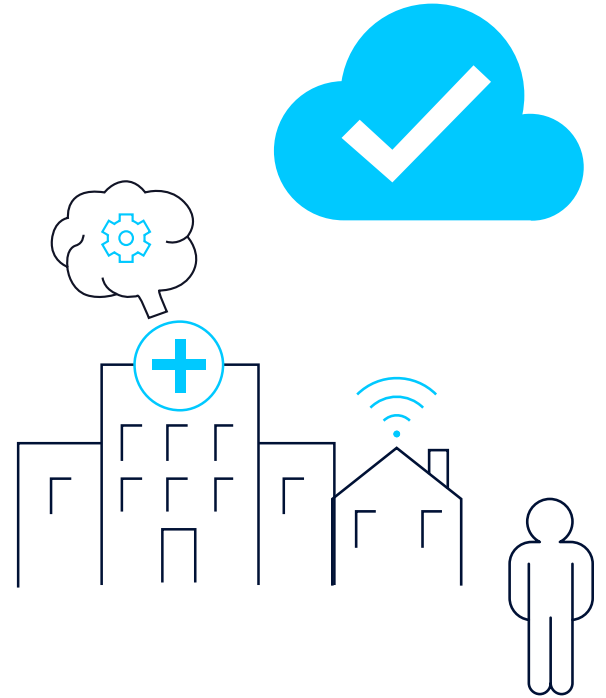
The experience to date

- HITECH's \$31 Billion dollars has moved adoption from 10% to over 90% in 8 years
- 50% of clinicians want to quit because of the overwhelming burden of complex regulatory requirements
- Patient portals have not been widely adopted
- Security challenges are escalating
- Innovation by the major EHR vendors has slowed because of government mandates



Emerging trends

- The rise of app stores/third party tools that layer on top of electronic health records.
- Work on the infrastructure that will accelerate data sharing - nationwide patient matching strategy, electronic provider directories, data governance/policy frameworks
- Internet of Things
- The urgency to reduce costs as part of the move from fee for service to value-based purchasing
- Reduced pace of government regulatory efforts

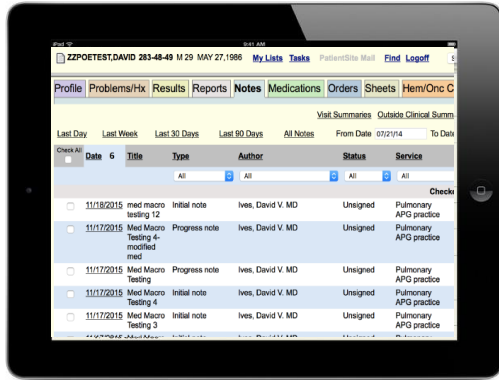


We can do better

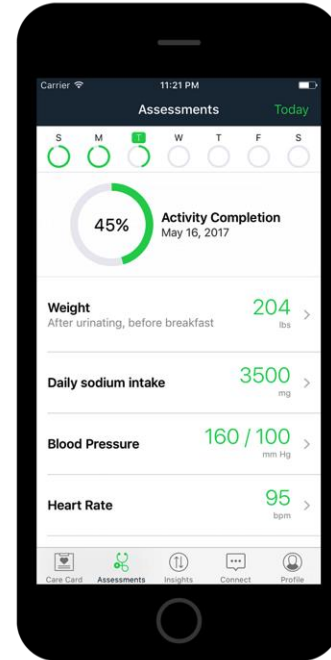
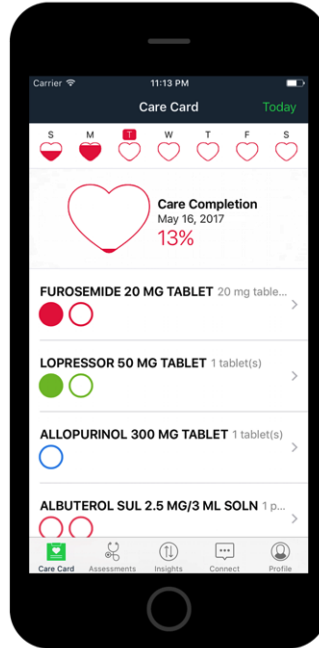
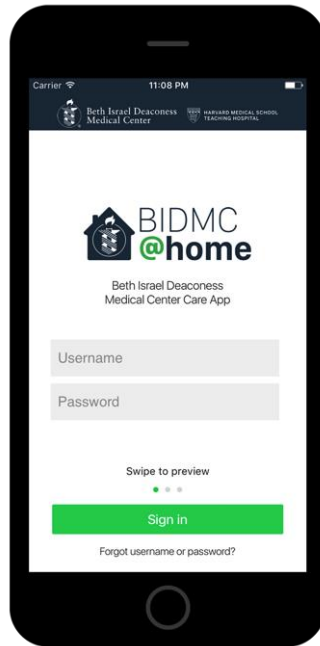
- *EHR* - my wife's thyroid issues and the need for "social" precision medicine
- *Patient/Family engagement* - my recent hypertension diagnosis and "internet of things" precision medicine
- *Big Data Analytics* - my wife's cancer experience and "clinical trial of one" precision medicine



