

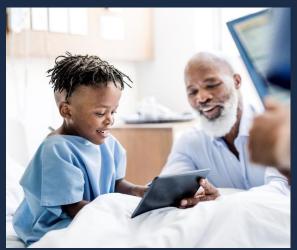


Module 3 Healthcare Data Model



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

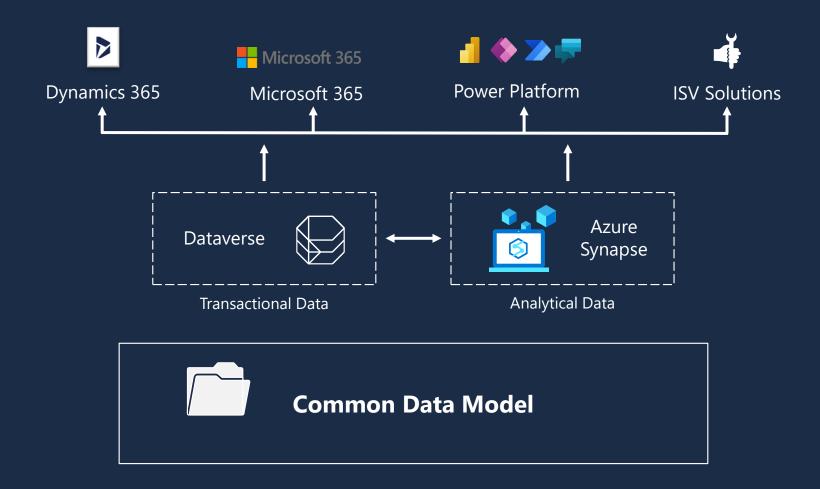


A common machine-understandable way to **describe data** with **semantic consistency** across business, transactional, analytical and industry domains that **drives interoperability** across apps and services from the Microsoft ecosystem, and
customers to **create insights**



