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Project Task #2 Mapping
Team #27
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Step 1 Mapping Regular Entity
     PATIENT
                                                DOB
                                                                Address
                 EmergencyContactInfo
                                                                                FirstName
                                                                                               LastName
    APPROVAL_FORM
      <u>form</u>
   TREATMENT
                            ICD-10-PCS
                   Cost
       Name
    EMPLOYEE
                           <u>SSN</u>
                                     <u>EID</u>
    FirstName LastName
    DIAGNOSIS
        ICD-10-CM
                             Name
     VISIT
     Visit_ID
    INITIAL_ASSESSEMENT
    Assess ID Pulse BloodPressure Weight
                                                      Height
  Step2 Mapping Weak Entity
           PATIENT
        → PID
                        EmergencyContactInfo DOB
                                                                      Address
                                                                                      FirstName LastName
          APPROVAL_FORM
            <u>form</u>
          TREATMENT
                         Cost
                                  ICD-10-PCS
            Name
                                                                     Note: FK from Payment.Visit_ID to Visit.Visit_ID
          EMPLOYEE
                                                                          FK from Insurance_Info.Visit_ID to Visit.Visit_ID
FK from PARENT_GUARDIAN.PID to PATIENT.PID
                                 <u>SSN</u>
                                           <u>EID</u>
          FirstName LastName
          DIAGNOSIS
              ICD-10-CM
                                   Name
       Visit ID
          INITIAL_ASSESSEMENT
          Assess ID Pulse BloodPressure Weight
                                                           Height
          PARENT_GUARDIAN
                                   FirstName LastName Relationship
                         <u>PGID</u>
          PAYMENT
              Visit_ID
                            Payment ID
         INSURANCE_INFO
          Visit ID Record ID Visit_Cost Record Provider
 Step 3 Mapping Binary 1:1 Relationship
            PATIENT
            PID
                        EmergencyContactInfo DOB
                                                                       Address
                                                                                      FirstName LastName
           APPROVAL_FORM
             <u>form</u>
           TREATMENT
              Name
                         Cost
                                  ICD-10-PCS
                                                            Note: FK from Payment.Visit_ID to Visit.Visit_ID
           EMPLOYEE
                                                                  FK from Insurance Info.Visit_ID to Visit.Visit_ID
                                                                  FK from PARENT_GUARDIAN.PID to PATIENT.PID
           FirstName LastName
                                  <u>SSN</u>
                                             <u>EID</u>
                                                                  FK from INITIAL_ASSESSEMENT.Assists_Visit_ID to VISIT.Visit.ID(1:1 relationship ASSISTS)
                                                                  VISIT should not be NULL
           DIAGNOSIS
              ICD-10-CM
                                    Name
           VISIT
         → Visit ID ►
           INITIAL_ASSESSEMENT
           Assess ID Pulse BloodPressure Weight
                                                             Height
                                                                          Assists_Visit_ID
           PARENT_GUARDIAN
                                     FirstName LastName Relationship
                           <u>PGID</u>
              PID
           PAYMENT
               Visit_ID
                              Payment_ID
           INSURANCE_INO
            Visit ID Record ID Visit_Cost Record Provider
   Step 4 Mapping Binary 1:N Relationship
             PATIENT
           PID
                                                      DOB
                                                                        Address
                                                                                       FirstName
                                                                                                       LastName
                        EmergencyContactInfo
           APPROVAL_FORM
                                 ICD-10-
PÇS
                        PGID
              <u>form</u>
           TREATMENT
              Name
                           Cost
                                   ICD-10-PCS
                                                                                                              Note: FK from Payment.Visit_ID to Visit.Visit_ID FK from Insurance_Info.Visit_ID to Visit.Visit_ID
                                                                                                                   FK from PARENT_GUARDIAN.PID to PATIENT.PID
FK from INITIAL_ASSESSEMENT.Assists_Visit_ID to VISIT.Visit.ID(1:1 relationship
           EMPLOYEE
                                                                                                               ASSISTS)
                                             <u>EID</u>
           FirstName LastName SSN
                                                                                                                    FK from APPROVAL_FORM.ICD-10-PCS to TREATMENT.ICD-10-PCS (1:N relationship
                                                                                                               REQUIRED FOR)
                                                                                                                    FK from VISIT.PID to PATIENT.PID (1:N relationship HAS_A)
FK from APPROVAL_FORM.PGID to PARENT_GUARDIAN.PGID (1:N relationship
            DIAGNOSIS
                                                                                                               APPROVE)
            ICD-10-CM
                                     Visit_ID
                         Name
                                                                                                                   FK from DIAGNOSIS.Visit_ID to VISIT.Visit_ID (1:N relationship SEEN_BY)
APPROVAL_FORM should not be NULL
                                                                                                                   VISIT should not be NULL
            VISIT √
         → Visit ID
                       PID
            INITIAL_ASSESSEMENT
                                 BloodPressure Weight
                                                                           Assists_Visit_ID
           Assess ID Pulse
                                                              Height
           PARENT_GUARDIAN
                                    FirstName LastName Relationship
               <u>PID</u>
                           <u>PGID</u>
            PAYMENT
               Visit_ID
                              Payment_ID
           INSURANCE_INFO
              Visit ID Record ID Visit_Cost Record Provider
       Step 5 Mapping Binary M:N Relationship
                 PATIENT
                             EmergencyContactInfo DOB
               ▶ PID
                                                                            Address
                                                                                            FirstName LastName
               APPROVAL_FORM
                                    ICD-10-
PCS
                            PGID
                  <u>form</u>
               TREATMENT
                                                                                                                        Note: FK from Payment.Visit_ID to Visit.Visit_ID
FK from Insurance_Info.Visit_ID to Visit.Visit_ID
FK from PARENT_GUARDIAN.PID to PATIENT.PID
                               Cost
                                       ICD-10-PCS ←
                  Name
                                                                                                                               FK from INITIAL_ASSESSEMENT.Assists_Visit_ID to VISIT.Visit.ID(1:1
                                                                                                                         relationship ASSISTS)

