



Module 1

Microsoft Cloud for Healthcare Overview

March 2022



Microsoft Cloud for Healthcare - The basics

What is Cloud for Healthcare (MC4HC)

- ❖ It is bringing together capabilities from Microsoft Azure, Dynamics 365, Microsoft Power Platform, and Microsoft 365 healthcare industry specific scenarios.
- ❖ A layer on top of our existing horizontal clouds for the healthcare industry specificity
- ❖ Makes healthcare data and applications secure, compliant, connected & interoperable across the entire care continuum
- ❖ A platform to build, integrate, enable or extend partner solutions to address the challenges the healthcare industry
- ❖ GA Oct 2020

What it is not

- ❖ Not a separate infrastructure or sovereign cloud

Why do I care

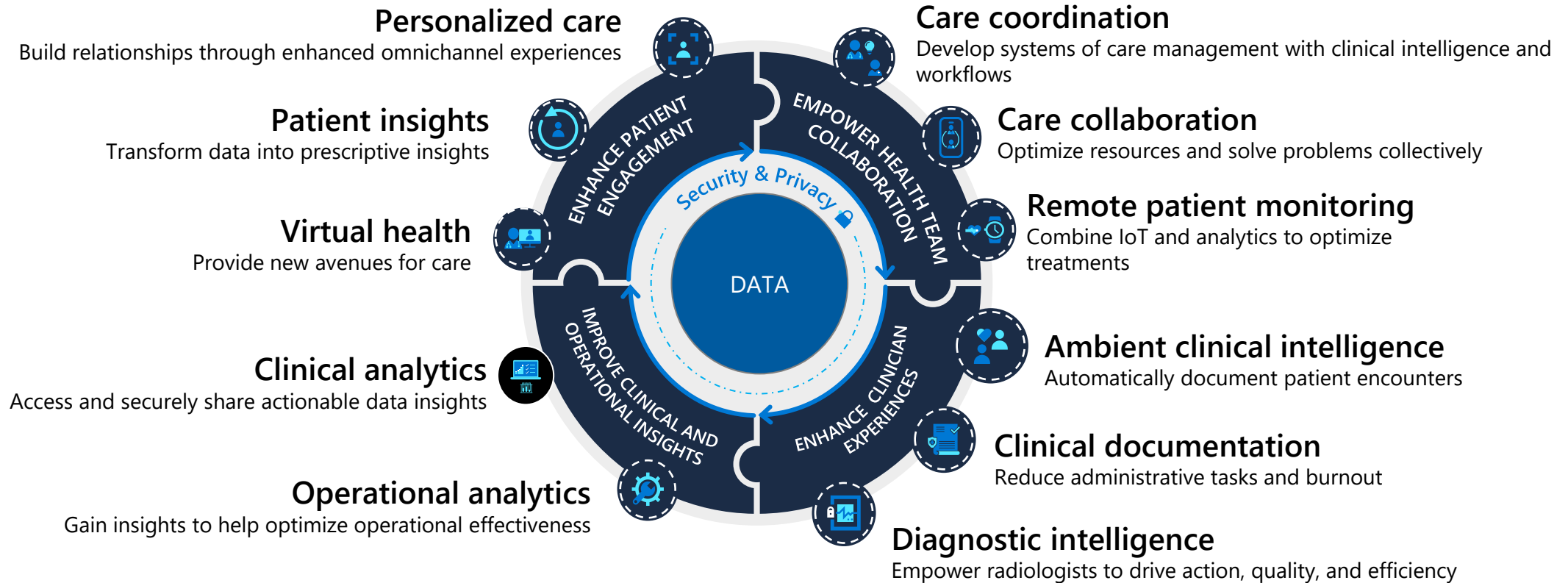
- ❖ Accelerates customer and partner adoption of Microsoft clouds
- ❖ Provides faster time to market by leveraging shared set of services and data model
- ❖ Builds a cohesive healthcare partner ecosystem

How do we acquire it?

- ❖ Existing cloud investments (Azure, M365, D365, Power Platform)
- ❖ Healthcare Add On (SKU) for 1st party applications (Not required for every scenario)
- ❖ Healthcare Capabilities are deployed by Microsoft Solution Center

Microsoft Cloud for Healthcare

Capabilities enabling better experiences, better insights, better care



Microsoft Cloud

Microsoft Cloud for Healthcare

Providing trusted and integrated cloud capabilities to deliver better experiences, better insights, and better care



Enhance patient engagement

Deliver personalized experiences to engage patients in secure, individualized encounters through every point of care



Empower health team collaboration

Connect, engage, and efficiently manage your healthcare workforce with tools that help them provide the best possible care



Enhance clinician experiences

Reduce time spent documenting patient encounters and alleviate provider burnout through AI-powered solutions that drive more personal and accessible healthcare



Improve clinical and operational insights

Leverage insights to improve patient care by connecting data from multiple sources and using predictive analytics for data modeling and identifying clinical trends

Built on a foundation of:



Security/Privacy/Compliance

Make it faster and easier to provide more efficient care and help customers support their security, compliance, and interoperability of health data.



Interoperability

Make it faster and easier to provide more efficient care and help customers support their security, compliance, and interoperability of health data.

Microsoft Cloud for Healthcare - Partner Opportunity

Partner ecosystem

Enhance patient engagement

Personalized care

Patient insights

Virtual health

Empower health team collaboration

Care team collaboration

Care coordination

Continuous patient monitoring

Improve clinical and operational insights

Data interoperability

Clinical analytics

Operational analytics

Partner

Healthcare Integration Partner

Use Case:
-EMR/EHR connectors
-EMR/EHR integration

Partner

Build solution using
-Azure Healthcare API's
-Azure IoT Connector for FHIR
-Azure Health Bot

Use Cases:
-Data Interoperability
-IoMT
-Digital Front Door

Partner

Build healthcare solution/apps by Azure Analytics/ AI/ML services

Use Cases:
- Clinical & Operational Analytics,
- Continuous Patient Monitoring

Partner

Build solutions/apps/ connectors using Healthcare common data model on Dataverse

Partner

Build solutions/apps using Teams and Power Platform or D365 products.
-Workflows customization
-Automation

