Addressing the future of healthcare now

Shaping the intelligent era of cross-sectoral collaboration

Dr. Anette Großmüller, Science & Innovation Lead, SAP
October, 2018

imi innovative medicines initiative

THE BEST RUN SAP

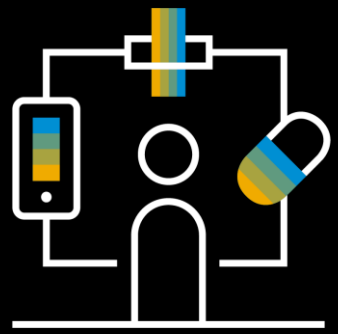
Market Dynamics in Healthcare

Data is the common thread

Increasing Pressure on Healthcare System

Expansion of value over volume

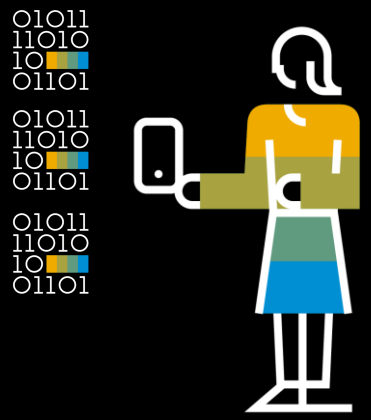
