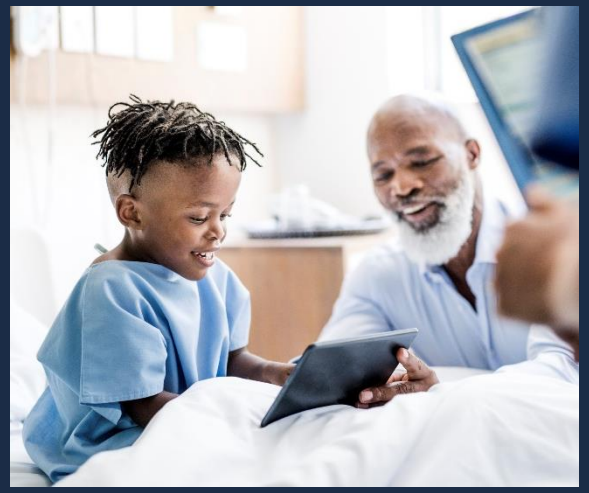
Microsoft

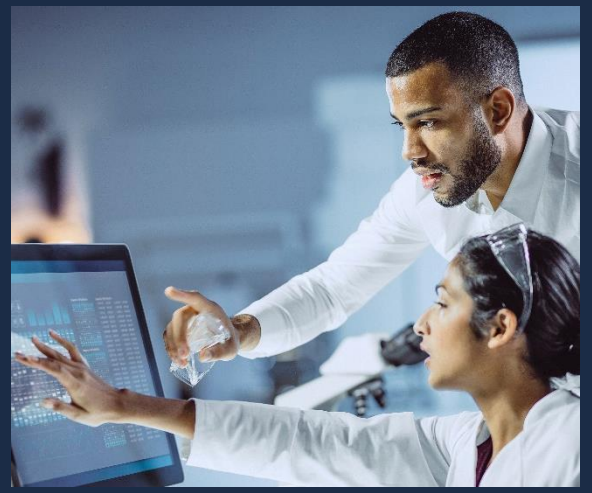
Module 3

Healthcare Data Model

Healthcare Common Data Model

- What is the Microsoft Common Data Model (CDM)
- GitHub view of the Healthcare CDM
- Microsoft Cloud for Healthcare solution layering deep dive
- Healthcare CDM extensibility

