HEADLINER

The importance of continuous access to patient data for AI Innovation in Healthcare

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Connected Care
Philips

13-14 September
INTELLIGENT HEALTH 2023
Basel, Switzerland

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The Power of Prediction

Prof. dr. Milan Petković
Philips
September 2023

innovation you

Products come and go ...
Technologies change ...

But Philips is still
about one thing:

Creating meaningful
innovation that improves
people's lives

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It is our purpose to improve people's health and well-being through meaningful innovation.

We aim to improve the lives of 2.5 billion people per year by 2030.*

* 2 billion by 2025

Helping our customers address their challenges

Better health outcomes

Improved patient experience

Improved staff experience

Lower cost of care

Flagship innovations across our portfolio will drive our growth

IntelliVue

Dynamic care solution

Alarm fatigue:
40% total alarm reduction[1]

Workflows:
Reduced time to process from 5 minutes to 3.9 seconds[2]

1. Team-Based Interventions to Reduce the Impact of Nonactionable Alarms in an Adult Intensive Care Unit. Justin Yeh 1, Ruth Wilson, Lufei Young, Lisa Pahl, Steven Whitney, Kevin C Dellsperger, Pascha E Schafer
2. Results from baseline and post time & motion studies conducted by Philips and Jackson Health internal teams in the high acuity units (ED, TICU, CCU) | 2.

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Flagship innovations across our portfolio will drive our growth

Philips BioTelemetry

4.6x more patients

with atrial fibrillation detected by MCOT compared to ILR alone[1]

8x lower costs achieved

with improved detection rates and reduction of secondary stroke risk due to new anticoagulant use in subjects with MCOT-patch-detected atrial fibrillation[1]

1. Medic G, Kotsopoulos N, Connolly MP, et al. Mobile cardiac outpatient telemetry patch vs implantable loop recorder in cryptogenic stroke patients in the US – cost-minimization model. Med Devices (Auckl). 2021;14:445-458. doi:10.2147/MDER.S337142

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Flagship innovations across our portfolio will drive our growth

MR

0 helium refill over lifetime

Up to 53% lower power consumption per patient scan
(32% on average)[1]

1. Philips SmartSpeed power consumption versus Philips SENSE based scanning. Based on COCIR and in-house simulated environment. Results can vary based on site conditions

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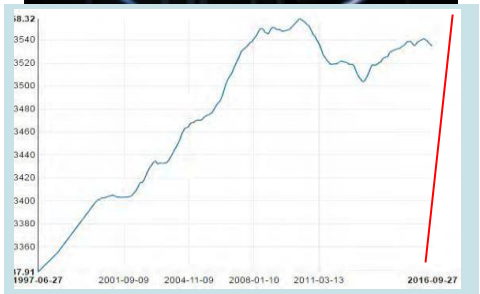
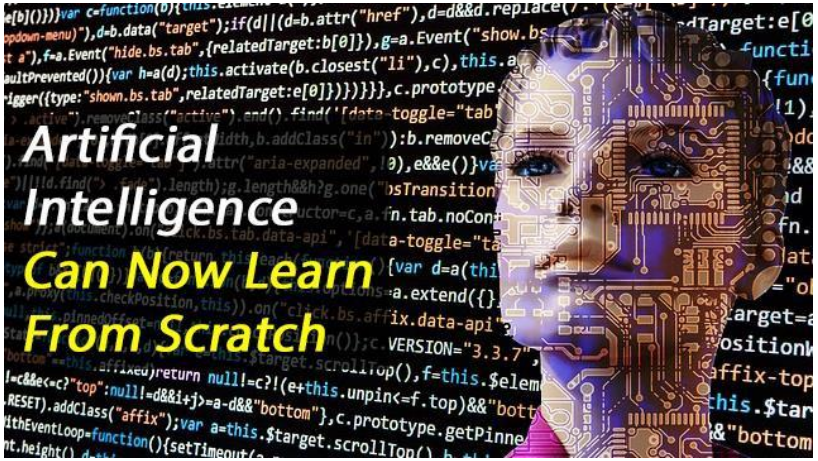
Artificial Intelligence - AI