Big Data explosion



Patient consumerism

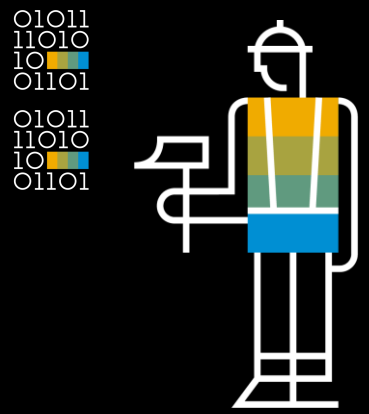
Turning Challenges into Opportunities

High Digitization



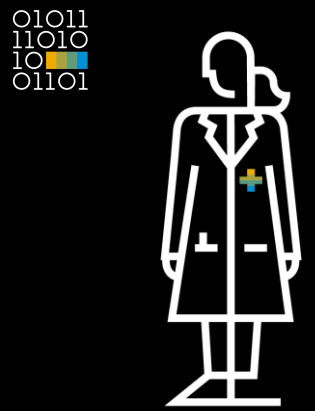
IT
Media
Professional Services

Medium Digitization



Mining
Real Estate
Transport / Warehousing

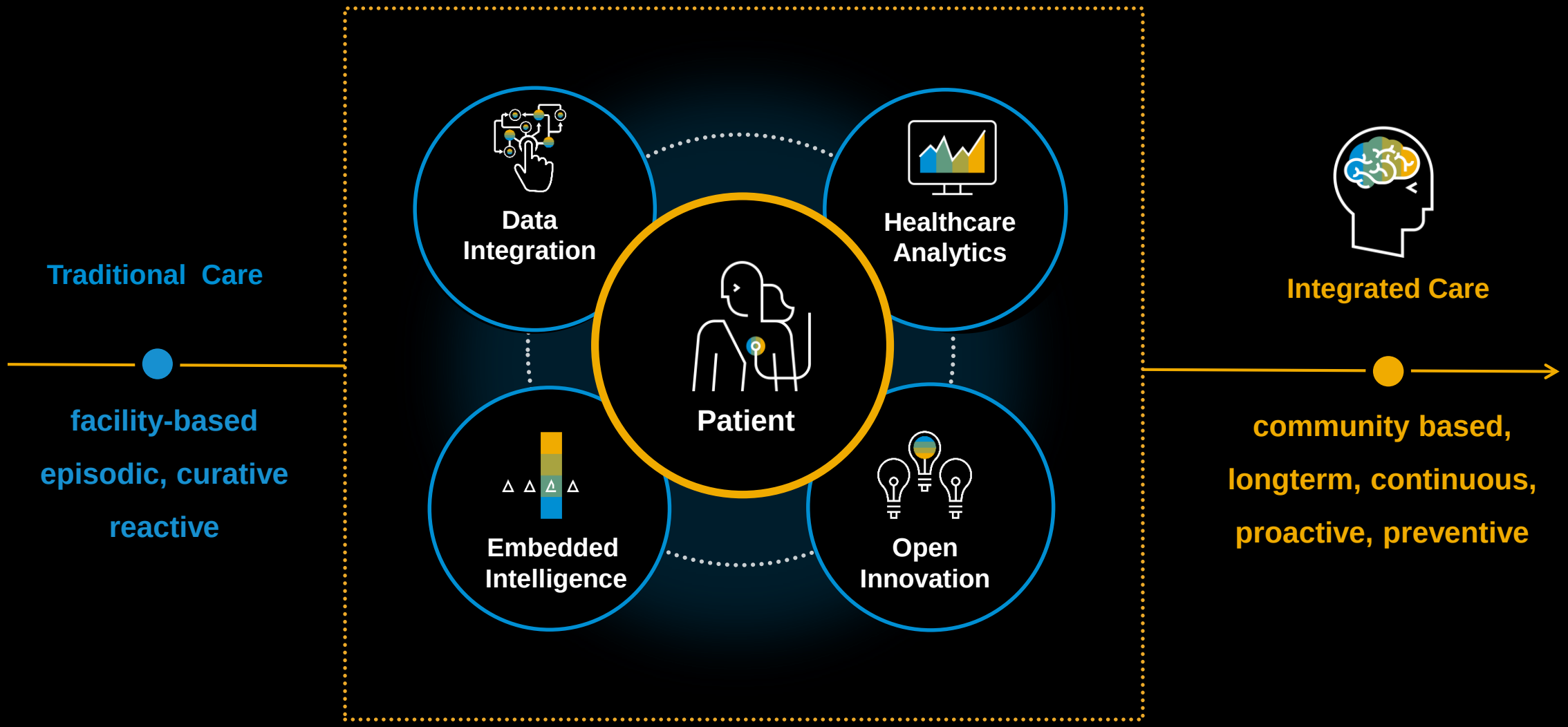
Low Digitization



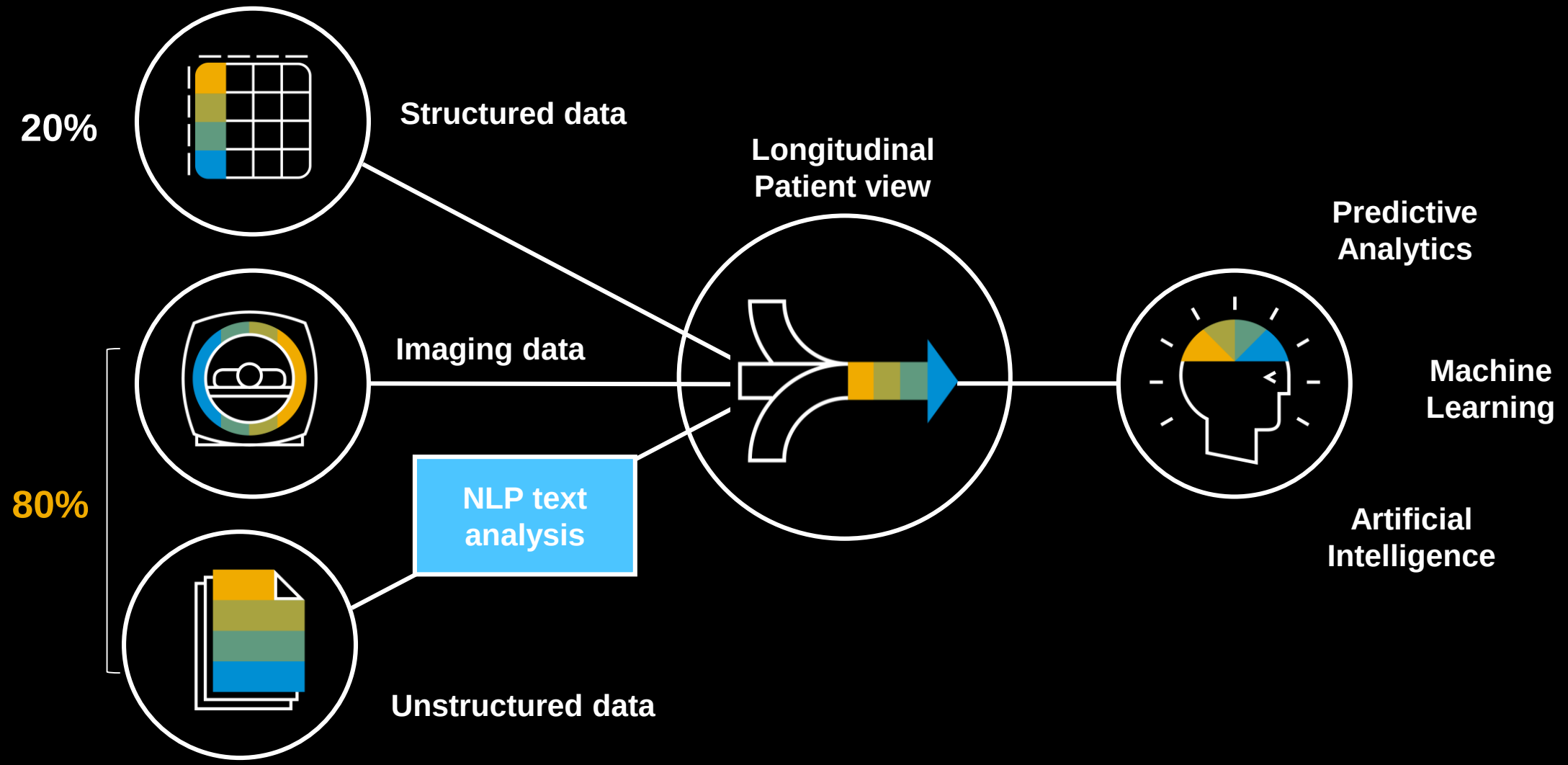
Health Care
Hospitality
Construction
Agriculture / Hunting

