

Was bringt die Zukunft ?

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vzk
verband
zürcher
krankenhäuser

 Microsoft

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A surgeon wearing a VR headset is shown in profile, interacting with a large, translucent 3D anatomical model of a human head and spine. The model is displayed on a screen or in a virtual space. The background is a blurred clinical setting with medical equipment. The overall image has a blue tint.

01

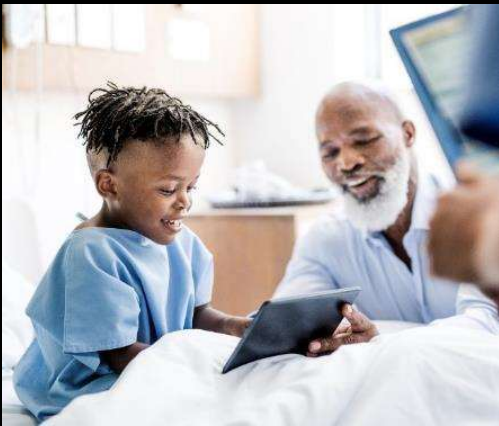
Digitale Transformation

Microsoft Cloud for Healthcare

Better experiences. Better insights. Better care

The Microsoft Cloud for Healthcare is a purpose-driven offering, enabling our Partners to help Healthcare customers **respond**, **recover**, and **reimagine** their future.

COVID-19 has impacted the Healthcare industry with unprecedented challenges and **provides a clear use case for accelerating innovation**. Healthcare organizations face an immediate need for solutions they may not have.



Healthcare in transition

COVID-19 disruption and challenges

70%

Average amount of elective procedures cancelled in Q2 plummeting income while expenses escalate

200,000

Cancer screenings paused each week in Great Britain's NHS

↓ Margins

And low cash flow forcing partnerships and M&A to survive with depleted reserves

Crisis  **Restored**

Role of healthcare leaders to move from managing the crisis to reinvent a successful future

Ongoing Healthcare system impacts

81%

Patients are unsatisfied with their current healthcare experience

\$6.2B

Loss per year to data breaches, amid growing pressures in security and compliance

41%

Providers say data and analytics challenges is preventing them from succeeding in value-based care models

14 million

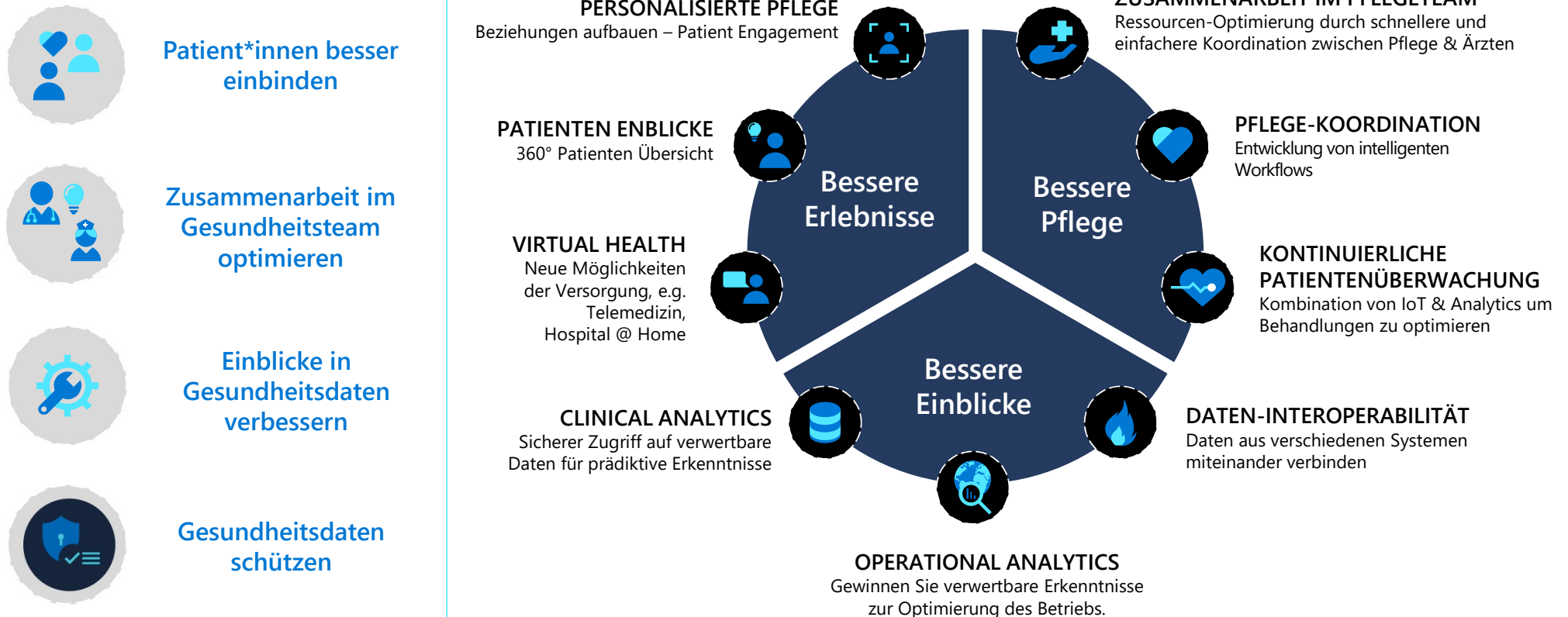
By 2030, providers will suffer from a projected shortage of healthcare workers worldwide

A background image showing medical professionals in an operating room. One person in the foreground is wearing an AR headset and looking at a transparent anatomical model of a human skull and spine. Another person is visible in the background, also looking at the model. The scene is dimly lit, typical of an operating room.

