Yeni normal ve sağlıkta dijitalizasyon

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NEW NORMAL
JUST AHEAD

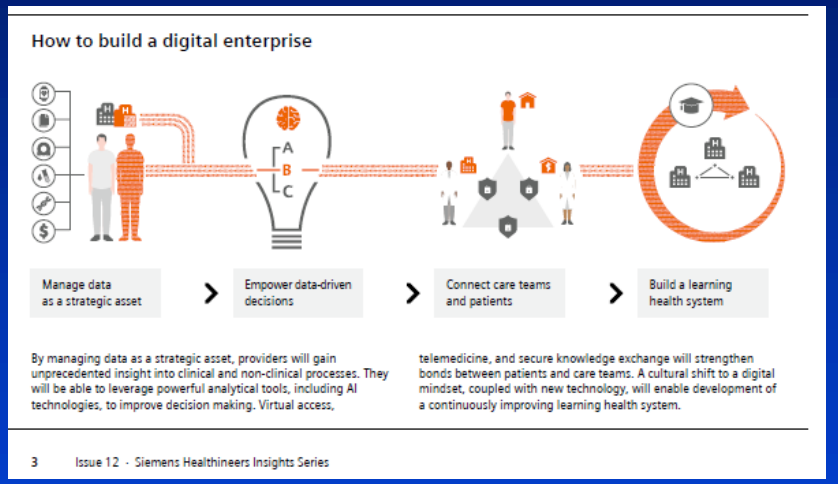
- Kaliteli bir yaşam, hastalıkların önlenmesi
- Teşhis (ve triyaj)
- Tedavi
- Kronik hastalık yönetimi (ya da pandemide hasta takibi)

- Endüstri 4.0
- Healthcare 4.0
- Internet of things
- Big data
- Cloud computing
- Yapay zeka (derin öğrenme) uygulamaları
- Sağlıkta dijitalizasyon ve operasyonel optimizasyon



Dijital bir sağlık kurumu

- Bilginin stratejik bir varlık olarak kullanılması
- Bilgi-tabanlı kararlar alınması
- Sağlık personeli ile hastaların iletişimi
- Öğrenen bir sağlık sisteminin kurulması