Which Industries Are the Most Digital (and Why)? by Gandhi, Khanna, Ramaswamy, April 2016, Harvard Business Review (Research by McKinsey Global Institute)

From Tradition to Integration



From Big Data to Smart Insights



Transitioning in Intelligence Era

Blockchain

Internet of Things (IoT)

Sensors

Machine Learning & AI

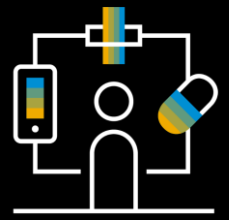
APIs

Conversational UIs

Mobile

Accelerating Digital Transformation and move into Intelligence Era

Have you set the right priorities?

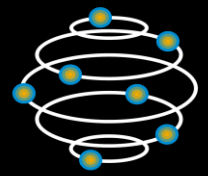


Operational Efficiency

How do we remove unnecessary cost and waste and free resources for innovation and better patient care?

Better Patient Outcomes

How do we move from volume to value care delivery with optimized outcomes for each individual patient?



Data-driven Clinical Innovations

How can we move from a reactive, experience-based model to delivering personalized medicine based on real-world evidence?

Patient/Customer Experience

How can we meet the expectations of the new healthcare consumers?

Empowered Workforce

How can we engage, restructure and empower our workforces to allow them to perform at their best?

SAP Digital Healthcare whitepaper - A Future in Digital Health: Transforming Healthcare for Patients and Providers, 2017

Do your priorities translate into business value?

Mercy

~ $13 million savings
in less than 2 years on total knee replacement costs per case

~ $9.4 million savings
through optimizing perioperative service utilization

SNUH
SEOUL NATIONAL UNIVERSITY BUNDANG HOSPITAL

80% reduction
in preventive antibiotics use

< 2 seconds
to analyze quarterly data, compared to 1-2 months

Roche

6-fold better chance
to achieve weight reduction of 5% with personalized health management

44.8% significant
expected one-year success rate vs. 11.5% in control group

UNIKLINIK RWTH AACHEN

30% higher case mix index
positively affecting revenue and reputation

Reduced
infection of sepsis and patient mortality through real-time analytics

ASCO CANCER LINQ
Learning Intelligence Network for Quality

1 million+
de-identified patient records represented in oncology database

97% of cancer patient data
previously locked away will provide insights to clinicians and researchers

CancerLinQ: Seeing the Whole Picture of Cancer Care to More Fully Inform Each Patient's Individual Care

CancerLinQ, a subsidiary of the American Society of Clinical Oncology (ASCO), is a health information technology platform aimed at enhancing and improving the understanding and treatment of cancer. Its primary purpose is to promote high quality care for every patient by unlocking the data of 97% of patients not participating in clinical trials and accessing real-world evidence data. To achieve the full potential and vision of CancerLinQ, SAP has provided sophisticated, customizable tools based on the SAP Connected Health platform.