02

Die Microsoft Cloud für das
Gesundheitswesen

Vernetzte Erlebnisse ermöglichen besseres Patienten Engagement, bessere Einblicke und bessere Pflege



Vertrauenswürdige Plattform mit unübertroffener Sicherheit und Datenschutz



03

Microsoft
Swiss Data Centers

Die Schweiz ist ein wichtiger Knotenpunkt im Microsoft Verbund mit über 60 Azure-Regionen



Compliance



Data
Residency



Performance



Mit den Schweizern Rechenzentren ermöglichen wir die Datenspeicherung im Land, gepaart mit höchster Verfügbarkeit



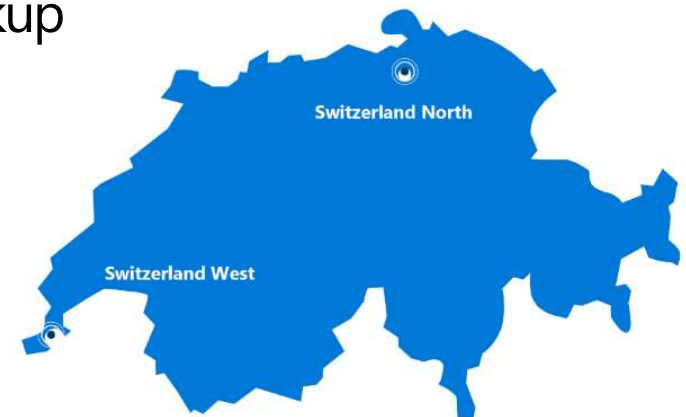
- Die beiden Rechenzentren sind innerhalb der Schweiz gepaart

Kundendaten im Ruhezustand verlassen die Schweiz nicht

- Region Pairing ermöglicht Geo-Replikation für Daten-Backup

Disaster Recovery im Land als Plus

- Basiert auf den **gleichen Vertrauensprinzipien** wie unsere globalen Angebote



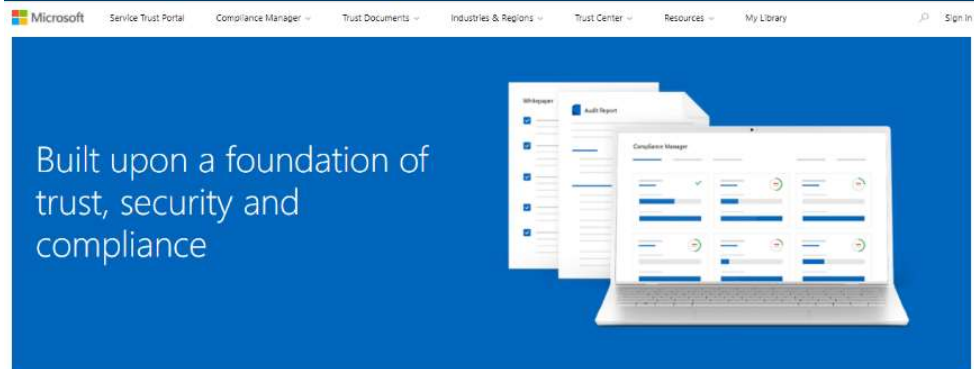
The background image is a dark blue-tinted photograph. It shows a surgeon in the foreground, wearing a surgical cap and AR glasses, looking down at a human spine model. The spine model is positioned in the center of the frame. In the background, another person is visible, also looking at the model. The overall scene suggests a medical or educational setting where AR technology is being used for training or surgery.

04

Compliance & Cybersecurity

Das Microsoft Trust Portal liefert aktuelle Informationen zu Compliance, Security und Audit-Berichten

Service Trust Portal



Audit Reports

Review the available independent audit reports for Microsoft's Cloud services, which provide information about compliance with data protection standards and regulatory requirements, such as International Organization for Standardization (ISO), Service Organization Controls (SOC), National Institute of Standards and Technology (NIST), Federal Risk and Authorization Management Program (FedRAMP), and the General Data Protection Regulation (GDPR).



SOC



FedRAMP



ISO 27001



PCI/DSS

[View all Audit Reports >](#)

<https://servicetrust.microsoft.com>

Data Protection Ressources



Data Protection Resources

Information about how Microsoft cloud services protect your data, and how you can manage cloud data security and compliance for your organization.

