



Save more lives, time, and cost with  
ThoughtWire's Smart Hospital Suite.

Give your **Hospital**  
a **Quadruple ByPass**

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**ThoughtWire**



A hospital is full of connected or connectable things. Increasingly, **health systems** are looking to leverage this data holistically to drive smarter operations that address the most pressing problems facing healthcare delivery organizations. Technologists have always held the viewpoint that **digital transformation** not only helps solve these problems but fundamentally changes the way healthcare is delivered. While that is true, technology providers have often focused on data and missed the importance of people and their workflows in the process of transformation.

Artificial intelligence and machine learning can give clinicians the ability to predict the likelihood of patients deteriorating. But, often left unaddressed is how people on the frontline of healthcare delivery will operationalize this information in real-time and in the context of the entire value chain. AI, ML, and IoT are seen as the silver bullets for solving big healthcare problems, but what many of these solutions fail to address is the quadruple aim. The quadruple aim categorizes 4 key areas of improvement for a health system:

1. Improvements to the patient experience
2. Driving better outcomes
3. Lowering costs
4. Better supporting the care teams

## Problems We Solve:

Preventable patient deterioration

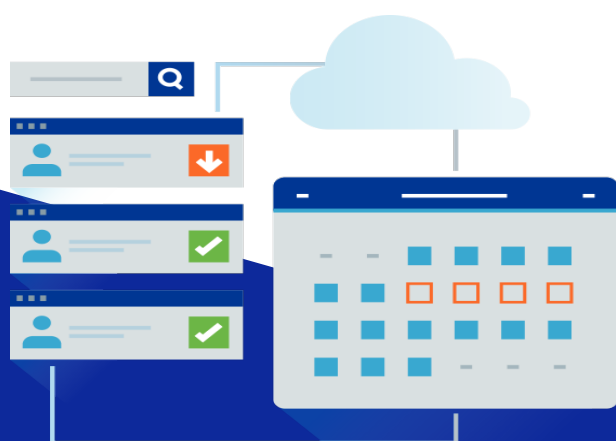
Lack of real-time information

Care team alarm fatigue

Rising wait time

Operational bottlenecks

Patient dissatisfaction





In recent years the number of smart systems, applications, and technology has exploded within health systems, most notably with the ubiquitous Electronic Medical Record (EMR), yet recent studies suggest that 34% of clinicians are dissatisfied and burnt out from digital health solutions that add more work compared to streamlining. There is no question that EMRs have helped to propel the digital transformation of healthcare and make certain aspects of hospital operation and administration easier, yet it hasn't delivered the fourth aim.

ThoughtWire's unique approach orchestrates people, process, and things to deliver on the quadruple aim for healthcare faster and smarter than existing methods. By bringing together data from a variety of sources like clinical systems, building systems, sensor devices, and people, ThoughtWire has created a data-rich digital replica of the hospital to drive more context for better outcomes. As the first **Digital Twin** platform for the Built Environment, ThoughtWire looks at the entire healthcare delivery value chain to help optimize operations in **real-time**. Our unique approach starts with people first, not just data, to deliver better outcomes for patients, lower costs for hospitals, and create a more positive experience for both care teams and patients.



# ThoughtWire's Smart Hospital Suite for Digital Twin

Our focus is on people, not only data



## EarlyWarning

**Pre-empt and prevent high acuity events through predictive analytics and digitally enabled operational responses.** Reduce Code Blue calls in a hospital by up to 61% by alerting and orchestrating nurses, doctors, and code teams to respond faster with the right information.

### APP FEATURES

- Capture vital signs quickly and easily on a mobile device
- Predict when a patient's condition is deteriorating with a predictive scoring algorithm
- Optimize workflows to enable fast response to warnings
- Deliver warnings to the needed appropriate care providers, eliminating alarm fatigue
- Collaborate between doctors, nurses, and critical response teams in real-time



## SynchronizedOps

**Orchestrates data from clinical systems, building systems, IoT devices,** and other sources to give you a complete real-time view of your operations. Use information from connected devices and assets like tagged stretchers and wheelchairs to streamline workflows and move patients through your hospital more efficiently.

### APP FEATURES

- Know when beds are free and optimize patient movement
- Increase real-time awareness for scheduling and availability
- Send messages and alerts using mobile devices
- Provide closed-loop communication
- Manage alarms and alerts intelligently



## RapidResponse

**Equip clinicians with the right information, at the right time,** to respond faster and more accurately to critical events. Better understand your patients' needs and enable quicker response to code alarms.

### APP FEATURES

- Get better visibility into relevant data
- Deliver critical information to the most appropriate care provider or security personnel at the right time
- Access information across mobile and desktop devices
- Collaborate with doctors, nurses, and ER teams in real-time
- See who is responding to events and optimize workflows

POWERED BY

# Smart Hospital Digital Twin

Turn hospital data into actionable insights – fast.

