Group Project

CLAIM
Claim ID
Procedure Name
Insurance Code
Insurance partner
Amount Submitted
Date Submitted
Amount Covered

COMPLAINT
ComplaintID
End Date
Start Date

INVENTORY
Inv ID
Medication Type

VENDOR
Vendor ID
Vendor Name
Phone
Email
Contact Person
(First Name, Middle Initial,
Last name)

Medication Type= "C"   d   "M"

CONSUMABLE
C_ID
Name
Description
Quantity

MEDICATION
M_ID
Name
Description
Quantity

INSURANCE
Provider Name
Phone
Email
Insurance Policy Number

APPOINTMENT
A_ID
Scheduled Date & Time
Actual Date & Time
Employee Note
Diagnosis Detail
Threatment Detail

EMPLOYEE
E_ID
Employee Name
(First Name, Middle Initial,
Last name)
Address
Phone
DOB
Gender
Email
{Credentials}
{Skills}
{Position History
(Job Title, Start Date, End Date)}
Job Type

PATIENT
Patient ID
Patient Name(
First Name, Middle Initial,
Last Name)
Address
(Street, City, Province,
Postal Code)
Phone
Email
DOB
Gender
OHIP
Netxt of Kin
Family Doctor Name
Family Doctor Contact
{Allergy}
Other_detail

Employee Type= "ME"   d   "NME"

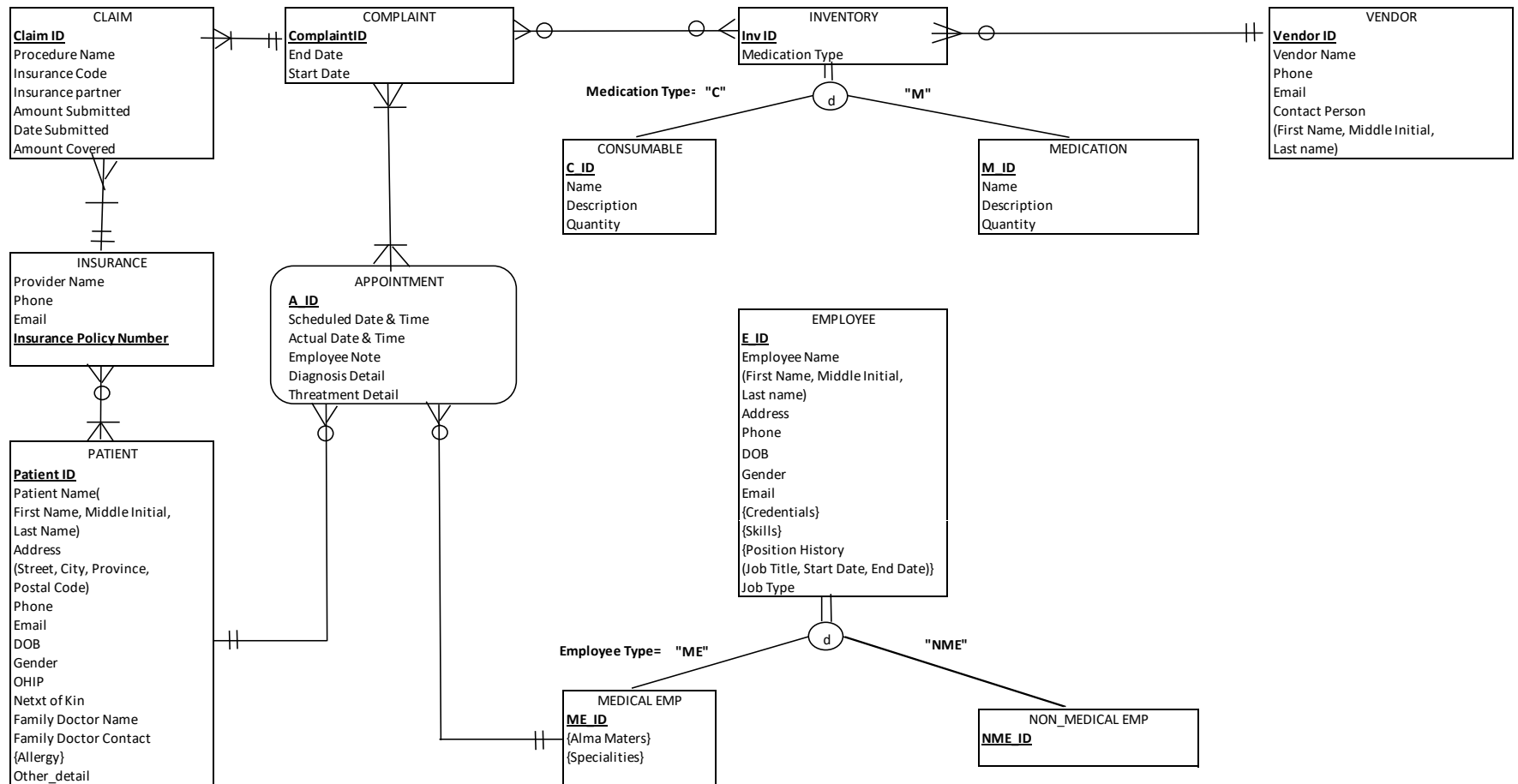**MEDICAL EMP**
ME_ID
{Alma Maters}
{Specialities}