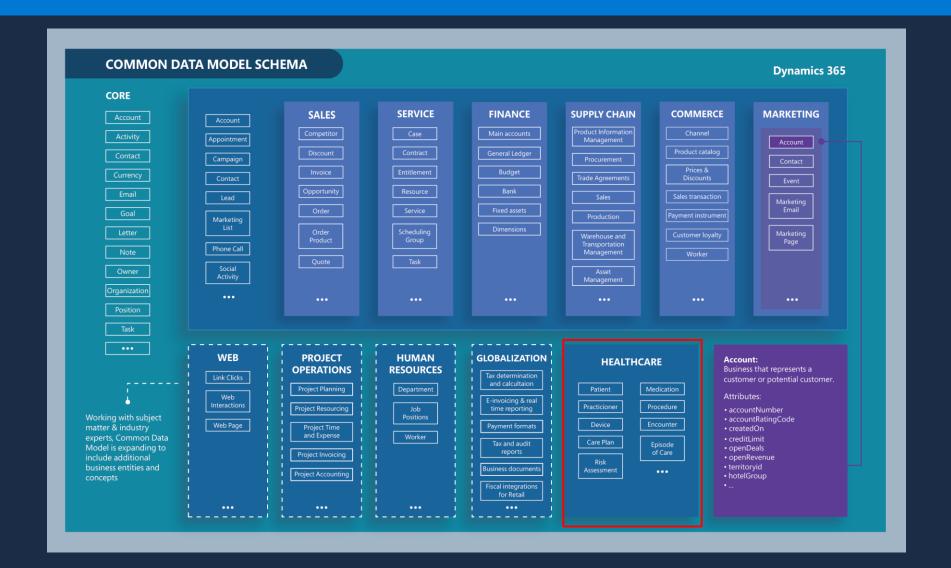
Microsoft Common Data Model





Common Data Model Schema





GitHub view of Microsoft Healthcare CDM



Healthcare Common Data Model – Open-sourced for extensibility

https://microsoft.github.io/CDM

healthCare ± .		
electronicMedicalRecords +-		
Account Contact Address AccountType ActivityDefinitionBodySite ActivityDefinitionContact		
ActivityDefinitionContributor ActivityDefinitionContributorContact ActivityDefinitionDosage		
ActivityDefinitionDynamicValue ActivityDefinitionJurisdiction ActivityDefinitionLibrary ActivityDefinitionParticipant		
ActivityDefinitionRelatedArtifact ActivityDefinitionTopic ActivityDefinitionUseContext AdditionalName		
AllergyIntolerance AppointmentEMR AppointmentEMRIndication AppointmentEMRParticipant		
AppointmentEMRReason AppointmentEMRReferralRequest AppointmentEMRRequestedPeriod		
AppointmentEMRServiceType		
BodySite CarePlan CarePlanActivity CarePlanActivityGoal CarePlanActivityOutcome		
CarePlanActivityOutcomeReference CarePlanActivityPerformer CarePlanActivityReason CarePlanActivityReason		
CarePlanActivityReasonReference CarePlanAddresses CarePlanAuthor CarePlanBasedOn CarePlanCareTeam		
CarePlanCategory CarePlanDefinition CarePlanGoal CarePlanGoalMeasure CarePlanGoalOutcome CarePlanPartOf		
CarePlanReplace CarePlanSupportInfo CareTeam CareTeamCategory CareTeamManagingOrganization		
CareTeamParticipant CareTeamParticipantRole CareTeamReasonCode CareTeamReasonReference ClinicalImpression		
ClinicalImpressionAction ClinicalImpressionInvestigation ClinicalImpressionInvestigation		
ClinicalImpressionProblem ClinicalImpressionPrognosis ClinicalImpressionProtocol CodeableConcept Communication		
CommunicationRequest CommunicationRequestBasedOn CommunicationRequestCategory		
CommunicationRequestMedium CommunicationRequestPayload CommunicationRequestReasonReference		
CommunicationRequestReason CommunicationRequestRecipient CommunicationRequestReplace		
CommunicationRequestTopic Condition ConditionBodySite ConditionCategory ConditionEvidence ConditionStage		
ContactLink DataRequirement DataRequirementCodeFilter DataRequirementCodeFilte		
DataReqCodeFilterValueCodeableConcept DataRequirementCodeFilterValueCoding DataRequirementDateFilter		
DataRequirementMustSupport DataRequirementProfile Device DeviceCalibration DeviceComponent		
DeviceComponentOperationalStatus DeviceComponentProductionSpecification DeviceContactPoint DeviceMetric		
DeviceMetricType DeviceRequest DeviceRequestBasedOn DeviceRequestDefinition DeviceRequestPriorRequest		
DeviceRequestReasonCode DeviceRequestReasonReference DeviceRequestRelevantHistory		

Common Data Model in Healthcare Cloud

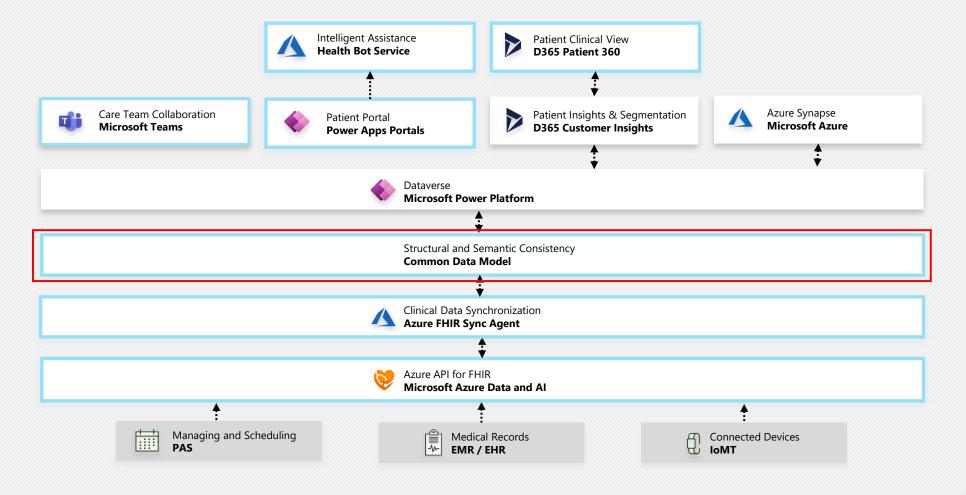




Care Coordination
Optimize resources & solve
problems collectively



Patient Insights
Remote patient monitoring and improved clinical & operational insights