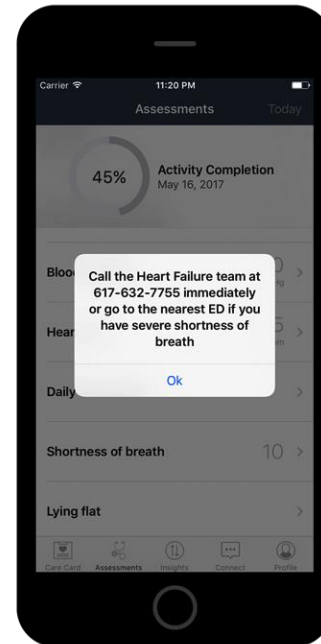
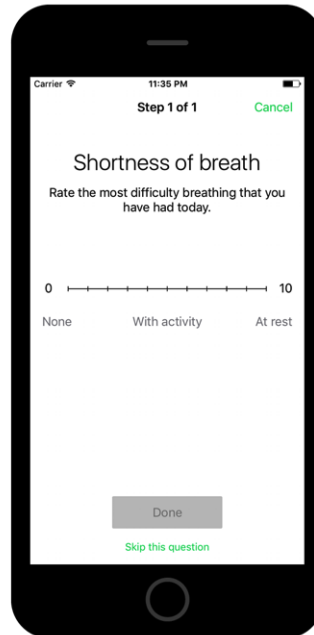
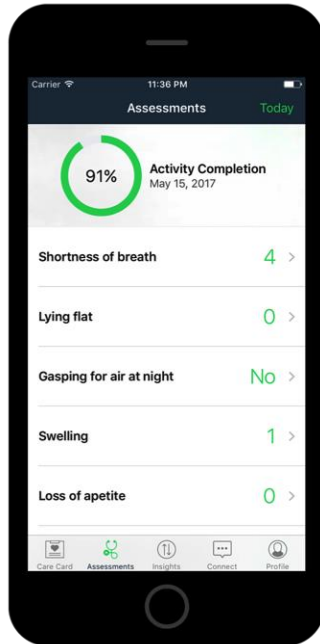
Patient and provider mobile apps



