

Here is a brief synopsis to help you understand entities, attributes, relationships and data models.

An entity is the thing we want to gather information about and you can visualize it as a table with columns and rows. Each entity or table is named and usually is a noun. Each column is an attribute, is named, and represents specific information; while each row is a particular instance of what the entity or table signifies. Relationships supply the structure needed to pull information from multiple entities or tables and are usually verbs.

A data model is a tool that we use to describe the data requirements and assumptions in a system, but a model also determines the structure of data, facilitating the design of databases.

Sample entities:

Patient
Physician
Nurse
Drug
Payment
Staff
Treatment
Unit

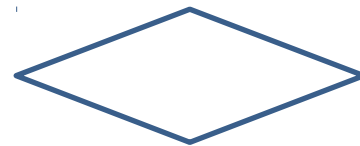
Sample relationships:

Assigned
Attend
Take
Paid
Associated
Track
Record
Treated

E-R Diagram Symbols:



Entity



Relationship



Attribute

Nurses attend to the patients. There are a number of patients assigned to each unit. Usually each patient will have many nurses but only one primary physician.

What questions could we ask?

1. Which nurses work on which units?
2. How many patients are assigned to each unit?
3. Which physician cared for the most patients?
4. Which nurses cared for which patient?

Cardinality Examples:

Patient to nurses - One to Many (1:M) / Patient to primary physician - One to One (1:1)

Please reflect on your E-R Diagrams and data models. Make sure that you have considered everything and your diagram is a visual picture that is easy to interpret and represents your intended data structure.