Select start date	to	Select end date	Document Type	Cloud Service	Instructions
Sign in with your Microsoft Account to access locked files and save to your library.					
Audited Controls Compliance Guides FAQ and White Papers ISO Reports Microsoft 365 Quarterly Pulse Report PCI DSS Pen Test and Security Assessments Security					
Title	Series	Description	Date		
Professional Services GDPR Control Mapping 10.28.19.xlsx		Comprehensive mapping of Microsoft Service Controls to GDPR obligations for Professional Services.	2019-11-06		
Office 365 - Audited Controls NIST 800.53A Rev 4		This spreadsheet provides information about Microsoft Office 365 controls, implementation details, and audit test procedures for NIST 800-53 standard. Combining this info... Show more	2019-09-06		
Office 365 - Audited Controls ISO 27001:2018		This spreadsheet provides information about Microsoft Office 365 controls, implementation details, and audit test procedures for ISO 27001 standard. Combining this info... Show more	2019-09-06		
Office 365 - Audited Controls ISO 27001:2018		This spreadsheet provides information about Microsoft Office 365 controls, implementation details, and audit test procedures for ISO 27018 standard. Combining this info... Show more	2019-09-06		
Office 365 GDPR control mapping 1.24.18		Comprehensive mapping of Microsoft Service Controls to GDPR obligations for Office 365	2018-05-01		
Azure GDPR control mapping 5.24.18		Comprehensive mapping of Microsoft Service Controls to GDPR obligations for Azure	2019-09-07		
Dynamics 365 GDPR Control Mapping 6.30.2018		Comprehensive mapping of Microsoft Service Controls to GDPR obligations for Dynamics 365	2019-09-07		
Professional Services GDPR control mapping 1.24.18		Comprehensive mapping of Microsoft Service Controls to GDPR obligations for Professional Services	2018-08-30		

[Audit Reports-ISO Reports](#)

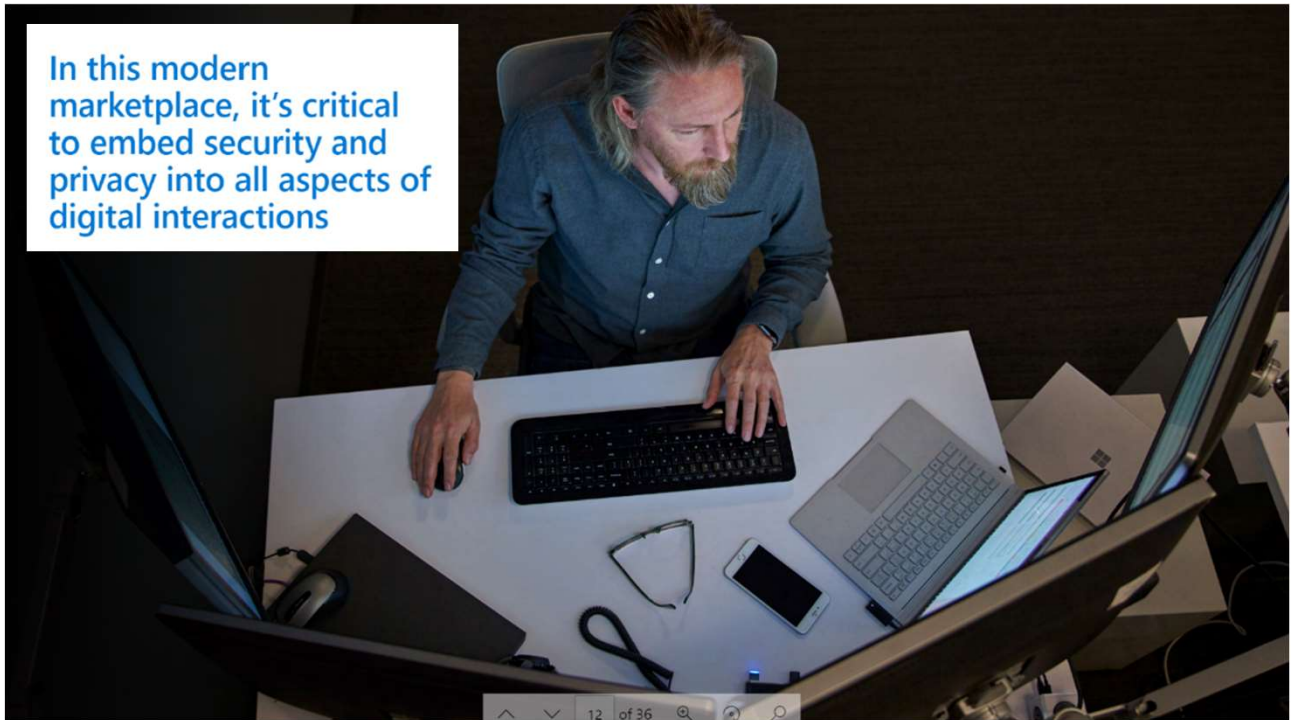
Herausforderung: Cybersecurity

Cybercriminals are targeting health organizations more frequently, so it's vital that you keep patient information and other sensitive data secure while preserving privacy. Modern security demands that protection for organizational data, apps, devices, and patient information is ensured in all forms.

