

INTERSYSTEMS HEALTHSHARE:
A STRATEGIC PLATFORM
FOR BREAKTHROUGH
HEALTHCARE SOLUTIONS

A Unique Business Opportunity for InterSystems Application Partners

INTERSYSTEMS HEALTHSHARE: A STRATEGIC PLATFORM FOR BREAKTHROUGH HEALTHCARE SOLUTIONS

Executive Overview	1
What is HealthShare?	2
What is a HealthShare Application Partner?	3
Why build applications on an interoperability platform such as HealthShare?	3
Does HealthShare make sense for me if I don't deal with clinical data?	3
What are the advantages of becoming a HealthShare Application Partner?	3
How do Application Partners use HealthShare?	4
What key technologies are in HealthShare?	4
Can HealthShare take advantage of any and all data in the healthcare environment?	5
Who are some of the other HealthShare Application Partners, and how are they developing with HealthShare?	5
How can my use of HealthShare evolve and grow over time?	5
What are the standards and profiles HealthShare supports for interoperability and document exchange?	6
How does InterSystems support its Application Partners?	6

Executive Overview

The healthcare software market offers exciting and significant growth opportunities. Yet, while some healthcare software companies enjoy incredible growth, others under-perform, languish, or even fail. There are many criteria for success in this market, but two are particularly critical:

- **Breakthrough solutions:** In every part of the world, healthcare buyers are demanding broad and deep new capabilities that eliminate cumbersome processes, deliver breakthrough results, and advance the missions of their organizations.
- **Connected care capabilities:** The future of healthcare depends on seamless interoperability, both within the organization and with the broader healthcare community. Buyers are increasingly demanding connected care solutions across a multitude of evolving industry standards.

InterSystems HealthShare provides the perfect platform to build new healthcare applications or to add breakthrough capabilities, services, and connected care solutions to existing applications. Using HealthShare, developers can quickly achieve high-impact benefits:

- **Streamline development and accelerate time to market:** Bundled standards and profiles help dramatically reduce the effort required to build and maintain a multitude of connected care interfaces, and free you to focus on developing high-value-add capabilities in your solution.

- **Quickly add breakthrough value and compelling differentiation:** Rapidly add the breakthrough capabilities most sought-after by today's healthcare organizations, including embedded real-time analytics; advanced processing of unstructured data such as text and signals; and connectivity among clinical, operational, and financial applications.
- **Appeal to the broadest markets:** InterSystems technology powers more than 50% of U.S. healthcare, including nearly all of the largest and most prestigious providers. Our partners offer a wide array of solutions that help customers organize, deliver, and pay for healthcare across the globe. Solutions based on InterSystems technology are widely deployed and easily connect to other applications already in your customers' organizations. A distinguishing characteristic of InterSystems technology is unmatched scalability, ranging from cost-effective solutions at smaller organizations to the most massive and complex healthcare solutions in the world.

Becoming a HealthShare Application Partner is an investment not only for today, but also for the future and the unanticipated challenges you will inevitably face as an application provider.

What is HealthShare?

HealthShare is a standards-based, service-oriented platform that enables the rapid development of connectable applications and services, as well as new functionality and interoperability among your existing offerings.

Some Application Partners have developed their solutions from the ground up based on HealthShare. Others use the technologies to provide a connectable, interoperable, scalable, and secure platform as the server-side backbone of applications built in .NET, Java, and other front-end languages. And still others use HealthShare to complement existing applications with connectivity, interoperability, workflow, rules-based business processes, and advanced analytics through a service-oriented architecture.

Here are just some of the challenges HealthShare can help you address:

- Provide connectivity among financial, operational, and clinical applications across the entire healthcare delivery system.
- Stay up-to-date on international and national healthcare industry standards and profiles for clinical and administrative data exchange.
- Enhance and update workflow in your applications as customer needs change.
- Integrate with other systems to enable the secure, relevant sharing of health records among stakeholders.
- Provide analytics and dashboards that aggregate and present relevant data from disparate sources (such as patient history) to decision-makers in real time, in near real time, or just in time (for analytics).
- Gain a solid technology platform for evolution and growth in the healthcare market, ensuring that your solution can cost-effectively address smaller customers' needs while also delivering unmatched performance in the world's largest healthcare organizations and networks.