Partner

Build or Extend solutions using C4HC add on

Microsoft Cloud for Healthcare Add-On First Party Healthcare Apps

(e.g. Templates ,workflows, configurations, apps, connectors, and services)



Microsoft Power Platform



Microsoft 365



Microsoft Dynamics 365

Engagement | Advanced analytics | Productivity | Collaboration

Healthcare Common Data Model



Microsoft Azure

Interoperability | AI/ML | Security and compliance

Azure Healthcare API's , Azure IoT Connector for FHIR & Azure Health Bot

Ingest, enrich, and convert with FHIR, DICOM, and IoMT

Existing health data sources and systems

Consumer-generated data | Claims data | Clinical data | IoMT data | Social determinants
(e.g. Medical imaging, IoMT, HL7 CCD, CRM, financial, -omics, third-party data, EMR)

Protected Health Information - PHI & Compliance
(e.g. HIPAA, HITRUST, GDPR)

Microsoft Cloud for Healthcare – Underlying Platform and Technologies

Industry Priority Scenario (IPS)	Capability	Solutions/ Building Blocks	C4HC Add-On	Microsoft 365			Power Platform			Microsoft Dynamics 365								Microsoft Azure			
				Microsoft Teams	Bookings	EHR Connector	Power Apps	Power Automate	Power BI	Marketing	Customer Insights	Customer Service (Enterprise)	Digital Messaging add-on	Field Service	Resource Scheduling add-on	Sales Enterprise	Sales Insights add-on	API for FHIR	Azure Health Bot	Text Analytics for Health	IoT Hub
Enhance patient engagement	Personalized care	Patient service center	●	◆			Included in D365 Customer Service		◆			●	●					●	●		
		Patient outreach	●	◆			●	Included in Power Apps		●	◆							●			
		Patient access	●	◆			●	Included in Power Apps				●						●	●		
	Patient insights	Patient view	●	◆			●	Included in Power Apps	◆									●		◆	
		Health assistant	●				Included in D365 Sales		◆							●	●				
	Virtual health	Virtual clinic	●	●	◆		●	Included in Power Apps	◆									◆			
		Virtual visits		●	◆	◆												●	◆		
Empower health team collaboration	Care coordination	Home health manager	●	◆			Included in D365 Field Service		◆					●	●			◆			
		Care management	●	◆			●	Included in Power Apps	◆			●						●	◆	◆	
	Remote patient monitoring	Remote patient monitoring		◆			◆	◆	◆									●	◆		●
	Care team collaboration	Care team collaboration		●														●			
Improve clinical and operational insights	Interoperability	Interoperability																●		◆	
	Operational analytics	Operational analytics		◆			●	Included in Power Apps	●									●		●	◆
	Clinical analytics	Clinical analytics		◆			●	Included in Power Apps	●									●		●	9◆

Enhance patient engagement

Develop personalized experiences and interactions that empower patients to take more control over their health.

Enhance patient engagement



Personalized Care

Increase patient engagement by encouraging more active participation through personalized experiences



Patient Insights

Drive better health outcomes by establishing a 360-degree view of each patient to create tailored care plans










Virtual Health

Expand care access and offerings by enabling secure, compliant virtual consultations with chat, video, or voice



Enhance patient engagement

Develop personalized experiences and interactions that empower patients to take more control over their health.

Scenario	Capabilities	Features
Enhance patient engagement	<div><div>Personalized Care</div></div>	<div><div>Patient Outreach</div></div>
	<div><div>Patient Insights</div></div>	<div><div>Patient Access</div></div>
	<div><div>Virtual Health</div></div>	<div><div>Patient Service Center</div></div> <div><div>Azure Health Bot</div></div>

Patient Access

Give patients omnichannel access to services like scheduling, messaging, and health bot via an intuitive patient portal.