3x

Cyberattacks in the healthcare industry are predicted to triple year over year from 2020 to 2021.⁴

In this modern marketplace, it's critical to embed security and privacy into all aspects of digital interactions

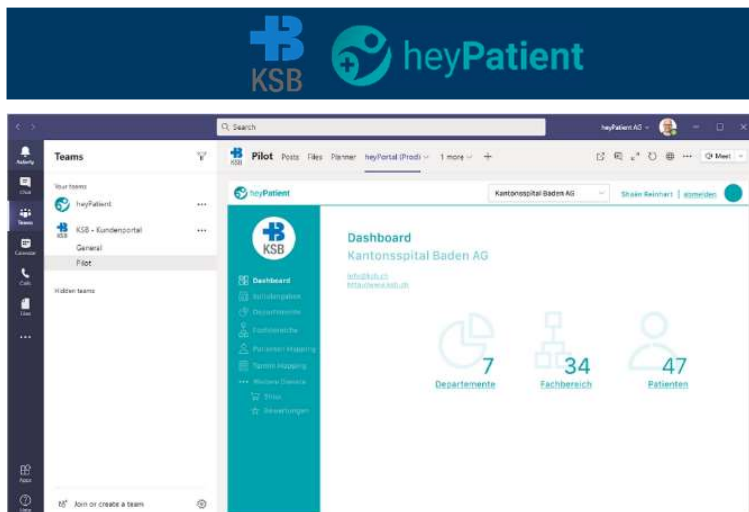


A surgeon wearing augmented reality (AR) glasses is shown in profile, looking at a 3D anatomical model of a human head and spine. The model is semi-transparent, revealing internal structures like the brain and vertebrae. The surgeon's hands are visible, interacting with the model. The background is a blurred operating room environment.

05

Referenzen

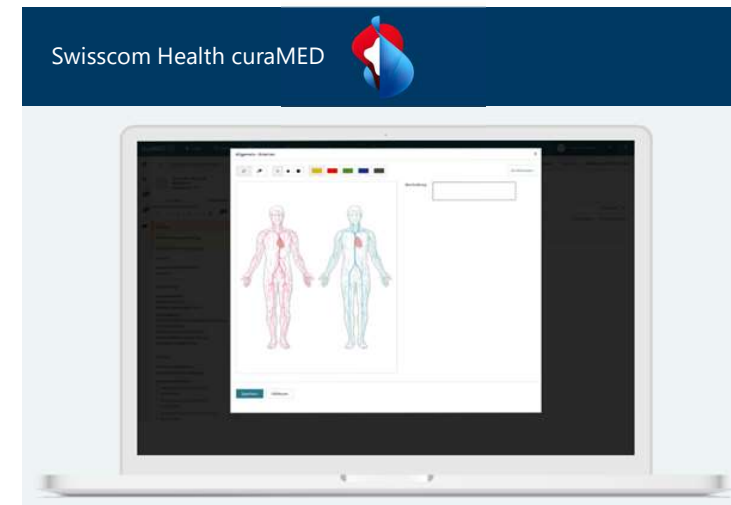
Auch im hochregulierten Gesundheitswesen der Schweiz nutzen unsere Kunden die Microsoft Cloud Services



[Vollständige Referenz-Story](#)



[Vollständige Referenz-Story](#)



[Vollständige Referenz-Story](#)

Augmented Reality im Operationssaal: Erste holographisch navigierte Wirbelsäulen-Operation weltweit an der Universitätsklinik Balgrist

Ein Team der Universitätsklinik Balgrist führte erfolgreich die erste **direkt auf den Patienten projizierte holographisch navigierte Wirbelsäulen-Operation** durch.

Die Operation ist Teil einer klinischen Studie, die weltweit erste dieser Art.

Die Technologie wurde an der Universitätsklinik Balgrist entwickelt. **Studienleiter ist Prof. Dr. med. Mazda Farshad**, Leiter des Flagship-Projekts SURGENT und Medizinischer Spitaldirektor der Universitätsklinik Balgrist. Er trug während der Operation eine **HoloLens**.

Microsoft unterstützt das Projekt als Technologiepartner.



