* AI-based disease diagnosis system

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| * Patient * patient\_id (Primary Key) * name * age * gender * contact\_info * blood\_type * weight * height * allergies * chronic\_conditions (e.g., diabetes, hypertension) * family\_history (e.g., cancer, heart disease) * lifestyle\_factors (e.g., smoking, alcohol use, diet) | * **Physical Patient Data** * patient\_id (Primary Key) * name * age * gender * contact\_info * blood\_type * weight * height * allergies * chronic\_conditions * family\_history * lifestyle\_factors * medical\_history | * **Mental Patient Data** * patient\_id (Primary Key) * name * age * gender * contact\_info * family\_history\_of\_mental\_illness * past\_mental\_health\_conditions * current\_medications | * **Donor Information** * donor\_id (Primary Key) * name * age * gender * blood\_type * contact\_info * medical\_history * organ\_available (Kidney, Liver, Heart, etc.) * organ\_health\_status (Healthy/Unhealthy) * donation\_status (Pending/Completed) * match\_status (Matched/Rejected) | * **Medical Consumables Inventory** * *(For disposable medical supplies like bandages, syringes, gloves, etc.)* * consumable\_id (Primary Key) * consumable\_name (e.g., Bandage, Cotton, Surgical Gloves, Face Mask) * category (Wound Care, Protection, Surgical, Injection) * size/quantity\_per\_unit * manufacturer * batch\_number * expiry\_date * stock\_quantity * storage\_conditions (Sterile/Non-Sterile, Room Temperature, Cold Storage) |
| * Symptoms * symptom\_id (Primary Key) * patient\_id (Foreign Key) * symptom\_name * severity * duration * onset\_date * associated\_conditions | * **. Physical Health Monitoring** * monitoring\_id (Primary Key) * patient\_id (Foreign Key) * heart\_rate * blood\_pressure * oxygen\_saturation * blood\_sugar\_level * body\_temperature * activity\_level * sleep\_duration * exercise\_frequency * timestamp | * **Mental Health Monitoring** * monitoring\_id (Primary Key) * patient\_id (Foreign Key) * stress\_level * anxiety\_level * depression\_score * mood\_patterns * sleep\_quality * cognitive\_function * social\_interaction\_frequency * work\_productivity\_score * suicidal\_risk (Yes/No) * timestamp | * **Recipient Information** * recipient\_id (Primary Key) * name * age * gender * blood\_type * contact\_info * medical\_condition * required\_organ * urgency\_level (Low/Medium/High) * waiting\_list\_status (Waiting/Matched/Transplanted) | * **Medical Equipment Inventory** * *(For devices & tools used in treatment and diagnosis)* * equipment\_id (Primary Key) * equipment\_name (e.g., Blood Pressure Monitor, Thermometer, ECG Machine) * model\_number * manufacturer * purchase\_date * warranty\_expiry\_date * current\_status (Available/In Use/Under Maintenance) * assigned\_department |
| * Medical tests   + test\_id (Primary Key)   + patient\_id (Foreign Key)   + test\_name   + test\_description   + result\_value   + result\_status (Normal/Abnormal)   + test\_date   + lab\_name | * **Physical Symptom Tracking** * symptom\_id (Primary Key) * patient\_id (Foreign Key) * symptom\_name * severity * duration * onset\_date * additional\_notes | * **Mental Symptom Tracking** * symptom\_id (Primary Key) * patient\_id (Foreign Key) * symptom\_name * severity * duration * onset\_date * additional\_notes | * **Organ Matching System** * match\_id (Primary Key) * donor\_id (Foreign Key) * recipient\_id (Foreign Key) * blood\_compatibility (Yes/No) * tissue\_match\_score (Percentage) * priority\_level (Low/Medium/High) * match\_status (Matched/Rejected) | * **Medicine Inventory** * *(For tablets, injections, drips, ointments, etc.)* * medicine\_id (Primary Key) * medicine\_name (e.g., Paracetamol, Antibiotics, Insulin) * category (Tablet, Injection, Syrup, Drip, Ointment) * active\_ingredients * manufacturer * batch\_number * expiry\_date * stock\_quantity * storage\_conditions (Cold, Room Temperature) |