Large language models to mimic a human conversationalist

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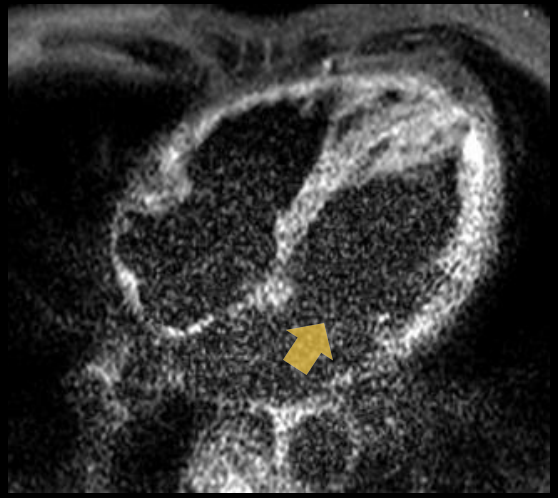
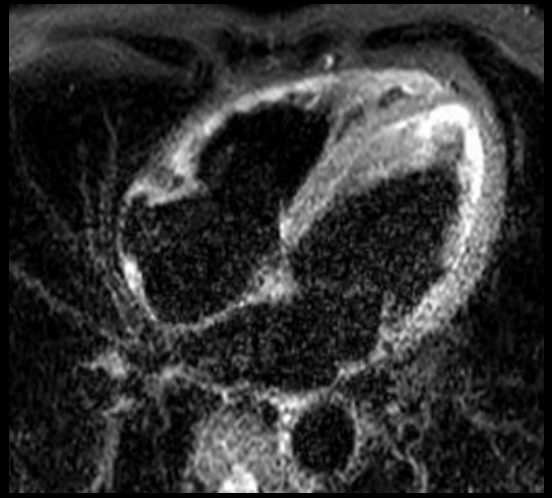
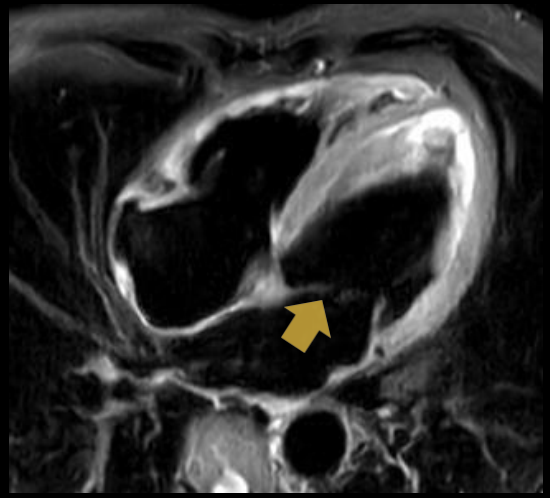
SmartSpeed AI: building on C-SENSE



SENSE 6.0



Compressed-SENSE 6.0



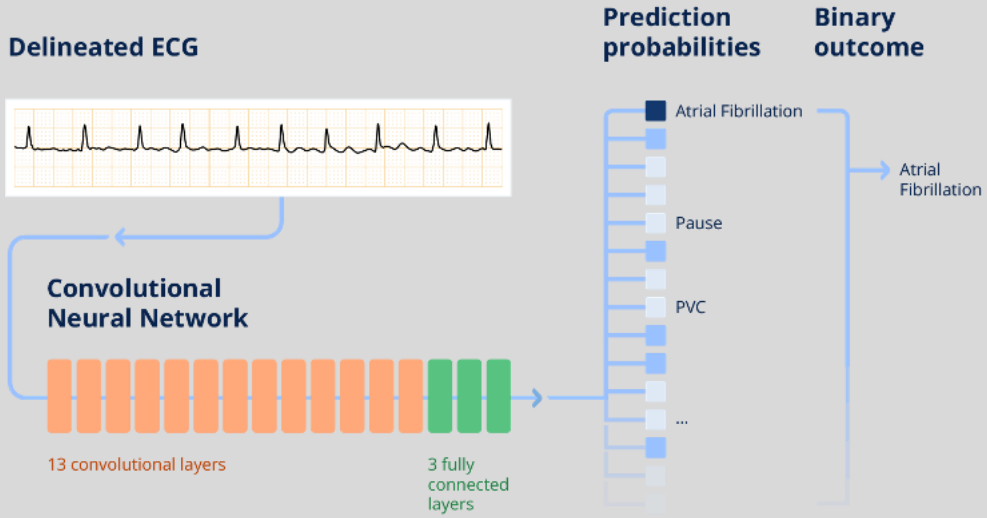
Complemented with AI: SmartSpeed

FDA 510K, April 2022

1) Machine Learning for Medical Image Reconstruction. Sept 2021. Springer Nature Switzerland AG.

