

**Scalable Medicaid Data Integration** - A Medicaid-focused organization transformed its healthcare interoperability with PilotFish. By automating EDI and HL7 workflows, streamlining data validation, and ensuring compliance, the client significantly improved operational efficiency and data accuracy. PilotFish's scalable architecture enabled the seamless processing of high transaction volumes, reducing errors, cutting processing time, and empowering self-sufficient workflows. Positioned for growth, the client now delivers faster, more reliable Medicaid services while setting a new standard for healthcare integration.

# Simplifying Healthcare Integration: Overcoming the Challenges of Interoperability

The healthcare industry faces a daunting challenge: integrating a vast ecosystem of diverse systems, from legacy platforms to cutting-edge cloud-based solutions. Organizations must navigate various operating systems, databases, and formats ranging from modern APIs to HL7, EDI, and proprietary systems—all while ensuring seamless interoperability. Achieving this level of integration is critical to driving operational efficiency, improving patient outcomes, and reducing costs.

## **Balancing Legacy Systems with Modern Innovation**

Upgrading or replacing legacy systems to meet new technology standards is often costly and impractical. However, organizations can unlock their full potential by implementing an integration layer that bridges the gap between old and new systems. This integration layer facilitates connectivity and data transformation, enabling organizations to innovate and operate without overhauling existing infrastructure.

## PilotFish: Bridging the Interoperability Gap

The PilotFish eiSuite integration engine serves as the ideal ntegration layer, enabling organizations to connect disparate systems easily and efficiently. By "loosely coupling" systems of various ages, vendors, and technologies, PilotFish provides unparalleled flexibility and adaptability, eliminating the need for costly and complex hard-coded integrations.

# The PilotFish eiSuite -Quickly Integrate Anything to Anything

PilotFish is trusted across the healthcare ecosystem by payers, providers, medical device and equipment vendors, cloud services, clearinghouses and health information exchanges, and other entities needing seamless, interoperable solutions. Its intuitive graphical "Assembly Line" interface empowers implementers to connect any system, regardless of its data model, design, or architecture. Fully compatible with all major databases, operating systems, data formats, and communication protocols, the eiPlatform offers unparalleled benefits:

- Streamlined Integration: A common model integration approach simplifies one-to-many and many-to-one connections, dramatically reducing the number of interfaces required for internal and external applications.
- Consistent Implementation: A unified "Assembly Line" process standardizes configuration, management, and execution across data formats and protocols, minimizing the tools and technologies IT teams must master.
- Support for Modern Standards: Immediate compatibility with emerging standards like HL7 3.x, CCDA, CCD, and FHIR, while continuing support for standards such as HL7 2.x, X12 EDI, CSV, and proprietary formats.
- Scalability and Efficiency: Leverage Docker containerization for faster deployments and scalable operations, ensuring your integration solution grows with your needs.

**PilotFish Powers Healthcare IT** – An information systems leader overcame complex HL7 and EDI integration challenges with PilotFish. By automating workflows, enhancing data quality, and streamlining processes, the firm transitioned to fully electronic operations without disrupting existing systems. With reusable interfaces and advanced analytics capabilities, PilotFish delivered rapid ROI, increased provider satisfaction, and empowered the client for future growth.

#### **Unlocking Real-Time Data for Analytics**

**Leader** – The client needed a solution for realtime HL7 data integration. PilotFish exceeded expectations, streamlining data ingestion, transformation, and validation. With tools for HL7 parsing and reusable components, they achieved seamless and near real-time data integration. Empowered by PilotFish, the client now drives operational efficiency, improves margins and gained high ROI prepared for future growth.

Lab Data Large Scale Integration – A leading lab faced overwhelming integration demands from healthcare and insurance partners, jeopardizing growth. PilotFish rearchitected their approach with a centralized integration platform, automating HL7 and ACORD data transformation, regression testing, and partner validation. By standardizing processes and reducing complexity, the lab streamlined operations, accelerated timelines, and unlocked new revenue.