NON_MEDICAL EMP
NME_ID

Assumptions

- All phone number & email are not multivalued
- All names are broken down to first, middle, and last name
- All addresses are broken down into street, city, province and zip code
- Assume credential does not need to be broken down into subcategories
- A medical employee can have no appointments with any patient (i.e. just analyzes X-rays but do not meet with any clients), one patient, or many patients
- An appointment can only be with one medical employee at a time, and the employee can only look after one patient per appointment
- A patient does not need to have an appointment to be a patient (i.e. just registered with clinic), and can have any number of appointments
- A complaint may use no supplies (i.e. just a simple checkup), one, or many supplies, while supplies may be used for no complaint (i.e. new technology), one or more complaints
- Assume insurance policy number is unique to each insurance provider and thus can act as the identifying unique ID
- An insurance must have at least one patient
- A claim can be made with only one insurance where an insurance must have at least one claim
- Each claim can address only one complaint
- A complaint must be addressed with at least one appointment
- A vendor does not need to supply any inventory to be a vendor (i.e. newly registered vendor), or they can supply one or more supplies
- Assume name, description and quantity are desired attributes to be recorded for inventory (both consumable and medication)

CLAIM

Claim_ID	Procedure_Name	Amount_Submitted	Date_Submitted	Amount_Covered	I_PolicyNumber	Complaint_ID

Primary Key Claim_ID
Foreign key I_PolicyNumber reference I_PolicyNumber from INSURANCE
Foreign key Complaint_ID reference Complaint_ID from COMPLAINT

INSURANCE

I_PolicyNumber	I_Name	I_Phone	I_Email

Primary Key I_PolicyNumber

INSURANCENUM

I_PolicyNumber	P_ID

Primary Key I_PolicyNumber, P_ID
Foreign Key I_PolicyNumber reference I_PolicyNumber from INSURANCE
Foreign Key P_ID reference P_ID from PATIENT

PATIENT

P_ID	P_FirstName	P_MiddleInitial	P_LastName	P_Street	P_City	P_Province	P_PostalCode	P_Email	P_DOB	P_Gender	P_OHIP	P_NextofKin	P_FamilyDoctorName	P_FamilyDoctorNumber	P_OtherDetail

Primary Key P_ID

ALLERGY

P_ID	P_allergy

Primary Key P_ID
Foreign Key P_ID references P_ID from PATIENT

COMPLAINT

Complaint_ID	Start_Date	End_Date

Primary Key Complaint_ID

VISITING_REASON

Complaint_ID	A_ID

Primary Key Complaint_ID, A_ID
Foreign Key Complaint_ID from COMPLAINT
Foreign Key A_ID from APPOINTMENT