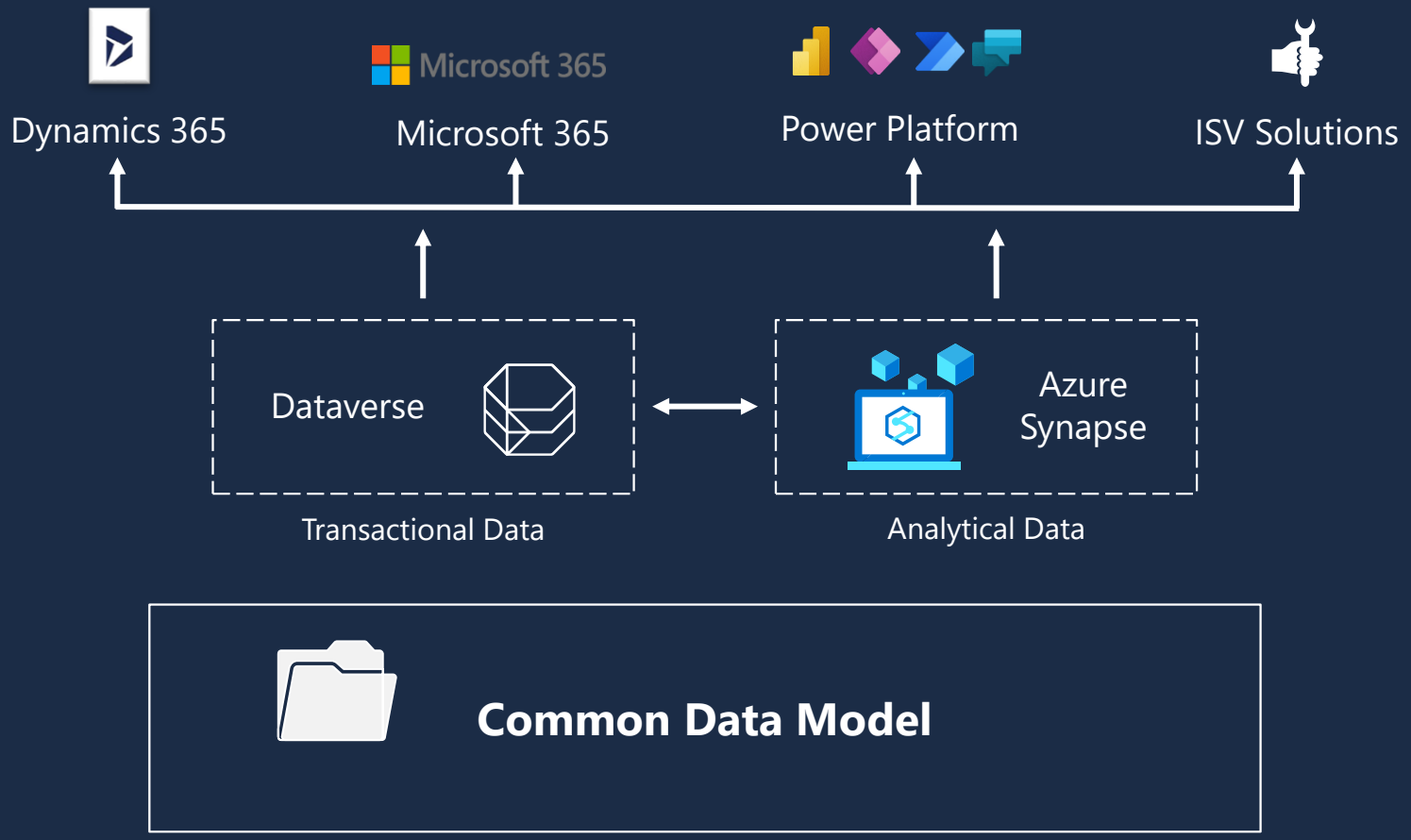




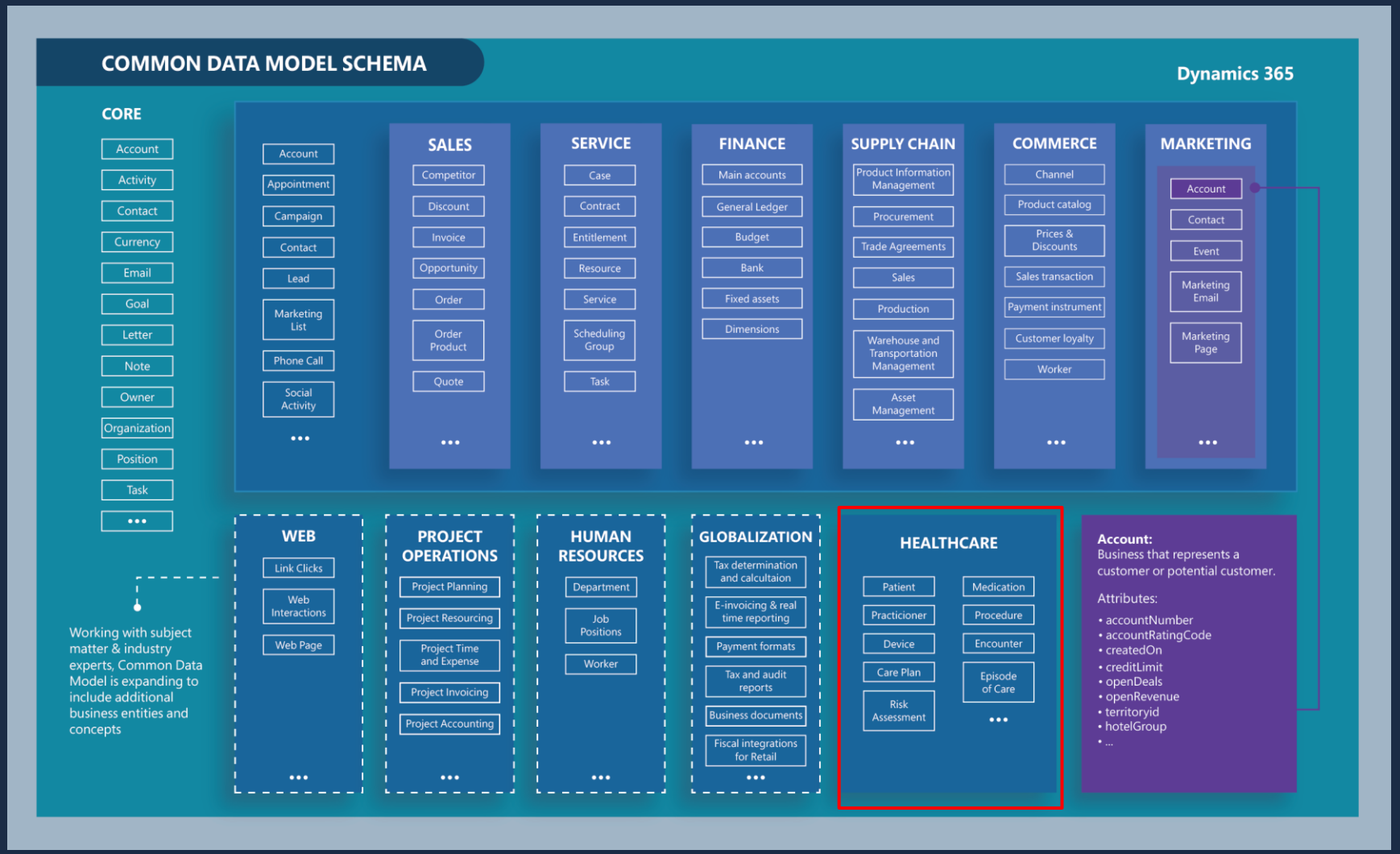
Microsoft Common Data Model

A common machine-understandable way to **describe data** with **semantic consistency** across business, transactional, analytical and industry domains that **drives interoperability** across apps and services from the Microsoft ecosystem, and customers to **create insights**