Der **Balgrist**

[Vollständige Referenz-Story](#)

Microsoft Cloud für das Gesundheitswesen wird von namhaften europäischen Gesundheitsorganisationen genutzt

Weitere Referenzen finden Sie [hier](#) oder unter <https://customers.microsoft.com/>



PERSONALISIERTE PFLEGE
Beziehungen aufbauen;
Patienten-Engagement

PATIENTEN-EINBLICKE
360° Patienten-Übersicht

VIRTUAL HEALTH
Neue Möglichkeiten
der Versorgung,
z.B. Telemedizin
Hospital@Home

KLINISCHE ANALYTICS
Sicherer Zugriff auf verwertbare
Daten für prädiktive Erkenntnisse



Bessere Erlebnisse



Bessere Pflege



Bessere Einblicke



**ZUSAMMENARBEIT
IM PFLEGETEAM**

Ressourcen-Optimierung durch
schnellere und einfachere Koordination
zwischen Pflege und Ärzten



**PFLEGE
KOORDINATION**
Entwicklung von
intelligenten Workflows



**KONTINUIERLICHE
PATIENTENÜBER-
WACHUNG**

Kombination von IoT &
Analytics, um Behandlungen
zu optimieren



DATEN-INTEROPERABILITÄT
Daten aus verschiedenen Systemen
miteinander verbinden



OPERATIVE ANALYTICS
Gewinnen Sie verwertbare
Erkenntnisse zur Optimierung
des Betriebs



A photograph of medical professionals in an operating room, overlaid with a semi-transparent blue filter. In the foreground, a man wearing a surgical cap and glasses is looking down. In the background, another person is visible, and a medical model of a human head and neck with a visible spine is being held. The overall scene suggests a focus on advanced medical technology and surgery.

06

Medizin/Pflege der Zukunft

Virtual Care + Artificial Intelligence / Machine Learning

Clinician to Clinician
virtual consults



Clinician to out-patients
virtual visits



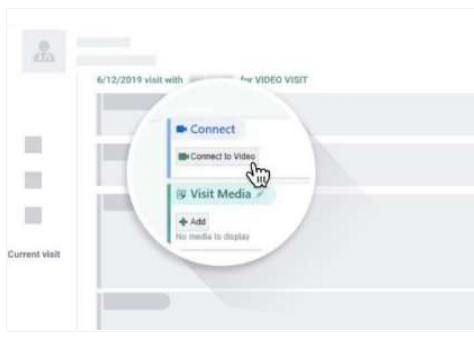
Clinician to in-patient
virtual rounding



In-patient to family
connections



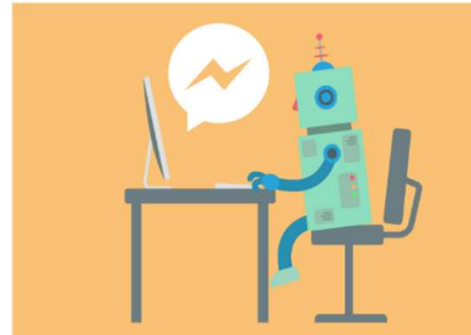
Integrations into HER
(Electronic Health Record)



Mixed Reality



Health Bot and
Medical Transcription



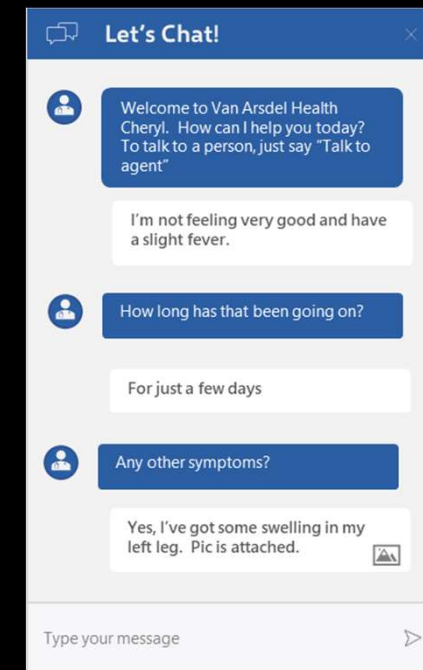
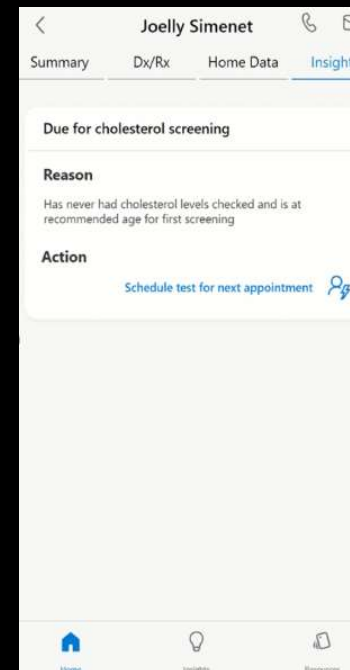
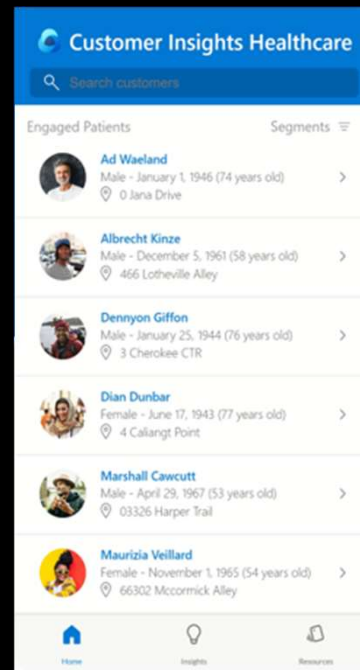
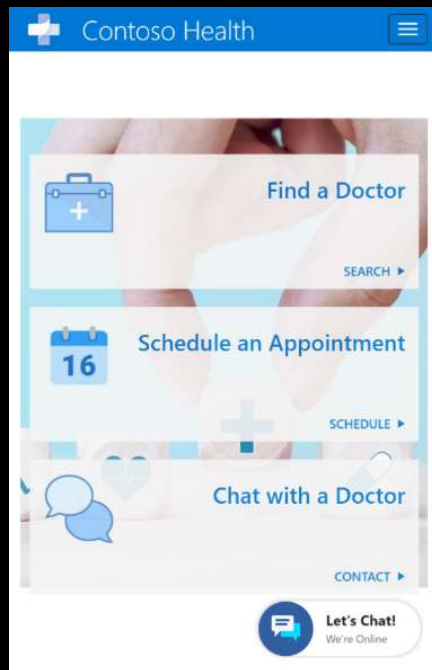
Remote Patient
Monitoring





