Module 6 Assignment Solutions

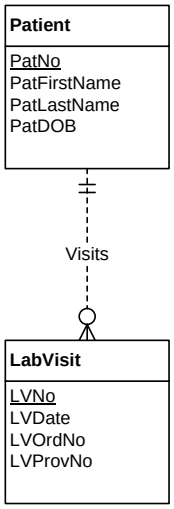
The assignment for Module 6 provides practice using the Crow's Foot notation. You are encouraged to use the ER Assistant or other drawing tool to complete the problems in module 6. If you want to use the ER Assistant, I encourage you to watch at least the first part of the software demonstration about the ER Assistant, available in module 7.

1. Draw an ERD containing the *LabVisit* and *Patient* entity types connected by a 1-M relationship from *Patient* to *LabVisit*. Choose an appropriate relationship name using your common knowledge of interactions between patients and lab visits. Define minimum cardinalities so that a patient is required for a lab visit. For the *Patient* entity type, add attributes *PatNo* (primary key), *PatLastName, PatFirstName, PatDOB* (date of birth). For the *LabVisit* entity type, add attributes for the *LVNo* (primary key), *LVDate, LVProvNo,* and optional *LVOrdNo* (for orders from physicians). If you are using a data modeling tool that supports data type specification, choose appropriate data types for the attributes based on your common knowledge.
2. Extend problem 1 with the *Lab* entity type connected by a 1-M relationship from *Lab* to *LabVisit*. Choose an appropriate relationship name using your common knowledge of interactions between labs and lab visits. Define minimum cardinalities so that a lab is required for a lab visit. For the *Lab* entity type, add attributes *LabNo* (primary key), *LabName, LabStreet, LabCity, LabState,* and *LabZip*. If you are using a data modeling tool that supports data type specification, choose appropriate data types for the attributes based on your common knowledge.
3. Augment your ERD from problem 2 with the *Specimen* entity type. For each specimen collected, the database should record a unique *SpecNo, SpecArea* (vaginal, cervical, or

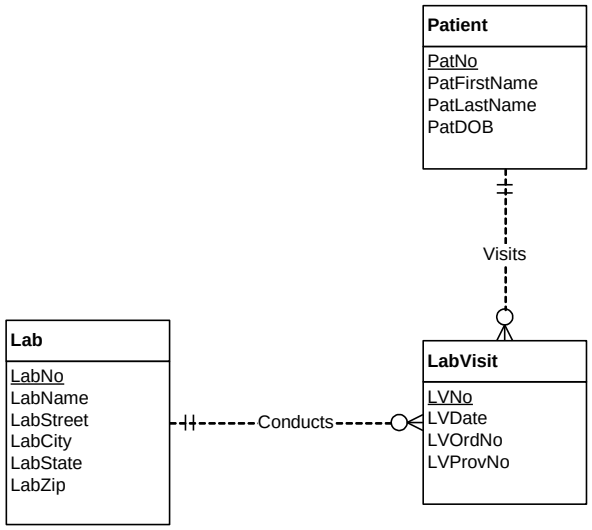
endocervical), and *SpecCollMethod* (thin prep or sure path). You should also add a 1-M relationship from *LabVisit* to *Specimen*. A lab visit must produce at least one specimen. A specimen is associated with exactly one lab visit.

Solutions

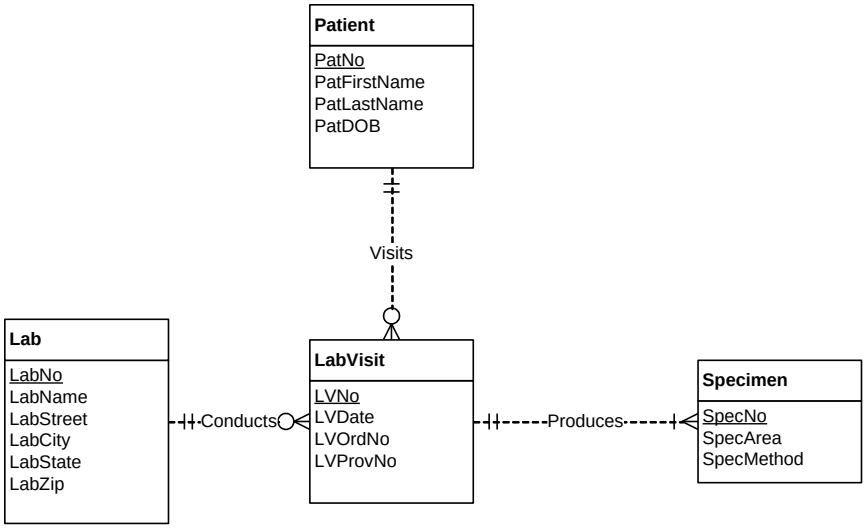
1.



2.



3.


Patient
PatNo
PatFirstName
PatLastName
PatDOB
Visits
Lab
LabNo
LabName
LabStreet
LabCity
LabState
LabZip
Conducts
LabVisit
LVNo
LVDate
LVOrdNo
LVProvNo
Produces
Specimen
SpecNo
SpecArea
SpecMethod