FK from APPROVAL_FROM.ICD-10-PCS to TREATMENT.ICD-10-PCS
               EMPLOYEE
               FirstName LastName SSN
                                                <u>EID</u>
                                                                                                                        (1:N relationship REQUIRED FOR )
FK from VISIT.PID to PATIENT.PID (1:N relationship HAS_A)
FK from DIAGNOSIS.Visit_ID to VISIT.Visit_ID (1:N relationship SEEN_BY)
FK from APPROVAL_FORM.PGID to PARENT_GUARDIAN.PGID (1:N
                DIAGNOSIS
                                                                                                                         relationship APPROVE)
                                                                                                                              FK from TREATING.VISIT_ID to VISIT.VISIT_ID
FK from TREATING.ICD-10-PCS to TREATMENT.ICD-10-PCS
FK from IS_MINOR.PID to PATIENT.PID
                 ICD-10-CM
                                    Name
                                                  Visit_ID
                                                                                                                               FK from IS_MINOR.PGID to PARENT_GUARDIAN.PGID
                 VISIT↓
                                                                                                                              PARENT_GUARDIAN should not be NULL
VISIT should not be NULL
        Visit ID
                           PID
                INITIAL_ASSESSEMENT
               Assess ID Pulse
                                     BloodPressure
                                                     Weight
                                                                  Height
                                                                               Assists_Visit_ID
               PARENT_GUARDIAN
                   PID
                               <u>PGID</u>
                                         FirstName | LastName | Relationship
                PAYMENT
                    Visit_ID
                                  Payment_ID
                INSURANCE INO
                 Visit ID Record ID Visit_Cost Record Provider
                 IS_MINOR
                   <u>PID</u>
                            <u>PGID</u>
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TREATING

Visit_ID

ICD-10-PCS