How to build a digital enterprise

Manage data as a strategic asset

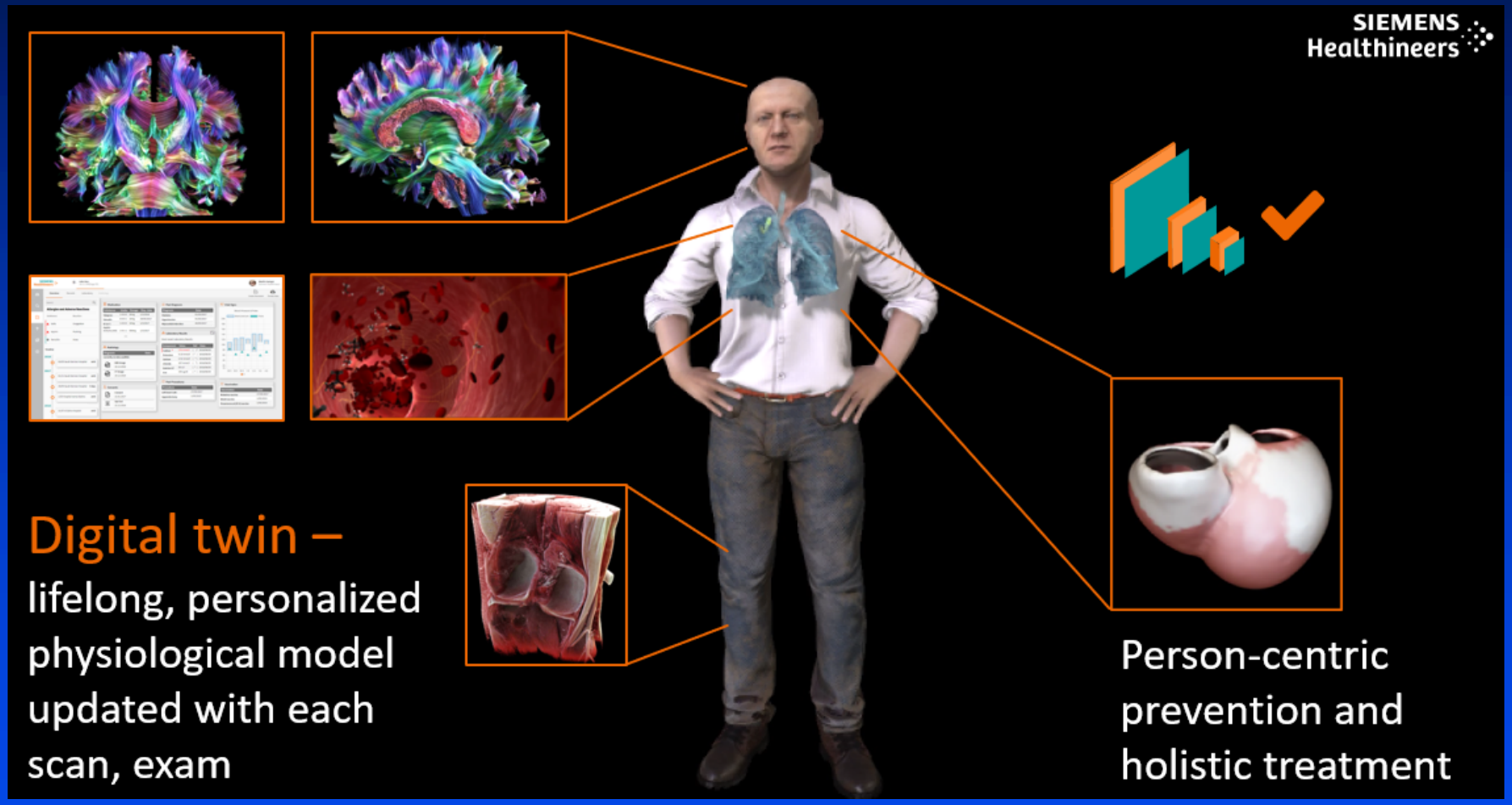
Empower data-driven decisions

Connect care teams and patients

Build a learning health system

By managing data as a strategic asset, providers will gain unprecedented insight into clinical and non-clinical processes. They will be able to leverage powerful analytical tools, including AI technologies, to improve decision making. Virtual access, telemedicine, and secure knowledge exchange will strengthen bonds between patients and care teams. A cultural shift to a digital mindset, coupled with new technology, will enable development of a continuously improving learning health system.