Achievements with SAP

Unlocked, assembled and analyzed de-identified cancer patient medical records

Uncovered patterns that can improve patient care

Currently adding millions of patient records from practices in 40 states, representing 2,000 oncologist are participating in CancerLinQ

MACSS: Digitally Connecting Chronically ill patients and their physicians to improve patient outcome

MACSS Medical Allround-Care Service Solutions

CHARITÉ DFKI dosing SAP smart patient medVISION

MACSS is a consortium project lead by Charité - publicly funded by BMWi within the Initiative Smart Service World – Internet-based Business Services. Its primary purpose is to give patients with chronic illnesses greater safety and a better quality of life by facilitating more efficient communication and data sharing between the doctor and the patient and between all of the doctors involved in the patient's treatment. To achieve the full potential and vision of better outcome in chronic disease management for kidney transplanted patients SAP is prototyping a cloud based solution connecting already existing systems and implementing a remote monitoring service that uses these shared data. We use infrastructure and tools of SAP Cloud Platform and SAP Health for Patient Engagement.

Expected Result with SAP

Unlock access to real world patient data by leveraging patient engagement for better diagnostic insights in patient's condition and therapy adherence

Cloud based application service for coordinated patient-centric care and decision support – forging a common decision basis by connecting already existing systems to share data

Business Model Innovation to create a regulatory compliant yet viable and scalable solution – targeting improvement of chronic disease management

HiGHmed
Medical Informatics

smith
Smart Medical Information Technology for Healthcare

Medical Informatics Initiative

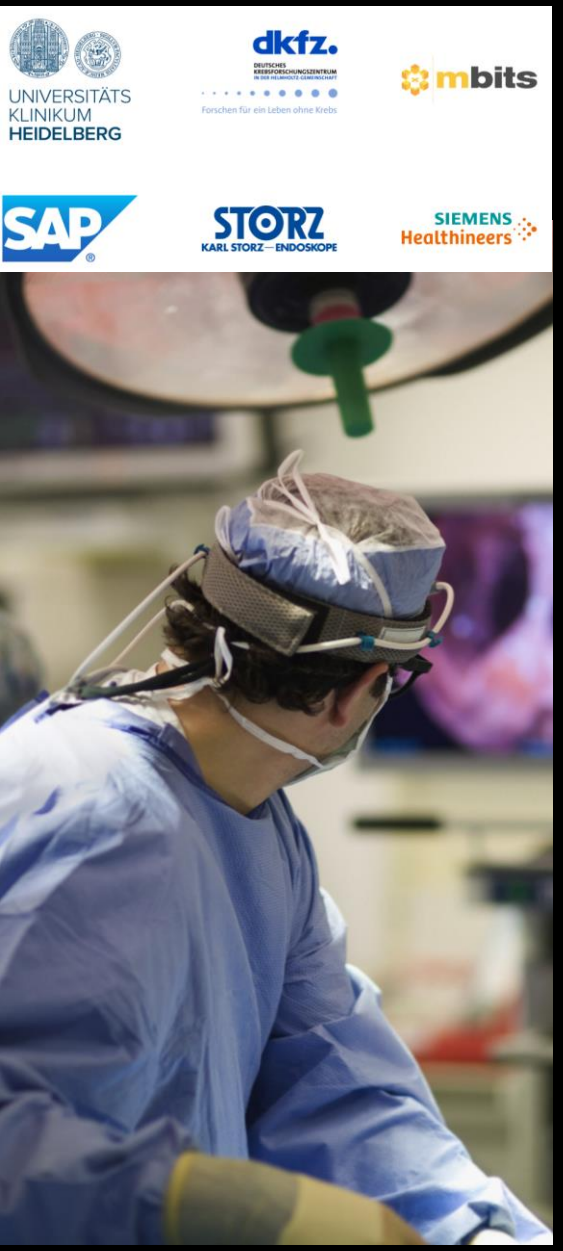
The medical informatics initiative was created to close the gap between research and healthcare. Nearly all of Germany's university hospitals have joined forces with research institutions, businesses, health insurers, and patient advocacy groups to create a framework that harnesses research findings to the direct benefit of patients. The German Federal Ministry for Education and Research (BMBF) plans to invest a total of 150 million euros in the program in coming years. SAP is an Industry Partner in HiGHmed and smith consortium.

Expected Result with SAP

Strengthen Research and support academic collaboration

Improve Care and enable knowledge sharing

Improve data accessibility and usability



Operating Theatre 4.1 (OP 4.1)

University Hospital Heidelberg, dkfz, Storz, Siemens Healthineers, mbits and SAP joining forces to design a user-centric, open, and extensible platform to intelligently support processes in an operating theatre of the future.
This BMWi funded project is was initiated after the great success of the cervical cancer screening solution ETiCCS.

