**Relational Schema**

1. Ward

* WardNumber **integer** (Primary Key)
* WardName **varchar**
* Location **varchar**
* TotalBeds **integer**
* TelephoneExtension **integer**

1. Staff

* StaffNumber (Primary Key)
* FirstName **varchar**
* LastName **varchar**
* Address **varchar**
* PhoneNumber **integer**
* DateOfBirth **date**
* Sex **varchar**
* NationalInsuranceNumber **integer**
* ContractID **integer** (Foreign Key, references Contract)

1. Contract

* ContractID **integer** (Primary Key)
* PositionHeld **varchar**
* CurrentSalary **integer**
* SalaryScale **integer**
* ContractType **varchar**
* HoursPerWeek **integer**
* WardID **integer *nullable*** (Foreign Key, references Ward)

1. Qualification

* QualificationID **integer** (Primary Key)
* DateOfQualification **date**
* Type **varchar**
* Institution **varchar**
* StaffNumber **integer** (Foreign Key, references Staff)

1. WorkExperience

* WorkExperienceID **integer** (Primary Key)
* OrganizationName **varchar**
* Position **varchar**
* StartDate **date**
* FinishDate **date**
* StaffNumber **integer** (Foreign Key, references Staff)

1. Patients

* PatientNumber **integer** (Primary Key)
* FirstName **varchar**
* LastName **varchar**
* Address **varchar**
* PhoneNumber **integer**
* DateOfBirth **date**
* Sex **varchar**
* MaritalStatus **varchar**
* RegistrationDate **date**
* NextOfKinID **integer *nullable*** (Foreign Key, references NextOfKin)
* ClinicNumber **integer** ***nullable*** (Foreign Key, references LocalDoctor)

1. NextOfKin

* NextOfKinID **integer** (Primary Key)
* FullName **varchar**
* Relationship **varchar**
* Address **varchar**
* PhoneNumber **integer**

1. LocalDoctor

* ClinicNumber **integer** (Primary Key)
* FullName
* Address
* PhoneNumber

1. Appointment

* AppointmentNumber **integer** (Primary Key)
* AppointmentDate **date**
* AppointmentTime **time**
* ExaminationRoom **varchar**
* WardRecommended **integer** (Foreign Key, references Ward)
* PatientNumber **integer** (Foreign Key, references Patients)
* ConsultantStaffID **integer** (Foreign Key, references Staff)

1. Waiting List

* WaitingID **integer** (Primary Key)
* InPatientNumber **integer** (Foreign Key, references Patients)
* RequiredWard **integer** (Foreign Key, references Ward)
* DatePlacedInList **date**
* ExpectedStay **varchar**

1. Admission List

* AdmissionID **integer** (Primary Key)
* InPatientNumber **integer** (Foreign Key, references Patients)
* WardNumber **integer** (Foreign Key, references Ward)
* DatePlacedInWard **date**
* ExpectedDateToLeave **date**
* ActualDateToLeave **date** ***nullable***
* BedNumber **integer**

1. Out-Patient Record

* RecordID **integer** (Primary Key)
* OutPatientNumber **integer** (Foreign Key, references Patients)
* AppointmentDate **date**
* AppointmentTime **time**

1. Supplier

* SupplierNumber **integer** (Primary Key)
* Name **integer**
* Address **varchar**
* Telephone **integer**
* FaxNumber **integer**

1. Surgical\_NonSurgical Supplies

* ItemNumber **integer** (Primary Key)
* ItemName **varchar**
* ItemDescription **varchar**
* QuantityInStock **integer**
* ReorderLevel **integer**
* CostPerUnit **integer**
* SupplierNumber (Foreign Key, references Supplier)

1. Pharmaceutical supplies

* DrugNumber **integer** (Primary Key)
* DrugName **varchar**
* Description **varchar**
* Dosage **varchar**
* MethodOfAdministration
* QuantityInStock **integer**
* ReorderLevel **integer**
* CostPerUnit **integer**
* SupplierNumber (Foreign Key, references Supplier)

1. Patient Medication
   * MedicationID **integer** (Primary Key)
   * PatientNumber **integer** (Foreign Key, references Patients)
   * DrugNumber **integer** (Foreign Key, references Pharmaceutical supplies)
   * StartDate **date**
   * FinishDate **date**
2. Ward Requisition

* RequisitionNumber **integer** (Primary Key)
* ChargeNurseID **integer** (Foreign Key, references Staff)
* WardNumber **integer** (Foreign Key, references Wards)
* ItemNumber **integer *nullable*** (Foreign Key, references Surgical\_NonSurgical Supplies)
* DrugNumber **integer** ***nullable*** (Foreign Key, references Pharmaceutical Supplies)
* QuantityRequired **integer**
* DateOrdered **date**
* DateDelivered **date**

**Functional Dependencies**

1. Ward

* WardNumber → WardName, Location, TotalBeds, TelephoneExtension

1. Staff

* StaffNumber → FirstName, LastName, Address, PhoneNumber, DateOfBirth, Sex, NationalInsuranceNumber, ContractID

1. Contract

* ContractID → PositionHeld, CurrentSalary, SalaryScale, ContractType, HoursPerWeek

1. Qualification

* QualificationID → DateOfQualification, Type, Institution, StaffNumber

1. WorkExperience

* WorkExperienceID → OrganizationName, Position, StartDate, FinishDate, StaffNumber

1. Patients

* PatientNumber → FirstName, LastName, Address, PhoneNumber, DateOfBirth, Sex, MaritalStatus, RegistrationDate, NextOfKinID, ClinicNumber

1. NextOfKin

* NextOfKinID → FullName, Relationship, Address, PhoneNumber

1. LocalDoctor

* ClinicNumber → FullName, Address, PhoneNumber

1. Appointment

* AppointmentNumber → AppointmentDate, AppointmentTime, ExaminationRoom, PatientNumber, ConsultantStaffID

1. Waiting List

* WaitingID → InPatientNumber, RequiredWard, DatePlacedInList, ExpectedStay

1. Admission List

* AdmissionID → InPatientNumber, WardNumber, DatePlacedInWard, ExpectedDateToLeave, ActualDateToLeave, BedNumber

1. Out Patient Record

* RecordID → OutPatientNumber, AppointmentDate, AppointmentTime

1. Supplier

* SupplierNumber → Name, Address, Telephone, FaxNumber

1. Surgical\_NonSurgical Supplies

* ItemNumber → ItemName, ItemDescription, QuantityInStock, ReorderLevel, CostPerUnit, SupplierNumber

1. Pharmaceutical Supplies

* DrugNumber → DrugName, Description, Dosage, MethodOfAdministration, QuantityInStock, ReorderLevel, CostPerUnit, SupplierNumber

1. Patient Medication

* MedicationID → PatientNumber, DrugNumber, StartDate, FinishDate

1. Ward Requisition

* RequisitionNumber → NurseInchargeID, WardNumber, ItemNumber, DrugNumber, QuantityRequired, DateOrdered, DateDelivered