

Is Your MedTech Organization Ready for Digital Transformation?

The 5 Key Questions to Ask.



Riding the Wave of Digital Transformation in MedTech

Data, the fuel for digital transformation in MedTech, is as abundant as water. It pervades your organization and internet-connected medical devices. It fuels electronic medical record (EMR) and other healthcare information systems, providing context for patient responses to your devices or therapies. And it saturates the broader world of social media, where people are talking about how your products have affected their lives.

Are you ready to harness all of this data to drive innovation across your business and demonstrate that your products can improve care while lowering costs? Ask yourself the 5 questions below. At stake is access to new customers and success in value-based care contracts.

1. Do you have a strategy for digital transformation that includes interoperability, data governance, and analytics?
2. Can you seamlessly connect device and clinical data from EMRs and other healthcare information systems?
3. For value-based care or other outcome-based contracts, are you identifying the patient cohorts and care pathways most likely to benefit from your devices and therapies, and creating real-world evidence of efficacy and cost reduction?
4. Are you easily consuming and aggregating data in any format in real-time?
5. Do you have one information system that can supply unified data from all sources for advanced analytics, machine learning, and artificial intelligence initiatives?

Unless you can answer 'yes' to all of these questions, a fresh approach to digital transformation may be in order.

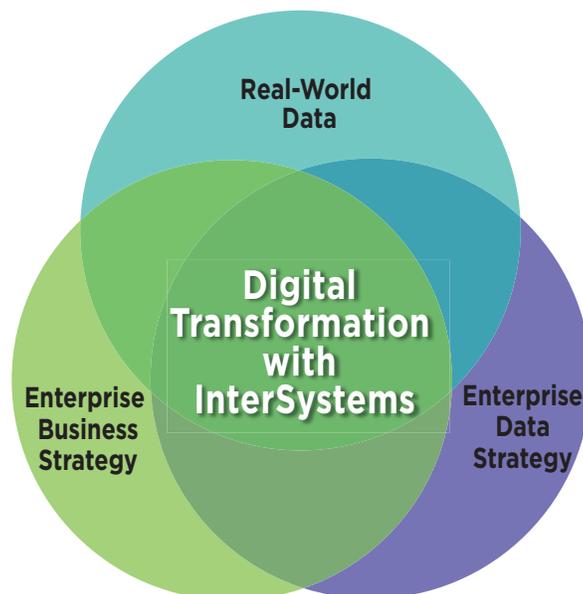
“INTEROPERABILITY IS ARGUABLY THE BIGGEST CHALLENGE FOR MEDTECH, INCLUDING COMPLYING WITH VARIOUS NATIONAL AND INTERNATIONAL STANDARDS AND PROTOCOLS AROUND THE EXCHANGE AND USE OF DATA.”

Deloitte Center for Health Solutions report, “MedTech and the Internet of Medical Things: How connected devices are transforming health care.” July 2018.

InterSystems: One Platform, More Value from All the Data

InterSystems software supports digital transformation by unifying and harnessing data from across your organization and external sources. InterSystems provides a single solution with all the capabilities you need to address your most pressing information technology and business challenges, including:

- Aggregating device data, whether from other systems or directly in an IoT (Internet of Things) environment
- Creating data pipelines for analytics and operationalizing advanced artificial intelligence and machine learning models
- Driving analytics-based insights to improve products and clinical care, to identify patient cohorts for marketing, and to enhance research and development
- Decreasing the time, effort and cost of post-market surveillance and other real-world data activities, and preventing adverse clinical events
- Capturing device, patient survey, and clinical outcome metrics to demonstrate the value of devices and therapies in value-based care contracts
- Reining in rising costs due to the need for multiple solutions for data aggregation, analytics, machine learning, and artificial intelligence



Digital Transformation Success Stories

InterSystems data platform, comprehensive data interoperability, clinical data informatics products, and analytics and machine learning support are used by the largest, most innovative and well-known device and solution providers in the world. These unified capabilities help you simplify your system architecture and reduce the cost of aggregating and using data from multiple types of information systems and applications.