Microsoft Common Data Model



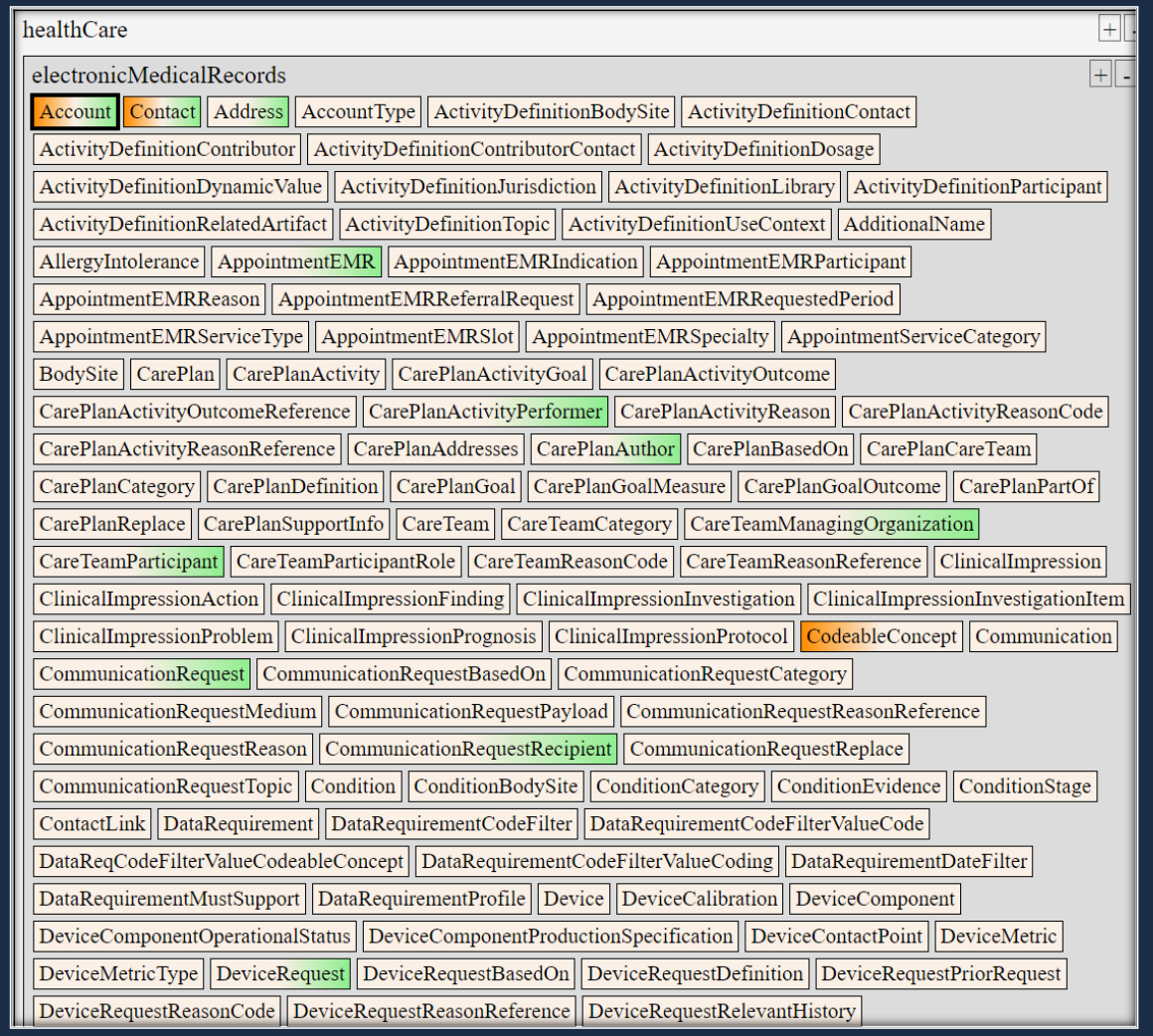
Common Data Model Schema



GitHub view of Microsoft Healthcare CDM

Healthcare Common Data Model –
Open-sourced for extensibility

https://microsoft.github.io/CDM

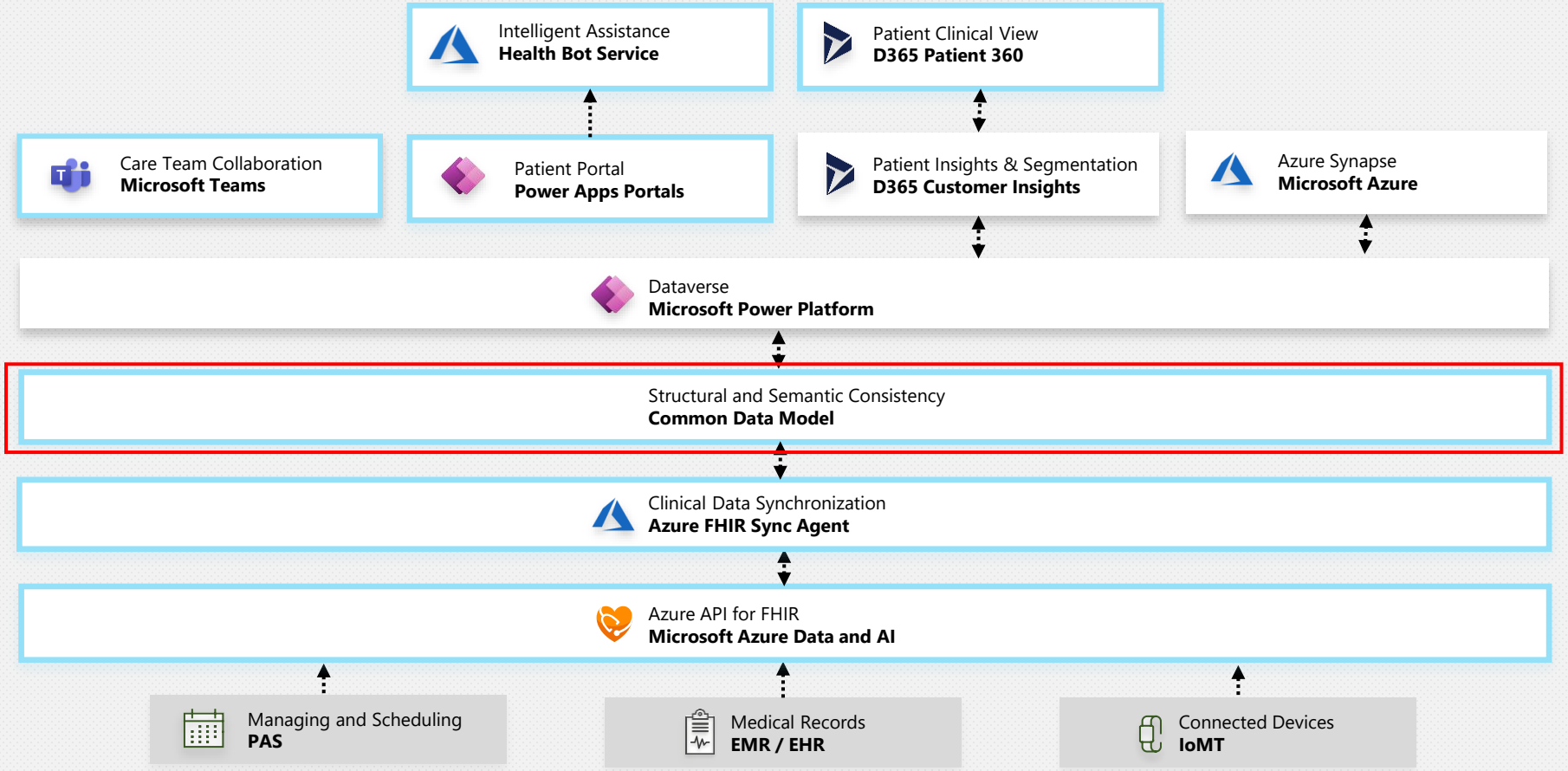


Common Data Model in Healthcare Cloud

Personalized Care
Build relationships through enhanced experiences

Care Coordination