Patient experience and access to care

Digital patient engagement for scheduling, proactive wellness outreach; on-going virtual patient follow-up in surveys, assessments



Features

- Patient Mobile and Web Platforms
- Patient Engagement Portal
- Scheduling
- Upcoming Activities
- Care Reminders, Prescription Reminder
- Wellness Coaching
- Patient Follow-Up
- Patient Virtual Follow-Up, Patient Surveys
- Provider Outreach
- Patient Education
- Physician Directory
- Patient Assessments
- Crisis response Power App with Healthcare Bot Integration

Microsoft Technologies



Microsoft Power Automate
Microsoft Power Apps



Microsoft Healthcare Bot
Microsoft Power Virtual Agent
Azure API for FHIR

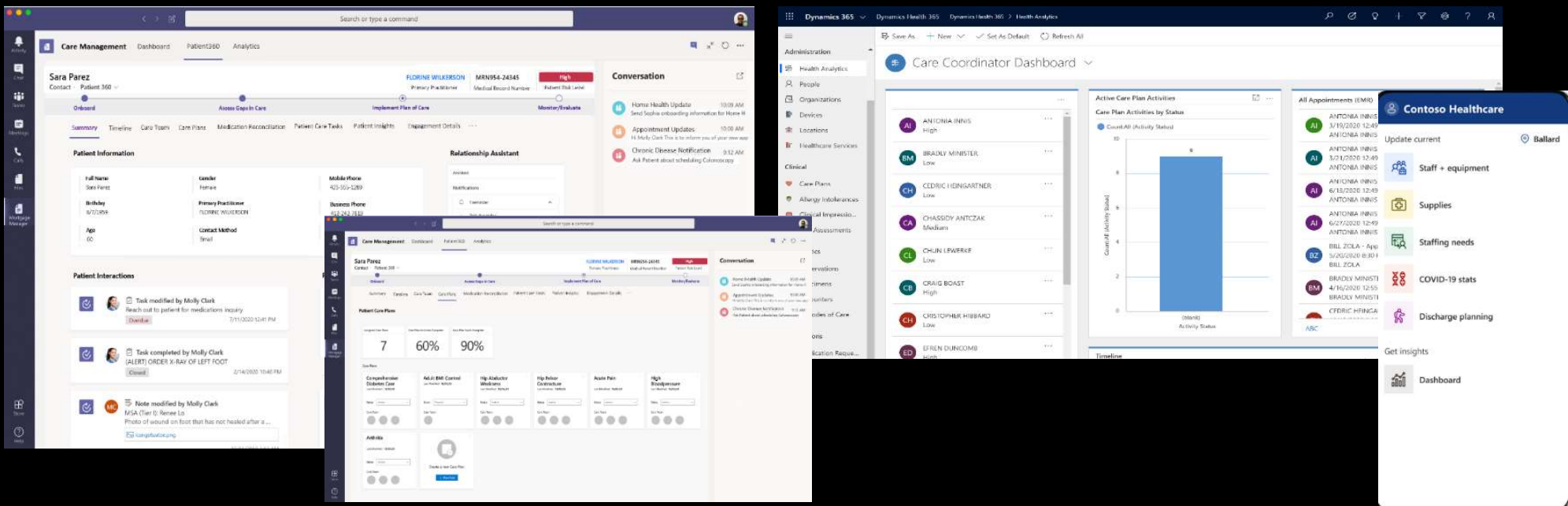


Dynamics 365 Customer Insights



Care Management and Coordination

Enhanced care team communication to enable more efficient workflow management (i.e. bed, equipment, discharge, staffing) and provide visualization for meaningful care insights



Features

- Care Management
- Virtual Visits
- Care Team Collaboration
- Care team communication
- Care Plan Development
- Care Plan Personalization
- Care Plan Enrollment
- Care Management Analytics
- Equipment Ordering & Management
- Utilization Management (Benefits usage, gaps, efficiencies)

