Insurance Agency CRM System - MVP Requirements Document

Project Name: Insurance Agency Telemarketing CRM
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Executive Summary

This document outlines the requirements for building an MVP CRM system for an insurance agency that sells life insurance through telemarketing. The system manages the complete lead lifecycle from call center submission through sales conversion and carrier integration.

Core Objectives

1. **Lead Management**: Capture and route leads from call centers to appropriate sales teams
2. **Dynamic Pipeline Management**: Track leads through configurable stages and pipelines
3. **Multi-Role Access**: Support call centers, sales agents, managers with role-based permissions
4. **Carrier Integration**: Daily updates from insurance carriers with dynamic field mapping
5. **Real-time Notifications**: Keep all stakeholders informed of lead status changes

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1. System Architecture Overview

Technology Stack

Component	Technology	Purpose
Frontend	Next.js 14+ (App Router)	User interface and application logic
Backend	Supabase (PostgreSQL + Auth)	Database, authentication, real-time subscriptions
Hosting	Vercel	Frontend deployment and serverless functions
File Storage	Supabase Storage	Document and recording storage
Real-time	Supabase Realtime	Live updates and notifications
API Layer	Next.js API Routes + Supabase Edge Functions	Business logic and integrations

2. User Roles & Permissions

2.1 Role Definitions

Call Center Agent

- **Access Level**: Limited
- **Permissions**:
    - Submit new leads via form
    - View their own submitted leads
    - View leads by their center
    - Access pipeline views (read-only for their leads)
    - View call recordings for their leads
    - Add notes to their leads

Sales Agent (Licensed)

- **Access Level**: Medium
- **Permissions**:
    - View assigned leads
    - Update lead status and pipeline stage
    - Add notes and call recordings
    - Make outbound calls
    - Convert leads to customers
    - View their own performance metrics

Sales Agent (Unlicensed)

- **Access Level**: Limited Sales
- **Permissions**:
    - View assigned leads
    - Add notes
    - Update certain fields
    - Cannot close deals independently

Sales Manager

- **Access Level**: High
- **Permissions**:
  - View all sales team leads
  - Assign/reassign leads
  - Manage pipeline stages
  - View team performance dashboards
  - Access all call recordings
  - Override lead assignments
  - Generate reports

Call Center Manager

- **Access Level**: Medium
- **Permissions**:
  - View all leads from their center
  - Manage call center agents
  - View center performance metrics
  - Access pipeline views for center leads

System Administrator

- **Access Level**: Full
- **Permissions**:
  - Manage all users and roles
  - Configure pipelines and stages
  - Set up carrier integrations
  - Configure routing rules
  - Access all system data
  - Manage carrier update mappings

3. Functional Requirements

3.1 Lead Submission Module (Call Centers)

FR-LS-001: Lead Capture Form

Description: Call center agents submit leads through a comprehensive form

Required Fields:

- **Personal Information**
  - Full Name (First, Last)
  - Date of Birth
  - Age
  - Social Security Number
  - Driver License Number
  - Phone Number
  - Email Address
  - Full Address (Street, City, State, ZIP)
  - Birth State
- **Medical Information**
  - Height
  - Weight
  - Doctor's Name
  - Tobacco Use (Yes/No)
  - Health Conditions (Text Area)
  - Current Medications (Text Area)
  - Existing Coverage (if any)
  - Previous Applications (in last 2 years)
- **Insurance Details**
  - Desired Coverage Amount
  - Monthly Premium Budget
  - Preferred Carrier (Dropdown)
  - Product Type
  - Draft Date
  - Future Draft Date
- **Beneficiary Information**
  - Beneficiary Name
  - Beneficiary Phone
  - Beneficiary Relationship

    - Beneficiary Information (Additional)
- **Banking Information**
    - Bank/Institution Name
    - Routing Number
    - Account Number
- **Call Center Metadata**
    - Call Center Name
    - Agent Name
    - Submission Date/Time
    - Customer Buying Motive
    - Additional Notes

FR-LS-002: Real-time Form Validation

- Validate SSN format (XXX-XX-XXXX)
- Validate phone numbers
- Validate email format
- Validate routing/account numbers
- Required field enforcement
- Age calculation from DOB

FR-LS-003: Duplicate Detection

- Check for duplicate SSN
- Check for duplicate phone + name combination
- Show warning if potential duplicate found
- Allow override with justification

FR-LS-004: Auto-save Draft

- Auto-save form data every 30 seconds
- Allow agents to resume incomplete submissions
- Clear draft after successful submission

3.2 Lead Routing Module

FR-LR-001: Automatic Lead Assignment

Description: System automatically routes leads to appropriate sales team based on rules

Routing Criteria:

1. **Primary**: Customer State
    - Map states to specific sales teams
    - Support multi-state assignments
2. **Secondary**: Insurance Carrier
    - Route to agents licensed for specific carriers
    - Carrier-agent mapping table
3. **Tertiary**: Agent Availability
    - Round-robin distribution
    - Workload balancing (lead count per agent)
    - Agent capacity limits
4. **Quaternary**: Lead Value
    - High-value leads to senior agents
    - Configurable value thresholds

FR-LR-002: Manual Assignment Override

- Sales managers can reassign leads
- Reassignment requires reason/note
- Track reassignment history
- Notify affected agents

FR-LR-003: Lead Pool Management

- Unassigned leads pool
- Auto-assignment from pool when agent available
- Manager can claim leads from pool

3.3 Dynamic Pipeline Management

FR-PM-001: Pipeline Configuration

Description: System supports three main pipelines with dynamic stages

Pipeline Types:

1. **Transfer Pipeline**
   - Purpose: Track lead qualification and initial contact
   - Default Stages (Configurable):
     - New Lead
     - Contacted
     - Qualified
     - Not Qualified
     - Callback Scheduled
     - No Answer
     - Do Not Call
     - Converted
     - Lost
2. **Customer Pipeline**
   - Purpose: Track converted customers through application process
   - Default Stages:
     - Application Started
     - Application Submitted
     - Underwriting Review
     - Medical Exam Required
     - Medical Exam Completed
     - Approved
     - Policy Issued
     - Active Policy
     - Lapsed
3. **Chargeback Pipeline**
   - Purpose: Track problematic policies/cancellations
   - Default Stages:
     - Chargeback Received
     - Under Investigation
     - Customer Contact Attempted
     - Resolution in Progress
     - Resolved - Reinstated
     - Resolved - Closed
     - Written Off

FR-PM-002: Dynamic Stage Management

- Admin can add/remove stages
- Admin can reorder stages
- Each stage has:
  - Name
  - Color (for visual distinction)
  - Description
  - Required actions before moving forward
  - Auto-transition rules (optional)
  - Notification triggers

FR-PM-003: Stage Transition Rules

- Define which stages can transition to which
- Require fields/actions before transition
- Trigger notifications on transition
- Log all stage changes with timestamp and user

FR-PM-004: Pipeline Views

- Kanban board view (drag-and-drop)
- List view (filterable/sortable)
- Calendar view (for scheduled callbacks)
- Timeline view (lead history)

3.4 Lead Management Module

FR-LM-001: Lead Detail Page

Description: Comprehensive view of all lead information

Sections:

1. **Lead Summary**
    - Current pipeline and stage
    - Lead value/priority
    - Assigned owner
    - Creation date
    - Last activity date
    - Days in current stage
2. **Contact Information**
    - All personal details
    - Communication history
    - Contact preferences
3. **Medical Profile**
    - All health-related information
    - Risk assessment score (calculated)
4. **Insurance Details**
    - Coverage preferences
    - Quote history
    - Carrier information
5. **Activity Timeline**
    - All interactions (calls, emails, notes)
    - Stage transitions
    - Ownership changes
    - System events
6. **Notes Section**
    - Add/view notes
    - Rich text editor
    - Tag important notes
    - Search within notes
7. **Call Recordings**
    - List of all recorded calls

    - Play/download recordings
    - Transcription (future enhancement)
8. **Documents**
    - Upload/view documents
    - Application forms
    - Medical records
    - Policy documents
9. **Related Records**
    - Family members (potential cross-sell)
    - Existing policies
    - Previous applications

FR-LM-002: Lead Value Calculation

- Auto-calculate based on coverage amount
- Adjust based on conversion probability
- Display prominently in UI
- Filter/sort by value

FR-LM-003: Lead Ownership

- Clear owner assignment
- Transfer ownership workflow
- Track ownership history
- Notify on ownership change

FR-LM-004: Notes Management

- Add notes with timestamp
- Tag notes (Important, Follow-up, etc.)
- Pin important notes to top
- Note visibility (private vs team)
- @mention team members in notes

FR-LM-005: Activity Logging

- Auto-log all lead interactions
- Manual activity entry
- Activity types:
    - Inbound call
    - Outbound call
    - Email sent/received
    - SMS sent/received
    - Meeting scheduled

- Document uploaded
- Stage changed
- Note added

3.5 Sales Team Module

FR-ST-001: Sales Dashboard

Description: Agent dashboard showing their work queue

Dashboard Widgets:

1. **My Leads** (Categorized)
    - New leads (uncontacted)
    - Follow-ups due today
    - Callbacks scheduled
    - Hot leads (high priority)
    - Stale leads (no activity > 7 days)
2. **Performance Metrics**
    - Leads assigned (this week/month)
    - Leads contacted
    - Conversion rate
    - Average response time
    - Revenue generated
3. **Quick Actions**
    - Call next lead
    - Add note
    - Schedule callback
    - Move to stage
4. **Pipeline Overview**
    - Leads by stage
    - Pipeline velocity
    - Stage conversion rates