What is a HealthShare Application Partner?

A HealthShare Application Partner is an organization that applies its domain and development expertise to create unique solutions on the HealthShare platform for its customers. InterSystems supplies the platform and offers the advice and guidance to help partners realize HealthShare's business and technical benefits in development, deployment, support, sales and marketing. The result is a winning partnership that helps us all better serve our healthcare customers and grow our businesses in a rapidly changing industry.

Why build applications on an interoperability platform such as HealthShare?

Building healthcare applications on top of an interoperability platform has shifted from an option to a necessity. InterSystems believes that in just a few short years, we will look at interoperability in much the same way that a PC application developer today regards printer drivers—yes, you could build your own drivers, but why would you?

Every healthcare application requires interoperability with a growing number of platforms, but building these capabilities yourself is a waste of time and resources, is highly distracting from your primary business objectives, and frankly isn't what your customers will want. Healthcare application developers essentially have two choices today: They can select a proven, robust, high-performance, and scalable off-the-shelf interoperability platform, or they can start the arduous journey of attempting to build and maintain their own platform—an undertaking akin to building a house room by room.

Does HealthShare make sense for me if I don't deal with clinical data?

Not all HealthShare Application Partners use clinical data as part of their solutions. For example, a HealthShare Application Partner could be a software company or an electronic medical records provider; a provider of financial systems or revenue cycle management solutions, a pharmaceutical company or a medical device manufacturer. What HealthShare Application Partners have in common is that they are motivated and forward-thinking, offer development expertise, and serve a market of healthcare stakeholders.

What are the advantages of becoming a HealthShare Application Partner?

1. You can implement HealthShare in multiple ways to best fit your business model and customer needs—building new solutions, adding functionality to existing applications, or delivering the broad, seamless connectivity increasingly required in healthcare.
2. You can focus 100% of your development efforts on your solution, rather than building out costly and complex infrastructure and connectivity. This allows you to get to market quicker with rich competitive solutions.
3. You eliminate the maintenance efforts required to keep up with standards and their certifications, freeing time and resources to focus on your core development business and customers.

4. You will be able to stay on top of a changing market because HealthShare is continually enhanced to stay current with standards and enriched with the functionality most needed to meet customers' dynamic and evolving requirements.
5. You gain access to InterSystems' team of experts, including technical, educational, and support resources that will help you streamline your development efforts and bring superior solutions to market.

How do Application Partners use HealthShare?

HealthShare is generally used in one of three ways: to **enhance** existing offerings; to **build** new solutions; or to **connect** disparate data, applications, and users.

■ Enhance

Use HealthShare to help you meet changing customer needs by enhancing the workflow and functionality of an existing offering without having to start from scratch.

■ Build

Develop new solutions for customers seeking breakthrough capabilities that will increase their competitiveness and efficiency, including embedded real-time analytics, advanced processing of unstructured data, and other high-value solutions.

■ Connect

Connect applications, data, processes, workflows, and users within the entire healthcare delivery system, which will open up more market opportunities in an industry that is consolidating and in need of broad range standards-based interoperability among providers, payers, systems, devices, and applications.

What key technologies are in HealthShare?

Three key technologies help to support how Application Partners use HealthShare to enhance, build, and connect applications:

- **Standards/protocol support:** You save coding time and resources because HealthShare provides full support for international, national, and local standards for health information exchange, with built-in object-based facilities for extending or constraining those standards to address specific project needs. InterSystems codes the standards and profiles (X12, HL7, CCD, IHE) required for interoperability of financial, operational, and clinical data among healthcare organizations, clinicians, payers, and public health agencies.
- **Data management:** HealthShare can accept and manage data from other data sources and applications. All data that passes through HealthShare is available not only for the specific customer application you are building, but for other healthcare purposes as well, such as payment, benefits determination, utilization management, health surveillance, population health management, and research.