Microsoft Technologies



Dynamics 365 Field Service
Dynamics 365 Customer Insights



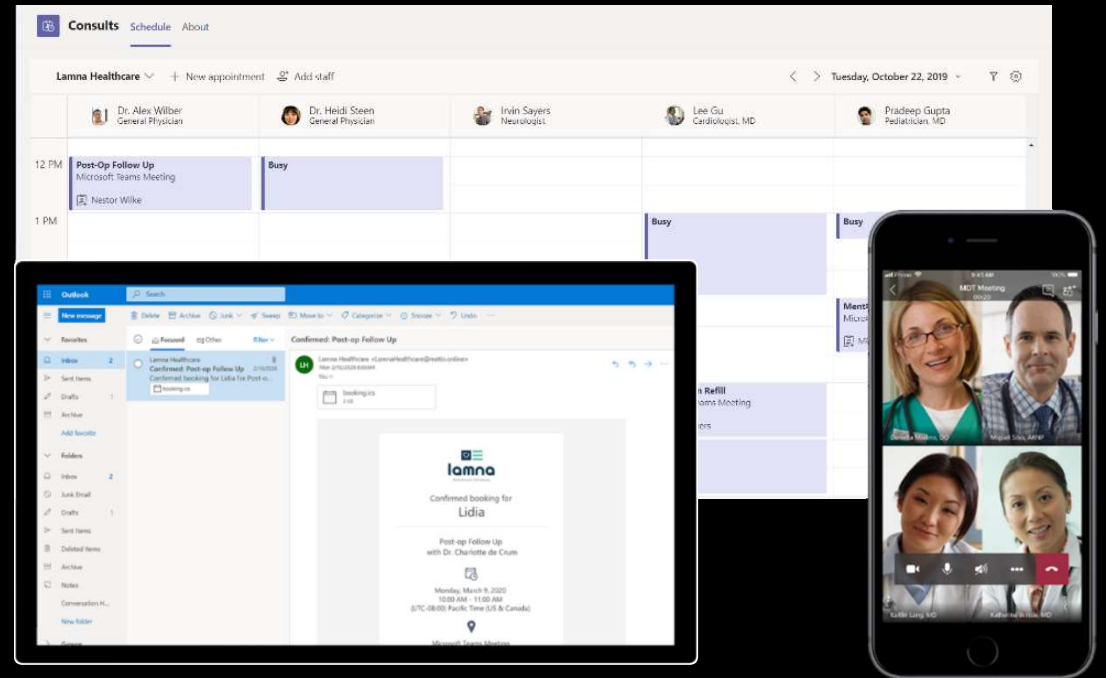
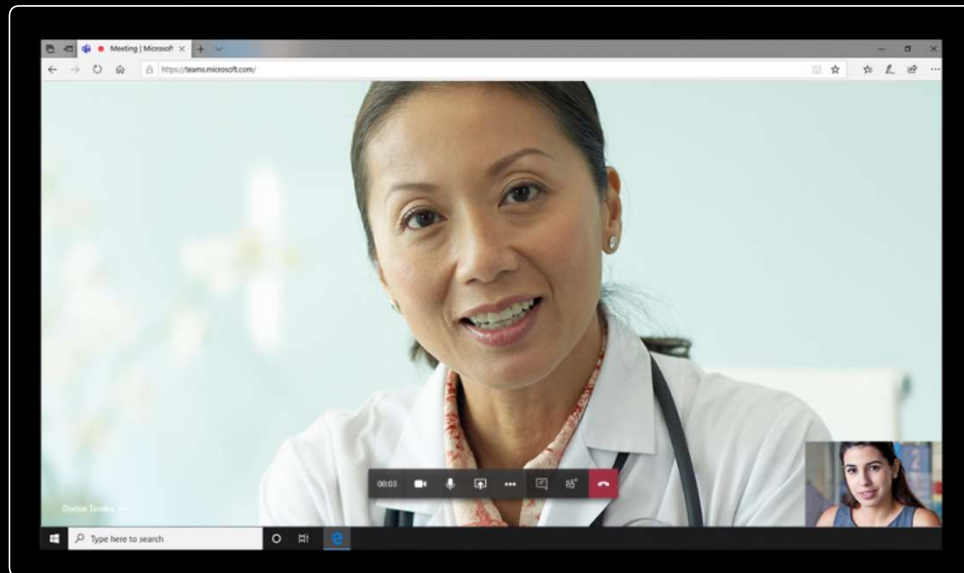
Microsoft Teams



Azure API for FHIR

Virtual consults

Clinician to clinician | Clinician to patient | Virtual rounding



Features

- Join online meetings with HD video, VoIP, and dial-in audio
- Cloud recording of meetings
- Meet across multiple devices
- Intuitive and customizable email invite
- External attendee join via WebRTC in web browser or Teams Mobile App
- Attendee arrival notification
- Simple tool for creating virtual appointments
- Admins can manage multiple departments and staff
- Sends notifications and reminders
- Online Meeting Graph APIs for customized scheduling