APPOINTMENT

A_ID	Scheduled_Date	Actual_DateTime	EmployeeNote	DiagnosisDetail	TreatmentDetail	P_ID	ME_ID

Primary Key A_ID
Foreign Key P_ID reference P_ID from PATIENT
Foreign Key ME_ID reference ME_ID from MEDICAL EMPLOYEE

INVENTORY USED

Inv_ID	Complaint_ID

Primary Key Inv_ID, Complaint_ID
Foreign Key Inv_ID reference Inv_ID from INVENTORY
Foreign Key Complaint_ID reference Complaint_ID from COMPLAINT

INVENTORY

Inv_ID	Inv_Type	V_ID

Primary key Inv_ID
Foreign key V_ID reference V_ID from VENDOR

CONSUMABLE

C_ID	C_Name	C_Description	C_Quantity

Primary key C_ID
Foreign Key C_ID reference Inv_ID from INVENTORY

MEDICATION

M_ID	M_Name	M_Description	M_Quantity

Primary key M_ID
Foreign Key M_ID reference Inv_ID from INVENTORY

VENDOR

V_ID	V_Name	V_Phone	V_Email	V_ContactFirstName	V_ContactMiddleInitial	V_ContactLastName

Primay Key V_ID

EMPLOYEE

E_ID	E_FirstName	E_MiddleInitial	E_LastName	E_Street	E_City	E_State	E_PostalCode	E_Phone	E_Email	E_DOB	E_Gender	E_JobTitle	E_JobType

Primary Key E_ID

NON_MEDICAL EMPLOYEE

NME_ID

Primary Key NME_ID
Foreign Key NME_ID reference E_ID from EMPLOYEE

CREDENTIAL

Credential	E_ID

Primary Key Credential, E_ID
Foreign Key E_ID from EMPLOYEE

SKILL

Skill	E_ID

Primary Key Skill, E_ID
Foreign Key E_ID from Employee

JOB_HISTORY

J_JobTitle	J_StartDate	J_EndDate	E_ID

Primary Key J_JobTitle, J_StartDate, J_EndDate, E_ID
Foreign Key E_ID from EMPLOYEE

MEDICAL EMPLOYEE

ME_ID

Primary Key ME_ID
Foreign Key ME_ID reference E_ID from EMPLOYEE

ALMA_MATER

School	ME_ID

Primary Key School, ME_ID
Foreign Key ME_ID reference ME_ID from MEDICAL EMPLOYEE

SPECIALITY

Speciality	ME_ID

Primary Key Speciality, ME_ID
Foreign Key ME_ID reference ME_ID from MEDICAL EMPLOYEE

CLAIM

Key	Column	Type	Constraint
PK	Claim_ID	INT(11)	NOT NULL
	Procedure_Name	VARCHAR(140)	
	Amount_Submitted	DECIMAL(11)	
FK	I_PolicyNumber	INT(11)	NOT NULL
FK	Complaint_ID	INT(11)	NOT NULL

INSURANCE

Key	Column	Type	Constraint
PK	I_PolicyNumber	INT(11)	NOT NULL
	I_Name	VARCHAR(140)	
	I_Phone	INT(13)	
	I_Email	VARCHAR(140)	

PATIENT

Key	Column	Type	Constraint
PK	P_ID	INT(11)	NOT NULL
	P_FirstName	VARCHAR(140)	
	P_MiddleInitial	VARCHAR(140)	
	P_LastName	VARCHAR(140)	
	P_Street	VARCHAR(140)	
	P_City	VARCHAR(140)	
	P_Province	VARCHAR(140)	
	P_PostalCode	VARCHAR(140)	
	P_Email	VARCHAR(140)	
	P_DOB	DATETIME	
	P_Gender	VARCHAR(140)	
	P_OHIP	VARCHAR(40)	
	P_NextofKin	VARCHAR(140)	
	P_FamilyDoctorName	VARCHAR(140)	
	P_FamilyDoctorNumber	VARCHAR(140)	
	P_OtherDetail	VARCHAR(140)	

