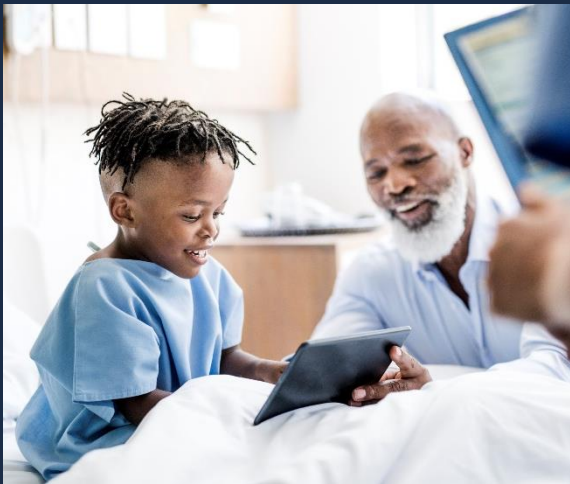Microsoft

Module 3

Healthcare Data Model

April 2022

Healthcare + Common Data Model

- What is the Microsoft Common Data Model (CDM)
- Microsoft Cloud for Healthcare solution layering
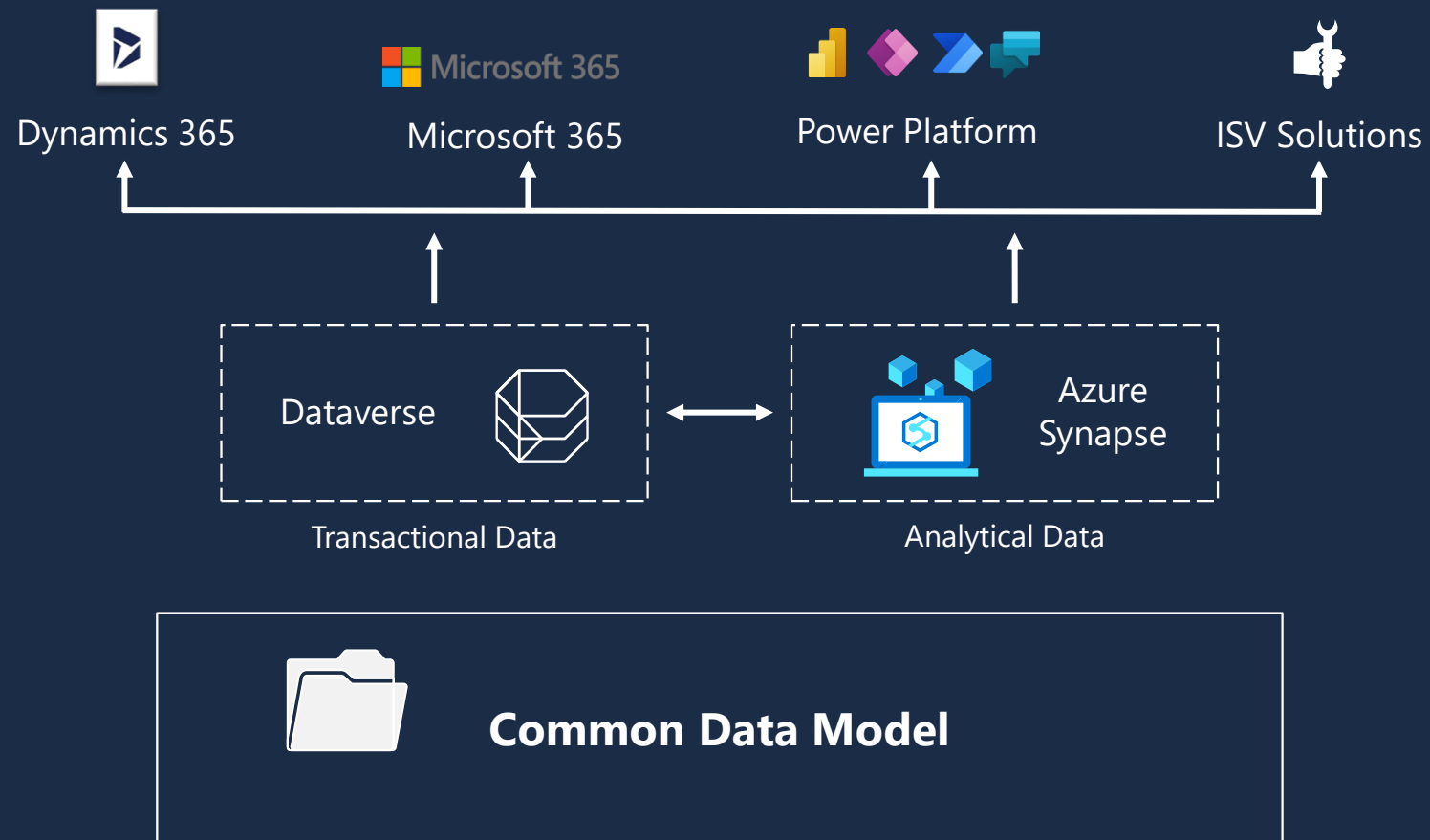- Healthcare Data Model extensibility
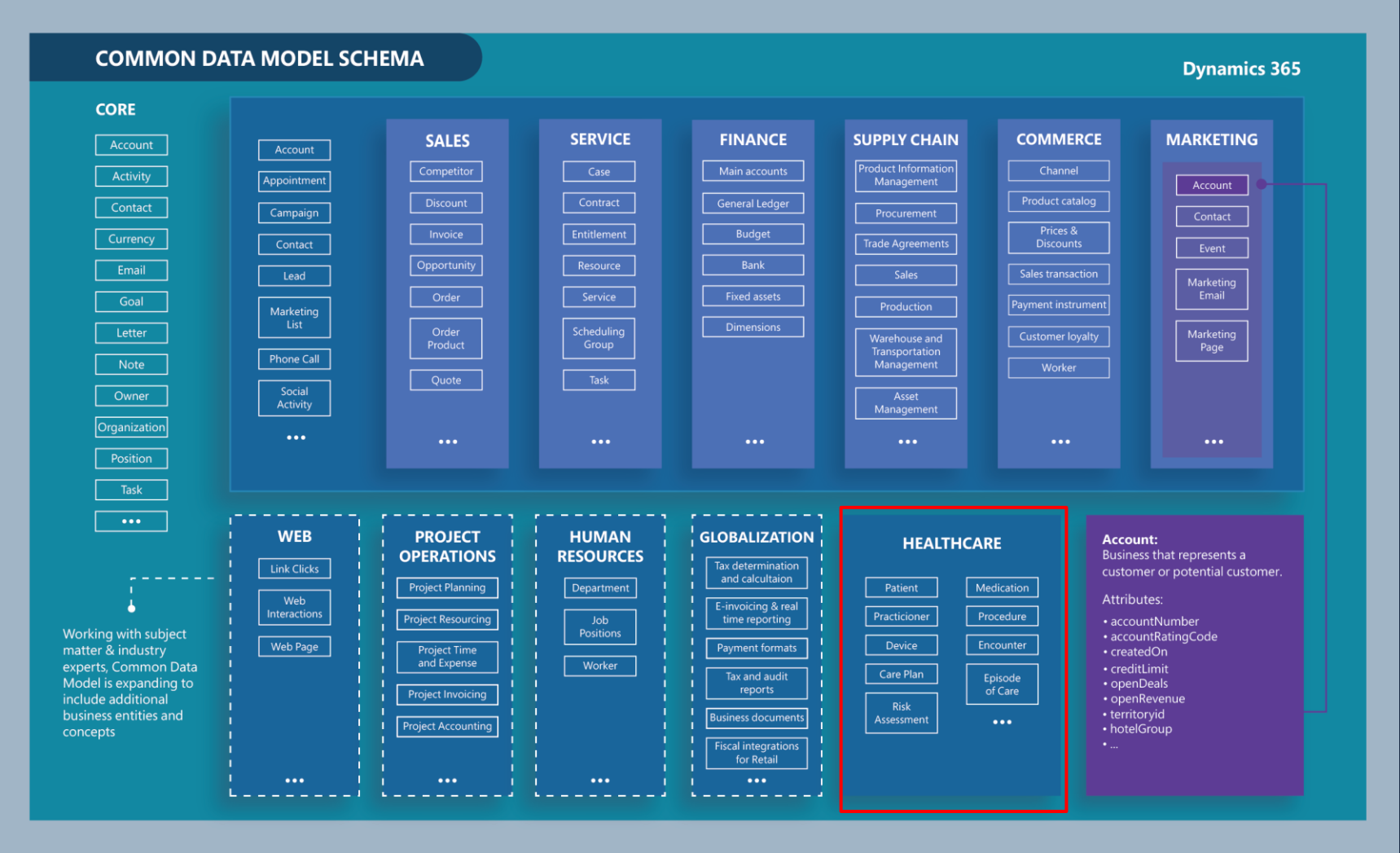
Microsoft Common Data Model