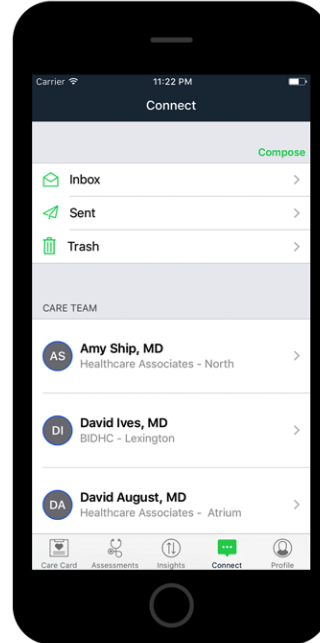
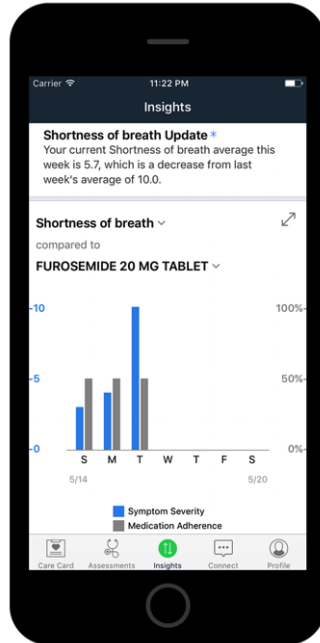
BIDMC @home



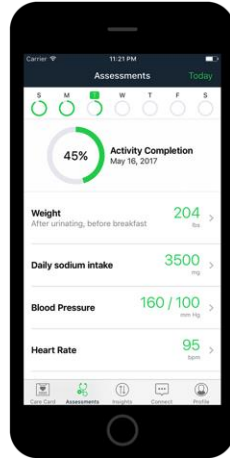
Monitoring to management



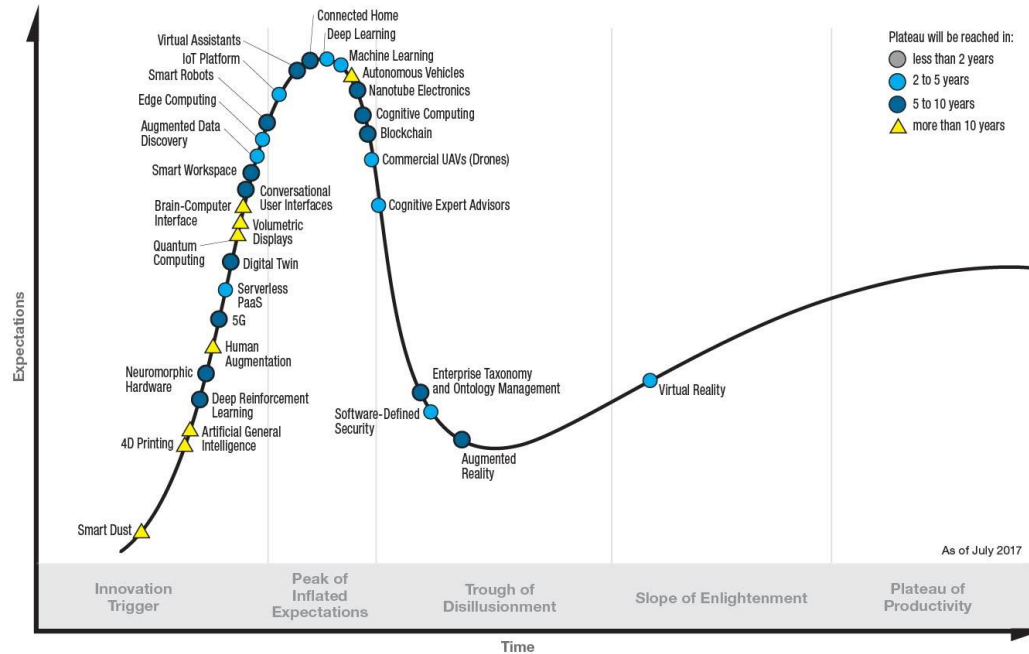
Insights and messaging



Hub for wearables and internet of things



Gartner Hype Cycle for Emerging Technologies, 2017



gartner.com/SmarterWithGartner

Source: Gartner (July 2017)
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Gartner

NOKIA

Part two

Building a remote monitoring solution leveraging PGHD

To leverage PGHD, you need:



RIGHT DATA



RIGHT TIME



RIGHT ACTION



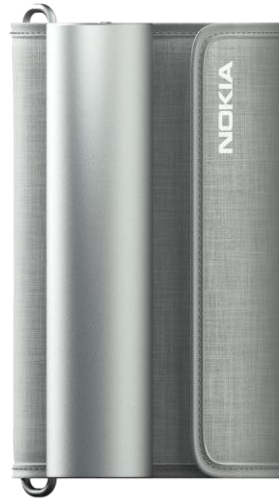
RIGHT PLACE

Measuring what matters

THE RIGHT DATA



Weight
BMI
Heart rate
Pulse wave velocity



Blood pressure
Heart rate
FDA approved



Activity
Sleep
Calories
Heart rate

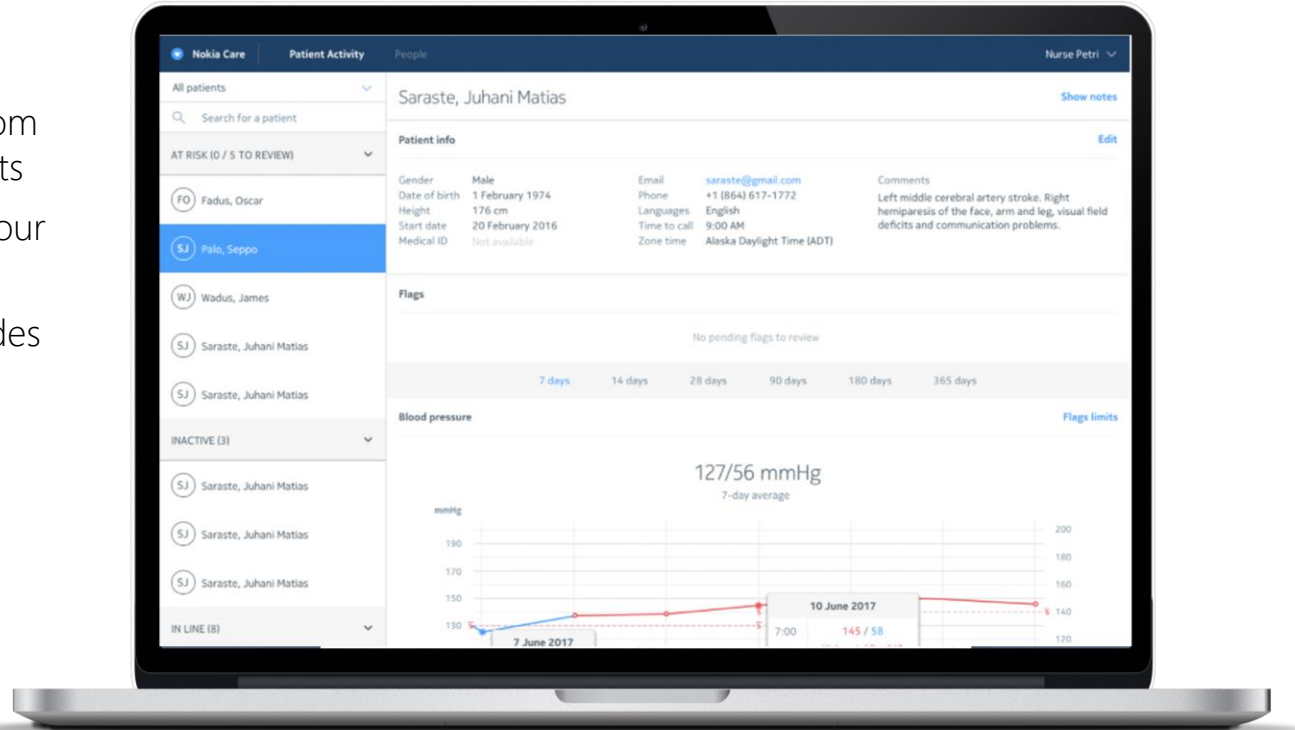


All device data
Diet
Environment

Custom flags and comprehensive reporting

THE RIGHT TIME

- Find a platform that enables segmented cohorts and custom thresholds to prioritize patients
- Plan outreach exactly when your patients need it most
- Look for reporting that provides insight on what interventions are working and what needs rework



Genius bar concept meets healthcare

THE RIGHT ACTION



“Prescribe” a patient their own device & care plan

Already implemented at top systems.



