

FHIRBridge Platform Guide

A complete guide to the FHIRBridge platform for Ontario MHA PDS/FHIR readiness, conversion, validation, terminology governance, interface-engine testing, evidence exports, and production preparation.

What the Platform Does

FHIRBridge helps implementation teams prepare Ontario Mental Health and Addictions PDS data for FHIR R4 workflows. It supports controlled source templates, conversion to FHIR Bundles, local validation, terminology review, mapping governance, transport testing, audit evidence, learning paths, and production readiness assessment.

Primary Navigation

- Access and workspace / Login gate: Protects platform pages and APIs behind authenticated access, with demo access enabled for training.
- Access and workspace / Tenant context: Displays the active tenant and constrains workspace data to tenant context where Supabase is configured.
- Conversion / Ontario MHA PDS template download: Provides the controlled data collection template with required Ontario MHA PDS fields and local guidance.
- Conversion / Demo source data: Provides a safe sample workbook for training conversion and validation without PHI.
- Conversion / FHIR Bundle generation: Converts source rows into FHIR R4 Bundles with Patient, Organization, Location, EpisodeOfCare, Encounter, Appointment, and SDOH Observation resources.
- Mappings / Mapping workbench: Shows source-to-FHIR mapping rules for PDS fields, FHIR paths, conformance notes, and review status.
- Terminology / Terminology catalogue: Displays local terminology references, code table concepts, and governance metadata.
- Validation / Bundle validation workbench: Validates FHIR Bundles against local requirements, downloaded package references, optional HL7 CLI/HAPI validation, and terminology checks.
- Interface engine / Source intake: Accepts one canonical source row, validates it, generates a FHIR Bundle, and queues or submits it through the feed.
- Interface engine / Queue and transport status: Tracks queued, validating, invalid, submitting, accepted, failed, and retrying submission jobs.
- Learning / Learning paths: Provides guided courses for roles, FHIR R4, MHA PDS data sets, terminology, validation, and submission operations.
- Evidence / Exports and audit log: Exports conversion, mappings, terminology, validation, readiness, and audit evidence for implementation governance.
- Settings / Standards and readiness settings: Shows package status, validator configuration, template self-checks, local requirements state, and readiness export.

Standard Operating Workflow

- 1. Sign in - Open the platform: Go to <https://fhirbridge.ca> and sign in. For training, use demo/demo. Expected result: The Overview dashboard opens and the left navigation is visible. Evidence: Authenticated workspace access.

- 2. Start with readiness - Run and interpret readiness: Open Readiness, review the current gates, and export the readiness workbook. For the seeded demo, distinguish demo-ready mechanics from blocked production gates. Expected result: Conversion/storage gates are ready; mappings need review; external validator, official package, and production access gates remain visibly incomplete. Evidence: Readiness workbook and documented gate decisions.
- 3. Prepare source data - Download template and demo data: Use Download template and Download demo data from Overview. Expected result: You have the controlled workbook structure and a practice data set. Evidence: Template and demo workbook downloads.
- 4. Convert data - Upload source workbook: Use the conversion upload panel, select the demo/source workbook, and run Convert to FHIR. Expected result: The supplied demo workbook converts 2 rows into 2 Bundles and 16 FHIR resources with zero rejected rows and zero fatal/error blockers. Evidence: Conversion job, two Bundle records, resource inventory, and downloaded Bundle JSON.
- 5. Review mappings - Open Mappings: Review PDS fields, source fields, FHIR targets, mapping rules, status, and export workbook. Expected result: Mappings are understood and review status is visible. Evidence: Mapping workbook export and owner decisions.
- 6. Review terminology - Open Terminology: Search the local catalogue, review code table concepts, run self-check, and export terminology evidence. Expected result: Terminology gaps and local crosswalk needs are visible. Evidence: Terminology export and warning triage notes.
- 7. Validate FHIR - Open Validation: Review the persisted conversion findings, separate blockers from warnings/information, and export validation evidence. Use manual Bundle validation when testing a separate payload. Expected result: The seeded demo shows no fatal/error blockers; terminology-snapshot and missing external-validator findings remain visible and must not be described as Ontario Health acceptance. Evidence: Validation report and issue log.
- 8. Test interface-engine workflow - Open Live Feed: Test the Excel source and mock endpoint, submit one synthetic Bundle immediately, queue another, process next, and review feed activity. Expected result: Both jobs reach accepted mock status with HTTP 201 semantics, while transport remains visibly labelled mock and dry-run. Evidence: Bundle identifier, queue status, HTTP/mock status, OperationOutcome diagnostics.
- 9. Complete learning - Open Learn: Choose FHIR, PDS data set, terminology, validation, submission, or role learning paths. Expected result: Learners can follow labs, scenarios, glossary, job aids, rubrics, and capstone deliverables. Evidence: Downloaded course material and completed capstone evidence.
- 10. Export evidence - Build readiness package: Export mappings, terminology, validation, audit log, conversions, readiness, and course evidence. Expected result: The implementation team has readable workbooks containing job, Bundle, resource, issue, package, gate, and audit evidence. Evidence: Named evidence package with reviewers and dates.
- 11. Prepare production transport - Review settings and transport mode: Confirm validation package, endpoint, dry-run/live mode, token governance, and Ontario Health onboarding requirements. Expected result: The team records a no-go until the authorized package, external validator, production authentication controls, approved endpoint, and credentials are complete. Evidence: Transport checklist and readiness sign-off.