- **Integration and connectivity:** HealthShare’s powerful integration engine Ensemble—is used to connect diverse applications already in use in a heterogeneous healthcare IT environment. Ensemble provides robust connectivity and integration with all data sources, plus event processing and workflow capabilities to tailor information flow to the way your customers work.

Can HealthShare take advantage of any and all data in the healthcare environment?

Absolutely. In addition to the industry standards and profiles required for data exchange, HealthShare handles unstructured data without requiring a predefined data dictionary. So much of the data in healthcare is in unstructured format, such as physician notes, radiology reports, discharge summaries, and other text-based information. HealthShare includes analytic capabilities that make sense of unstructured data, allowing it to be analyzed, measured, and reported on for financial performance management, quality assessment, care planning, and other initiatives.

Who are some of the other HealthShare Application Partners, and how are they developing with HealthShare?

There are many examples of HealthShare Application Partners who meet customer needs and achieve their business goals using HealthShare. Here are two:

- DTI Healthcare Professionals uses HealthShare as an integration engine to connect a patient portal application with other healthcare entities. Rather than writing all the code itself, the company saved time and resources by using HealthShare’s IHE profiles and other connectivity standards to achieve integration with other systems.
- Ascend HiT required a platform that supports all the message and data exchange protocols the company currently uses, as well as the HL7/IHE document-exchange capabilities it plans to use. In one use case, the company was able to use HealthShare to populate portions of a patient’s CCD with data from its procedural report, and subsequently communicate the CCD to a health information exchange.

How can my use of HealthShare evolve and grow over time?

Initially, you might use HealthShare to integrate your offering with disparate applications used by your customers in the same environment. Over time, you will likely find economic benefits in enriching your solutions with new functionality enabled by HealthShare, enhancing the workflow of existing solutions, or building entirely new solutions on HealthShare.

What are the standards and profiles HealthShare supports for interoperability and document exchange?

One advantage of HealthShare is that InterSystems provides support for the required interoperability and document exchange standards and profiles. The following are among the most popular:

- X12
- HL7v2, HL7v3 (CCD)
- DICOM
- CDA and CCD documents
- NwHIN Direct
- IHE profiles, such as XDSb, XCA, XCPD, PIX, and PDQ
- ITK (United Kingdom), EN13606 (Europe), DMP (France), NEHTA (Australia)
- Plus a continual focus on supporting other national and international standards that are relevant to our customers as their needs evolve.

Support for these standards and profiles can help your solution deliver patient information such as benefits eligibility, cost-of-care measures, transcribed reports from hospitals, device data, image reports from external labs, discharge summaries, and other relevant patient data into operational systems and electronic medical records. This will lead to more comprehensive information and provide support for performance improvement, care coordination, and other management efforts.

In addition, having these standards and profiles at the ready can save you significant coding time. If you already have them coded, you can take advantage of the other capabilities in HealthShare. Over time, you can invest fewer resources in trying to stay current on the standards and profiles and instead rely on HealthShare for that aspect of coding, freeing you to focus on your value-add solutions.

How does InterSystems support its Application Partners?

InterSystems has a long history of successful relationships with Application Partners. On the business side, InterSystems provides sales and marketing support for partners when appropriate. On the technical side, InterSystems provides education, mentoring, and advice from product conception through development and ongoing support. We offer online education classes and community forums, user groups, an annual summit, and in-person training at your site or ours. In addition, our sales engineers serve as your trusted advisers as you design, implement, and deploy your InterSystems-based solutions.

Our entire support organization, staffed by application developers and systems engineers, is dedicated to rapid response and your application's success, and is available 24 hours a day, every day.

InterSystems Corporation

World Headquarters

One Memorial Drive

Cambridge, MA 02142-1356

Tel: +1.617.621.0600

Fax: +1.617.494.1631

InterSystems.com

INTERSYSTEMS®