Feature Functionality

Patient Portal

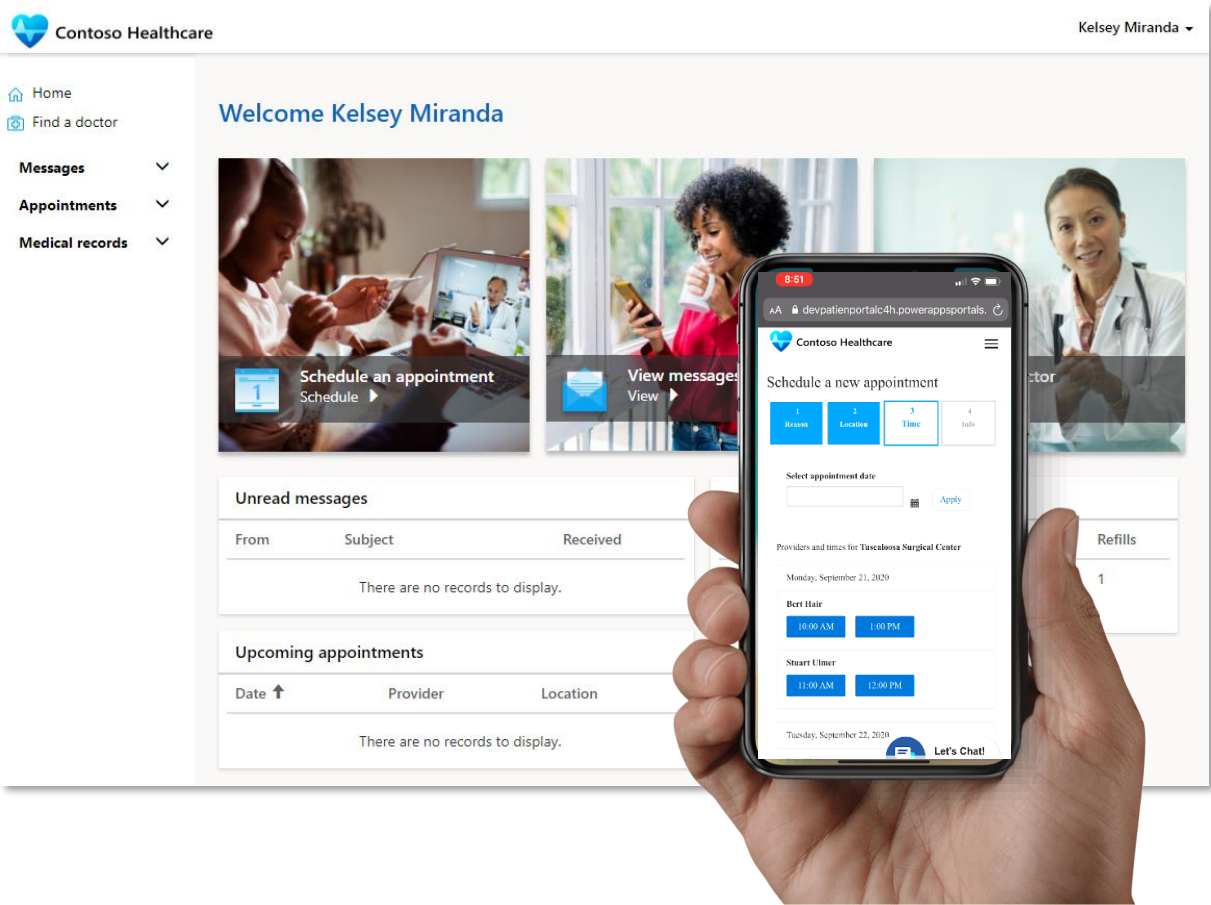
Access to Medical Records

Patient Self-Scheduling

Secure Patient Messaging

Patient Triage with Health Bot

Physicians Directory



Patient Service Center

Engage effectively with patients using built-in guidance while managing interactions and communications.

Feature Functionality

Conduct Patient Conversations

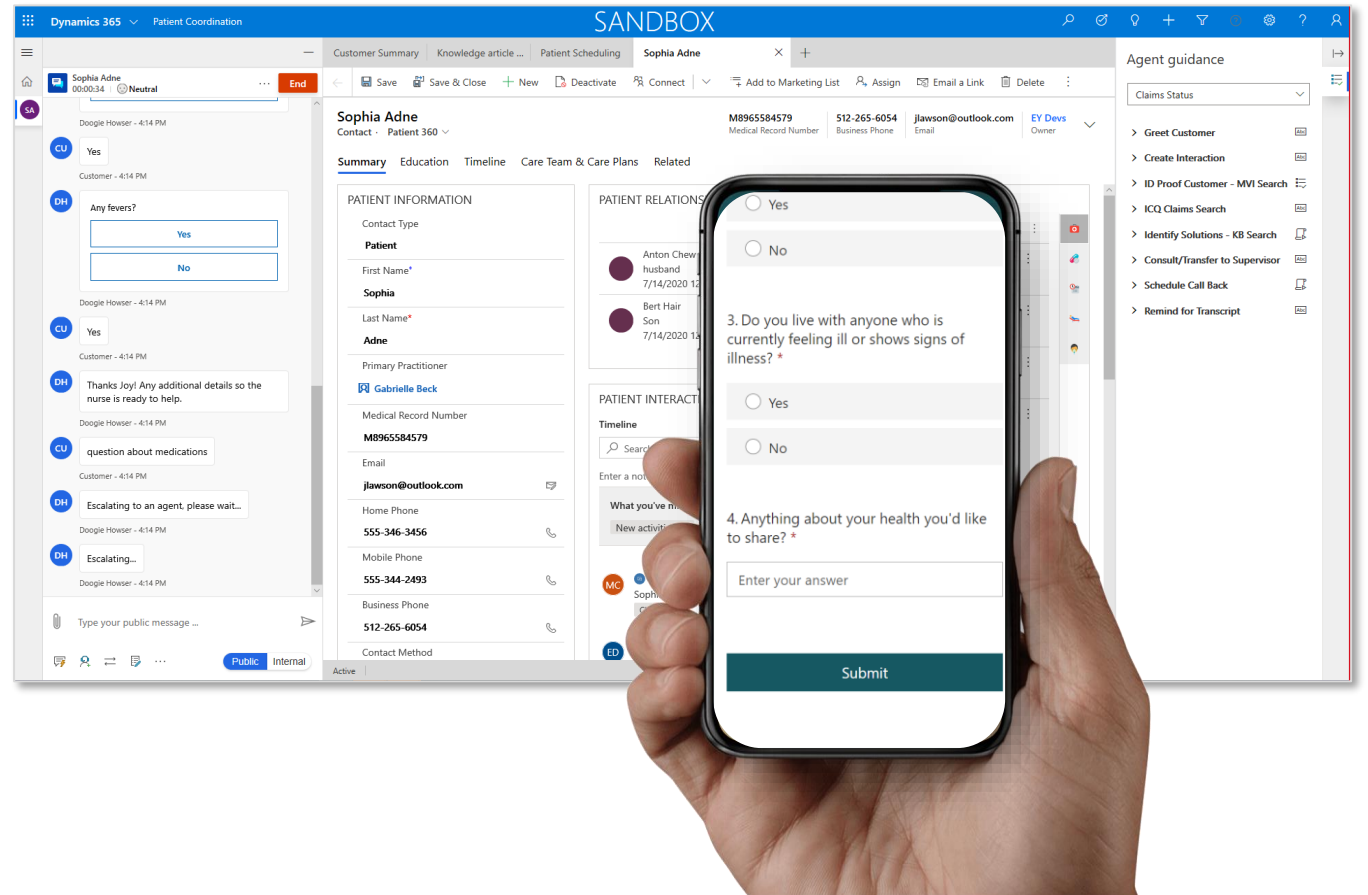
Get Patient 360 Information

Agent Scripts with Smart Assist

Knowledge Article Coaching

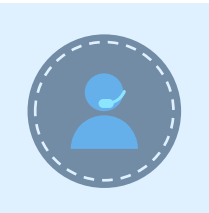
Monitor Sentiment Analysis

Patient Satisfaction Survey



Patient Outreach

Streamline and tailor patient outreach leveraging pre-built segments and healthcare-specific event templates.