Optimize resources & solve problems collectively

Patient Insights
Remote patient monitoring and improved clinical & operational insights



Key

- Microsoft Cloud for Healthcare
- Microsoft Product
- Other

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Microsoft Cloud for Healthcare Capabilities

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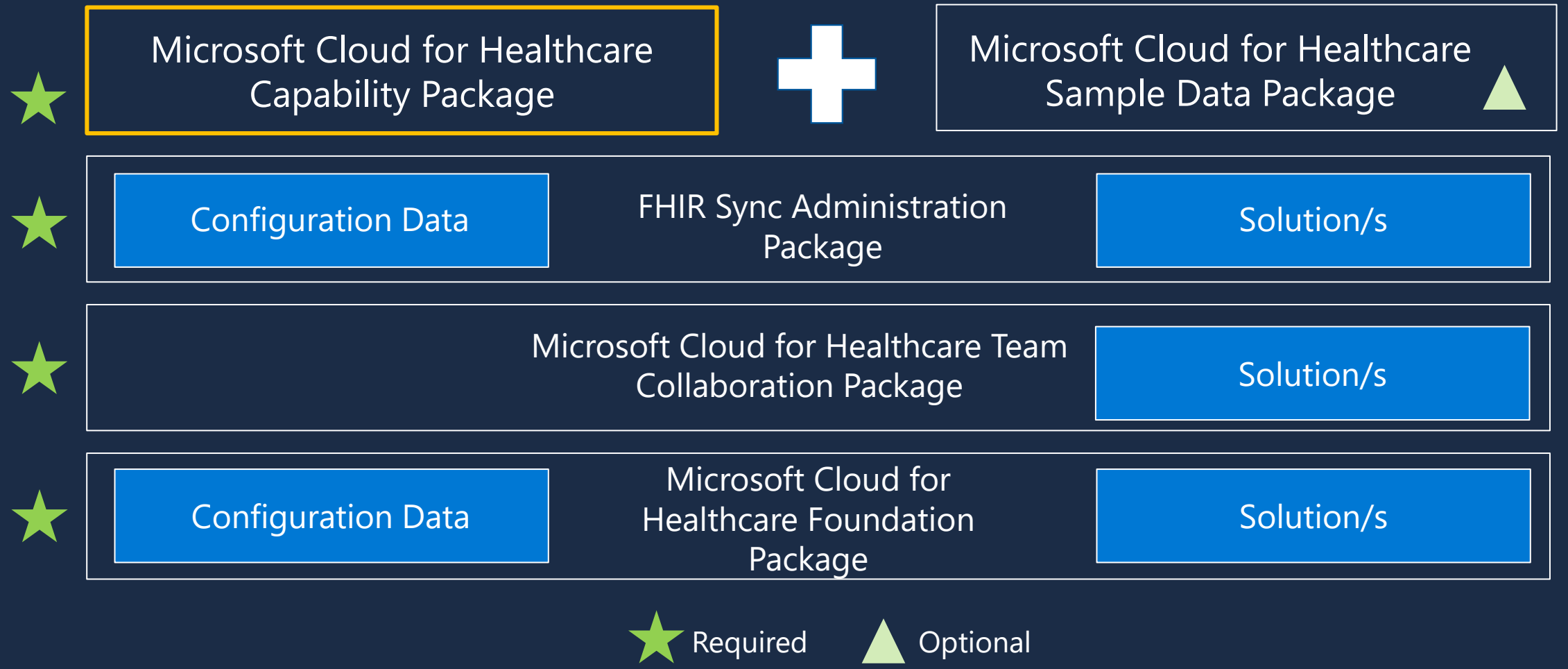
Healthcare Data Model

