Business Requirements Document (BRD)

Telemedicine Services Data Analysis

*Project Title: Telemedicine Services Data Analysis*

*Company: VHealth*

*Website: www.vhealth.io*

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# 1. Purpose & Scope

* Purpose**:**  
  The goal of this project is to design and implement a robust data analytics solution for VHealth’s telemedicine and healthcare services. The analytics will help track utilization, customer engagement, and operational performance across different healthcare services.
* Scope:
  + Analyze service utilization (doctor consultations, hospital visits, lab tests, voucher services).
  + Provide insights on patient behavior, voucher redemption, and partner engagement.
  + Ensure compliance with healthcare data privacy and governance standards.
  + Deliver interactive dashboards and reports for leadership and operations teams.

# 2. Services Catalog (Telemedicine Services at VHealth)

* Doctor Consultations
  + Via Phone
  + Via Chat
* Hospital Visit Consultation
* Lab Tests (e.g., Thyrocare voucher utilization)
* Vouchers & Preventive Health Packages
  + Thyrocare Lab Test Voucher
  + Dental Check-up Voucher
  + Diet/Nutrition Voucher
  + OPD (Outpatient Department) Voucher

# 3. Data Requirements

For each service, the following data fields are required:

* General Data Fields:
  + Customer ID
  + Service ID
  + Service Type (Consultation, Lab Test, Voucher, Hospital Visit)
  + Booking Date / Service Date
  + Mode of Consultation (Phone, Chat, In-person)
  + Status (Booked, Completed, Cancelled, No-show)
  + Payment Method (Voucher, Cash, Insurance)
  + Partner/Provider ID (Doctor, Hospital, Lab)
  + Feedback/Rating
* Voucher Utilization Specific Data:
  + Voucher ID / Code
  + Voucher Type (Thyrocare, Dental, Diet, OPD)
  + Redemption Date
  + Redemption Status (Used, Expired, Pending)
* Lab/Diagnostic Data:
  + Test ID
  + Test Type (Blood, Thyroid, etc.)
  + Lab Partner (e.g., Thyrocare)
  + Test Result Date

# 4. Data Sources & Integration

* CRM System – customer profiles, service bookings.
* Call Logs & Chat System – teleconsultation data.
* Hospital/Clinic Systems – in-person visit records.
* Voucher Management System – voucher issuance and redemption.
* Lab Integration (Thyrocare, etc.) – test booking and results.
* Data Warehouse/SQL Server – consolidated storage and reporting.

# 5. Analytical Use Cases

* Utilization Analysis:
  + Number of doctor consultations per month (phone vs chat).
  + Hospital visit trends by location.
  + Lab test utilization by voucher type.
* Voucher Analytics:
  + Redemption rates by voucher type.
  + Expired vs redeemed vouchers.
  + Partner performance (Thyrocare, Dental, Diet programs).
* Customer Behavior:
  + Repeat usage rates.
  + Average time between services.
  + Drop-off points (e.g., bookings not converted).
* Operational Insights:
  + Provider/hospital load analysis.
  + Service SLAs and turnaround times.

# 6. Data Quality & Compliance

* Validation Rules: Remove duplicates, validate IDs, check missing values.
* Data Governance: Standardized master data for services and providers.
* Compliance: Ensure adherence to Indian data protection guidelines (DPDP Act), HIPAA (if US data involved), GDPR (if EU customers).
* Anonymization: Mask personal identifiers for analytics.

# 7. Deliverables & Timeline

* Phase 1 (Weeks 1–3): Requirement gathering, data mapping, source system access.
* Phase 2 (Weeks 4–6): Data integration, cleaning, and validation.
* Phase 3 (Weeks 7–9): Dashboard development (Power BI/Tableau).
* Phase 4 (Week 10): Testing, stakeholder review, documentation.
* Phase 5 (Week 11–12): Final deployment & training.

**Deliverables:**

* BRD document
* Data dictionary & source-to-target mapping
* Power BI dashboards (utilization, vouchers, trends)
* Final project report

Thank You!