# NICK DUGAN, RN-BC, BSN, CPHIMS

**Healthcare Interoperability | Solution Architecture | Product Strategy | FHIR and Enterprise APIs**

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## SUMMARY

Clinician-turned-architect with 12 years in healthcare and 7+ years designing, building, and running integration and interoperability solutions across provider and payer environments. Hands-on across the full standards stack — HL7 v2.x interfaces and engine channel development, FHIR R4 and Da Vinci APIs, C-CDA, X12, SOAP and REST services — and equally comfortable defining the reference architecture, writing the code, and leading the team that ships it. Built interoperability capability from scratch in transformational settings, stood up API observability and release governance, and led informatics and architecture teams through complex EHR, cloud, and vendor integrations. A clinical background keeps data exchange designed around how care actually gets delivered, not just how the spec reads.

## CORE COMPETENCIES

**Interoperability Standards & Regulation:** HL7 v2.x, FHIR R4, US Core & USCDI, C-CDA, X12, SOAP/WSDL, REST APIs, SMART on FHIR, CDS Hooks, CQL, Da Vinci IGs (PAS, DTR, CRD, CDex, PDex, HRex), CARIN BB; CMS-0057-F, Patient/Provider Access APIs, payer-to-payer exchange, ONC / TEFCA landscape, HIPAA

**Integration Platforms & Engineering:** Integration engines, interface engines, and middleware platforms (Cerner OpenLink, InterSystems, Mirth/NextGen Connect, Rhapsody) — channel development, mapping, transformation, and production support; event-driven and pub/sub patterns; API management and gateway design; OAuth 2.0 / OIDC / SMART authorization; Azure cloud integration architectures; enterprise application integration (EAI); data integration and transformation; SQL, Python, TypeScript/Next.js, PostgreSQL, Databricks/Spark, CI/CD

**Architecture, Governance & Operations:** Enterprise integration reference architectures and pattern libraries, interface monitoring and observability, canonical data modeling and identity resolution, data quality and semantic validation, release governance, security and compliance alignment, technology evaluation and vendor selection

**Leadership & Delivery:** Team leadership and mentoring; capacity planning; roadmap and backlog ownership; executive-to-engineering communication; vendor and partner management; payer-provider and clinical stakeholder alignment

## INDEPENDENT ENGINEERING

**ImOnFHIR.com** | **Founder & Architect** 2026 – Present

- Built and operate imonfhir.com end to end (architecture, engineering, product, release): a personal interoperability ecosystem for testing standards workflows on synthetic data and tracking how standards change. Stack: TypeScript/Next.js, PostgreSQL/Prisma, HL7 Validator, Vercel, Cloudflare.
- Designed the data model around a canonical PostgreSQL source of truth with FHIR servers as replaceable projections; synthetic payer, member, and provider scenarios are projected into FHIR, read back, and diffed against the original to expose lost context, provenance, and completeness.
- Engineered a layered validation pipeline (HL7 Validator structural and profile checks, then terminology, cross-resource, identity, and ~39 semantic rules across provider, coverage, diagnosis, and network domains) that consolidated 185 raw validator issues into 36 distinct findings on a reference case; a matching display name never counts as an identifier.
- Shipped tooling for Da Vinci PAS Submit/Inquiry, DTR questionnaire analysis, CDex attachment analysis, payload compare, and IG package/version diffing with version-gap reporting and CMS-0057-F payer-mandate presets; scheduled jobs census the published FHIR IG ecosystem and probe live server endpoints.
- Building HORIZON (horizon.imonfhir.com), a standards-intelligence layer: pluggable adapters ingest HL7 work group lists, the SMART on FHIR group, and chat.fhir.org; AI-assisted analysis tracks discussions to their outcomes and flags decisions that change or drive spec changes, under a hard AI spend cap, with no person-level data published.
- Instituted tiered release governance (stable / preview / preview-only / never-public) with capability kill-switches, security gating, zero-egress client-side processing, rate-limited NPPES lookup, and a published security posture; AI-assisted development ships only through CI gates (unit, end-to-end, secret scanning).