Solution Layering in Microsoft Cloud for Healthcare



Deep Dive into Healthcare CDM

Care Management

Table	Schema/Logical Name
Allergy Intolerance	msemr_allergyintolerance
Appointment (EMR)	msemr_appointmentemr
Appointment Indication (EMR)	msemr_appointmentemrindication
Appointment Participant (EMR)	msemr_appointmentemrparticipant
Appointment Reason (EMR)	msemr_appointmentemrreason
Appointment Referral Request (EMR)	msemr_appointmentemrreferralrequest
Care Plan	msemr_careplan
Care Plan Activity	msemr_careplanactivity
Care Plan Activity Goal	msemr_careplanactivitygoal
Care Plan Activity Performer	msemr_careplanactivityperformer
Care Plan Care Team	msemr_careplancareteam
Care Plan Goal	msemr_careplangoal
Care Plan Goal Outcome	msemr_careplangoaloutcome
Care Plan Part Of	msemr_careplanpartof
Care Team	msemr_careteam
Care Team Managing Organization	msemr_careteammanagingorganization
Care Team Participant	msemr_careteamparticipant
Claim	msemr_Claim
Condition	msemr_condition
Contact (Patient, Related Person, Practitioner)	Contact
Coverage	msemr_Coverage
Device	msemr_device
Encounter	msemr_encounter
Encounter Diagnosis	msemr_encounterdiagnosis
Encounter Episode of Care	msemr_encounterepisodeofcare
Encounter Location	msemr_encounterlocation
Encounter Participant	msemr_encounterparticipant
Encounter Reason	msemr_encounterreason
Episode of Care	msemr_episodeofcare

Table	Schema/Logical Name
Goal	msemr_goal
Health Care Service	msemr_healthcareservice
Health Care Service Location	msemr_healthcareservicelocation
Insurer	Account
Location	msemr_location
Medication	Product
Medication Administration	msemr_medicationadministration
Medication Price List	PriceLevel
Medication Request	msemr_medicationrequest
Nutrition Order	msemr_nutritionorder
Observation	msemr_observation
Observation Based On	msemr_observationbasedon
Observation Category	msemr_observationcategory
Observation Performer	msemr_observationperformer
Organization	Account
Patient	Contact
Practitioner	Contact
Practitioner Qualifications	msemr_practitionerqualification
Practitioner Role	msemr_practitionerrole
Price List Items	ProductPriceLevel
Procedure	msemr_procedure
Procedure Based On	msemr_procedurebasedon
Procedure Body Site	msemr_procedurebodysite
Procedure Performer	msemr_procedureperformer
Referral Request	msemr_referralrequest
Related Person	Contact
Related Person Link	msemr_relatedperson
Risk Assessment	msemr_riskassessment
Specimen	msemr_specimen
Task	Task
Unit Group	UoMSchedule

* The slide demonstrates the CDM for Healthcare based on sample data, and not a full representation

Deep Dive into Healthcare CDM

Home Health

Table	Schema / Logical Name
All Tables from Care Management / Foundational Data	
Incident Type	msdyn_incidenttype
Case	incident
Home Care	msdyn_workorder
Price List	pricelevel

*The slide demonstrates the CDM for Healthcare based on sample data, and not a full representation