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**
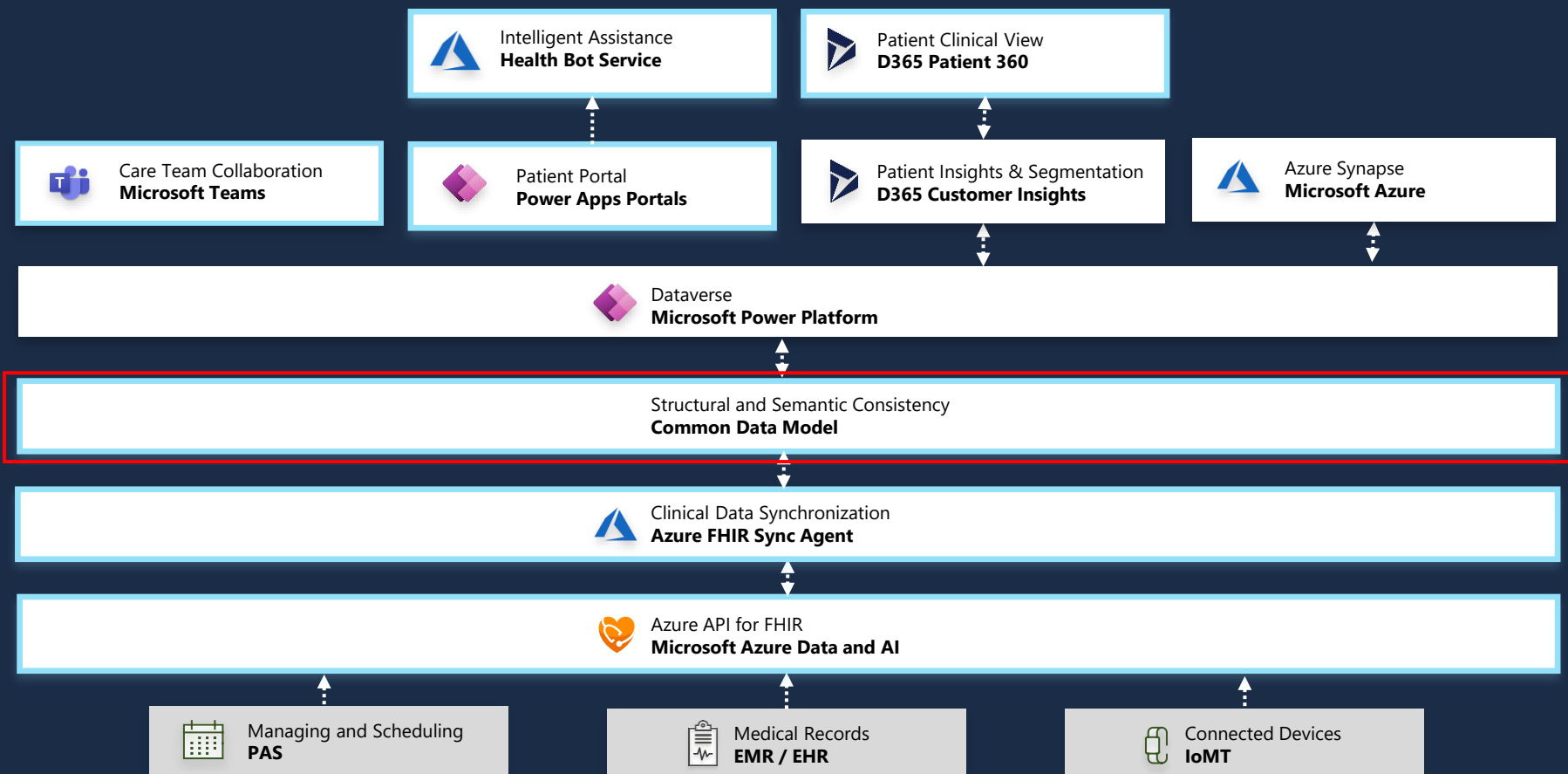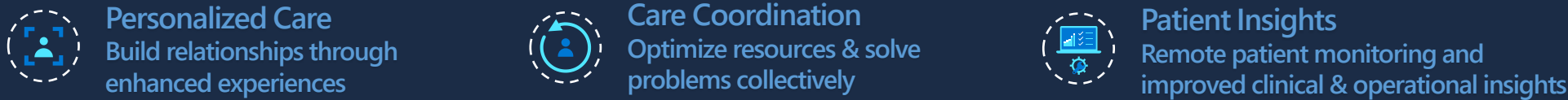
Common Data Model Schema