## PROFESSIONAL EXPERIENCE

**eviCore (Cigna / Evernorth)** | **Senior Solutions Architect, FHIR Interoperability (contract)** Aug 2023 – Sep 2026

- Led the integration and API architecture for payer-facing interoperability programs driven by CMS-0057-F — prior authorization (PAS), documentation templates and rules (DTR), clinical data exchange (CDex), and subscription-based

status notification — owning integration patterns, API contracts, authorization boundaries, error handling, and versioning standards.

- Defined target-state FHIR data models and canonical mappings linking Claim, ServiceRequest, Condition, Encounter, Coverage, Practitioner/PractitionerRole, Patient, and Organization, establishing reusable clinical context across interfaces and downstream consumers.
- Served as technical authority and integration liaison across product, engineering, data, compliance, security, and business stakeholders; led client API readiness, end-to-end testing coordination, and payer-provider workflow alignment.
- Defined data-quality and semantic-integrity evaluation for exchanged payloads — completeness, mapping fidelity, clinical traceability, and downstream processing impact — converting integration risk into prioritized engineering requirements.
- Built API observability, monitoring, and platform-usage reporting that gave leadership operational visibility into interface behavior and grounded prioritization in data rather than intuition.
- Developed multi-tier provider network mapping logic and data transformation tooling (SQL, VBA), improving network onboarding speed and configuration accuracy.

**Vital** | **Senior Solutions Architect** Nov 2022 – Feb 2023

- Led technical discovery, solution framing, and integration architecture for hospital and digital-health customers; translated clinical, operational, and executive goals into executable specifications, interface designs, and workflow models (SQL rules, YAML clinical configuration, TypeScript workflow models).
- Supported RFP/RFI responses and client-specific solution narratives spanning clinical workflow, patient engagement, and data-exchange requirements.

**Olive AI** | **Technical Architect** Feb 2022 – Nov 2022

- Directed enterprise integration and solution architecture for healthcare automation across provider environments, bridging customer IT, executives, operations, security, and internal engineering on EHR, middleware, and data-exchange design.
- Led and mentored a team of solution architects and implementation engineers — setting technical standards, reviewing designs, and managing workload across concurrent customer deployments.
- Authored a customer-facing Technical Infrastructure Implementation Playbook standardizing integration practices, timelines, and ownership; built reusable onboarding frameworks that improved implementation consistency and reduced deployment timelines.

**Baystate Health** | **Clinical Software Engineer / Nurse Informaticist** Aug 2018 – Feb 2022

- Led a cross-functional informatics and development team delivering patient-access and integration products — hiring input, onboarding, mentoring, design and code review, sprint planning, and release management across a multi-year roadmap.
- Built, configured, and supported HL7 v2.x interfaces between Cerner Millennium and downstream clinical, ancillary, registration, and patient-facing systems — interface engine channel development, message mapping and transformation, testing, and 24/7 production troubleshooting (Cerner OpenLink certified).
- Led informatics delivery for SMART on FHIR integration embedding MyBaystate into Cerner PowerChart, aligning interface design, testing, implementation artifacts, and clinician adoption.
- Owned the patient-facing integration roadmap for the MyBaystate portal and CRM, converting user feedback into technical specifications and CI/CD-managed releases; shipped chatbots and digital intake workflows that reduced access friction during COVID-era demand shifts.
- Deployed RPA-enabled HIM workflow automation enabling annual repurposing of 7.5 FTEs, a measured reduction in manual data entry and downstream integration load.

**UConn Health & Waterbury Hospital** | **Registered Nurse** May 2014 – Aug 2018

- Delivered direct patient care across emergency, ICU, intermediate care, behavioral health, and interventional settings; served as Epic and Cerner super user, leading workflow improvement, documentation optimization, and clinical-to-IT translation.

## CREDENTIALS, EDUCATION & AFFILIATIONS

**Certifications:** Informatics Nursing (RN-BC), ANCC • CPHIMS, HIMSS • Cerner/Oracle: OpenLink (interface engine), SMART on FHIR, Dynamic Documentation, Clinical Reporting

**Education:** BSN, University of Hartford (2016) • ADN, Naugatuck Valley Community College (2014)

**Affiliations:** HL7 International — Individual Member • HIMSS • ANIA