Feature Functionality

Patient Experiences

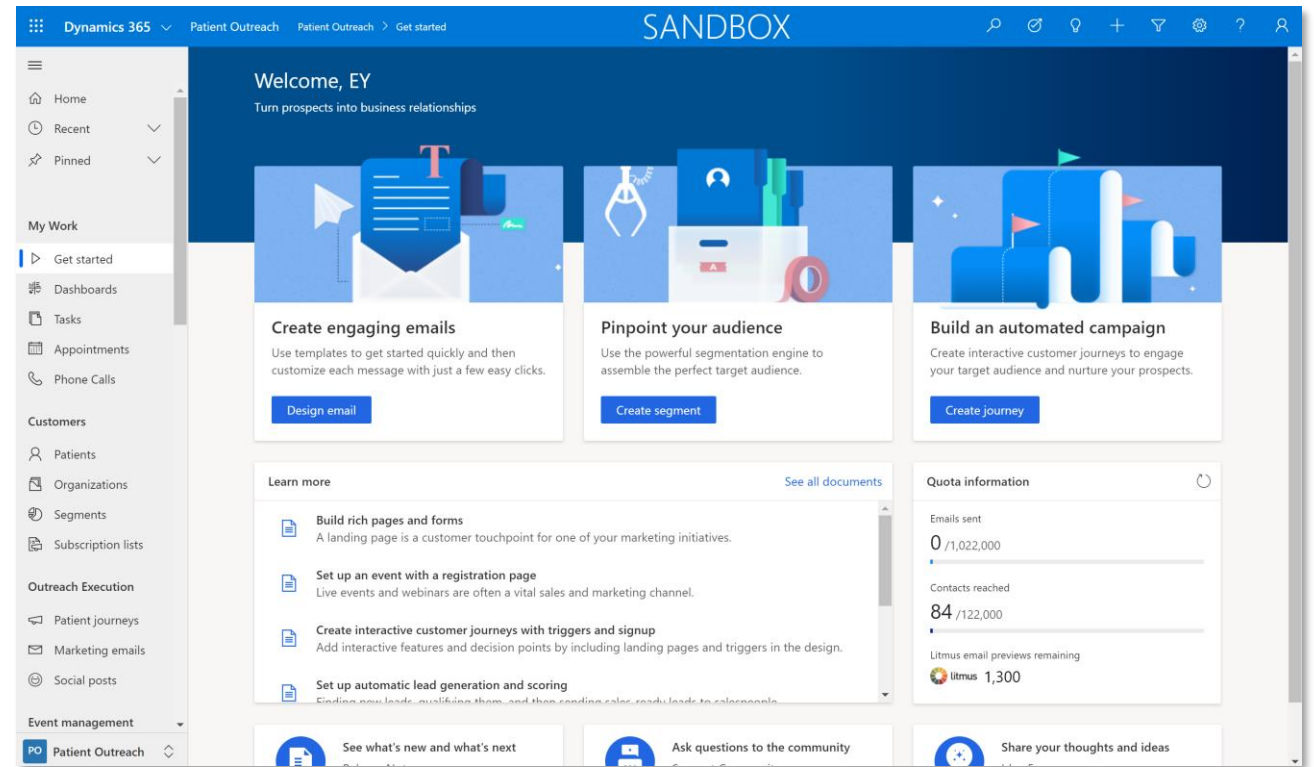
Patient Insights

Patient Segmentation

Patient Journey Automation

Patient Campaign Management

Event Management



Azure Health Bot

Provide a self-service engagement channel by building chatbots from templates with built-in and custom scenarios.

Feature Functionality

Built-in Conversations

Scenario Templates

Custom Scenarios

Authored Cards

Language Model Extensibility

Escalate to Call Center

The screenshot displays the Health Bot Service interface. On the left, a sidebar menu includes options like Scenarios, Language, Models, Localization, Configuration, Integration, Analytics, Users, and Resources. The main panel is titled 'Language models' and lists various built-in scenarios with their corresponding intents and actions. A hand is holding a smartphone in the foreground, showing a chat interface with a Microsoft Health bot. The chat history includes a welcome message and a user's query about COPD, with the bot providing a list of symptoms and causes.

Active	Model	Intent	Action
On	Medical information requests	ConditionInformation	/builtin/condition/information
On		ConditionSymptoms	/builtin/condition/symptoms
On		ConditionCauses	/builtin/condition/causes
On		ConditionComplications	/builtin/condition/complications
On		ConditionResources	/builtin/condition/resources
On		ConditionDoctorSpecialties	/builtin/condition/specialties
On	Medical complaints	Triage	/builtin/triage
On	Drugs and medications	DrugInformation	/medication/information
On	Greetings	greeting	/builtin/greeting
On	Help	help	/builtin/help
On	View terms	terms	/builtin/terms
On	Privacy queries	need_to_know	/builtin/need_to_know
On	View personal data	user_info	/builtin/user_info
On	Delete all data	forget_me	/builtin/forget_me
On	Feedback	feedback	/builtin/feedback
On	View conversation history	log	/builtin/log
On	Escalate	Escalate	Escalate



Empower health team collaboration

Accelerate health teams' ability to coordinate care in a secure environment and simplify complex workflow management.

Empower health team collaboration



Care Team Collaboration

Enable **secure collaboration and messaging** across the organization – from housekeeping to billing – from a single, highly configurable platform



Care Coordination

Enable **effective care management, scheduling, and resource optimization** by empowering care team members with the right operational tools










Continuous Monitoring

Optimize patient treatments from anywhere, anytime by unlocking the power of IoT and analytics to monitor health



Empower health team collaboration

Accelerate health teams' ability to coordinate care in a secure environment and simplify complex workflow management.

