CSCI 4707 Project: Mapping ER Diagram to Relations
Assumptions for the New Haven Urgent Care

Team Number:

8

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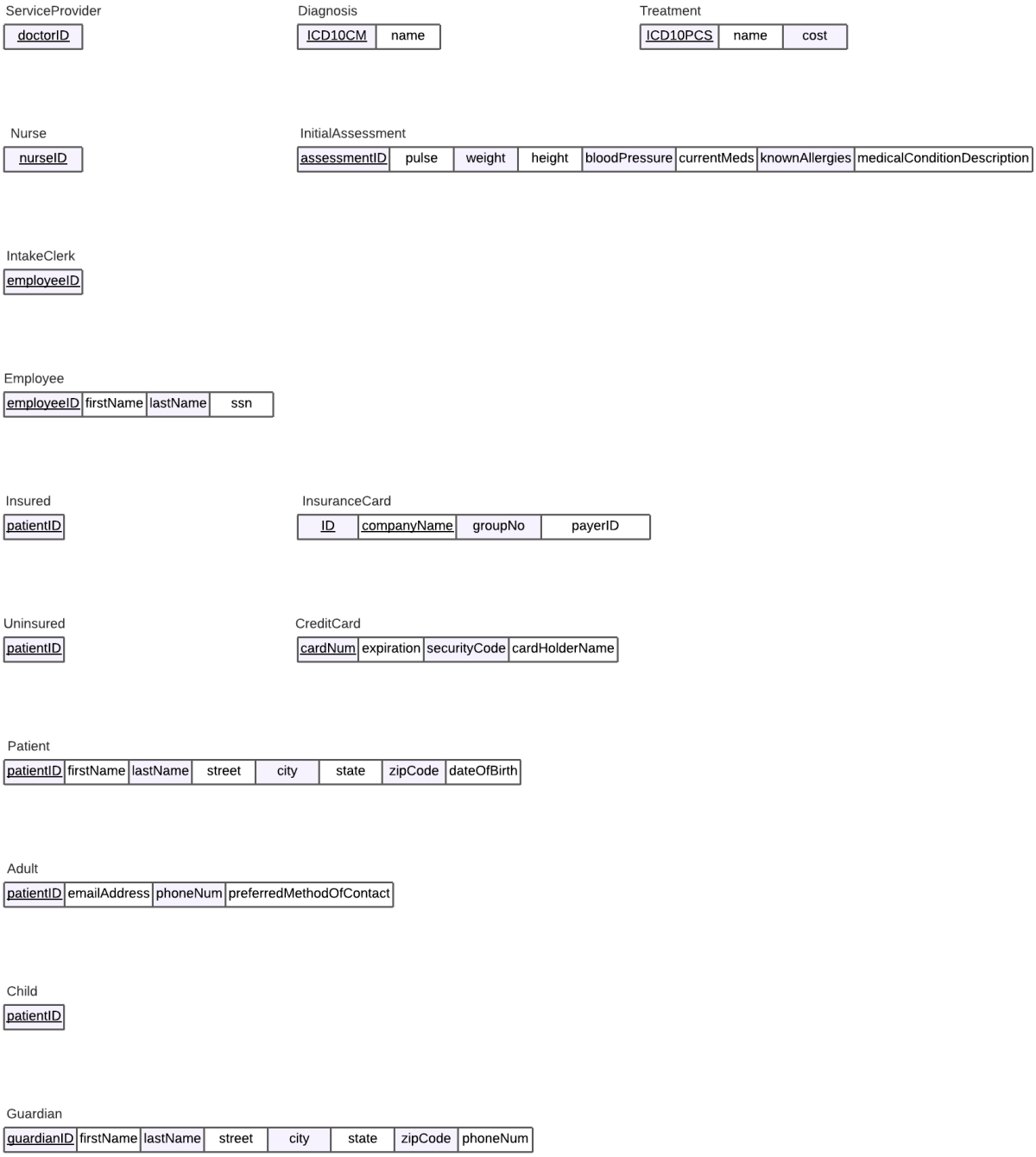
Mapping Steps:

Step 1: Mapping of Regular Entity Types



Notes for Step 1:

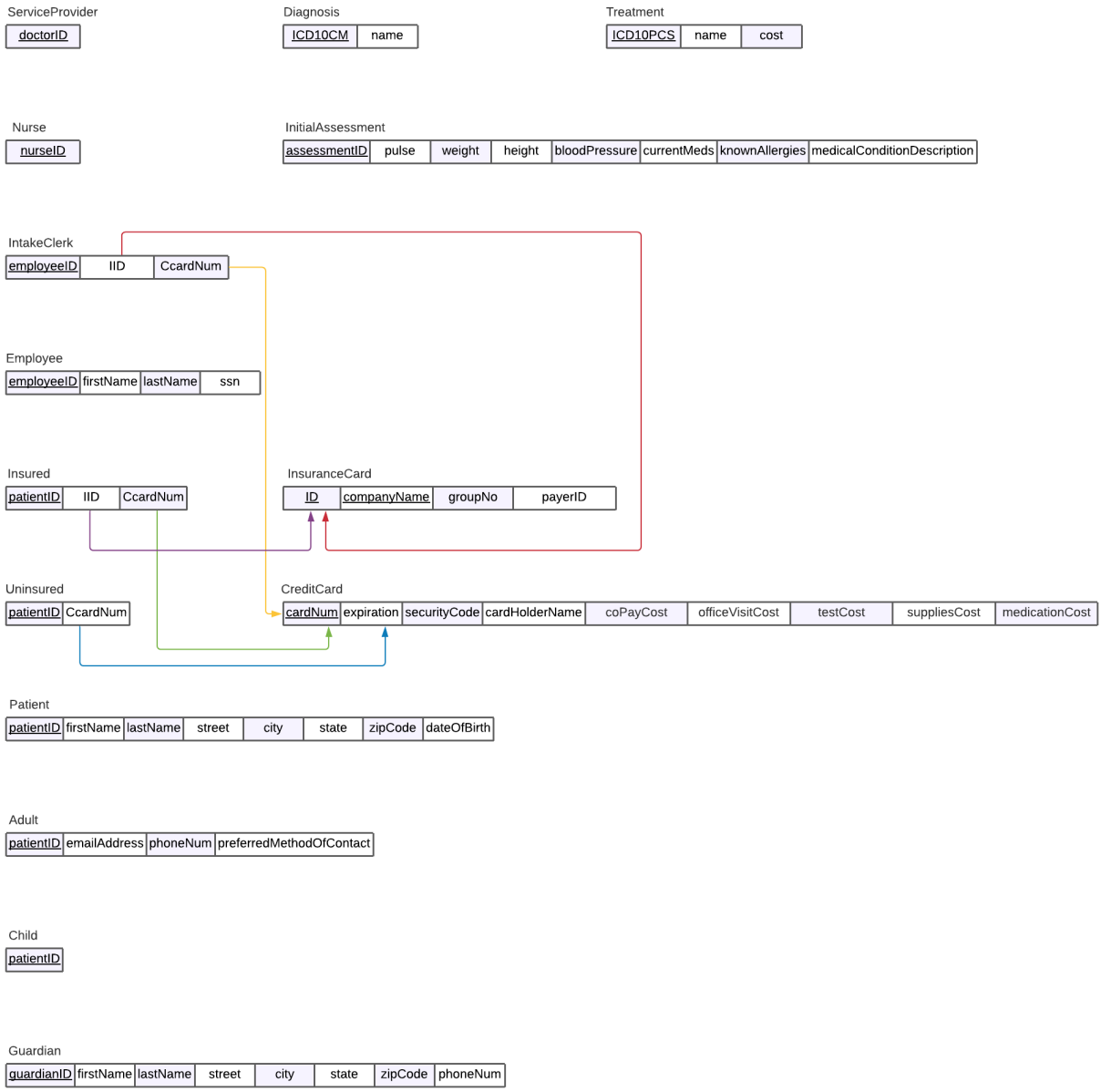
- *Patient.patientID* is unique and is the PK of *Patient*.