Production Implementation Plan

- 1. Confirm sponsorship and tenant setup: Owner: Executive sponsor, implementation lead, administrator. Work: Name the implementation owner, define tenant boundaries, confirm privacy/accountability contacts, and configure the production tenant before PHI or customer files are used. Acceptance: Tenant record exists, users are assigned to roles, demo-only access is disabled for customer production use, and RLS evidence is captured. Evidence: Tenant setup record, role matrix, access approval, and RLS test notes.

- 2. Pin the authorized standards package: Owner: FHIR lead, data standards owner. Work: Confirm the Ontario MHA PDS data dictionary, FHIR implementation guide, terminology package, and validator package version used for the implementation. Acceptance: Settings show the intended version, local package metadata is recorded, and the team knows which official materials cannot be redistributed publicly. Evidence: Package/version register, Settings export, and checksum or source-path notes where available.
- 3. Complete source-system inventory: Owner: Hospital data lead, integration lead. Work: List source systems for organization, client, SDOH, referral, program, clinical summary, substance use/addictions, problem gambling, and encounter domains. Acceptance: Every required field has a named source, accountable owner, extraction method, and known data-quality limitation. Evidence: Source inventory workbook and unresolved gap log.
- 4. Complete template readiness: Owner: Data analyst, quality lead. Work: Download the controlled template, verify mandatory and conditional fields, preserve column names, and run the template self-check before the first conversion. Acceptance: Template contains the full required field set and a populated test row with no structural errors. Evidence: Template workbook, self-check export, and sample-row review notes.
- 5. Approve mappings: Owner: Clinical owner, FHIR lead, data owner. Work: Review each source-to-FHIR mapping, target path, rule, cardinality note, and decision status in the Mappings workbench. Acceptance: Mandatory fields are approved or explicitly deferred with owner/date, and unresolved mappings are not accepted for production. Evidence: Mapping export with approved/review statuses and sign-off notes.
- 6. Build terminology crosswalks: Owner: Terminology lead, clinical owner. Work: Load local code tables, map local values to accepted terminology or controlled PDS values, and document unmapped or local-only values. Acceptance: Terminology self-check passes for configured local catalogues, and every warning has an owner and disposition. Evidence: Terminology export, crosswalk file, and warning triage log.
- 7. Run a demo conversion: Owner: Implementation analyst, QA lead. Work: Use the demo data and then a de-identified customer extract to generate FHIR Bundles from the conversion workflow. Acceptance: Expected row count becomes expected Bundle count, import issues are explained, and generated resources can be traced to source fields. Evidence: Conversion summary, Bundle JSON, import issue report, and traceability notes.
- 8. Validate and triage findings: Owner: FHIR lead, QA lead. Work: Run validation against local requirements and the configured package/validator where available, then classify fatal, error, warning, and information messages. Acceptance: No unresolved fatal/error items remain for the production candidate extract; warnings are accepted or remediated. Evidence: Validation report, issue log, and remediation decisions.
- 9. Test interface-engine workflow: Owner: Integration lead, operations lead. Work: Submit a canonical source row through Live Feed, queue it, process the next job, and review mock or dry-run transport results. Acceptance: Jobs move through queued, validating, submitting, and accepted/mock-accepted states with traceable identifiers. Evidence: Feed activity export, job ID, Bundle ID, OperationOutcome, and retry/attempt history.
- 10. Complete privacy and security readiness: Owner: Privacy officer, security lead, administrator. Work: Confirm tenant isolation, PHI minimization, retention rules, audit logging, access reviews, and incident response expectations. Acceptance: No production PHI is loaded until access, retention, audit, and operations controls are accepted. Evidence: Security checklist, privacy sign-off, audit export, and access review.
- 11. Prepare Ontario Health transport go/no-go: Owner: Executive sponsor, integration lead, FHIR lead. Work: Confirm endpoint, credentials, onboarding expectations, dry-run evidence, support contacts, submission windows, and rollback plan. Acceptance: A signed go/no-go decision exists before live transmission is enabled. Evidence: Transport checklist, dry-run evidence, endpoint/token governance notes, and go/no-go record.

