



FHIR Today, Interoperability Tomorrow

Solution Brief

Healthcare has become a data challenge. With the advent of FHIR and the drive toward interoperability, we are closer to a future where episodic, intermittent care is replaced by a holistic, “longitudinal” view of the patient to promote life-long health. Choosing the right data platform can help get you there.

Interoperability

Share data, save lives, conquer costs. Modernize your data platform and embrace interoperability via FHIR with one of [MongoDB’s partners](#).

Beyond HIPAA

Patient privacy and data protection are fundamental to all healthcare technologies. Go beyond HIPAA compliance with the latest in database security and encryption.

Patient 360

Improve health outcomes and customer experience with a connected, longitudinal health record that reflects patients’ healthcare over their lifetime, not just the last time they visited a clinic.

Connected Health

Ingest, store, analyze, and act in real time to the data from millions of connected health devices in use today – and billions more tomorrow.

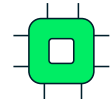
IT Drivers



FHIR



Multi-Cloud Agility



Artificial Intelligence



Legacy Transformation



Data Privacy

“The data in our Universal Identity Manager platform fits perfectly with the document model of MongoDB.”

MIKE OCHS, CHIEF TECHNOLOGY
OFFICER, EXPERIAN HEALTH

Healthcare is a Data Challenge

Pick the Platform That Can Meet It

MongoDB is uniquely suited to an interoperable future. Both MongoDB and FHIR natively support the JSON format, the standard that supports rich data structures and objects prevalent in healthcare such as patient data, claims, policies, and treatment information. In addition, the flexibility of the document model at the heart of MongoDB is uniquely qualified to adapt to future data demands. Be ready for FHIR schema updates and new regulatory requirements with MongoDB.

How We Can Help: Selected Use Cases



Go Beyond HIPAA Compliance

Our partners want to offer their patients and customers privacy assurances that go beyond HIPAA, and that's why they turn to client-side field level encryption (FLE) from MongoDB Atlas. With FLE, only the client can see PHI or PII data. Individual fields within a document, such as SSN or blood type, can be encrypted, with minimal performance impact to the application.

“It had to be something that could serve data very fast.”

LEVI BAILEY, AVP OF
CLOUD ARCHITECTURE
HEALTHCARE
INTEROPERABILITY
SERVICES AT HUMANA



The Fastest Way to Build FHIR Applications

When the U.S. Department of Health & Human Services announced its \$50,000 “Secure API Server Showdown,” the race was on. To win Stage 1 of the competition, teams had to be the first to build a secure FHIR server.

After a vigorous competition, the team at Asymmetrik won with their reference implementation of a secure, open source FHIR server using MongoDB as the system of record.

“FHIR implementation using Node.js and MongoDB is now available for industry developers to build upon.”

U.S. DEPARTMENT OF
HEALTH & HUMAN SERVICES



Patient 360

MongoDB is built to bring together data from disparate databases, systems, and data formats to create a single view of the patient. And with MongoDB's dynamic schema, you're ready to enrich your view of the patient with data from new sources, such as connected health devices. What's more, with [Realm](#) Mobile Database and MongoDB Realm Sync you're also ready to sync data to and from a patient's smartphone, even when the connection is intermittent.

“Moving forward, we have no concerns about our database slowing us down as our business continues to grow.”

MIKE OCHS, CTO,
EXPERIAN HEALTH



From Big Data to Precision Medicine

From sequencing genomes to personalized medicine, MongoDB is trusted by the world's leading research institutes and pharmaceutical firms to power the data science behind tomorrow's medical breakthroughs. With its modern, non-relational database, MongoDB underpins many big data systems, not only as a real-time, operational data store but in offline capacities too, making it easier to crunch more data and serve groundbreaking medical insights.

MongoDB is helping the 100,000 Genomes Project reduce the processing time for complex queries from hours to milliseconds.

GENOMICS ENGLAND

MongoDB – The general-purpose data platform for modern applications.

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