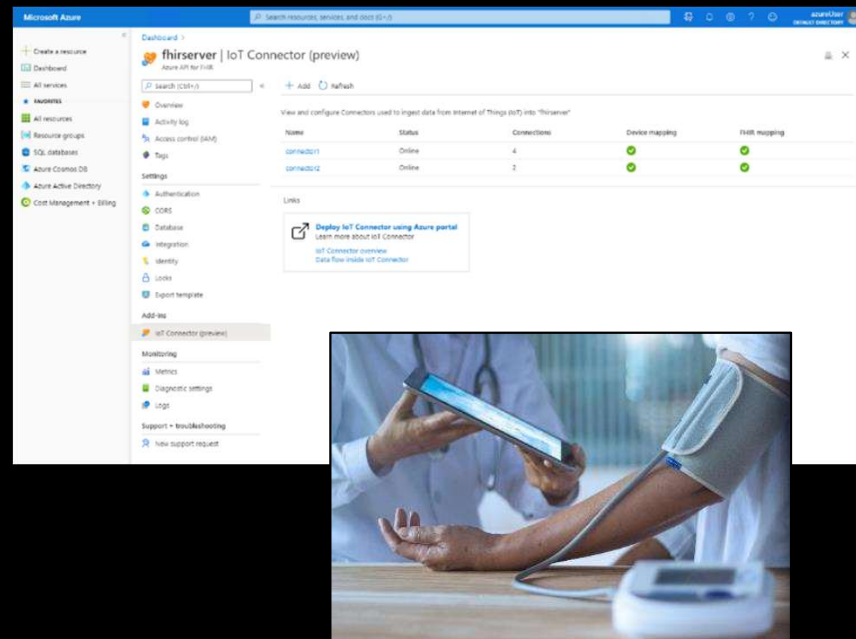
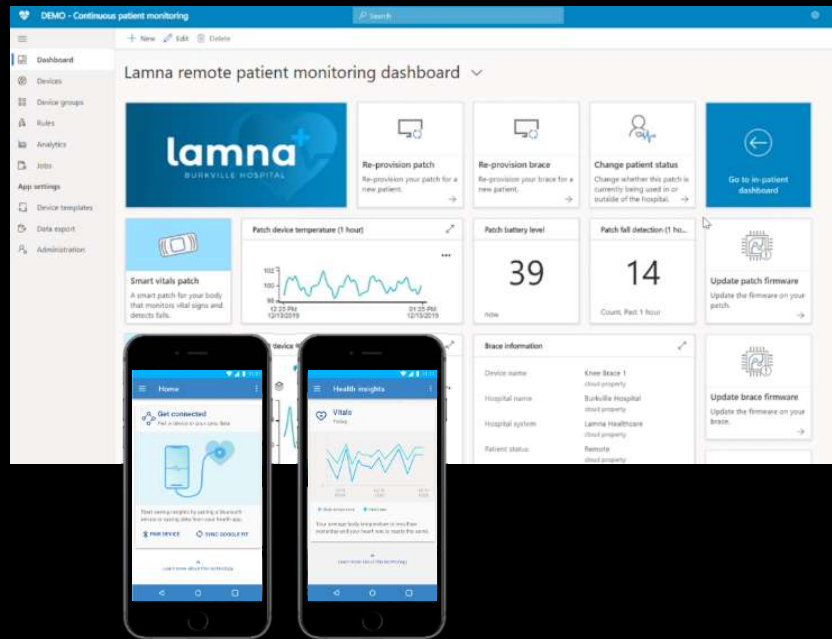
Microsoft Technologies

Microsoft 365

Microsoft Teams
Microsoft Bookings
Microsoft Bookings API in Microsoft Graph

Healthcare interoperability, IoT, and patient monitoring

Drive data interoperability and IoT connectivity for IoT devices, sensors and healthcare apps and systems



Features

Azure API for FHIR 🏡

Health data interoperability
Secure PHI management and compliance
AI, ML, and data analytics workloads acceleration

Azure IoT Connector for FHIR 🏡

Managed feature of Azure API for FHIR
Help meet security and compliance requirements
Normalize device data
Convert to FHIR Observations
Support for sub second
Scalable with new workloads
Seamless connection with Azure IoT

Continuous patient monitoring 🏡

Hospital care team data visualization
Real-time streaming dashboard for patient vitals
Connectivity to Azure IoT Central
Logic app connectivity
Stream data to Power BI

Microsoft Technologies



Azure API for FHIR
Azure IoT Connector for FHIR
Continuous patient monitoring template on
Azure IoT Central



“**Natural Language Processing**” (NLP) is a hot topic for innovation leaders in Healthcare. It’s an Artificial Intelligence technology.

It enables health providers to **digitise the creation of the clinical note which today is manually filled in for every single consultation.**

You can imagine therefore what this offers to healthcare decisionmakers in terms of **potential productivity improvement** in addition **to improved accuracy.**

On top of this it enables the Clinician to **search & find relevant patient data faster.**

07

Fragen?

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