Deep Dive into Healthcare CDM

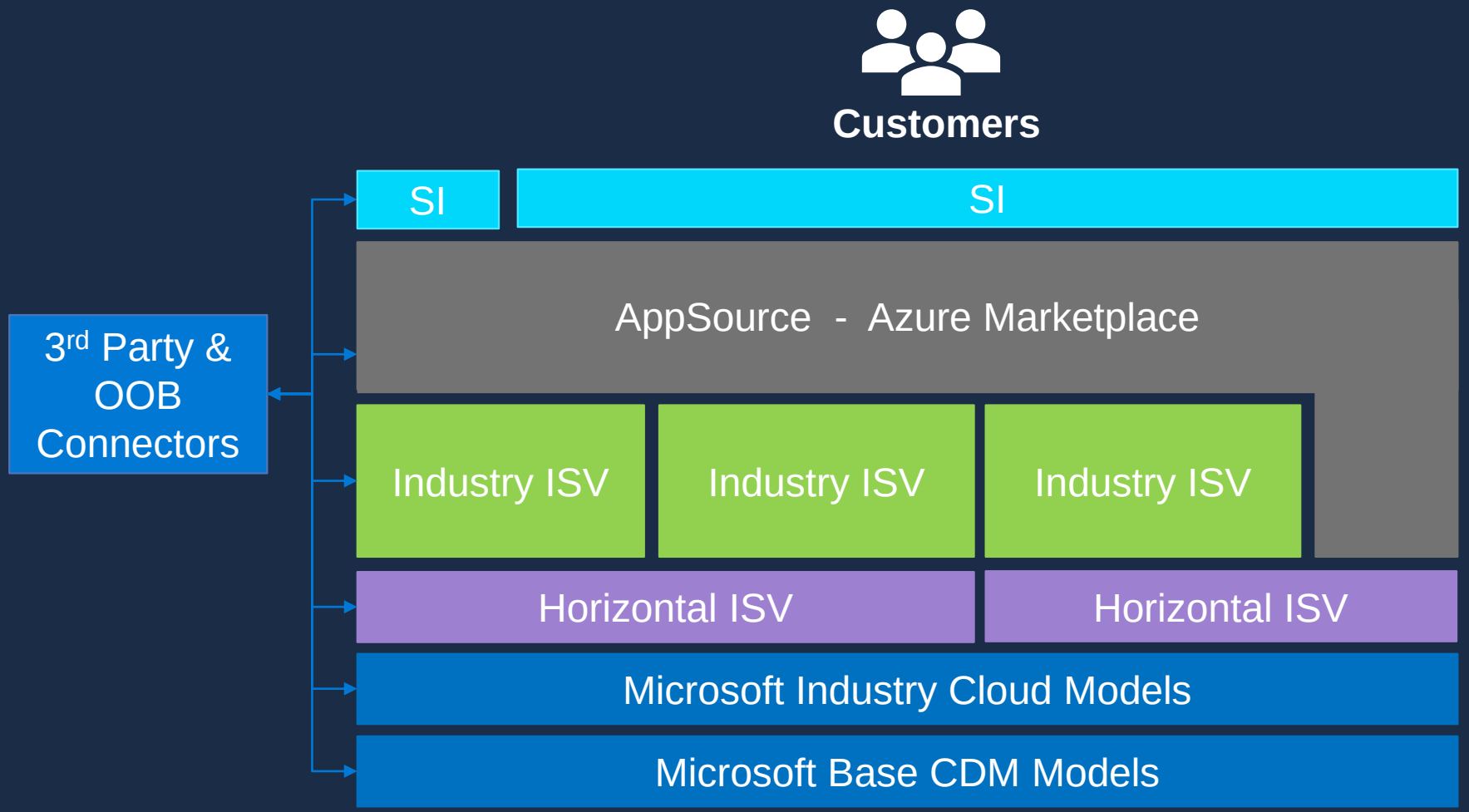
Patient Outreach

Table	Schema / Logical Name
All Tables from Care Management / Foundational Data	
Appointment	appointment
Phone Call	phonecall
Marketing List	list
Customer Journey	msdyncrm_custom
Marketing Email	msdyncrm_market
Event	msevtmgt_event
Event Registration	msevtmgt_eventr
Lead	lead
Segment	msdyncrm_segment

*The slide demonstrates the CDM for Healthcare based on sample data, and not a full representation

Healthcare CDM Extensibility

CDM Extensibility – Solution Delivery Model



SIs: Deliver and customize applications on our cloud for the customer.

AppSource/Azure Marketplace: Delivery mechanism for Industry Solutions and/or Apps and Microsoft Solution Clouds

Industry ISVs: Provide applications which require specialized industry knowledge to build, such as regulatory restrictions or industry processes

Horizontal ISVs: Provide applications which target business processes common to many industries

Microsoft Industry Solution Clouds: package of data model, relevant business processes, Power BI, AI, M365, Teams Integrations and sample data built on top of Microsoft Azure

*Disclaimer: Neither Microsoft Cloud for Healthcare nor any of its component technologies is intended or made available as a medical device for the diagnosis of disease or other conditions, or in the cure, mitigation, treatment or prevention of a disease. Partners are responsible for ensuring the regulatory compliance of any solution they build using Microsoft Cloud for Healthcare

15-minute break

Next Session:

Lab 01
Care Management

Microsoft