Collaboration in Value-based Care

MedTech companies are using InterSystems technology to create solutions for value-based care collaborations. For example, identifying high-insulin-use Type 1 diabetes patients who would benefit from a move to a more advanced insulin pump device. Others are creating platforms to aggregate and normalize data from multiple information systems within their companies and from their customers' systems. The merged data can be used in applications that, for example, match patients to therapies, coordinate shared accountability for clinical and economic outcomes, and help customers create predictable, reliable processes to get the right interventions to the right patients at the right time.

Through integration with customer information systems, MedTech companies can have the data they need for analytics that clearly demonstrate the improved care and lower costs resulting from collaboration and use of their products.

Using Clinical Data to Expand Capabilities, Enhance Workflow, Increase Safety and Value

Guerbet, a provider of contrast agents and related software used in medical imaging, uses InterSystems technology as the foundation for Contrast&Care®, its contrast agent injection management solution. With the InterSystems technology, Contrast&Care:

- Integrates faster with CT/MRI devices, electronic health records, and other IT systems used in hospitals and medical imaging centers
- Presents a unified view of the patient record and injection history
- Customizes contrast dosing based on the patient's laboratory and clinical profile
- Increases safety and supports decision-making by collecting, analyzing, archiving, and sharing data on contrast products, adverse events, injector activity, estimated glomerular filtration rate (eGFR), and other risk factors before an imaging study
- Improves radiologist workflow with advanced connectivity and analytics
- Supports development of Guerbet's next generation applications powered by real-time analytics and machine learning

“THIS PARTNERSHIP [WITH INTERSYSTEMS] WILL STRENGTHEN OUR DIGITAL STRATEGY, WHICH IS DESIGNED TO SIMPLIFY DECISION-MAKING FOR HEALTHCARE PROFESSIONALS.”

Adan Martin, Head of Digital Solutions, Guerbet.



InterSystems Delivers High Performance for the Internet of Medical Things

A global supplier of smart intravenous patient-controlled analgesia infusion pumps conducted a head-to-head performance evaluation of InterSystems IRIS for Health™ data platform versus its current SQL Server-based cloud platform. InterSystems IRIS for Health was challenged with:

- Connecting over 20,000 IoT devices to monitor the status and safety of analgesia patients
- Storing more than 200 million device records
- Reducing technology costs

InterSystems IRIS for Health exceeded the company's requirements and provided ample headroom for growth. Results of the evaluation showed:

- Increased sensor data throughput, from 300/second to 19,600/second
 - Improved SQL query performance by 6,500%
 - Reduced hardware footprint (4GB memory vs 10 GB)
 - Consumed 55.5% less disk space
 - Made analytics easier to use
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InterSystems at a Glance

Whether you are developing new diagnostic imaging technology, radiology workflow software solutions, or the next implantable device or infusion pump, InterSystems provides the most robust connectivity, data management, interoperability, and analytics technology for the new generation of MedTech solutions. No company has more experience supporting clinical and business data strategies and connected health information systems than InterSystems.

- More than 1 billion health records worldwide are managed using InterSystems technology
- Customers in over 80 countries
- Nearly all U.S. academic medical centers are InterSystems customers
- All 20 of the U.S. News & World Report 2020 Honor Roll of Best Hospitals use InterSystems products
- Two-thirds of Americans receive care where InterSystems technology plays a key role
- Two of the three major EHR products that Gartner calls “Global Solutions” run on InterSystems technology
- In 2019 and 2020, InterSystems was named a Gartner Peer Insights Customers’ Choice for Operational Database Management Systems (ODBMS)¹, and also a Visionary in the 2020 Gartner Cloud Database Management Systems Magic Quadrant².
- Named Best in KLAS: Interoperability Platforms 2021 by KLAS Research

For More Information

To learn more about InterSystems solutions for MedTech, please visit: [InterSystems.com/MedTech](https://www.intersystems.com/MedTech)

¹Gartner Peer Insights Customers’ Choice constitute the subjective opinions of individual end-user reviews, ratings, and data applied against a documented methodology; they neither represent the views of, nor constitute an endorsement by, Gartner or its affiliates.

² Magic Quadrant for Cloud Database Management Systems. Published 23 November 2020. Analysts: Donald Feinberg, Merv Adrian, Rick Greenwald, Adam Ronthal, Henry Cook.