Sağlıklı yaşam

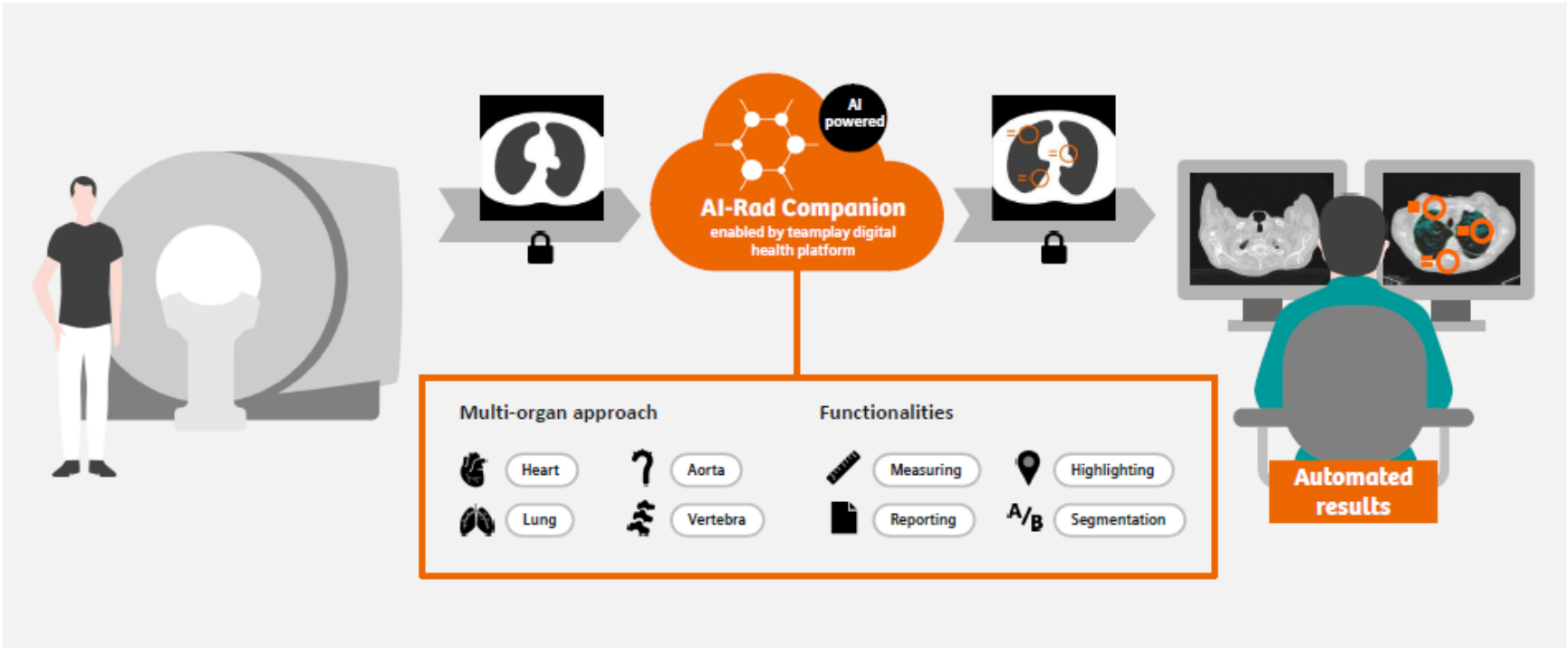


- Hekimler ve sağlık personeli
  - Müdahale zamanının önceden kestirimi
  - Tedavi kararlarında destek
  - Kronik hastalık yönetimi
- Hasta
  - E-randevu sistemleri
  - Kişisel sağlık bilgileri ve önleyici sağlık
- Sağlık kuruluşu
  - Kaynak kullanım optimizasyonu
  - Verimlilik

Teşhis (ve triyaj)

Chest CT with AI-Rad Companion[1]
Your augmented reading aide

SIEMENS Healthineers



Courtesy of Klinikum Nürnberg, Nuremberg, Germany
1) Tested and validated for DICOM Images from CT scanners of Siemens Healthineers, GE Healthcare and Philips Healthcare.

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AI COVID-19

An algorithm developed in a collaborative approach

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(1) Hôpital Foch, Paris, France
(2) Northwell Health, New York, NY, USA
(3) University Hospital Basel, Clinic of Radiology & Nuclear Medicine, Basel, Switzerland
(4) Vancouver General Hospital, Vancouver, Canada

And with our unique AI research and development group in Princeton, our software development center in Bangalore, our product experts of CT in Forchheim, our customer collaboration partners in Paris and our own supercomputer we were able to enhance our AI portfolio with this algorithm, which works on CT images. We are stepping up as a partner to support healthcare systems helping them to deliver high-value care to patients and families and developing with us together the CT pneumonia analysis.

(5) Siemens Healthineers, Bangalore, India Software Development Center
(6) Siemens Healthineers, Forchheim, Germany CT chest Product Development and Manufacturing
(7) Siemens Healthineers, Princeton, NJ, USA Digital Technology and Innovation
(8) Siemens Healthineers, Paris, France AI collaborations

The AI-Rad Companion Family continues to grow

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Recently added extended modality coverage for MR



Recently added body regions and organs, e.g., Head[1], Prostate[1]

Recently added therapy planning support - Organs-at-Risk[1] segmentation for radiotherapy planning



Added seamless workflow integration, e.g. Notifier[1]



1) AI-Rad Companion Brain MR, Prostate MR, Organs RT and Engine (VA20) are 510(k) pending. The information about these products is preliminary. They are not commercially available in all countries, and their future availability cannot be ensured

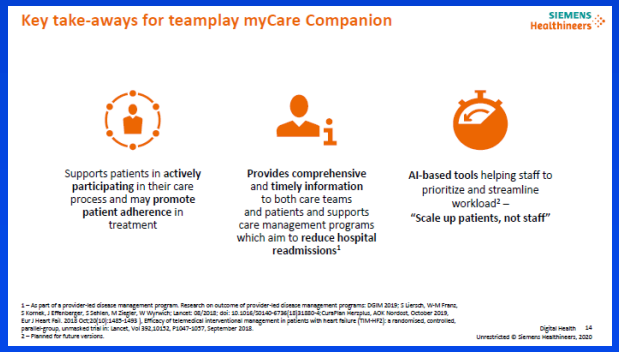
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Takip – teamplay my Care companion

- Hasta
  - Vital bulguların saptanması (3. taraf cihazlar)
  - Uygulamalar
- Sağlık kuruluşu
  - Bilgi ekranı (dashboard)
  - Hasta görüşmelerinin planlanması ve dokümentasyonu
  - AI ile önceliklerin tayin edilmesi

teamplay myCare companion

- Hastanın sürece daha aktif şekilde katılmasını sağlamak
- Hem sağlık görevlilerine hem de hastaya bilgi sağlamak, hastanelerdeki yığılmaları azaltmak
- AI ile hasta akışını yöneltmek



