# Requirements Traceability Matrix (RTM)

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| Requirement ID | Requirement Description | Source | Mapped Test Case ID | Status |
| FR-1 | The system must allow doctors to add or update detailed patient data and specify illness types, with related dynamic questions. | Use Case 1 [7], Doctor’s Journey [8] | TC-1 | Pending |
| FR-2 | The system must enable doctors to request diagnostic tests or imaging and include notes for relevant departments. | Use Case 2 [7], Doctor’s Journey [8] | TC-2 | Pending |
| FR-3 | The system must generate detailed patient reports, including observations, diagnoses, and treatment plans. | Use Case 3 [7], Doctor’s Journey [8] | TC-3 | Pending |
| FR-4 | Doctors should view comprehensive patient records, including medical history, test results, and prescriptions. | Use Case 4 [7], Doctor’s Journey [8] | TC-4 | Pending |
| FR-5 | The system must enable doctors to prescribe medication, including dosage, frequency, and duration, with warnings for allergies or interactions. | Use Case 5 [7], Doctor’s Journey [8] | TC-5 | Pending |
| FR-6 | Nurses should update specific patient data like BP, HR, or blood sugar levels. | Use Case 7 [7], Nurse’s Journey [8] | TC-6 | Pending |
| FR-7 | Lab technicians must view and process test requests and upload results into the system. | Use Cases 12, 14 [7], Lab Tech’s Journey [8] | TC-7 | Pending |
| FR-8 | Radiology technicians should view imaging requests, upload imaging results, and submit detailed reports. | Use Cases 15-17 [7], Radiology Journey [8] | TC-8 | Pending |
| FR-9 | Patients must log health metrics like blood pressure or sugar levels, with system validation for accuracy. | Use Case 21 [7], Patient’s Journey [8] | TC-9 | Pending |
| FR-10 | Admins must manage user roles and permissions to restrict data access based on roles. | Use Case 19 [7], Admin’s Journey [8] | TC-10 | Pending |
| FR-11 | Admins must securely share patient records with external hospitals and maintain logs of these transactions. | Use Case 18 [7], Admin’s Journey [8] | TC-11 | Pending |
| NFR-01 | Support up to 500 concurrent users with critical operations responding within 250-1000 ms. | NFR [9] | TC-N01 | Pending |
| NFR-02 | Ensure scalability to support up to 2000 users and enable standard data format sharing (JSON, CSV, TSV). | NFR [9] | TC-N02 | Pending |
| NFR-03 | Guarantee 99.5% system uptime with backups for critical functions and daily offsite storage. | NFR [9] | TC-N03 | Pending |
| NFR-04 | Implement data encryption and role-based access control while complying with Egyptian healthcare privacy laws. | NFR [9] | TC-N04 | Pending |
| NFR-05 | Ensure system learnability for patients and staff, requiring minimal training. | NFR [9] | TC-N05 | Pending |
| NFR-06 | Perform disaster recovery planning and maintain up-to-date backups. | NFR [9] | TC-N06 | Pending |