Scenario	Capabilities	Features
Empower health team collaboration	<div><div>Care Team Collaboration</div></div>	<div><div>Care Management</div></div>
	<div><div>Care Coordination</div></div>	<div><div>Home Health</div></div>
	<div><div>Continuous Monitoring</div></div>	<div><div>Care Team Member</div></div> <div><div>Virtual Clinic</div></div>

Care Management

Manage Care Plans and Care Teams

Feature Functionality

Holistic Patient Information

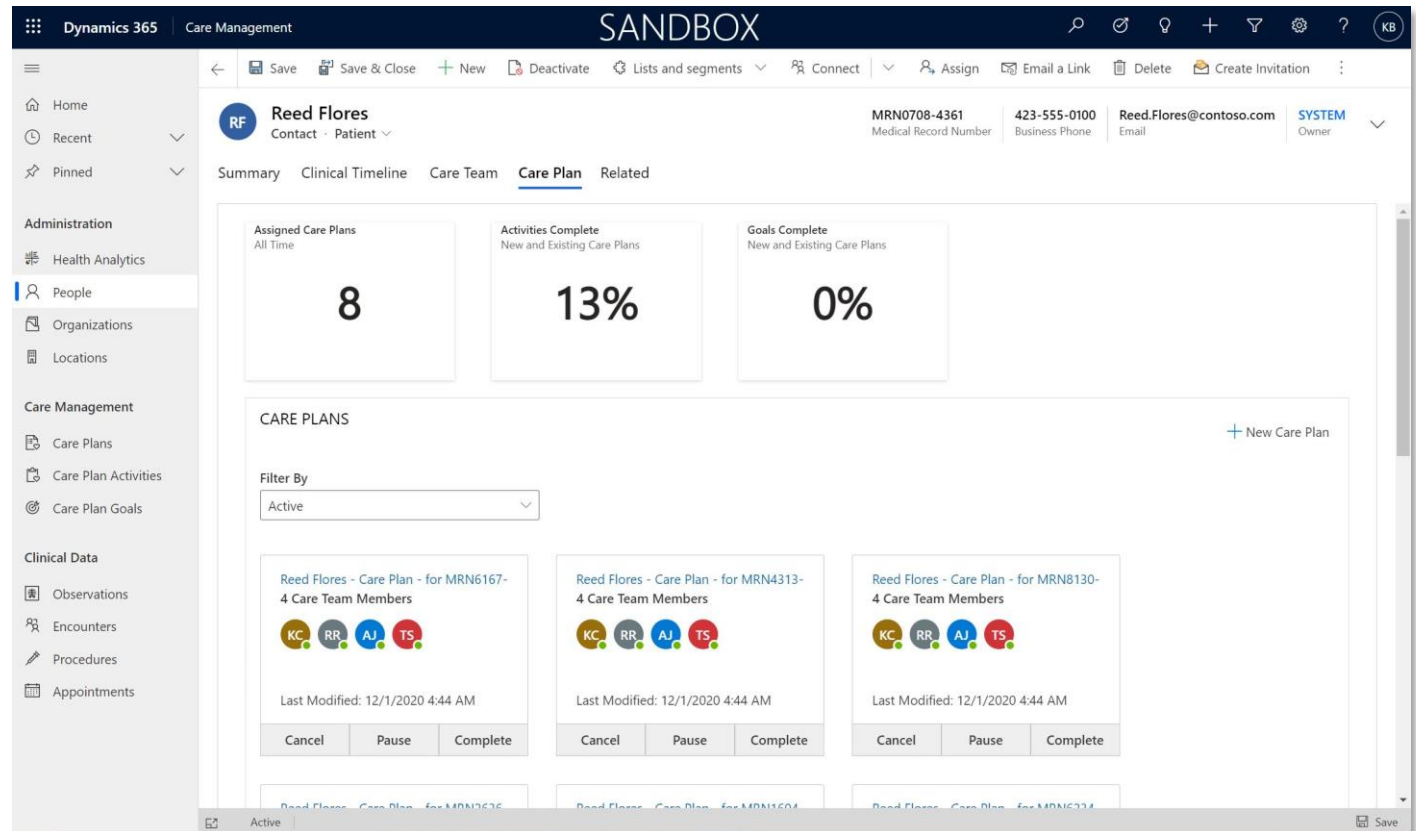
Care Plan Management

Care Team Management

Care Team Support

Patient Health Timeline

Health Analytics



Care Team Member

Care Team view that provides a complete picture of all people collaborating to provide the best care for the patient.