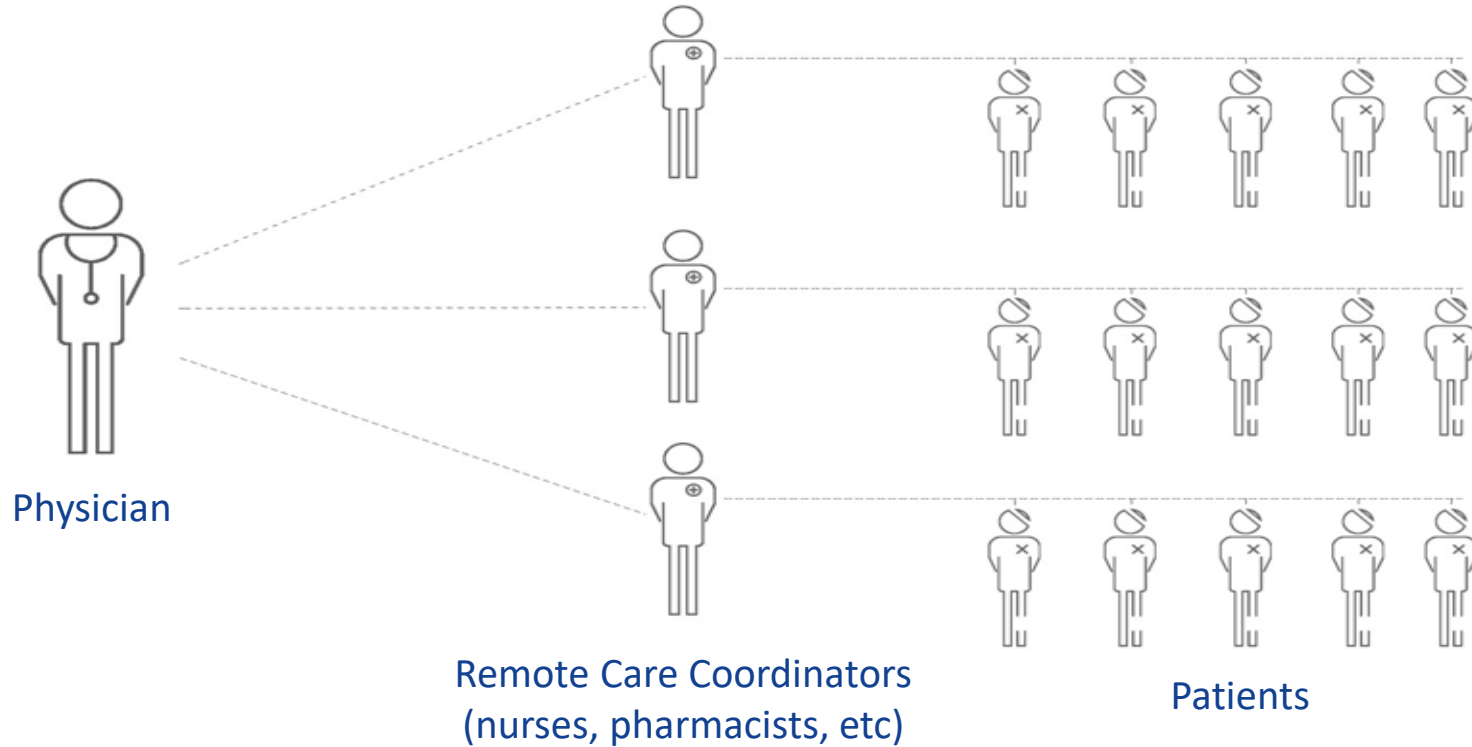
Integration with EHRs



Staffed with product experts to on-board patient and integrate data into EHRs and clinical workflows.

