**MongoDB Model**

(One tuple for each)

* Nurse is non-existent in these tuples of data as the tuple data did not warrant it; however, it would function nearly the same as doctor does (as shown in the Patient collection)
* The treatment weak entity set is incorporated into the patient collection.
* Mostly links are made (essentially foreign keys in relational DB design) by incorporating the key of other entities/collections. Only one collection (doctor) was embedded into patient to provide proper information of the employee.

**Employee**

{

“\_id” : 122045,

“employeeName” : “Jane Doe”,

“salary”: 100000,

“deptID” : 313 //ties dept. to employee

}

**Appointment**

{

“\_id” : 975835,

“location” : “W110”,

“ddate” : “4/1/2019”

“ttime” : “13:30:00”,

“attended” : TRUE,

“satisfactionLevel” : 9,

“employeeID” : 122045, //links employee to specific appointment

“patientID” : 43320455, //links patient as well

“VIN” : “JH4KA8160PC000949” //vehicle used for appointment

}

**Ailment**

{

“\_id” : “common cold”,

“ailDescription” : “The common cold is a viral infection of your nose and throat ( . . . )”,

“medID” : 1200, //ties ailment to med, otherwise couldn’t efficiently find treatment

“deptID” : 313, //ties dept. that works with specific ailment

}

//Employees are linked to department in their collection

**Department**

{

“\_id” : 313,

“deptName” : “dermatology”,

“ailmentName” : “common cold” //each department deals with an ailment

}

**Medicine**

{

“\_id” : 1200,

“medCost” : 12,

“quantity” : 30,

“dosage” : “100mg”

}

**Vehicle**

{

“\_id” : “JH4KA8160PC000949”,

“vehicleType” : “van”,

“deptID” : “dermatology” //Links vehicle to specific department

}

**Patient**

{

“\_id” : 43320455

“patientName” : “Lynn Hunter”,

“age” : 30,

“weight” : 150,

“inHomeCare” : FALSE,

“primaryPhysician” : 122045

“Doctor” : {

“employeeID” : 122045, //can find deptID w/ this

“employeeName” : “Jane Doe”,

“salary” : 100000,

“specialty” : “dermatology”

},

“appointmentID” : 975835, //ties specific appointment

“medID” : 1200, //ties medication to each patient

“treatmentCost” : 500, //each patient will have individual treatment cost

}

**// OLD, (linked/embedded relations into collections instead of doing this below)**

**// Chose to keep for clarity and record-keeping**

**Treatment**

{

“patientID” : 43320455,

“medID” : 1200,

“treatmentCost” : 500

}

**doctorIsA**

{

“\_id” : 122045”,

“employeeName” : “Jane Doe”,

“salary” : 100000”,

“specialty” : “dermatology”

}

**Attends**

{

“employeeID” : 122045,

“appointmentID” : 975735

“location ” : “W110”

“ddate” : “4/1/2019”

“ttime” : “13:30:00”

}

**nurseIsA**

**{**

“employeeID” : 351813,

“employeeName” : “Ismael Byers”,

“salary” : 70000,

“license” : “LPN”

}

**withinA**

{

“deptID” : 313

“ailmentName” : “psoriasis”

}

**Billed**

{

“patientID” : 43320455

“medID” : 1350

}

**belongsTo**

{

“employeeID” : 122045

“deptID” : 313

}

**Owns**

{

“deptID” : 313

“VIN” : “JH4KA8160PC000949”

}

**ailmentRequires**

{

“ailmentName” : “diabetes type 1”

“medID” : 3620

}

**Assigned**

{

“patientID” : 65721028

“appointmentID” : 975835

“location” : “W110”

“ddate” : “4/1/2019”

“ttime” : “13:30:00”

}

**patientHasA**

{

“patientID” : 43320455

“ailmentName” : “influenza”

}