For research application only and not for clinical use.

Ingenia Ambition 1.5T. T2 STIR BB



MACHINE LEARNING FOR ECG DIAGNOSIS AND RISK STRATIFICATION OF OCCLUSION MYOCARDIAL INFARCTION
Nature Medicine

NEAR-TERM PREDICTION OF LIFE-THREATENING VENTRICULAR ARRHYTHMIAS USING ARTIFICIAL INTELLIGENCE-ENABLED SINGLE LEAD AMBULATORY ECG
Hearth Rhythm Society congress 2023

High-quality ECG diagnostics

Medical grade AI technology powering our cloud-based arrhythmia diagnostic platform

IntelliVue GuardianSoftware

Detecting early signs of patient deterioration in general care settings

IntelliVue GuardianSoftware with early warning scoring (EWS) automatically acquires patient vital signs, calculates an early warning score customized to the individual needs of the hospital, displays it at the point of care, and notifies responsible caregivers.

A prospective study using Philips IntelliVue GuardianSoftware supports the use of an automated EWS system with notifications to provide improvements in key patient-centered clinical outcomes.

Hospital mortality including readmissions[1]

ICU readmissions rates[1]

Severe adverse events[1]

Cardiopulmonary arrests[1]

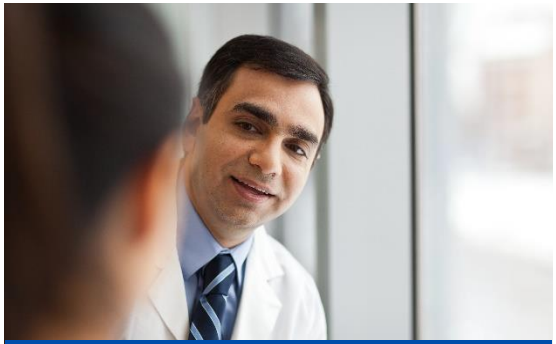
ICU mortality of patients transferred to the ICU[1]

1. Subbe, C.P., Duller, B. & Bellomo, R. Crit Care (2017) 21: 52. doi:10.1186/s13054-017-1635-z

We combine the power of AI with deep clinical knowledge to create solutions that integrate into the workflows of healthcare providers and people’s daily health routines.

Partnerships and new business models

Driving AI at scale through collaborative ecosystems



Long-term strategic partnerships

We innovate with leading medical centers to advance AI-enabled solutions around the globe

Integrating third-party AI offerings

We integrate validated third-party AI applications into our solutions for seamless workflow support

AI marketplace based on a cloud-based platform

We enable healthcare providers to easily implement AI apps into their workflows – including apps from third parties – via a common cloud-based platform

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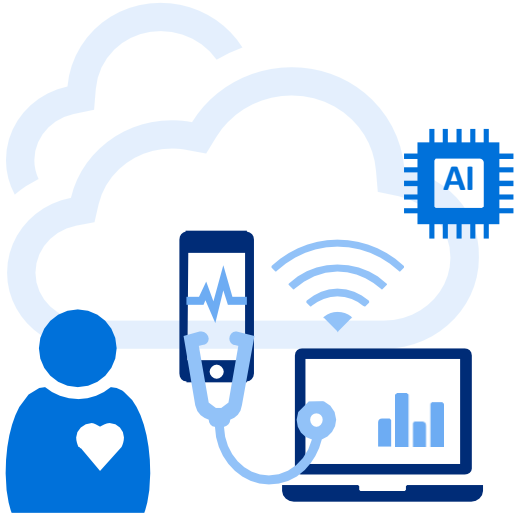
Key take-aways

- With AI, we can help people take better care of their health and well-being, and **enable healthcare providers to do what they do best**: prevent, diagnose, treat, and monitor

- For AI to support the **human experience** in healthcare, it needs to **integrate into the workflows** of healthcare providers and people's daily health routines

- Scaling AI in healthcare requires a human-centered approach, based on a strong foundation of trust – while promoting increased data sharing, interoperability, and **ecosystem partnerships** that enable seamless workflow integration



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