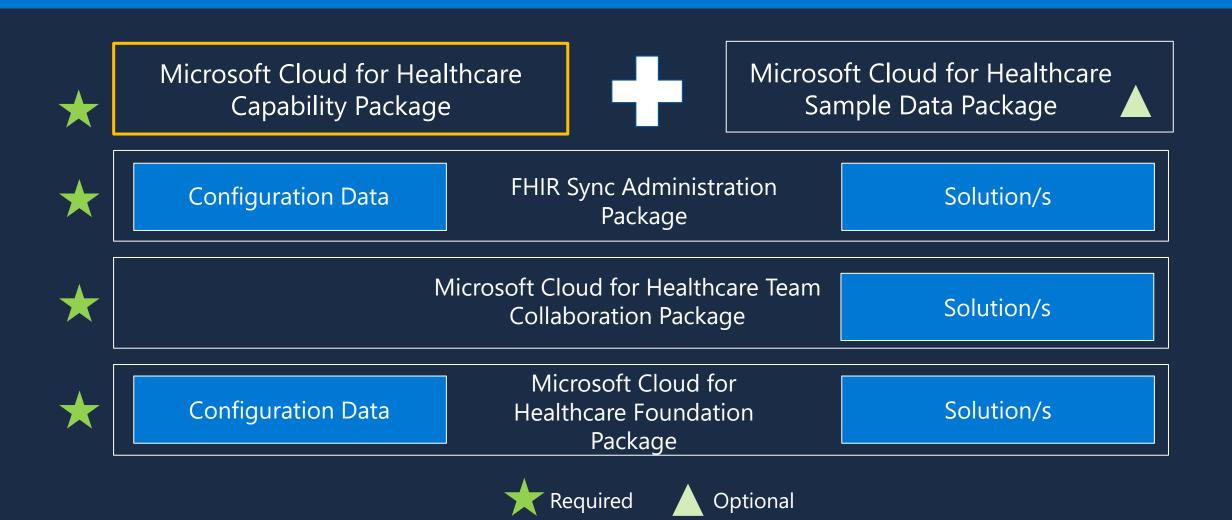
Microsoft Cloud for Healthcare Capabilities



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	Cahama /Lagigal Nama
	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

Deep Dive into Healthcare CDM Patient Outreach

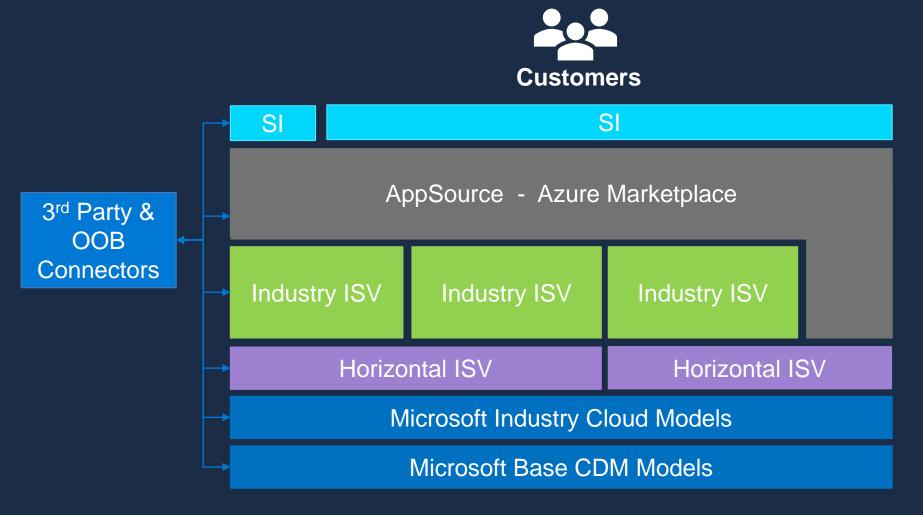


Table	Schema / Logical Name
All Tables from Care Management / Foundational Data	
Appointment	appointment
Phone Call	phonecall
Marketing List	list
Customer Journey	msdyncrm_custom
Marketing Email	msdyncrm_market
Event	msevtmgt_event
Event Registration	msevtmgt_eventr
Lead	lead
Segment	msdyncrm_segment



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



Next Session:

Lab 01 Care Management