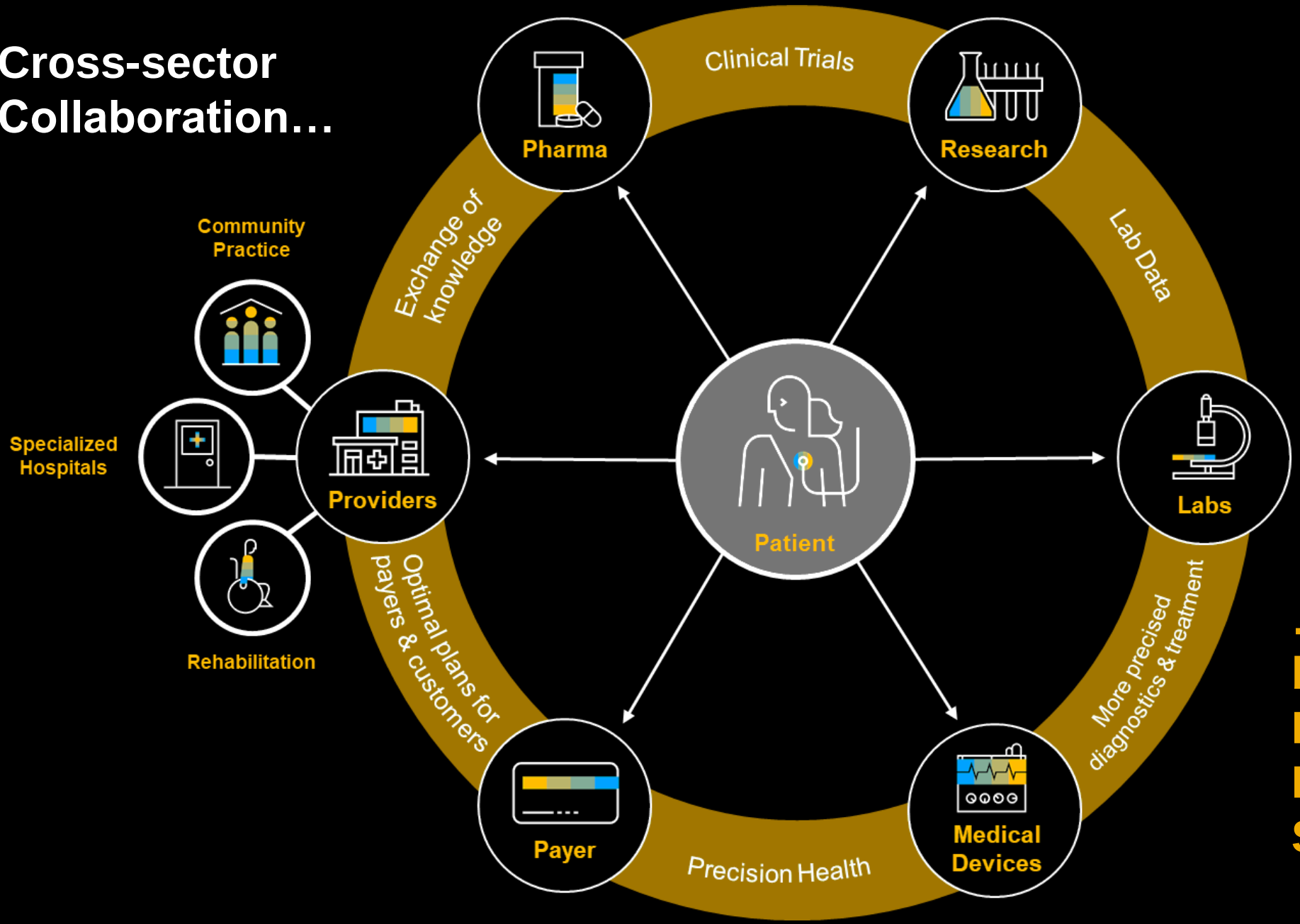
Expected Result with SAP

Cloud based prototype to intelligently support various processes and information needs of an operating theatre by an open, extensible, and services-based platform

Cloud based application service for coordinated patient-centric care and decision support – forging a common decision basis by connecting already existing systems to share data

Creating new business models for device manufacturers

Cross-sector Collaboration…



…the backbone of Rapid Learn Health Systems


Change has never been this fast, and it will never be this slow again.
Let us join forces and transit into the intelligence era.