| * Diagnosis   + diagnosis\_id (Primary Key)   + patient\_id (Foreign Key)   + disease\_name   + diagnosis\_date   + probability   + doctor\_id (Foreign Key)   + recommendations | * **Physical AI Diagnosis** * diagnosis\_id (Primary Key) * patient\_id (Foreign Key) * disease\_name * diagnosis\_date * AI\_confidence\_score * doctor\_verified (Yes/No) * recommended\_tests * treatment\_suggestions | * **Mental AI Diagnosis** * diagnosis\_id (Primary Key) * patient\_id (Foreign Key) * mental\_condition\_name * diagnosis\_date * AI\_confidence\_score * therapist\_verified (Yes/No) * recommended\_treatment * therapy\_suggestions | * **Organ Transplant Procedure** * transplant\_id (Primary Key) * match\_id (Foreign Key) * hospital\_name * surgery\_date * surgeon\_name * procedure\_status (Scheduled/Completed) * post\_transplant\_condition (Stable/Critical) | * **4. Usage & Dispensing Record** * *(Tracks usage of consumables & medicines)* * usage\_id (Primary Key) * item\_id (Foreign Key) * patient\_id (Foreign Key) * doctor\_id (Foreign Key) * quantity\_used * usage\_date * administration\_method (Oral, IV, Topical, Injection) |
| * Medical Images   + image\_id (Primary Key)   + patient\_id (Foreign Key)   + image\_path   + scan\_type (X-ray, MRI, CT, Ultrasound)   + image\_date   + findings | * **Physical Medical Imaging & Tests** * **Medical Tests**   + test\_id (Primary Key)   + patient\_id (Foreign Key)   + test\_name   + test\_description   + result\_value   + result\_status (Normal/Abnormal)   + test\_date * **Medical Images**   + image\_id (Primary Key)   + patient\_id (Foreign Key)   + image\_path   + scan\_type (X-ray, MRI, CT, Ultrasound)   + image\_date   + AI\_findings | * **Mental Cognitive & Behavioral Analysis** * analysis\_id (Primary Key) * patient\_id (Foreign Key) * attention\_span * memory\_retention\_score * decision\_making\_ability * emotional\_responsiveness * behavioral\_trends * therapy\_progress\_score | * **Organ Storage & Logistics** * storage\_id (Primary Key) * organ\_type * storage\_temperature * transport\_status (In Transit/Delivered) * storage\_location * handling\_team | * **5. Sterilization & Safety Compliance** * *(For reusable items like forceps, scissors, surgical tools)* * sterilization\_id (Primary Key) * tool\_id (Foreign Key) * last\_sterilized\_date * next\_sterilization\_due * sterilization\_method (Autoclave, Chemical, UV) * sterilization\_status (Sterile/Non-Sterile) |
| * Doctors * doctor\_id (Primary Key) * name * specialization * license\_number * hospital\_name * contact\_info * experience\_years | * **Physical Disease Knowledge Base** * disease\_id (Primary Key) * disease\_name * causes * symptoms\_list * risk\_factors * treatment\_options * prevention\_tips | * **Mental Disease Knowledge Base** * disease\_id (Primary Key) * mental\_condition\_name * causes * symptoms\_list * risk\_factors * treatment\_options * therapy\_techniques | * **Donor & Recipient Follow-Up** * followup\_id (Primary Key) * recipient\_id (Foreign Key) * donor\_id (Foreign Key) * health\_status\_after\_transplant (Good/Fair/Critical) * complications\_detected (Yes/No) * follow-up\_date * additional\_treatments\_required |  |
| * Prescription * prescription\_id (Primary Key) * patient\_id (Foreign Key) * medicine\_name * dosage * duration * frequency * doctor\_id (Foreign Key) * prescription\_date | * **Physical AI Model Predictions** * prediction\_id (Primary Key) * patient\_id (Foreign Key) * predicted\_disease * probability\_score * AI\_algorithm\_used * timestamp | * **Mental AI Model Predictions** * prediction\_id (Primary Key) * patient\_id (Foreign Key) * predicted\_mental\_condition * probability\_score * AI\_algorithm\_used * timestamp |  |  |
| * Surgeries * surgery\_id (Primary Key) * patient\_id (Foreign Key) * surgery\_name * surgery\_date * surgeon\_id (Foreign Key) * hospital\_name * outcome |  |  |  |  |