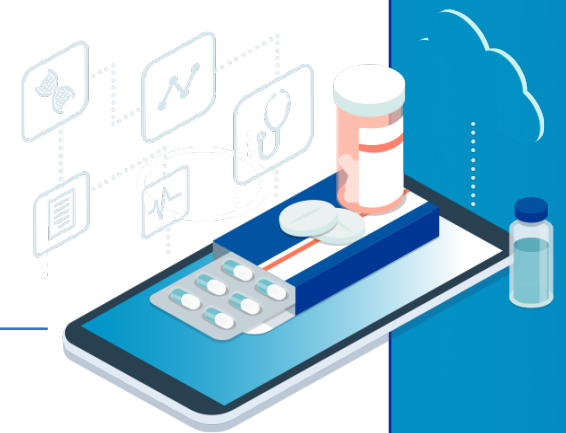
**The Smart Hospital Suite** is built on a powerful **digital twin** that brings together data from clinical and IT systems, from connected devices, building systems, and people. Rather than inundating clinicians with excessive alerts, screens, and fragmented systems, ThoughtWire's suite of smart hospital applications aims to simplify the deluge of data to just the information that matters. This intelligent orchestration is enabled by semantic linking of disparate data sets to drive context-rich information for the doctors, nurses, and staff trying to deliver better outcomes for patients. The **digital twin** orchestrates data about patients, staff, hospital operations, building systems, processes, and workflows to deliver real-time operational command and control of the entire healthcare delivery value chain.

## BENEFITS OF A DIGITAL TWIN

The Digital Twin is a living, breathing, dynamic representation of the past, present, and future state of hospital operations

Turn disparate real-time data into contextualized insights faster than legacy models and methods such as traditional integration engines

One of the fastest in-memory graph databases enables Intelligent context processing for real-time IoT, OT, and IT data



# What's under the hood

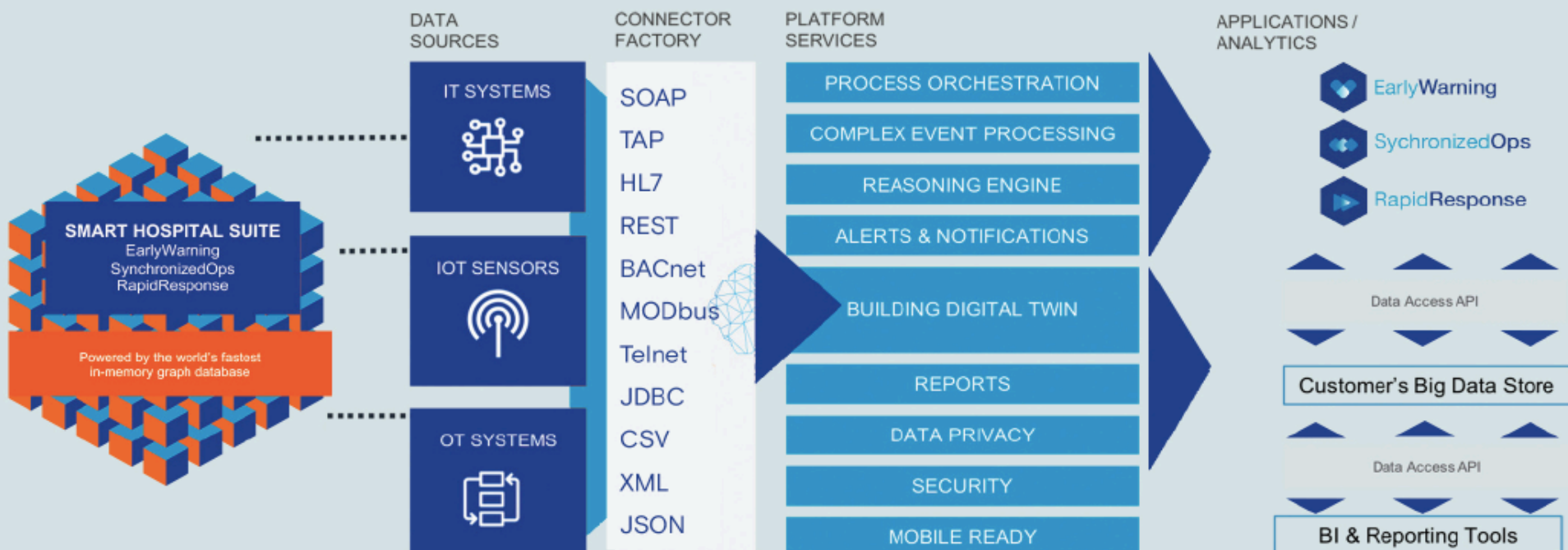
All of our applications run on a set of common **Core Services** that allow us to do very complex queries and computations simply.

- **An intelligent data** overlay that brings together your systems, devices, and workflows putting them into a single pane view for users to take precise action. We call this your **Digital Twin for Smart Hospital**. It is the lifeblood of your applications
- **A framework** that replaces your myriad of manual workflows with a dynamic workflow orchestration engine
- **A real-time reasoning engine** for workflow automation
- **Powered by one of the fastest in-memory graph databases** that provides a highly performant and scalable solution for processing context-rich data generated by the built environment.

Leave the data sourcing to our **Connector Factory**. It is a proven connectivity layer that orchestrates pre-built connectors to simplify and streamline integration and communication with a wide variety of protocols including but not limited to :

- HL7 (v2, v3, FHIR)
- JDBC/ODBC
- RESTful
- SOAP
- File-based connectors such as CSV, XML, JSON
- Telnet
- Modbus

## How it works.



**Contact us today**

See what Digital Twin can do for you and the people in your facility.



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