FR-ST-003: Callback Scheduling

- Schedule follow-up calls
- Set date, time, and reason
- Add to agent's calendar
- Reminder notifications
- Recurring callback options
- Bulk reschedule capability

FR-ST-004: Lead Conversion

- "Convert to Customer" action
- Moves lead from Transfer to Customer Pipeline
- Assign policy number (manual entry)
- Set policy details:
  - Carrier
  - Product type
  - Coverage amount
  - Monthly premium
  - Policy start date
  - Commission amount

FR-ST-005: Mobile-Responsive Interface

- Optimized for tablets
- Quick actions accessible
- One-hand operation friendly
- Offline capability (view cached leads)

3.6 Carrier Integration Module

FR-CI-001: Policy Assignment

Description: When lead converts, assign carrier policy

Policy Data:

- Carrier Name (from predefined list)
- Policy Number (unique identifier)
- Product Type
- Coverage Amount
- Monthly Premium
- Policy Start Date
- Policy Status (Active/Pending/Lapsed)
- Commission Amount
- Commission Status (Pending/Paid)
- Next Premium Due Date

FR-CI-002: Dynamic Carrier Update Fields

Description: System supports carrier-specific update fields

Configuration:

- Admin defines carrier-specific fields
- Each carrier can have different update schema
- Example fields:
    - Policy Status
    - Premium Payment Status
    - Coverage Changes
    - Beneficiary Updates
    - Medical Exam Status
    - Underwriting Decision
    - Lapse Date
    - Reinstatement Date
    - Cancellation Reason

FR-CI-003: Daily Carrier Updates

Description: Process daily update files from carriers

Update Process:

1. **File Upload**
    - Support CSV/Excel formats
    - Manual upload or API integration
    - FTP/SFTP scheduled imports
2. **Field Mapping**
    - Map carrier file columns to system fields
    - Save mapping configurations per carrier
    - Handle missing/extra columns gracefully
3. **Data Processing**
    - Match records by policy number
    - Update lead/customer records
    - Flag unmatched records
    - Validation and error handling
4. **Update History**
    - Log all updates with timestamp
    - Track field changes (before/after)
    - Audit trail for compliance
5. **Notifications**
    - Notify owners of status changes
    - Alert managers of chargebacks
    - Daily summary report

FR-CI-004: Chargeback Detection

- Auto-detect chargeback indicators:
    - Policy cancelled within X days
    - Specific status codes
    - Premium refund processed
- Automatically move to Chargeback Pipeline
- Calculate chargeback amount
- Notify relevant parties

3.7 Data Access & Permissions

FR-DA-001: Call Center Data Isolation

- Each call center sees only their own leads
- Filter all queries by center ID
- Row-level security in database
- Cannot view other centers' data

FR-DA-002: Sales Agent Data Access

- View only assigned leads
- View team leads if manager
- Cannot access unassigned leads (except pool)
- Cannot view other teams' leads

FR-DA-003: Manager Overrides

- Sales managers: View all sales team data
- Call center managers: View all center data
- System admin: View all data
- Audit log for admin access

FR-DA-004: Export Restrictions

- Users can export only their accessible data
- Exports include watermark/timestamp
- Log all exports for compliance
- Rate limit exports to prevent abuse

3.8 Notification System

FR-NS-001: Real-time Notifications

Description: Keep users informed of important events

Notification Types:

1. **For Call Center Agents:**
   - Lead accepted by sales team
   - Lead status changed to Converted
   - Lead moved to Customer Pipeline
   - Chargeback on their lead
2. **For Sales Agents:**
   - New lead assigned
   - Callback reminder (15 min before)
   - Lead activity by other team member
   - Lead became hot (engagement increase)
   - Manager reassigned lead
3. **For Sales Managers:**
   - New leads in unassigned pool
   - Lead stale (no activity > 7 days)
   - Agent exceeds capacity
   - High-value lead conversion
   - Chargeback alert
4. **For Call Center Managers:**
   - Daily center performance summary
   - Conversion rate changes
   - Agent performance alerts

Notification Channels:

- In-app notifications (bell icon)
- Email notifications
- SMS notifications (critical only)
- Browser push notifications

FR-NS-002: Notification Preferences

- Users can configure notification preferences
- Choose channels per notification type
- Set quiet hours
- Digest mode (batch notifications)

FR-NS-003: Notification Center

- Central inbox for all notifications
- Mark as read/unread
- Click to navigate to relevant record
- Filter by type/date
- Archive old notifications