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

Intelligent Assistance
Health Bot Service

Patient Clinical View
D365 Patient 360

Care Team Collaboration
Microsoft Teams

Patient Portal
Power Apps Portals

Patient Insights & Segmentation
D365 Customer Insights

Azure Synapse
Microsoft Azure

Dataverse
Microsoft Power Platform

Structural and Semantic Consistency
Common Data Model

Clinical Data Synchronization
Azure FHIR Sync Agent

Azure API for FHIR
Microsoft Azure Data and AI

Managing and Scheduling
PAS

Medical Records
EMR / EHR

Connected Devices
IoMT

Key

Microsoft Cloud for Healthcare

Microsoft Product

Other

© Microsoft Corporation

Microsoft

Microsoft Cloud for Healthcare Capabilities

+

Healthcare Data Model

Healthcare Data Model
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

*This slide demonstrates the CDM for Healthcare based on sample data. This is not a full representation

Healthcare Data Model
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 Data Model
Home Health

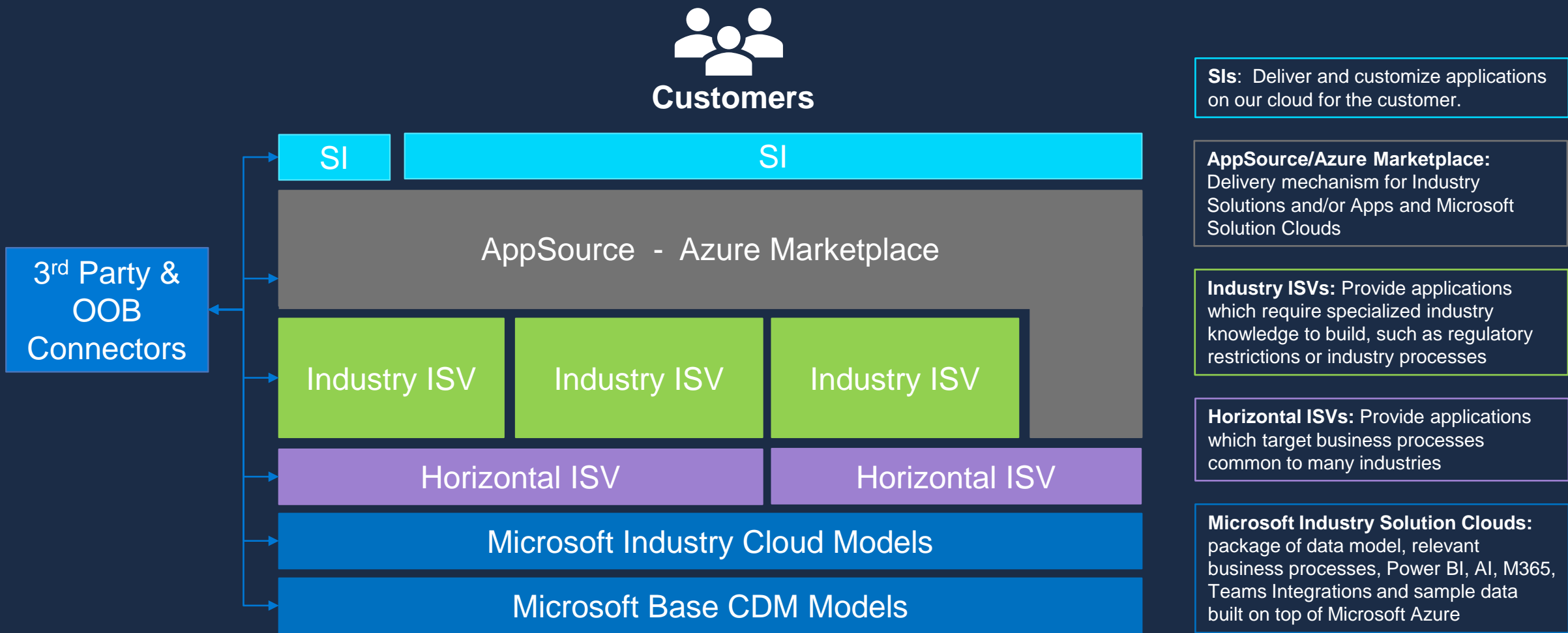| Table	Schema / Logical Name
All Tables from Care Management / Foundational Data	
Incident Type	msdyn_incidenttype
Case	incident
Home Care	msdyn_workorder
Price List	pricelevel

Healthcare
Data Model
Extensibility

CDM Extensibility – Solution Delivery Model

Customers

SI

SI

3rd Party & OOB Connectors

AppSource - Azure Marketplace

Industry ISV

Industry ISV

Industry ISV

Horizontal ISV

Horizontal ISV

Microsoft Industry Cloud Models

Microsoft Base CDM Models

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