- 12. Run hypercare and evidence review: Owner: Operations lead, quality lead. Work: Monitor submissions, review validation drift, track incidents, refresh terminology/package changes, and schedule evidence review. Acceptance: Daily review is in place for the first production period and unresolved production defects have owners and due dates. Evidence: Hypercare tracker, daily queue review, issue register, and release notes.

Readiness and Maturity

Use the Readiness page to score maturity across data readiness, FHIR build, terminology, validation, interface-engine transport, tenant/security, and governance. The result should show a maturity level, visual graphs, domain scores, and remediation actions to reach the next level.

Evidence Exports

Guide-style materials are available as HTML pages for in-app viewing and PDF downloads for offline review. Operational evidence exports such as templates, mapping workbooks, terminology catalogues, validation evidence, conversion evidence, audit evidence, and readiness packages remain workbook/JSON artifacts where structured data is required.

Submission Boundary

FHIRBridge local validation and QA HAPI testing prove local readiness and transport mechanics. They are not Ontario Health production acceptance. Live submission requires approved endpoint onboarding, credential governance, package/version confirmation, go/no-go sign-off, and operational support readiness.

Minimum Go-Live Evidence

- 1. Authorized standards confirmed: The Ontario MHA PDS data dictionary, implementation guide, package, and terminology references are version-pinned for the release. Blocker: Package version, source, or validation configuration is unknown or differs from the approved implementation baseline. Evidence: Standards register, package metadata, Settings export, and validation configuration record.
- 2. Tenant and access controls approved: Production tenant, memberships, RLS policies, role checks, export protection, and audit logging are verified. Blocker: Any cross-tenant read/write succeeds or users can access restricted exports/actions without the required role. Evidence: RLS tests, role matrix, audit export, and access review sign-off.
- 3. Data quality blockers resolved: Mandatory fields, dates, identifiers, terminology crosswalks, and timeline consistency pass for the production candidate extract. Blocker: Unresolved fatal/error validation issue or unowned mandatory-field gap remains. Evidence: Data quality remediation tracker, source preflight report, and final validation report.
- 4. Mappings approved: Source-to-FHIR mappings for required and conditional fields are reviewed, approved, or formally deferred. Blocker: Required field mappings remain draft or clinical mappings lack owner approval. Evidence: Mapping workbook export, approval status, and decision notes.
- 5. Terminology governance complete: Local source codes are inventoried, mapped, approved, and retained with a package-aligned terminology snapshot. Blocker: Required coded fields have unmapped production values without accepted remediation. Evidence: Terminology catalogue export, crosswalk, self-check result, and approval log.
- 6. Validation evidence accepted: Source preflight, conversion traceability, local requirement validation, structural validation, package validation, and terminology validation are retained. Blocker: Validation reports cannot be reproduced or show unresolved fatal/error items. Evidence: Validation evidence package, OperationOutcome diagnostics, and issue disposition log.

- 7. Interface-engine dry run accepted: Live Feed can queue, process, and record mock/dry-run jobs with traceable Bundle IDs, attempts, statuses, and diagnostics. Blocker: Jobs fail without actionable diagnostics or accepted jobs cannot be traced to source rows and Bundles. Evidence: Feed job export, attempt history, dry-run response, and support notes.
- 8. Transport and credentials approved: Endpoint, token ownership, rotation, timeout, retry, support contacts, and live-mode enablement procedure are approved. Blocker: Credentials are unmanaged, endpoint is not approved, or live mode can be enabled without go/no-go approval. Evidence: Transport checklist, credential owner register, and endpoint approval notes.
- 9. Operations and hypercare ready: Daily queue review, incident triage, retry/replay procedure, escalation path, and release notes are prepared. Blocker: No named support owner, no incident procedure, or no monitoring process exists for failed/retrying jobs. Evidence: Hypercare plan, support roster, incident playbook, and queue review schedule.
- 10. Final go/no-go recorded: Business, clinical, data, privacy, security, FHIR, integration, and operations owners record final readiness decision. Blocker: Any required owner has not signed off or has open blocker conditions. Evidence: Go/no-go record, owner sign-offs, final evidence pack, and launch decision.