- *Child.patientID* is unique and is the PK of *Child*.
- *Adult.patientID* is unique and is the PK of *Adult*.
- *Guardian.guardianID* is unique and is the PK of *Guardian*.
- *Uninsured.patientID* is unique and is the PK of *Uninsured*.
- *Insured.patientID* is unique and is the PK of *Insured*.
- *CreditCard.cardNum* is unique and is the PK of *CreditCard*.
- *InsuranceCard.ID* and *InsuranceCard.companyName* are used together to form a **superkey**.
- *Employee.employeeID* is unique and is the PK of *Employee*.
- *IntakeClerk.employeeID* is unique and is the PK of *IntakeClerk.*
- *Nurse.nurseID* is unique and is the PK of *Nurse*.
- *ServiceProvider.doctorID* is unique and is the PK of *ServiceProvider.*
- *InitialAssessment.assessmentID* is unique and is the PK of *InitialAssessment.*
- *Diagnosis.ICD10CM* is unique and is the PK of *Diagnosis.*
- *Treatment.ICD10PCS* is unique and is the PK of *Treatment*.

Step 2: Mapping of Weak Entity Types

There are no weak entities in the ER diagram, thus no changes have been made to the relational mapping.

Step 3: Mapping of Binary 1:1 Relationship Types



1:1 Relationships:

UNINSURED | PAYS_VISIT_COST_WITH | CREDITCARD

INSURED | PAYS_COPAY_WITH | CREDITCARD

INSURED | INSURED_BY | INSURANCECARD

INTAKECLERK | REQUESTS | INSURANCECARD

INTAKECLERK | COLLECTS | CREDITCARD

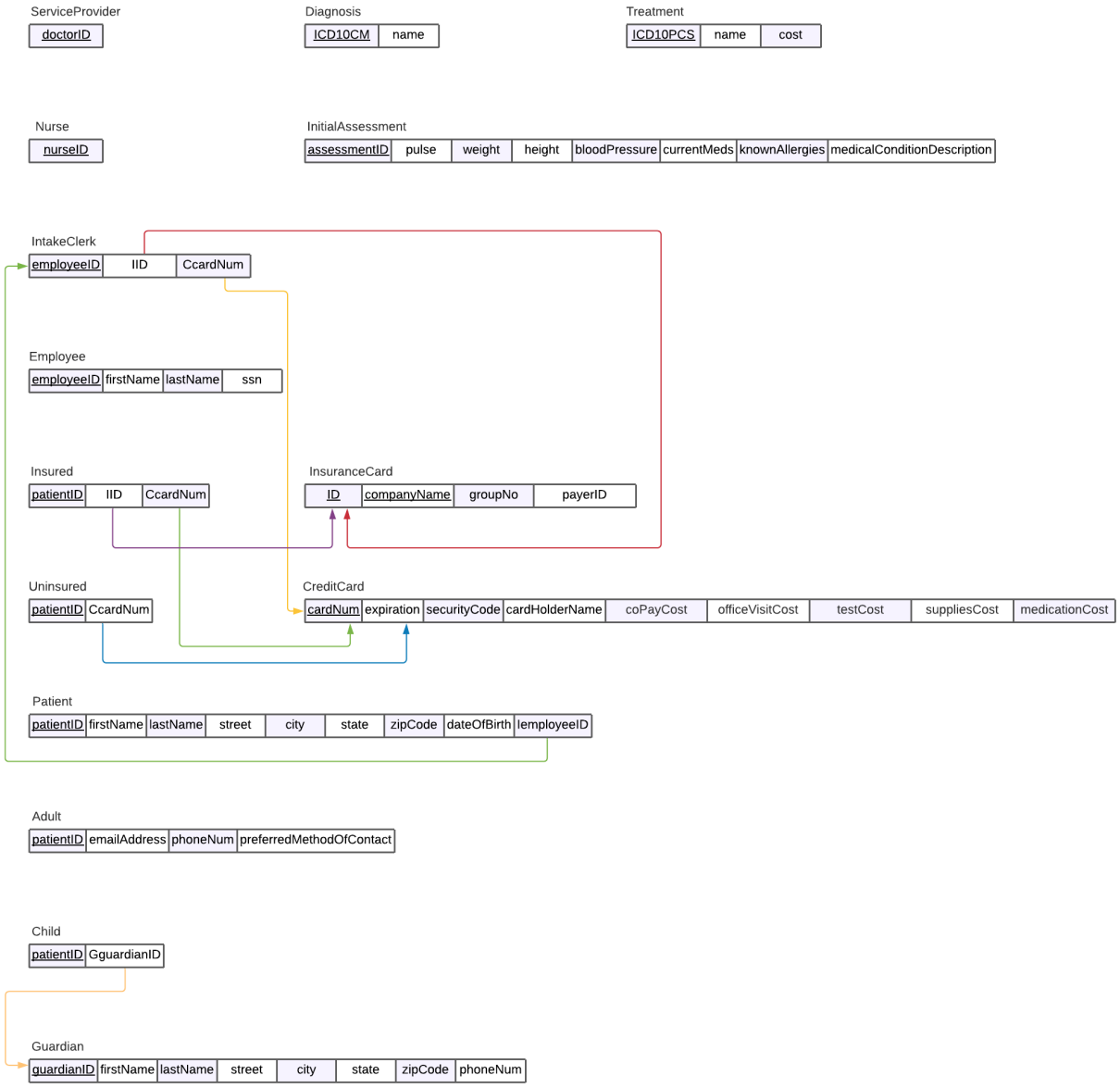
Notes for Step 3:

- FK from *Uninsured.CcardNum* to *CreditCard.cardNum* (captures the PAYS_VISIT_COST_WITH relationship).
- FK from *Insured.CcardNum* to *CreditCard.cardNum* (captures the PAYS_COPAY_WITH relationship)
- FK from *Insured.IID* to *InsuranceCard.ID* (captures the INSURED_BY relationship)
- FK from *IntakeClerk.IID* to *InsuranceCard.ID* (captures the REQUESTS relationship)
- FK from *IntakeClerk.CcardNum* to *CreditCard.cardNum* (captures the COLLECTS relationship)
- The attributes of the COLLECTS relationship in the ER diagram (*coPayCost, officeVisitCost, testCost, suppliesCost,* and *medicationCost*) are now represented as entries in the *CreditCard* table.
- The derived attribute *visitCost* of the COLLECTS relationship in the ER diagram was not added to the *CreditCard* table and would have to be programmed separately in SQL as a view.

Notes from previous steps:

- *Patient.patientID* is unique and is the PK of *Patient*.
- *Child.patientID* is unique and is the PK of *Child*.
- *Adult.patientID* is unique and is the PK of *Adult*.
- *Guardian.guardianID* is unique and is the PK of *Guardian*.
- *Uninsured.patientID* is unique and is the PK of *Uninsured*.
- *Insured.patientID* is unique and is the PK of *Insured*.
- *CreditCard.cardNum* is unique and is the PK of *CreditCard*.
- *InsuranceCard.ID* and *InsuranceCard.companyName* are used together to form a **superkey**.
- *Employee.employeeID* is unique and is the PK of *Employee*.
- *IntakeClerk.employeeID* is unique and is the PK of *IntakeClerk.*
- *Nurse.nurseID* is unique and is the PK of *Nurse*.
- *ServiceProvider.doctorID* is unique and is the PK of *ServiceProvider.*
- *InitialAssessment.assessmentID* is unique and is the PK of *InitialAssessment.*
- *Diagnosis.ICD10CM* is unique and is the PK of *Diagnosis.*
- *Treatment.ICD10PCS* is unique and is the PK of *Treatment*.

Step 4: Mapping of Binary 1:N Relationship Types



1:N Relationships:

GUARDIAN | HAS_GUARDIAN | CHILD

INTAKECLERK | COLLECTS_INFO | PATIENT

Notes for Step 4:

- FK from *Child.GguardianID* to *Guardian.guardianID* (captures the HAS_GUARDIAN relationship)
- FK from *Patient.IemployeeID* to *IntakeClerk.employeeID* (captures the COLLECTS_INFO relationship).

Notes from previous steps:

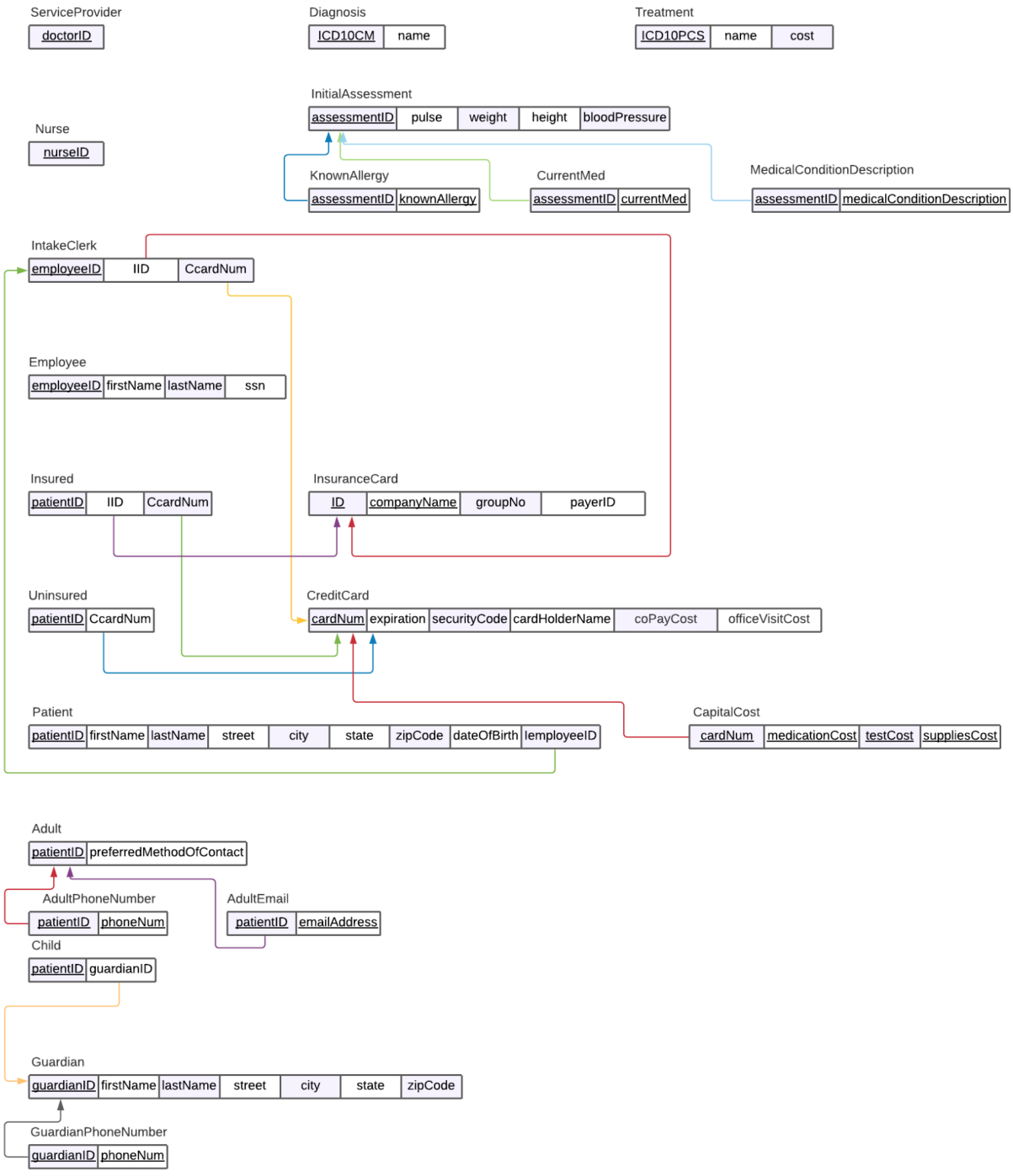
- *Patient.patientID* is unique and is the PK of *Patient*.
- *Child.patientID* is unique and is the PK of *Child*.
- *Adult.patientID* is unique and is the PK of *Adult*.
- *Guardian.guardianID* is unique and is the PK of *Guardian*.
- *Uninsured.patientID* is unique and is the PK of *Uninsured*.
- *Insured.patientID* is unique and is the PK of *Insured*.
- *CreditCard.cardNum* is unique and is the PK of *CreditCard*.
- *InsuranceCard.ID* and *InsuranceCard.companyName* are used together to form a **superkey**.
- *Employee.employeeID* is unique and is the PK of *Employee*.
- *IntakeClerk.employeeID* is unique and is the PK of *IntakeClerk.*
- *Nurse.nurseID* is unique and is the PK of *Nurse*.
- *ServiceProvider.doctorID* is unique and is the PK of *ServiceProvider.*
- *InitialAssessment.assessmentID* is unique and is the PK of *InitialAssessment.*
- *Diagnosis.ICD10CM* is unique and is the PK of *Diagnosis.*
- *Treatment.ICD10PCS* is unique and is the PK of *Treatment*.
- FK from *Uninsured.CcardNum* to *CreditCard.cardNum* (captures the PAYS_VISIT_COST_WITH relationship).
- FK from *Insured.CcardNum* to *CreditCard.cardNum* (captures the PAYS_COPAY_WITH relationship)
- FK from *Insured.IID* to *InsuranceCard.ID* (captures the INSURED_BY relationship)
- FK from *IntakeClerk.IID* to *InsuranceCard.ID* (captures the REQUESTS relationship)
- FK from *IntakeClerk.CcardNum* to *CreditCard.cardNum* (captures the COLLECTS relationship)
- The attributes of the COLLECTS relationship in the ER diagram (*coPayCost, officeVisitCost, testCost, suppliesCost,* and *medicationCost*) are now represented as entries in the *CreditCard* table.

- The derived attribute *visitCost* of the COLLECTS relationship in the ER diagram was not added to the *CreditCard* table and would have to be programmed separately in SQL as a view.

Step 5: Mapping of Binary M:N Relationship Types

There are no binary M:N relationships in the ER diagram, thus no changes have been made to the relational mapping.

Step 6: Mapping of Multivalued Attributes



Notes for Step 6:

- FK from *GuardianPhoneNumber.guardianID* to *Guardian.guardianID*

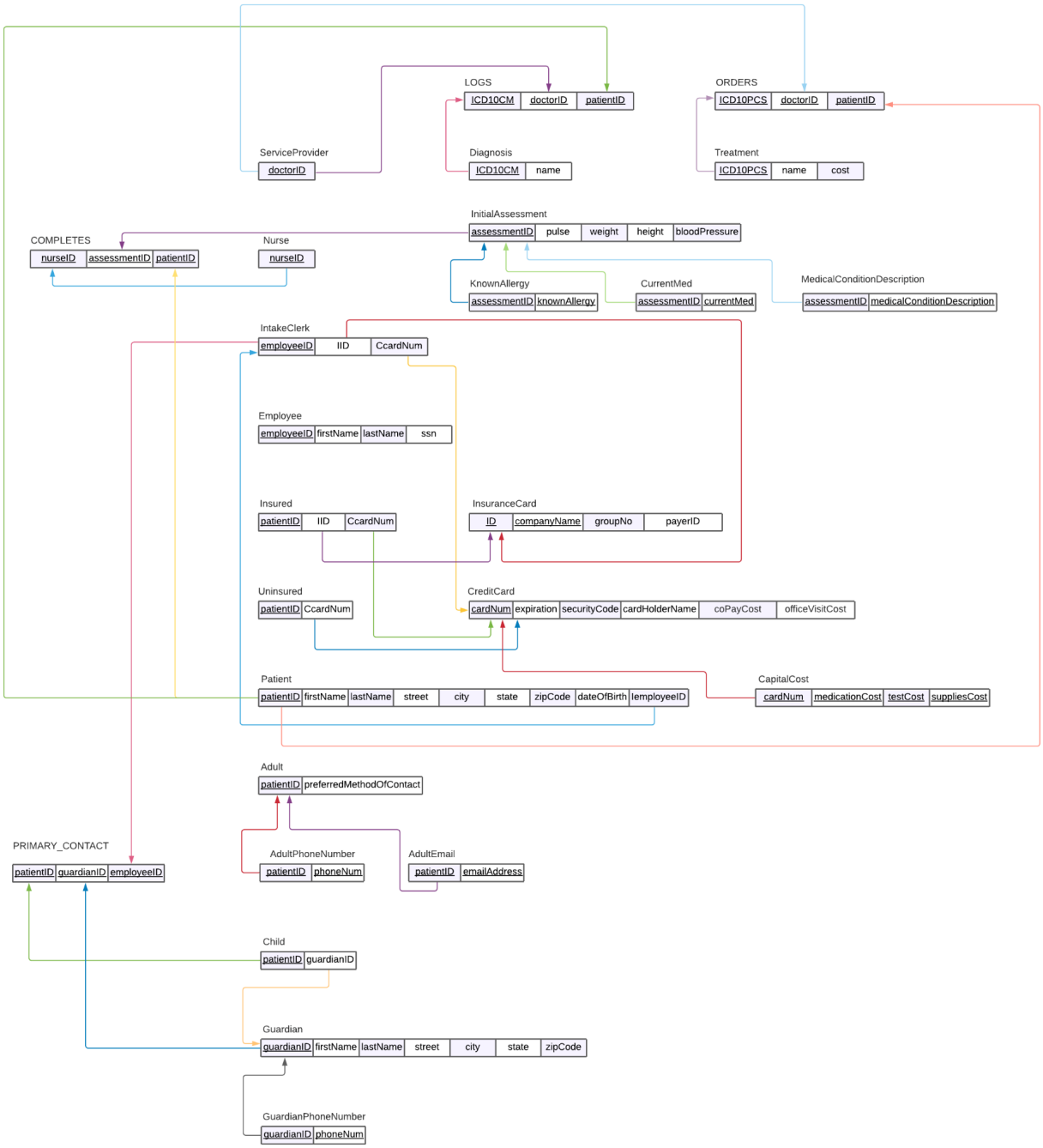
- The combination of *GuardianPhoneNumber.phoneNum* and *GuardianPhoneNumber.guardianID* is unique and is the PK of the Relation *GuardianPhoneNumber*.
- FK from *AdultEmailAddress.patientID* to *Adult.patientID*
- The combination of *AdultEmailAddress.emailAddress* and *AdultEmailAddress.patientID* is unique and is the PK of the Relation *AdultEmailAddress*.
- FK from *AdultPhoneNumber.patientID* to *Adult.patientID*
- The combination of *AdultPhoneNumber.phoneNum* and *AdultPhoneNumber.patientID* is unique and is the PK of the Relation *AdultPhoneNumber*.
- FK from *CurrentMed.assessmentID* to *InitialAssessment.assessmentID*
- The combination of *CurrentMed.currentMed* and *CurrentMed.assessmentID* is unique and is the PK of the Relation *CurrentMed*.
- FK from *KnownAllergy.assessmentID* to *InitialAssessment.assessmentID*
- The combination of *KnownAllergy.knownAllergy* and *KnownAllergy.assessmentID* is unique and is the PK of the *Relation KnownAllergy*.
- FK from *MedicalConditionDescription.assessmentID* to *InitialAssessment.assessmentID*
- The combination of *MedicalConditionDescription.medicalConditionDescription* and *CurrentMed.assessmentID* is unique and is the PK of the Relation *MedicalConditionDescription*.
- FK from *CapitalCost.cardNum* to *CreditCard.cardNum*
- The combination of *CapitalCost.medicationCost*, *CapitalCost.testCost*, *CapitalCost.suppliesCost* and *CapitalCost.cardNum* is unique and is the PK of the Relation *CapitalCost*.

Notes from previous steps:

- *Patient.patientID* is unique and is the PK of *Patient*.
- *Child.patientID* is unique and is the PK of *Child*.
- *Adult.patientID* is unique and is the PK of *Adult*.
- *Guardian.guardianID* is unique and is the PK of *Guardian*.
- *Uninsured.patientID* is unique and is the PK of *Uninsured*.
- *Insured.patientID* is unique and is the PK of *Insured*.
- *CreditCard.cardNum* is unique and is the PK of *CreditCard*.
- *InsuranceCard.ID* and *InsuranceCard.companyName* are used together to form a **superkey**.
- *Employee.employeeID* is unique and is the PK of *Employee*.
- *IntakeClerk.employeeID* is unique and is the PK of *IntakeClerk.*
- *Nurse.nurseID* is unique and is the PK of *Nurse*.
- *ServiceProvider.doctorID* is unique and is the PK of *ServiceProvider.*

- *InitialAssessment.assessmentID* is unique and is the PK of *InitialAssessment.*
- *Diagnosis.ICD10CM* is unique and is the PK of *Diagnosis.*
- *Treatment.ICD10PCS* is unique and is the PK of *Treatment*.
- FK from *Uninsured.CcardNum* to *CreditCard.cardNum* (captures the PAYS_VISIT_COST_WITH relationship).
- FK from *Insured.CcardNum* to *CreditCard.cardNum* (captures the PAYS_COPAY_WITH relationship)
- FK from *Insured.IID* to *InsuranceCard.ID* (captures the INSURED_BY relationship)
- FK from *IntakeClerk.IID* to *InsuranceCard.ID* (captures the REQUESTS relationship)
- FK from *IntakeClerk.CcardNum* to *CreditCard.cardNum* (captures the COLLECTS relationship)
- The attributes of the COLLECTS relationship in the ER diagram (*coPayCost, officeVisitCost, testCost, suppliesCost,* and *medicationCost*) are now represented as entries in the *CreditCard* table.
- The derived attribute *visitCost* of the COLLECTS relationship in the ER diagram was not added to the *CreditCard* table and would have to be programmed separately in SQL as a view.
- FK from *Child.GguardianID* to *Guardian.guardianID* (captures the HAS_GUARDIAN relationship)
- FK from *Patient.IemployeeID* to *IntakeClerk.employeeID* (captures the COLLECTS_INFO relationship).