COVID-19 offering[1]

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Patient

Measures body temperature and SpO_2 levels with measuring devices[2]





Web-Access via Smartphone or PC for patient data and questionnaire



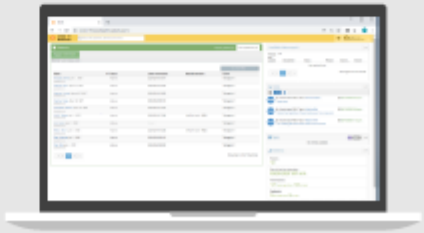


Health Authority

Dashboard

- Smart overview of enrolled patients
- All relevant data in one view
  - Progress on temperature curve
  - Questionnaires and chat history
  - Nursing notes and reminder for follow-ups

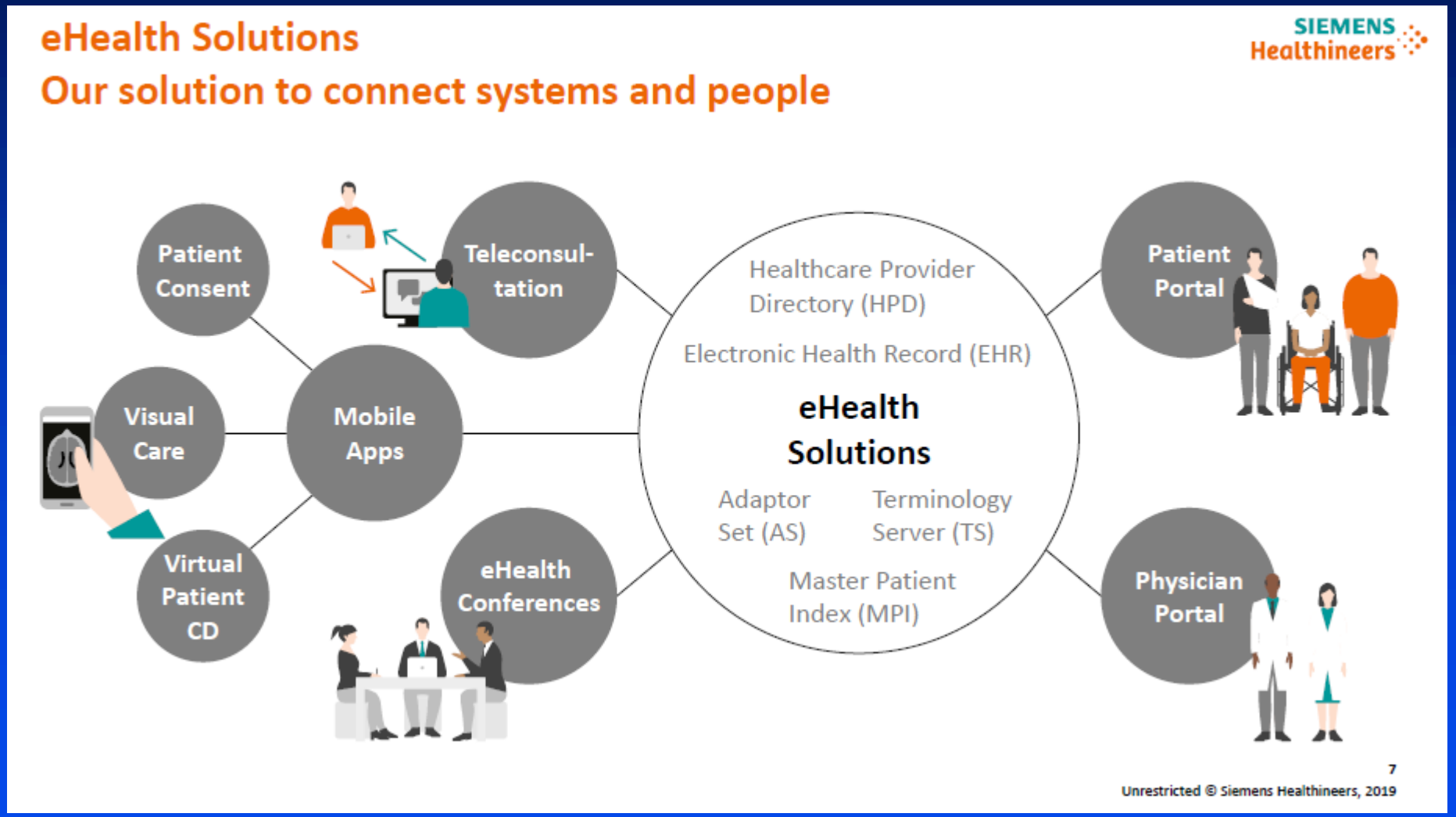




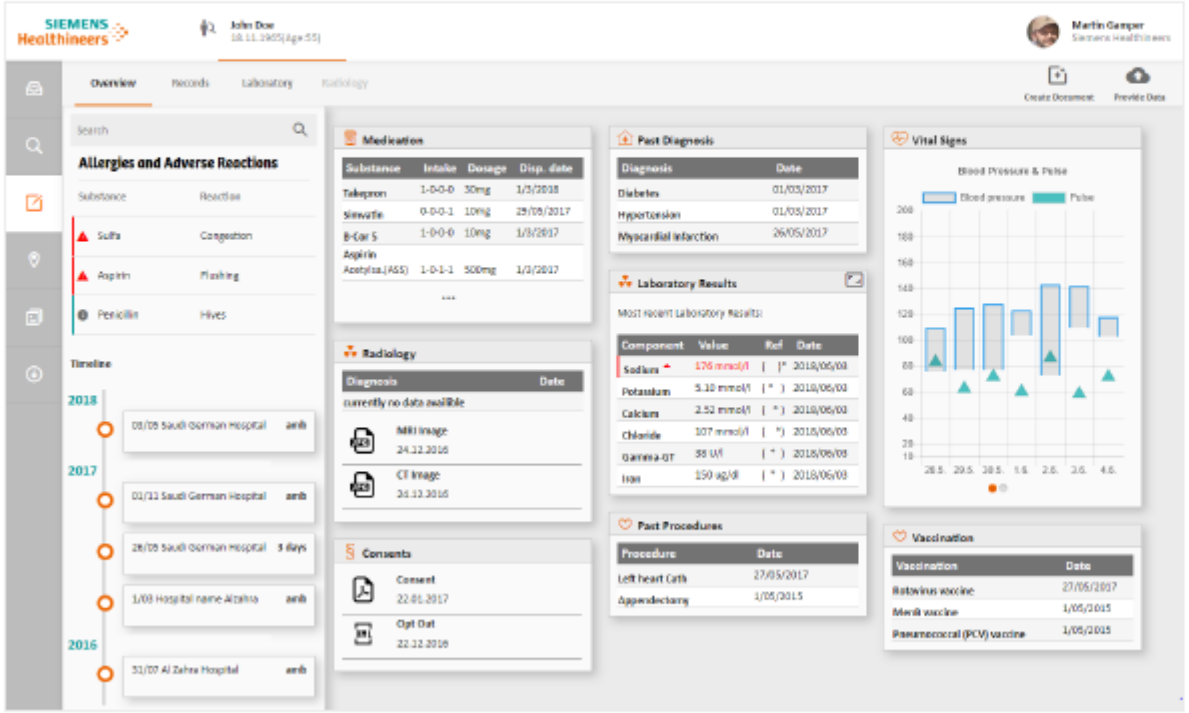
[1] COVID-19 functionality is currently not part of teamplay myCare Companion. For information please contact your local Siemens Healthineers organization.
[2] Measuring devices are not part of the solution.

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eHealth çözümleri: bir ekosistem örneği



eHealth Physician Portal
Patient Chart



- Extracts discrete data from CDA findings or directly fills with discrete data via FHIR interfaces
- Retrieves date from homecare devices or point-of-care devices, even from fitness trackers
- Patient can add data by upload to patient portal

The eHealth Physician Portal simply displays received/endered data. The product itself does not issue alerts or similar.

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Optimizasyon

***syngo* Virtual Cockpit is a digital solution to address staff shortages – integrating a virtual clinical workflow needs active management**

SIEMENS Healthineers



Need to strengthen capabilities in regards to digitalization where technological advancements can help overcome staff shortages



Need to avoid workflow interruptions, re-scans, and long waiting times for patients where staff requires confidence through training when adopting new technologies



Risk of missing operational optimization potentials and bottom-line improvements despite innovations being available to provide these

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Syngo Virtual Cockpit

- Ekipler ve kuruluşlar arasında gerçek zamanlı bilgi paylaşımı
- Bir kıdemli teknisyen üç farklı sağlık kuruluşu ile canlı bağlantıya geçebilir
- Expert-i



Sağlıkta dijital dönüşüm