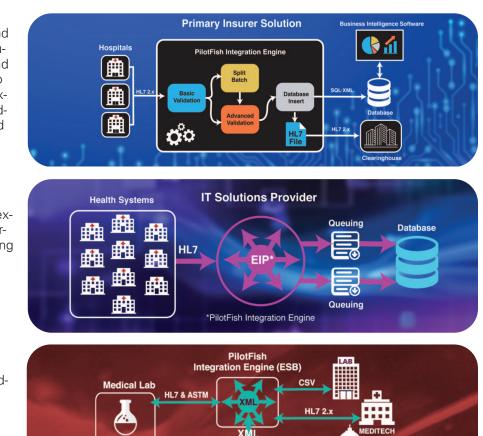
**Seamless EHR Integration** – A leading solutions provider needed real-time integration with HL7based EHRs to deliver accurate dietary orders in acute care settings. PilotFish enabled seamless transformation of HL7 data into JSON API calls, ensuring guaranteed message delivery, error-free processing, and patient safety. With reusable interfaces and rapid deployment capabilities, the provider has scaled nationwide, achieving faster onboarding with reduced costs.

## Seamless Transition and Growth Enabled - $\ensuremath{\mathsf{A}}$

nonprofit serving 40,000+ patients annually faced bottlenecks in billing and data integration due to manual workflows and limited HL7 expertise. Partnering with PilotFish, they automated key processes, implemented HL7 interfaces, and transitioned easily to NextGen. With streamlined operations and reduced errors with faster insurance verification they could focus on delivering vital services while preparing for future growth.

#### Solving Multi-Vendor HL7 Integration Chal-

**lenges -** A regional hospital management company faced the complexities of integrating diverse systems, third-party vendors, and legacy technologies. Leveraging PilotFish they streamlined workflows for Omnicell, UniPOC, and PACS, and achieved seamless HL7 data exchange, faster onboarding, and future-proof scalability. PilotFish helped to position the hospital group for sustained growth and operational excellence.

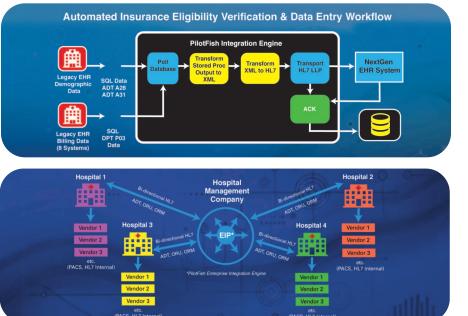




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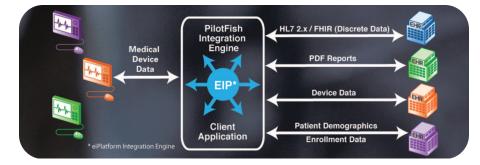
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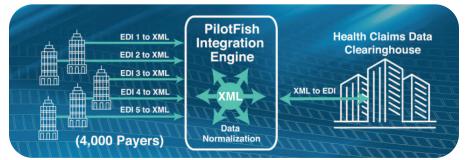
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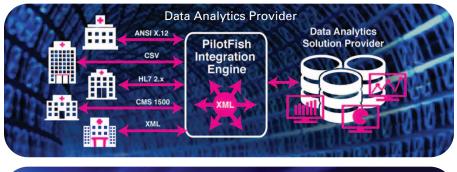


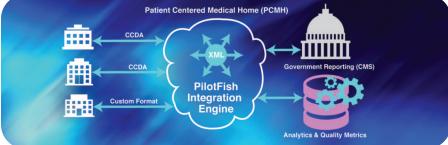












**Healthcare Claims Accuracy Solution -** Using PilotFish this firm leveraged deep technology and product expertise to build new, gamechanging solutions from the ground up for payers. The client valued the accelerated market leadership it could achieve with the out-of-thebox interoperability brought by PilotFish's integration software. It entered the Claims Accuracy space delivering advanced FHIR capabilities as well as X12 EDI functionality.

**Quality Analytics Delivered** - A non-profit that promotes quality healthcare through contracts with government and private organizations receives data feeds from a wide variety of entitities. Their IT team was challenged to build out HL7, FHIR and API integration capabilities quickly and easily. The PilotFish solution facilitated rapid interface development, so that the client could scale the solution on a demanding timeline to serve more and more hospitals.

