Entities (Bold face)

* Organ: Stores information about different types of organs used in transplants.
* HIV: Associates HIV diagnosis with specific organs through foreign key references to the Organ table.
* Area: Represents geographic areas within the network.
* Hospital: Contains information about hospitals, including their location (Area).
* Blood Group: Stores blood group information.
* Medical Record: Stores medical record details, including genetic diseases, acquired diseases, and allergies.
* Doctor: Contains information about doctors working in hospitals, with a foreign key reference to the Hospital they work in.
* Operation Room: Represents operating rooms in hospitals.
* Donor: Contains information about organ donors, with references to hospitals, medical records, and blood groups.
* Patient: Stores information about patients, including references to hospitals, medical records, and blood groups.
* Consultant: Associates doctors with patients in a many-to-many relationship.
* Donates: Records organ donations by donors to specific organs.
* Surgery: Represents surgical operations performed, involving patients, doctors, donors, operation rooms, and date/time information.

Entities and their Relationships (Cardinality):

1. HIV-Organ(m:1) Need

2. Hospital-Area(m:1) Located

3. Patient-Hospital(m:1) Admitted

4. Patient-Medical Record(m:1) Pat\_MR

5. Patient-Blood Group(m:1) Has

6. Patient-HIV(m:1) Diagnosed

7. Donor- Medical Record(m:1) Don\_MR

8. Donor-Hospital(m:1) Died

9. Donor-Blood Group(m:1) Had

10. Donor-Organ(m:n) Donates

11. Doctor-Hospital(m:1) Works

12. Doctor-Patient(m:n) Consultant

13. Surgery-Operation Room(m:1) Occur

14. Surgery-Patient(1:m) Perform