MediQR — Full Product Management Project (Market-Ready Version)

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1. Problem Statement

Rural and semi-urban populations struggle to understand medicine instructions due to low literacy, language barriers, and limited access to pharmacists. Existing digital solutions rely on internet connectivity, making them unusable in offline regions. Users require an **offline, simple, visual guidance system** that clearly explains how to take their medicines safely.

MediQR solves this by using QR codes linked to offline local-language videos explaining dosage, timing, and usage instructions.

2. Goals & Success Metrics

Product Goals

1. Provide **offline medicine guidance** for rural and illiterate populations.
2. Reduce medicine misuse and dosage errors.
3. Help pharmacists easily update/transfer new guidance videos offline.

Success Metrics

- **+40% improvement** in correct medicine usage accuracy (survey).
- **–30% reduction** in pharmacist repeated explanation time.
- **80%+ user comprehension** of video instructions.
- **90% offline accessibility** even in zero-network villages.

3. Personas (Final 3 Personas)

Persona 1 — Rural Patient (Selvarani, 45)

Pain: Cannot read labels, forgets dosage.
Needs: Simple video explaining how to take medicine. Behavior: Depends on neighbors for instructions.

Persona 2 — Pharmacist (Rakesh, 33)

Pain: Repeating instructions for 100+ customers daily.
Needs: Fast way to give local-language instructions. Behavior: Wants time-saving solutions.

Persona 3 — Field Health Worker (Meena, 28)

Pain: Must explain medicines to 50+ villagers daily.
Needs: A digital assistant that works offline.
Behavior: Visits remote areas with zero network.

4. Pain Points (Top 4)

1. Illiterate users **cannot read dosage** or precautions.
2. Poor or no internet access prevents them from using apps like YouTube.
3. Pharmacists waste significant time **re-explaining the same medicines**.
4. Medicine misuse (overdose/underdose) leads to health risks.

5. User Journey (Simplified)

1. User buys medicine → cannot understand label
2. Sees QR code → scans
3. Video opens offline inside MediQR
4. User watches clear instructions in local language
5. User understands dosage and follows correctly
   Opportunity: Make scanning → video → understanding happen in **under 10 seconds**.

6. Proposed Solution (MVP Features)

Core Features (MVP)

1. **Offline QR Scan → Local Video Guidance**
2. **Pre-installed 100 essential-medicine videos**
3. **Local-language audio explanations**
4. **Video updates via Bluetooth / Wi-Fi Direct**
5. **Automatic deletion of irrelevant videos** to save storage
6. **Medicine-code mapping system** (e.g., PCM_TAMIL mapped to Paracetamol)

Future Features

- Side-effect alerts

- Voice-based search
- AI-based pill recognition
- Doctor-mode dashboard

7. RICE Prioritization Table

Feature	R	I	C	E	Score
Offline QR → Video	8	9	7	3	**206**
Bluetooth/WiFi Direct update	6	8	7	2	**82**
Auto-delete irrelevant videos	6	7	8	2	**73.5**
Local-language multi-audio	7	9	6	3	**157.5**

MVP Priority: Offline QR → Local video + Multi-language + Offline transfer

8. User Stories

- As a **patient**, I want a **video that explains my medicine clearly**, so I don't misuse it.
- As a **pharmacist**, I want to **transfer videos offline**, so I can help customers in remote regions.
- As a **health worker**, I want the app **to work without internet**, so I can use it anywhere.
- As an **elderly user**, I want **simple UI**, so I can use it without confusion.

9. Acceptance Criteria

- QR scan must open correct local-language video **within 2 seconds**.
- App must operate **100% offline** for scanning + video playback.
- Bluetooth transfer must successfully send a video within **10 seconds**.
- Users must understand dosage after **one video watch** (tested via comprehension score).

10. Wireframe Descriptions

Screen 1: Home Screen

Buttons: Scan QR / My Videos / Update Videos.

Screen 2: QR Scan

Camera view → instant detect → auto-launch video.

Screen 3: Video Player

Local language narration, big icons, replay button, dosage summary text.

Screen 4: Update Videos

Bluetooth search → select pharmacist → transfer pack → success.

11. Usability Test (Simulated Results)

Test Group: 8 rural users, 3 pharmacists.
Tasks: Scan QR → watch video → explain dosage.

Results:

- 10/11 users understood dosage correctly.
- 9/11 users completed scan-to-video in <6 seconds.
- Pharmacists rated Bluetooth update as “Very helpful”.

Improvements made:

- Increased icon size for elderly users
- Added “Replay” button
- Added subtitle option

12. Final Roadmap

0–3 Months (MVP Launch)

- 100 videos built-in
- Multi-language
- QR mapping
- Offline scan + play

3–6 Months

- Bluetooth video packs
- Regional pharmacy onboarding

6–12 Months

- AI pill detection
- Government partnership for rural health centres