**EHR HL7 Medical Device Integration -** Mobile health solutions and remote cardiac monitoring services provider leveraged PilotFish to support its development of disruptive monitoring technologies. PilotFish offered built-in support for the required HL7 2.x and FHIR scenarios, facilitating sending device data results to EHRs in both HL7 discrete data and PDF report form. PilotFish quickly exceeded expectations and provided substantial productivity gains.

**Re-Engineered Architecture for HIE** – Healthcare Claims Clearinghouse and HIE utilized Pilot-Fish to re-engineer and transition its claims processing architecture. PilotFish was used to create a framework capable of handling the connectivity, data manipulation and data validation to effectively replace their legacy implementation. The effort included the implementation of several hundred unique data flows providing a secure gateway for the electronic exchange of data.

**Transforming Healthcare Analytics** – A leader in healthcare analytics faced challenges with highvolume, diverse data integration across hospitals and clinics. PilotFish's integration platform transformed their processes, enabling seamless handling of X12 EDI, HL7, and custom data formats. Scalable architecture and reusable components accelerated database population, improved data quality, and delivered insights faster, driving growth and enhancing customer satisfaction.

**Patient Centered Integration -** The organization offers technology and clinical services to various healthcare providers, who are transitioning to fully integrated, population-based practices to meet health reform mandates. The client was required to communicate in a standard, secure fashion dictated by the IHE Profiles for interoperability. With PilotFish the client was able to meet its healthcare interoperability challenges and pressing timelines.

# **PilotFish Product Specifications**



SUPPORTED PLATFORMS
Windows
Linux / Unix / AIX / HP-UX
Mac OSX
SUPPORTED APPLICATION SERVERS
Windows Service
Apache Tomcat
JBoss / WildFly
WebSphere Application Server (WAS)
Glassfish
WebLogic
Any Other Java Container
SUPPORTED DATABASES
Any JDBC DB
(MS SQL Server / Oracle / DB2 / Postgresql /
MySQL / MariaDB / Java DB / Derby / H2)
MS Access
MongoDB
SUPPORTED FORMATS
HL7 2.x / 3.x / FHIR
CCD / CDA
EDI X12
Delimited and Fixed-Width Files (CSV/Positional/Custom)
Key / Value
XLS / XLSX
DICOM
XML
JSON
PDF
NCPDP
Binary (.wav / .jpg)
SUPPORTED PROTOCOLS
Database (JDBC)
Email (IMAP / POP3 / SMTP)
Local / Network File System
FTP / SFTP / FTPS
TCP / UDP Sockets
HL7 LLP
HTTP / HTTP/S
OAuth2 (JWT / Token Introspection)
Messaging (JMS / MQ / MSMQ / RabbitMQ / Kafka)
EMR API Call
Web Services (SOAP / RESTful)
Command-Line Invocation (CLI)
Active Directory / LDAP
Custom Connectors
IoT (Serial / MQTT)
AI API's
AS2
Cloud Storage (S3 / Google / Azure)
ARCHITECTURE
Consistent "Assembly Line" Pattern
Configuration Over Code
Component Driven
Extensible Via Open APIs
Scripting Support (via GraalVM: JavaScript, Python, etc.)

HL7 FEATURES
HL7 Friendly Name Option
HL7 Lenient Parser
Ability to Read Any Version of HL7
Inline HL7 Documentation
Transaction Templates for HL7, FHIR and CDA
EDI X12 FEATURES
Parse any EDI X12 Transaction
EDI Friendly Name Option
SNIP Validation 1-3 Included, 4-7 Available
Inline Code Set Definitions (Optional Code Maintenance)
Transaction Templates for EDI
DATA TRANSFORMATIONS
Graphical, Drag & Drop Data Mapping
No Coding or Custom Scripting Required
Standards Compliant (W3C XSLT)
Computationally Complete
WORKFLOW PATTERNS SUPPORT
Sequencing
Splitting / Merging
Process Orchestration
Branching
Conditional Logic
Iteration
ERROR HANDLING
Easy, Hook-Based Customized Error Handling
Configurable Text-Based Logging
Flexible Proactive Notifications
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