Feature Functionality

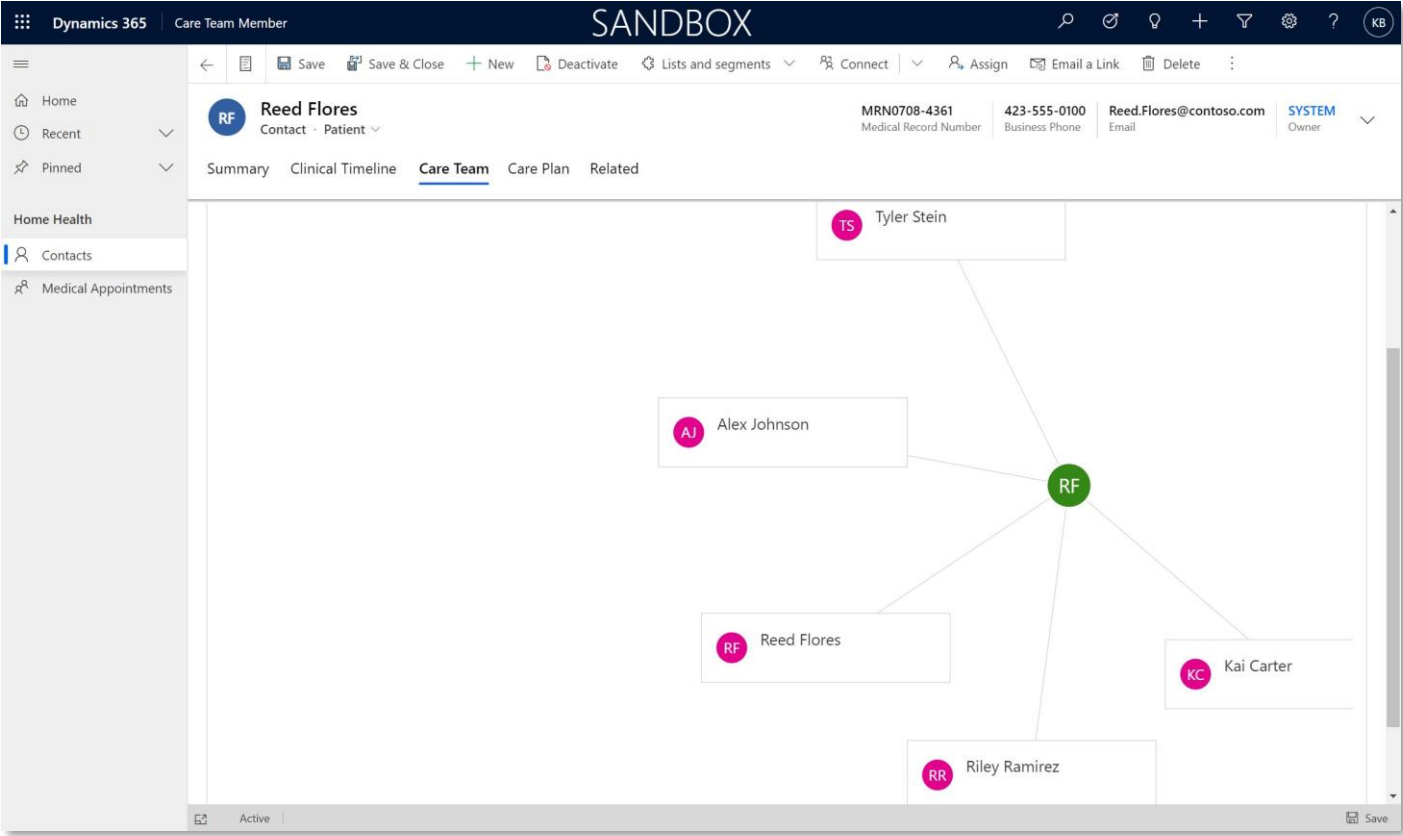
Holistic Patient Information

Home & Virtual Patient Care

Care Team Collaboration

Patient Health Timeline

Health Analytics



Home Health

Streamline home care with resource management and route optimization tools.

Feature Functionality

Scheduled Home Visit

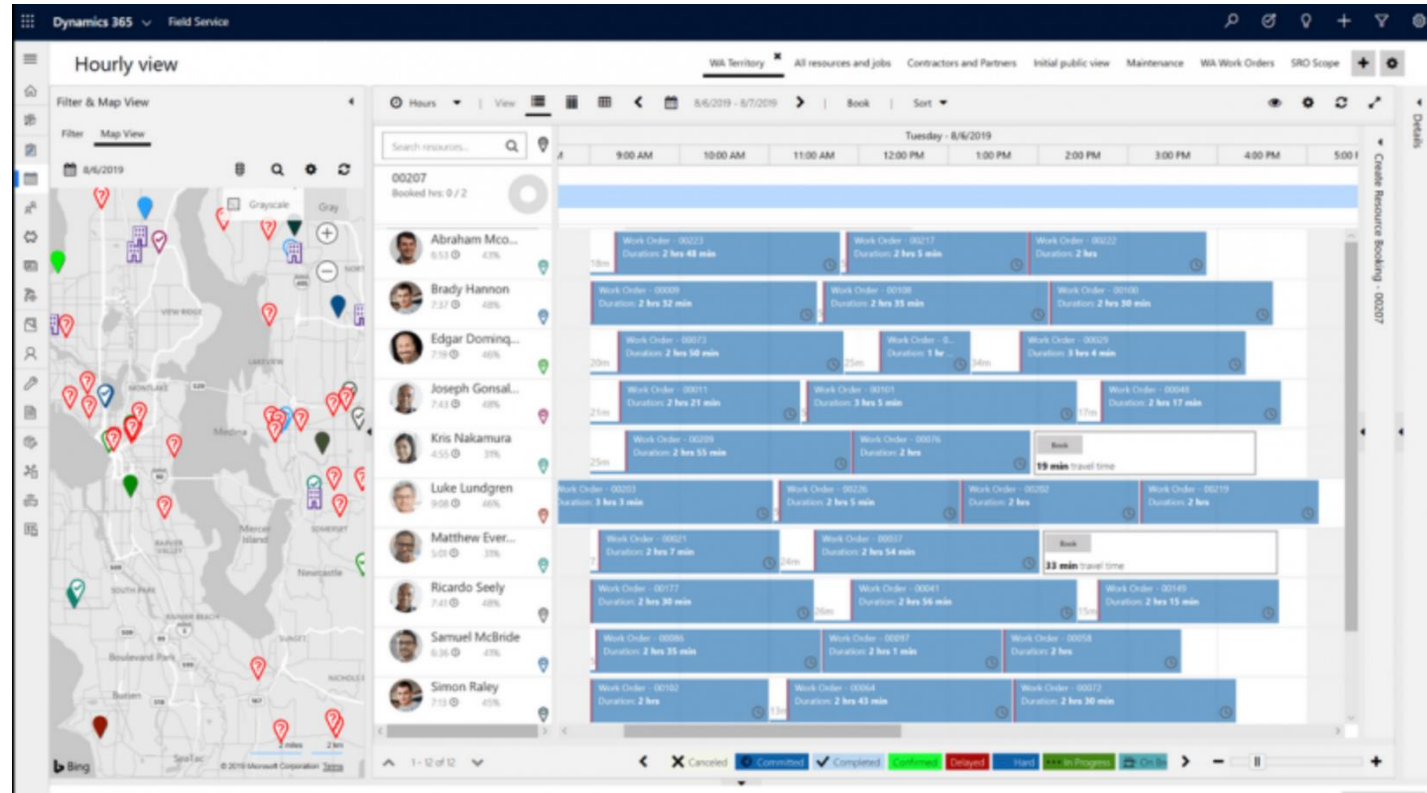
Home Patient Care

Home Care Management

Visit Tracking Notifications

Provider Schedule Management

Scheduling Optimization



Virtual Visits

Utilize video conferencing to provide high-quality, personalized, and affordable consultations.

