## Changes

- 1. Instead of making the nurse entity two separate entities, we have one nurse entity that can either do initial assessment, assist service provider, or both. Before, we only had them doing the initial assessment, but added the assist option after class discussion.
  - a. Added the assist relationship for the nurse and service provider that we did not have before called "assist".
- 2. Created an entirely new visit entity so that we can tie everything together. Instead of having the treatment and diagnoses going to the patient, it goes to the visit so we can keep their different diagnoses separate. This idea came from class discussion and groups that had that already placed into their design like group 10, 12 and 13.
  - a. Added attributes to that visit like date, start and leave time, as well as a unique ID so it can be identified.
  - b. Changed the relationships that used to point directly back to patient like treatment, diagnosis, initial assessment towards this new visit id.
  - c. Moved the date from the relationship off of intake clerk into the visit entity as well.
- 3. Added more attributes under patient's address saying street, city, state, country and also change phone number so it was a multivariable attribute in case the patient had more than one number.
  - a. Because it shouldn't all be stored in one string, that makes for inefficient sorting
- 4. Parent/Guardian is not a weak entity anymore. This idea is mainly from class discussion, because a patient can have multiple parents and a parent can have multiple children as patients
- 5. Added "ID", "name", "number", "address" and "Relationship" as attributes to parent/guardian
  - a. Because this is the information collected and recorded for each parent/guardian also parent/guardian needs a unique identifier
- 6. Added Emergency contact entity with "number", "relationship" attributes, composite attribute "name", and a unique . Also Emergency contact has a unique ECID.
  - a. Because initially we had emergency contact listed as an attribute of patient but an emergency contact would need more information recorded than just their phone number.
- 7. Added a relationship "Emergency contact of" to relate Patient and Emergency Contact
  - a. Because the new emergency contact entity needs to relate to patient in some way.
- 8. Added the medication entity with attributes "name" and "dosage" as well as a unique attribute "Product ID" taken from the NDC (national drug code directory). Medication had a relationship "Med for" which relates to the initial assessment entity.

- a. Because this was missed in the initial design. Names and codes are standardized as discussed in class, so an entity makes the most sense instead of an attribute.
- 9. Added a relationship from initial assessment to diagnosis called "symptom for" this relationship has an attribute called "severity"
  - a. Because the ICD-10-CMcode and ICD-10-CMname contain symptoms so a separate entity for symptom is not needed. This reduces redundancy in our design and still keep information like severity included.
- 10. Off of the employee entity we added an attribute called "job type" because of the disjointness constraint coming out of employee, we also labeled the lines of the disjoint to the subclasses so they are properly identified. We also made the full name attribute be a composite attribute for first, middle, and last name.
  - a. Because this is the correct way to annotate a disjointness constraint.
- 11. Department we added name and locations so that we can more stored for that entity to describe it other than a Department ID only.
- 12. Changed how we tracked the service provider logging diagnosis. Instead of having the relationship go from the service provider to diagnosis, it goes from service provider to visit. This way it has a way to connect back to the patient instead of being not related at all.