Step 7: Mapping of N-ary Relationship Types



Ternary Relationships:

GUARDIAN | PRIMARY_CONTACT | CHILD | INTAKECLERK (1:1:1)

NURSE | COMPLETES | INITIALASSESSMENT | PATIENT (1:1:1)

SERVICEPROVIDER/DOCTOR | LOGS | DIAGNOSIS | PATIENT (1:N:1)

SERVICEPROVIDER/DOCTOR | ORDERS | TREATMENT| PATIENT (1:N:1)

Notes for Step 7:

- FK from *IntakeClerk.employeeID* to PRIMARY_CONTACT.*employeeID* (captures the PRIMARY_CONTACT 1:1:1 relationship).
- FK from Child.*PatientID* to PRIMARY_CONTACT.*PatientID* (captures the PRIMARY_CONTACT 1:1:1 relationship).
- FK from Gaurdian.*GaurdianID* to PRIMARY_CONTACT.*GaurdianID* (captures the PRIMARY_CONTACT 1:1:1 relationship).
- FK from Nurse.*NurseID* to COMPLETES.*NurseID* (captures the COMPLETES 1:1:1 relationship).
- FK from InitialAssesment.*assesmentID* to COMPLETES.*assesmentID* (captures the COMPLETES 1:1:1 relationship).
- FK from Patient.*PatientID* to COMPLETES.*PatientID* (captures the COMPLETES 1:1:1 relationship).
- FK from Diagnosis.*ICD10CM* to LOGS.*ICD10CM* (captures the LOGS 1:N:1 relationship).
- FK from ServiceProvider.*doctorID* to LOGS.*doctorID* (captures the LOGS 1:N:1 relationship).
- FK from Patient.*patientID* to LOGS.*patientID* (captures the LOGS 1:N:1 relationship).
- Diagnosis.*ICD10CM* is unique and is the PK of the Relation LOGS.
- FK from ServiceProvider.*doctorID* to ORDERS.*doctorID* (captures the ORDERS 1:N:1 relationship).
- FK from Patient.*patientID* to ORDERS.*patientID* (captures the ORDERS 1:N:1 relationship).
- FK from Treatment.*ICD10PCS* to ORDERS.*ICD10PCS* (captures the ORDERS 1:N:1 relationship).
- Diagnosis.*ICD10CM* is unique and is the PK of the Relation ORDERS.

Notes from previous steps:

- *Patient.patientID* is unique and is the PK of *Patient*.
- *Child.patientID* is unique and is the PK of *Child*.
- *Adult.patientID* is unique and is the PK of *Adult*.
- *Guardian.guardianID* is unique and is the PK of *Guardian*.
- *Uninsured.patientID* is unique and is the PK of *Uninsured*.
- *Insured.patientID* is unique and is the PK of *Insured*.

- *CreditCard.cardNum* is unique and is the PK of *CreditCard*.
- *InsuranceCard.ID* and *InsuranceCard.companyName* are used together to form a **superkey**.
- *Employee.employeeID* is unique and is the PK of *Employee*.
- *IntakeClerk.employeeID* is unique and is the PK of *IntakeClerk.*
- *Nurse.nurseID* is unique and is the PK of *Nurse*.
- *ServiceProvider.doctorID* is unique and is the PK of *ServiceProvider.*
- *InitialAssessment.assessmentID* is unique and is the PK of *InitialAssessment.*
- *Diagnosis.ICD10CM* is unique and is the PK of *Diagnosis.*
- *Treatment.ICD10PCS* is unique and is the PK of *Treatment*.
- FK from *Uninsured.CcardNum* to *CreditCard.cardNum* (captures the PAYS_VISIT_COST_WITH relationship).
- FK from *Insured.CcardNum* to *CreditCard.cardNum* (captures the PAYS_COPAY_WITH relationship)
- FK from *Insured.IID* to *InsuranceCard.ID* (captures the INSURED_BY relationship)
- FK from *IntakeClerk.ID* to *InsuranceCard.ID* (captures the REQUESTS relationship)
- FK from *IntakeClerk.CcardNum* to *CreditCard.cardNum* (captures the COLLECTS relationship)
- The attributes of the COLLECTS relationship in the ER diagram (*coPayCost, officeVisitCost, testCost, suppliesCost,* and *medicationCost*) are now represented as entries in the *CreditCard* table.
- The derived attribute *visitCost* of the COLLECTS relationship in the ER diagram was not added to the *CreditCard* table and would have to be programmed separately in SQL as a view.
- FK from *Child.GguardianID* to *Guardian.guardianID* (captures the HAS_GUARDIAN relationship)
- FK from *Patient.IemployeeID* to *IntakeClerk.employeeID* (captures the COLLECTS_INFO relationship).
- FK from *GuardianPhoneNumber.guardianID* to *Guardian.guardianID*
- The combination of *GuardianPhoneNumber.phoneNum* and *GuardianPhoneNumber.guardianID* is unique and is the PK of the Relation *GuardianPhoneNumber*.
- FK from *AdultEmailAddress.patientID* to *Adult.patientID*