Feature Functionality

Scheduled/Instant Virtual Appts

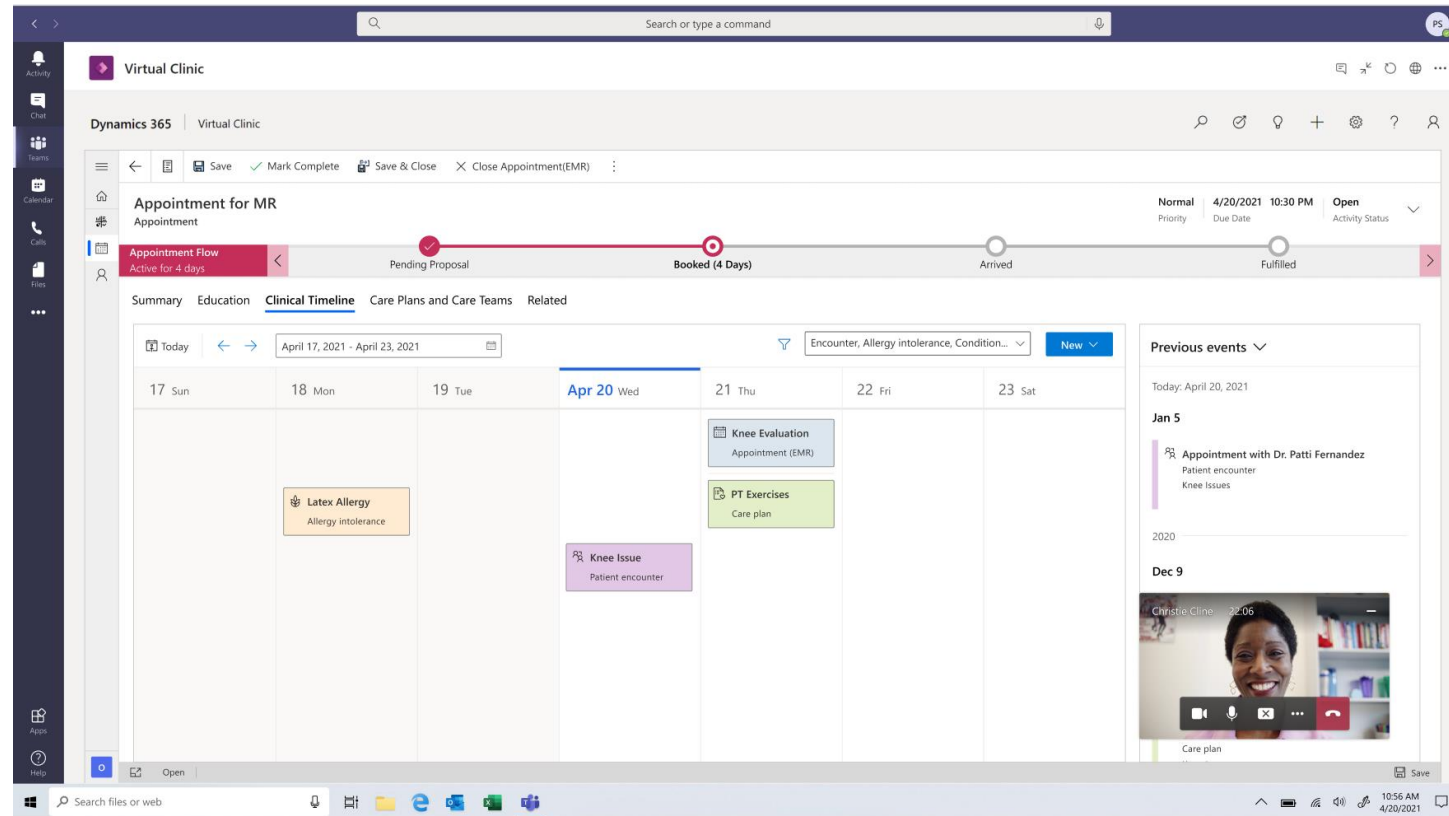
Virtual Clinic Dashboards

Video Calls via Microsoft Teams

Multiple Client Options

Embedded App Experience

Access Holistic Patient View



Improve clinical and operational data insights

Connect data across systems, creating insights to predict risk and help improve patient care, quality assurance, and operational efficiencies

Improve clinical
and operational
analytics



Data Interoperability

Simplify data governance and compliance by unifying data on a single, secure data platform



Operational Analytics

Improve operational efficiency by synchronizing management efforts across clinicians and administrators










Clinical Analytics

Transform health outcomes using data-driven insights to improve clinical decision-making and care experiences



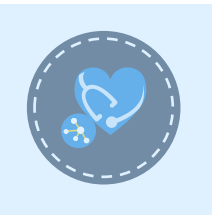
Improve clinical and operational data insights

Connect data across systems, creating insights to predict risk and help improve patient care, quality assurance, and operational efficiencies.

Scenario	Capabilities	Features
Improve clinical and operational analytics	 Data Interoperability	 Dataverse
	 Operational Analytics	 Azure Health DataServices
	 Clinical Analytics	 FHIR Sync Administration
		 Healthcare Administration

Dataverse

Securely store and manage data that's used by Microsoft Cloud for Healthcare applications.



Feature Functionality

Securely Store & Manage Data

Build Apps Against your Data

Quickly Access your Data

Reusable Business Logic

Built-in Validations

Integration with Other Systems

Power Apps

Environment: HealthcareInADay_Test

HomeLearnAppsCreateDataTablesChoicesDataflowsExport to data lakeConnectionsCustom ConnectorsGatewaysFlowsChatbotsAI BuilderSolutions

New tableGet dataExport dataExport to data lakeAnalyze in Power BIAl Builder

Tables

Table	Name	Type	Customiza...
Account	account	Standard	✓
Activity	activitypointer	Custom	✓
Address	customeraddress	Standard	✓
Appointment	appointment	Standard	✓
Attachment	activymimeattachment	Standard	✓
Business Unit	businessunit	Standard	✓
Contact	contact	Standard	✓
Currency	transactioncurrency	Standard	✓
Email	email	Standard	✓
Email Template	template	Standard	✓
Fax	fax	Standard	✓
Feedback	feedback	Standard	✓
Knowledge Article	knowledgearticle	Standard	✓
Letter	letter	Standard	✓
Mailbox	mailbox	Standard	✓
Organization	organization	Custom	✓
Phone Call	phonecall	Standard	✓
Position	position	Standard	✓
Privilege	privilege	Custom	✓
Product	product	Standard	✓
Recurring Appointment	recurringappointmentmaster	Standard	✓



Azure Health Data Services

Rapidly exchange data and securely connect and interact with any system that utilizes FHIR APIs.