COMPLAINT

Key	Column	Type	Constraint
PK	Complaint_ID	INT(11)	NOT NULL
	Start_Date	DATETIME	
	End_Date	DATETIME	

APPOINTMENT

Key	Column	Type	Constraint
PK	A_ID	INT(11)	NOT NULL
	Scheduled_DateTime	DATETIME	
	Actual_DateTime	DATETIME	
	EmployeeNote	VARCHAR(140)	
	DiagnosisDetail	VARCHAR(140)	
	TreatmentDetail	VARCHAR(140)	
FK	P_ID	INT(11)	NOT NULL
FK	ME_ID	INT(11)	NOT NULL

INVENTORY

Key	Column	Type	Constraint
PK	Inv_ID	INT(11)	NOT NULL
	Inv_Type	CHAR(1)	
FK	V_ID	INT(11)	NOT NULL

CONSUMABLE

Key	Column	Type	Constraint
PK, FK	C_ID	INT(11)	NOT NULL
	C_Name	VARCHAR(25)	
	C_Description	VARCHAR(100)	
	C_Quantity	INT(11)	

MEDICATION

Key	Column	Type	Constraint
PK, FK	M_ID	INT4(11)	NOT NULL
	M_Name	VARCHAR(25)	
	M_Description	VARCHAR(100)	
	C_Quantity	INT(11)	

VENDOR

Key	Column	Type	Constraint
PK	V_ID	INT(11)	NOT NULL
	V_Name	VARCHAR(25)	
	V_Phone	INT(13)	
	V_Email	VARCHAR(50)	
	V_ContactFirstName	VARCHAR(25)	
	V_ContactMiddleInitial	VARCHAR(1)	
	V_ContactLastName	VARCHAR(25)	

EMPLOYEE

Key	Column	Type	Constraint
PK	E_ID	INT4(11)	NOT NULL
	E_FirstName	VARCHAR(25)	
	E_MiddleInitial	VARCHAR(1)	
	E_LastName	VARCHAR(25)	
	E_Street	VARCHAR(25)	
	E_City	VARCHAR(25)	
	E_State	CHAR(2)	
	E_PostalCode	VARCHAR(6)	
	E_Phone	INT4(13)	
	E_Email	VARCHAR(50)	
	E_DOB	DATETIME	
	E_Gender	VARCHAR(140)	
	E_JobTitle	VARCHAR(140)	
	E_JobType	CHAR(2)	

NON MEDICAL EMPLOYEE

Key	Column	Type	Constraint
PK, FK	NME_ID	INT(11)	NOT NULL

MEDICAL EMPLOYEE

Key	Column	Type	Constraint
PK, FK	ME_ID	INT(11)	NOT NULL

ALMA_MATER

Key	Column	Type	Constraint
PK	School	VARCHAR(140)	NOT NULL
PK, FK	ME_ID	INT(11)	NOT NULL

SPECIALITY

Key	Column	Type	Constraint
PK	Speciality	VARCHAR(140)	NOT NULL
PK, FK	ME_ID	INT(11)	NOT NULL

JOB_HISTORY

Key	Column	Type	Constraint
PK	J_JobTitle	VARCHAR(140)	NOT NULL
PK	J_StartDate	DATETIME	
PK	J_EndDate	DATETIME	
PK, FK	E_ID	INT(11)	NOT NULL

CREDENTIAL

Key	Column	Type	Constraint
PK	Credential	VARCHAR(140)	NOT NULL
PK, FK	E_ID	INT(11)	NOT NULL

SKILL

Key	Column	Type	Constraint
PK	Skill	VARCHAR(140)	NOT NULL
PK, FK	E_ID	INT(11)	NOT NULL

ALLERGY

Key	Column	Type	Constraint
PK, FK	P_ID	INT(11)	NOT NULL
	Allergy	VARCHAR(140)	