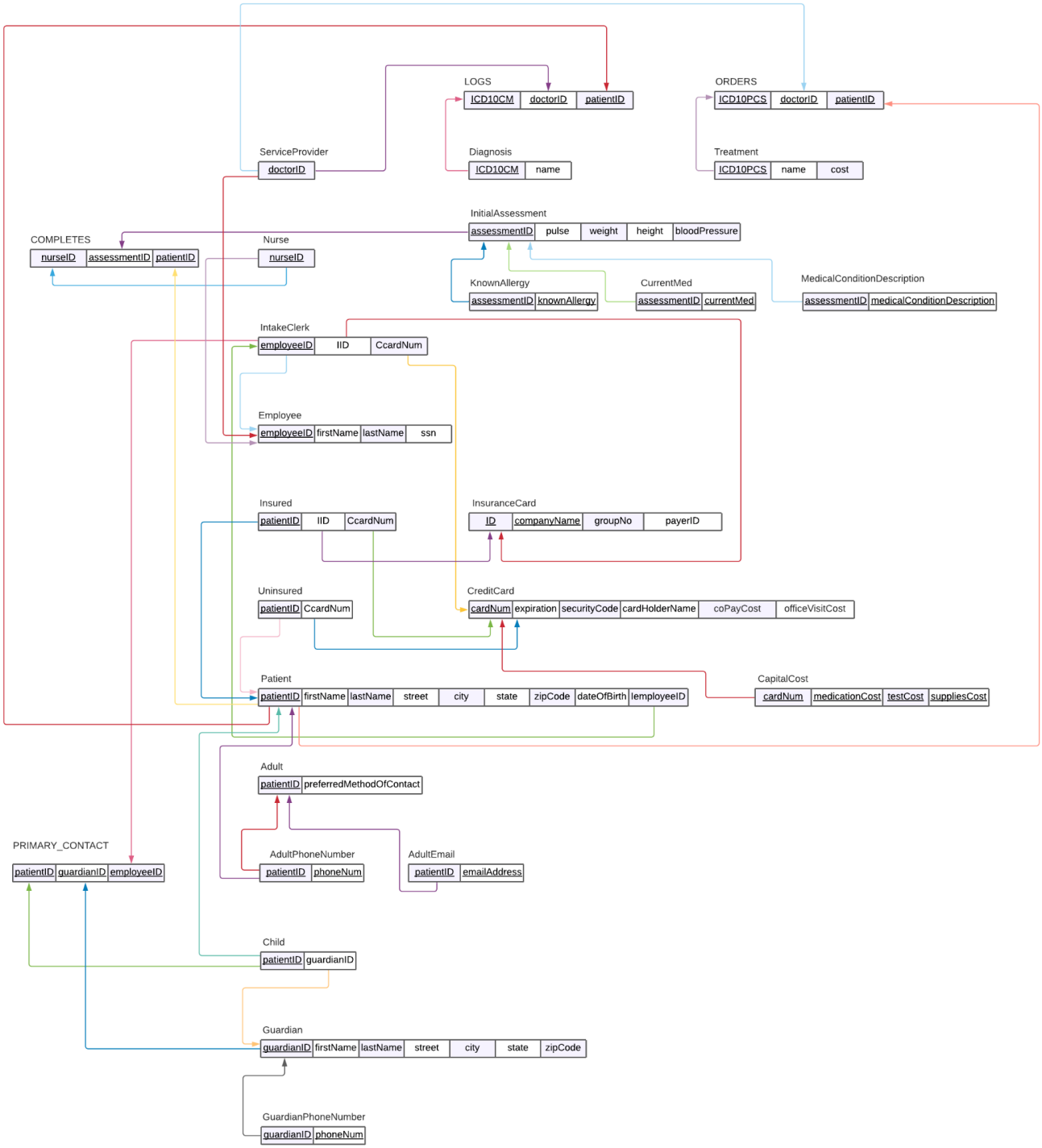
- The combination of *AdultEmailAddress.emailAddress* and *AdultEmailAddress.patientID* is unique and is the PK of the Relation *AdultEmailAddress*.
- FK from *AdultPhoneNumber.patientID* to *Adult.patientID*
- The combination of *AdultPhoneNumber.phoneNum* and *AdultPhoneNumber.patientID* is unique and is the PK of the Relation *AdultPhoneNumber*.
- FK from *CurrentMed.assessmentID* to *InitialAssessment.assessmentID*
- The combination of *CurrentMed.currentMed* and *CurrentMed.assessmentID* is unique and is the PK of the Relation *CurrentMed*.
- FK from *KnownAllergy.assessmentID* to *InitialAssessment.assessmentID*
- The combination of *KnownAllergy.knownAllergy* and *KnownAllergy.assessmentID* is unique and is the PK of the *Relation KnownAllergy*.
- FK from *MedicalConditionDescription.assessmentID* to *InitialAssessment.assessmentID*
- The combination of *MedicalConditionDescription.medicalConditionDescription* and *CurrentMed.assessmentID* is unique and is the PK of the Relation *MedicalConditionDescription*.
- FK from *CapitalCost.cardNum* to *CreditCard.cardNum*
- The combination of *CapitalCost.medicationCost*, *CapitalCost.testCost*, *CapitalCost.suppliesCost* and *CapitalCost.cardNum* is unique and is the PK of the Relation *CapitalCost*.

Step 8: Specialization/Generalization Subclasses

Patient -> Child, Adult (total, disjoint)

Patient -> Insured, Uninsured (total, disjoint)

Employee -> IntakeClerk, ServiceProvider/Doctor, Nurse (partial, disjoint)



Notes for Step 8:

- FK from Child.*PatientID* to Patient.*PatientID* (captures the Patient -> Child specialization)
- FK from Adult.*PatientID* to Patient.*PatientID* (captures the Patient -> Adult specialization)
- FK from Insured.*PatientID* to Patient.*PatientID* (captures the Patient -> Insured specialization)
- FK from Uninsured.*PatientID* to Patient.*PatientID* (captures the Patient -> Uninsured specialization)
- FK from IntakeClerk.*employeeID* to Employee.*employeeID* (captures the Employee -> IntakeClerk specialization)
- FK from ServiceProvider.*doctorID* to Employee.*employeeID* (captures the Employee -> ServiceProvider specialization)
- FK from Nurse.*nurseID* to Employee.*employeeID* (captures the Employee -> Nurse specialization)

Notes from previous steps:

- *Patient.patientID* is unique and is the PK of *Patient*.
- *Child.patientID* is unique and is the PK of *Child*.
- *Adult.patientID* is unique and is the PK of *Adult*.
- *Guardian.guardianID* is unique and is the PK of *Guardian*.
- *Uninsured.patientID* is unique and is the PK of *Uninsured*.
- *Insured.patientID* is unique and is the PK of *Insured*.
- *CreditCard.cardNum* is unique and is the PK of *CreditCard*.
- *InsuranceCard.ID* and *InsuranceCard.companyName* are used together to form a **superkey**.
- *Employee.employeeID* is unique and is the PK of *Employee*.
- *IntakeClerk.employeeID* is unique and is the PK of *IntakeClerk.*
- *Nurse.nurseID* is unique and is the PK of *Nurse*.
- *ServiceProvider.doctorID* is unique and is the PK of *ServiceProvider.*
- *InitialAssessment.assessmentID* is unique and is the PK of *InitialAssessment.*
- *Diagnosis.ICD10CM* is unique and is the PK of *Diagnosis.*
- *Treatment.ICD10PCS* is unique and is the PK of *Treatment*.
- FK from *Uninsured.CcardNum* to *CreditCard.cardNum* (captures the PAYS_VISIT_COST_WITH relationship).