Feature Functionality

Rapidly Exchange Data

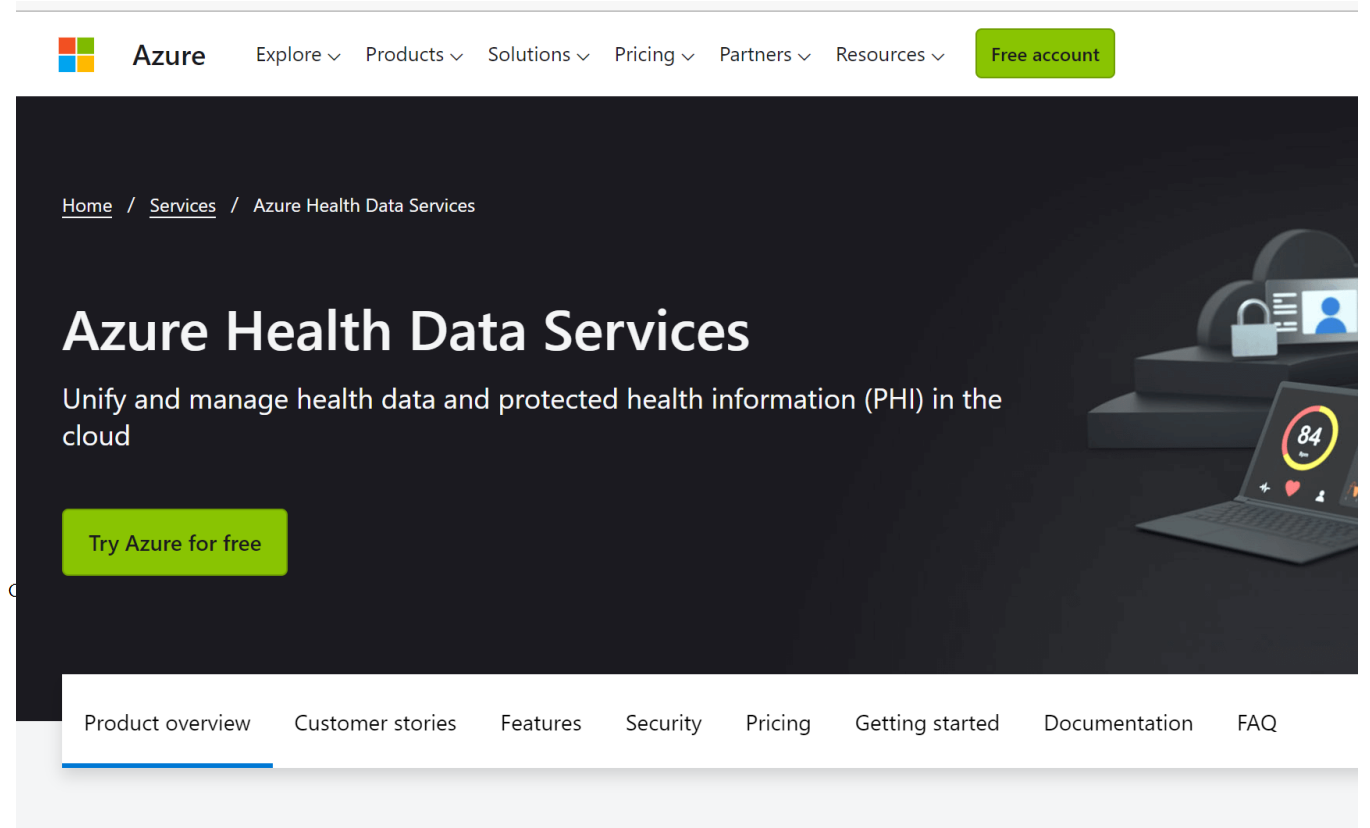
Holistic View of FHIR Data

Adapt and Extend Dataverse

Enrich Disparate Data Sets

End to End Data Pipeline

DICOM, IOMT, FHIR



Manage your FHIR mappings, resources, and integration settings for Dataverse.

Manage your FHIR mappings, resources, and integration settings for Dataverse.



Configure Azure FHIR Resources

Configure Azure FHIR Resources

Create & Manage Entity Maps

Create & Manage Attribute Maps

Analyze FHIR Sync Data

Track FHIR Sync History

Manage Integration Settings

Protect health information

Protect sensitive health data to support privacy and effective, end-to-end security and compliance

Protect health
information



Security

Protect against the latest threats with intelligent tools to prevent attacks and react quickly to security events



Compliance

Stay up-to-date with the latest requirements with the most comprehensive set of cloud compliance offerings



Privacy

Maintain control of your data with confidence knowing we don't use your data for commercial purposes



In Summary...

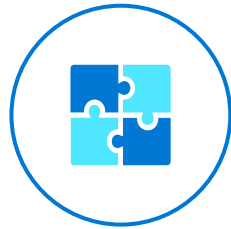


Unlock your data's full potential with the **Microsoft Cloud for Healthcare**



Trust

Consolidate data on a platform backed by investments in security, a commitment to privacy, and robust compliance offerings



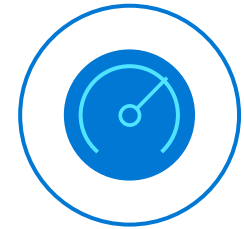
Interoperability

Create a unified data estate that communicates seamlessly with external FHIR systems and critical business applications



Intelligence

Reveal actionable, intelligent insights by applying AI and ML tools to comprehensive institutional datasets



Agility

Increase institutional efficiency through custom apps, role-based dashboards, and automated workflows

Next Session:

Module 2

Microsoft Cloud
Solution Center

