

ABHA Face Authentication — FLW Testing Guide

Short developer/tester checklist for validating the Face Auth flow in the FLW Mobile App

1. Test Prerequisites

- FLW Mobile App installed with the Face Authentication feature enabled.
- Sandbox testing: ABHA Sandbox app installed. Package: **in.ndhm.phr.debug**.
- Production testing: official ABHA app installed. Package: **in.ndhm.phr**.
- Valid test beneficiary/Aadhaar and mobile number appropriate for the environment.
- Internet connectivity available on both apps.
- Camera permission available for the ABHA app.

2. Verify Environment

Environment	ABHA Package	Face Auth URL
Sandbox	in.ndhm.phr.debug	https://phrsbx.abdm.gov.in/face-auth?txnId=<txnId>
Production	in.ndhm.phr	https://phr.abdm.gov.in/face-auth?txnId=<txnId>

3. Start the Test in FLW

- Open FLW Mobile App.
- Navigate to the relevant beneficiary/user and start ABHA creation.
- Select **Face Authentication** as the authentication method.
- Continue until FLW initializes the Face Auth transaction.

4. Verify Transaction Initialization

FLW should call **POST /v3/enrollment/enrol/auth/init** with scope **["abha-enrol", "face-auth"]** and receive a **txnId**.

Expected: a valid transaction ID is received from the API. Do not manually generate a txnId.

5. Verify ABHA App Launch

- FLW opens the correct ABHA app directly on the Face Authentication screen.
- Sandbox should use **phrsbx.abdm.gov.in/face-auth**; production should use **phr.abdm.gov.in/face-auth**.
- If a browser opens instead of the ABHA app, verify the environment, package ID, installed app, and Android deep-link configuration.

6. Complete Face Authentication

- Follow the instructions shown in the ABHA app.
- Allow camera permission if requested.
- Complete face capture/authentication.
- Return to FLW when the ABHA app finishes or exits.

Important: returning to FLW does not by itself mean Face Auth succeeded. The backend transaction status from capturePID is the source of truth.

7. Verify capturePID Polling

FLW should poll **POST /v3/enrollment/enrol/capturePID** approximately every **5–10 seconds**.

Status	Expected FLW behavior
PENDING	Continue polling.
VERIFIED	Continue polling; Face Auth is not yet complete.
COMPLETE	Stop polling and proceed to byAadhaar.
FAILED	Stop polling and show/handle failure; retry with a new transaction.

8. Verify Final ABHA Enrollment

- Call **POST /v3/enrollment/enrol/byAadhaar** only after capturePID returns **COMPLETE**.
- Request uses **authMethods: ["face_auth"]**.
- Aadhaar value is encrypted.
- Mobile is sent as the mobile number; txnId is the transaction identifier.
- Consent code/version are included as required by the integration.

9. Verify Success

- ABHA profile/ABHA number is returned successfully.
- FLW completes its existing beneficiary-to-ABHA mapping.
- Success confirmation is shown to the user.
- No duplicate ABHA creation or duplicate beneficiary mapping occurs.

10. Negative / Retry Tests

- ABHA app is not installed → FLW should handle unavailable Face Auth app gracefully.
- User cancels/exits the ABHA app → FLW should not treat the flow as successful.
- Face Auth returns FAILED → show failure and allow retry.
- capturePID remains pending beyond the configured timeout → stop polling and handle timeout.
- Retry after failure/timeout → initialize a **new txnId**; do not reuse the old transaction.

11. Quick Successful Flow

FLW → auth/init → txnId → ABHA Face Auth → capturePID polling → COMPLETE → byAadhaar → ABHA Profile
→ FLW beneficiary mapping

12. What to Capture When a Test Fails

- Environment: Sandbox / Production
- FLW app version/build
- ABHA app version and package ID
- txnId (only if allowed by your project logging policy)
- Last capturePID status
- API endpoint and HTTP status/error
- Exact step where the flow failed
- Avoid putting real Aadhaar numbers, OTPs, or other sensitive PII in screenshots/logs.

Tester sign-off: Happy path + ABHA app launch + capturePID status handling + byAadhaar success + cancel/failure/timeout/retry should all be verified before considering the integration ready.

Reference: ABDM Face Auth ABHA Creation flow and API specifications used during implementation.