- FK from *Insured.CcardNum* to *CreditCard.cardNum* (captures the PAYS_COPAY_WITH relationship)
- FK from *Insured.IID* to *InsuranceCard.ID* (captures the INSURED_BY relationship)
- FK from *IntakeClerk.ID* to *InsuranceCard.ID* (captures the REQUESTS relationship)
- FK from *IntakeClerk.CcardNum* to *CreditCard.cardNum* (captures the COLLECTS relationship)
- The attributes of the COLLECTS relationship in the ER diagram (*coPayCost, officeVisitCost, testCost, suppliesCost,* and *medicationCost*) are now represented as entries in the *CreditCard* table.
- The derived attribute *visitCost* of the COLLECTS relationship in the ER diagram was not added to the *CreditCard* table and would have to be programmed separately in SQL as a view.
- FK from *Child.GguardianID* to *Guardian.guardianID* (captures the HAS_GUARDIAN relationship)
- FK from *Patient.IemployeeID* to *IntakeClerk.employeeID* (captures the COLLECTS_INFO relationship).
- FK from *GuardianPhoneNumber.guardianID* to *Guardian.guardianID*
- The combination of *GuardianPhoneNumber.phoneNum* and *GuardianPhoneNumber.guardianID* is unique and is the PK of the Relation *GuardianPhoneNumber*.
- FK from *AdultEmailAddress.patientID* to *Adult.patientID*
- The combination of *AdultEmailAddress.emailAddress* and *AdultEmailAddress.patientID* is unique and is the PK of the Relation *AdultEmailAddress*.
- FK from *AdultPhoneNumber.patientID* to *Adult.patientID*
- The combination of *AdultPhoneNumber.phoneNum* and *AdultPhoneNumber.patientID* is unique and is the PK of the Relation *AdultPhoneNumber*.
- FK from *CurrentMed.assessmentID* to *InitialAssessment.assessmentID*
- The combination of *CurrentMed.currentMed* and *CurrentMed.assessmentID* is unique and is the PK of the Relation *CurrentMed*.
- FK from *KnownAllergy.assessmentID* to *InitialAssessment.assessmentID*
- The combination of *KnownAllergy.knownAllergy* and *KnownAllergy.assessmentID* is unique and is the PK of the *Relation KnownAllergy*.
- FK from *MedicalConditionDescription.assessmentID* to *InitialAssessment.assessmentID*

- The combination of *MedicalConditionDescription.medicalConditionDescription* and *CurrentMed.assessmentID* is unique and is the PK of the Relation *MedicalConditionDescription*.
- FK from *CapitalCost.cardNum* to *CreditCard.cardNum*
- The combination of *CapitalCost.medicationCost*, *CapitalCost.testCost*, *CapitalCost.suppliesCost* and *CapitalCost.cardNum* is unique and is the PK of the Relation *CapitalCost*.
- FK from *IntakeClerk.employeeID* to PRIMARY_CONTACT.*employeeID* (captures the PRIMARY_CONTACT relationship).
- FK from Child.*PatientID* to PRIMARY_CONTACT.*PatientID* (captures the PRIMARY_CONTACT relationship).
- FK from Gaurdian.*GaurdianID* to PRIMARY_CONTACT.*GaurdianID* (captures the PRIMARY_CONTACT relationship).
- FK from Nurse.*NurseID* to COMPLETES.*NurseID* (captures the COMPLETES relationship).
- FK from InitialAssesment.*assesmentID* to COMPLETES.*assesmentID* (captures the COMPLETES relationship).
- FK from Patient.*PatientID* to COMPLETES.*PatientID* (captures the COMPLETES relationship).
- FK from Diagnosis.*ICD10CM* to LOGS.*ICD10CM* (captures the LOGS relationship).
- FK from ServiceProvider.*doctorID* to LOGS.*doctorID* (captures the LOGS relationship).
- FK from Patient.*patientID* to LOGS.*patientID* (captures the LOGS relationship).
- Diagnosis.*ICD10CM* is unique and is the PK of the Relation LOGS.
- FK from ServiceProvider.*doctorID* to ORDERS.*doctorID* (captures the ORDERS relationship).
- FK from Patient.*patientID* to ORDERS.*patientID* (captures the ORDERS relationship).
- FK from Treatment.*ICD10PCS* to ORDERS.*ICD10PCS* (captures the ORDERS relationship).
- Diagnosis.*ICD10CM* is unique and is the PK of the Relation ORDERS.

Step 9: Union Categories

There are no union categories in the ER diagram, thus no changes have been made to the relational mapping.

Relationships By Cardinality (DELETE AFTER ASSIGNMENT COMPLETED):

Relationships

GUARDIAN | HAS_GUARDIAN | CHILD (1:N)

GUARDIAN | PRIMARY_CONTACT | CHILD | INTAKECLERK (1:1:1)

UNINSURED | PAYS_VISIT_COST_WITH | CREDITCARD (1:1)

INSURED | PAYS_COPAY_WITH | CREDITCARD (1:1)

INSURED | INSURED_BY | INSURANCECARD (1:1)

INTAKECLERK | REQUESTS | INSURANCECARD (1:1)

INTAKECLERK | COLLECTS_INFO | PATIENT (1:N)

INTAKECLERK | COLLECTS | CREDITCARD (1:1)

SERVICEPROVIDER/DOCTOR | LOGS | DIAGNOSIS | PATIENT (1:N:1)

SERVICEPROVIDER/DOCTOR | ORDERS | DIAGNOSIS | PATIENT (1:N:1)

NURSE | COMPLETES | INITIALASSESSMENT | NURSE (1:1:1)

(1:1)

UNINSURED | PAYS_VISIT_COST_WITH | CREDITCARD

INSURED | PAYS_COPAY_WITH | CREDITCARD

INSURED | INSURED_BY | INSURANCECARD

INTAKECLERK | REQUESTS | INSURANCECARD

INTAKECLERK | COLLECTS | CREDITCARD

(1:N)

GUARDIAN | HAS_GUARDIAN | CHILD

INTAKECLERK | COLLECTS_INFO | PATIENT

(N:M)

No relationships of this type.

Tertiary Relationships

GUARDIAN | PRIMARY_CONTACT | CHILD | INTAKECLERK (1:1:1)

NURSE | COMPLETES | INITIALASSESSME0NT | NURSE (1:1:1)

SERVICEPROVIDER/DOCTOR | LOGS | DIAGNOSIS | PATIENT (1:N:1)

SERVICEPROVIDER/DOCTOR | ORDERS | DIAGNOSIS | PATIENT (1:N:1)

Multivalued Attributes and their Entities

Guardian: phoneNum

Adult: phoneNum, emailAddress

Initial Assessment: currentMeds, knownAllergies, medicalConditionDescription

<Collects is a RELATIONSHIP> Collects: capitalCosts