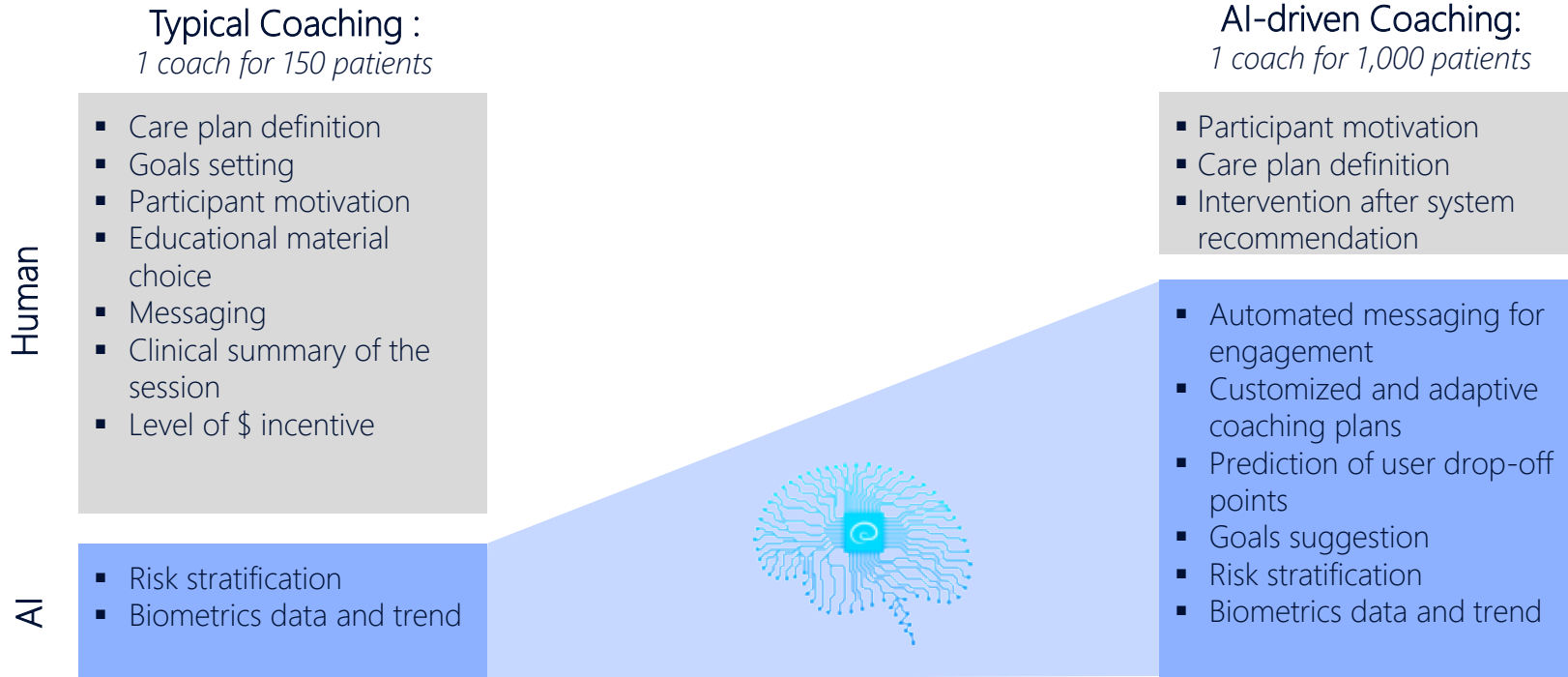
Remote monitoring at scale

THE RIGHT ACTION



TOWARDS MORE AUTOMATED & PERSONALIZED INSIGHTS

Leveraging our data to scale remote monitoring platforms



Monitoring wherever the patient is

THE RIGHT PLACE



At home



On-the-go



At night



Even underwater

Health care doesn't just happen at the doctor's office. Look to offer devices that work wherever and whenever the patient needs them.

Questions?

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