



# Enhancing patient experiences with converged connectivity solutions

Solution Brief



Setting new standards in patient experiences, inspiring staff dedication and optimizing facility efficiency

## Belden makes the connections that prepare the Healthcare market for tomorrow

The healthcare landscape is full of challenges and opportunities for innovation. Advancements in technology and care delivery promise improved outcomes. However, obstacles like access, cost, equity and workforce issues prevent many facilities from moving forward. Resolving these issues is essential to building a more equitable, efficient and patient-centered healthcare system.

### Key value drivers

These four key value drivers impact healthcare decision-making:

Value drivers	Implication in Healthcare
Reliability	Delivering timely, efficient and effective care
Cost optimization	Balancing the costs of frontline clinical staff and equipment
User experience	Taking a patient-centered, equitable approach to every step in the hospital experience
Safety & sustainability	Creating a safer, more secure hospital for patients and employees that is also better for the environment

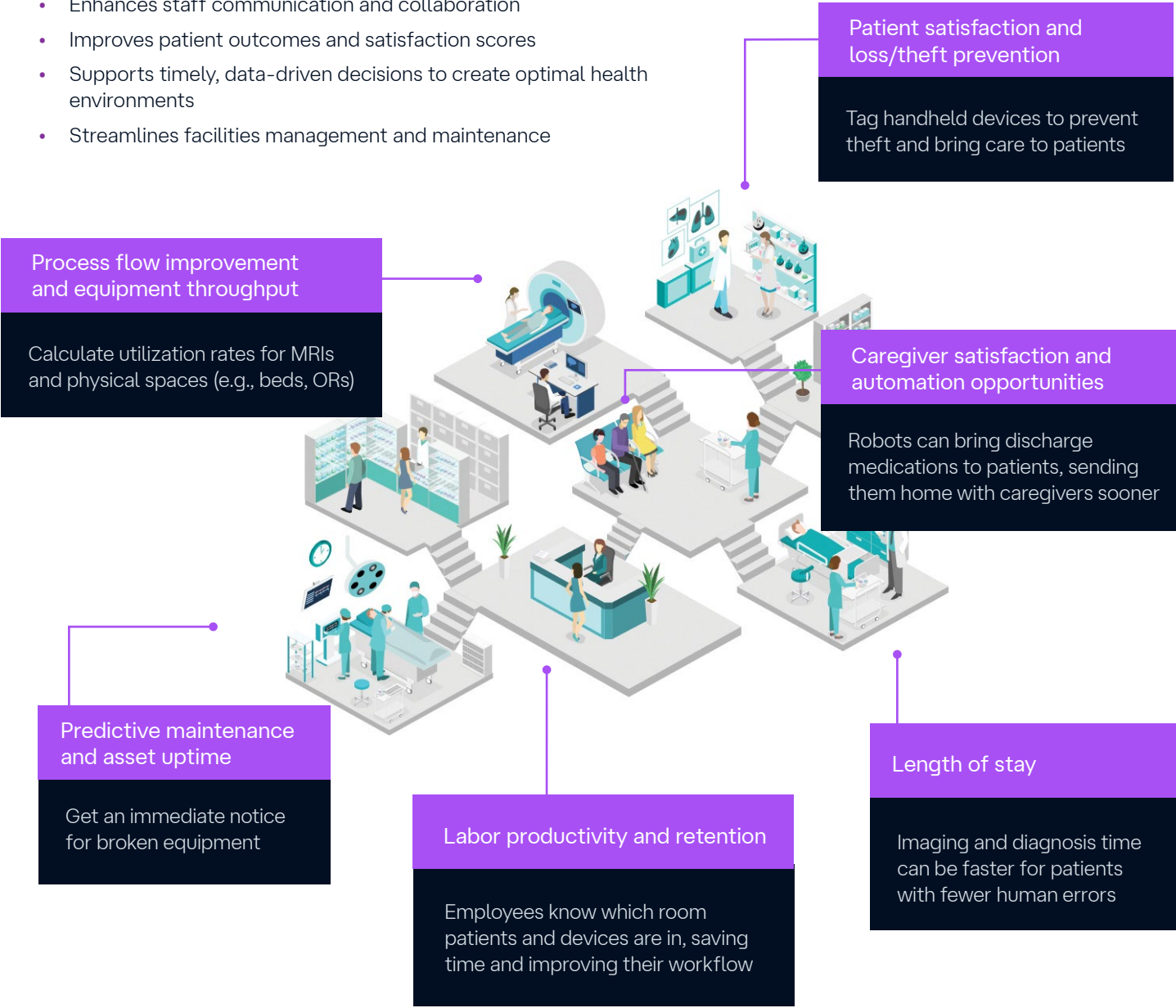


# Revolutionizing Healthcare with intelligent connectivity

With Belden acting as a hospital's central nervous system, technology revolutionizes healthcare facility design by integrating smart systems to create truly intelligent healing spaces. A converged network integrates and unifies clinical technologies like enterprise networks, wireless and nurse call systems. It also brings patient engagement platforms onto a single control plane.

By converging these innovative technologies, Belden delivers an improved, patient-centered experience that:

- Empowers clinicians to deliver predictive, personalized and equitable care
- Enhances staff communication and collaboration
- Improves patient outcomes and satisfaction scores
- Supports timely, data-driven decisions to create optimal health environments
- Streamlines facilities management and maintenance



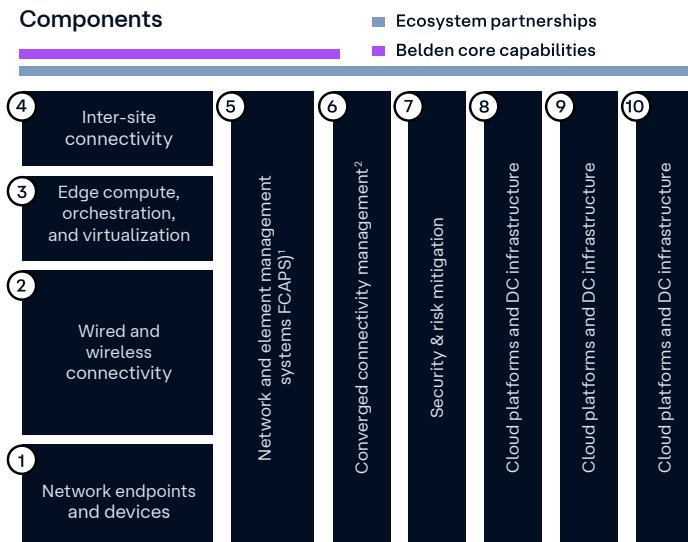
# Connecting technology, people and data for a healthier future

With Belden's help, your converged network solution will enhance patient care throughout your hospital. From doctors and nurses to patients and families, asset optimization can improve experiences for all stakeholders. It creates unified environments. Our experts combine technology and apply industry-leading best practices. They address the intricacies of your healthcare environment, people and systems.

Belden is evolving its approach to addressing the biggest pain points in healthcare. Our capabilities combine our network and data products, services and software into building blocks. These offer a simpler, smarter and more secure path to achieve your goals.

Together, we will connect every corner of your hospital, integrating equipment, people, processes and technology.

## Components



## The benefits of a converged network

### Cost efficiency:

Eliminate the need for separate voice and data infrastructures, leading to savings in equipment, maintenance and management costs. A single network infrastructure optimizes resource utilization and streamlines IT operations.

### Seamless patient connectivity:

Enable seamless, integrated and reliable connectivity for patients across the hospital. They can enjoy high-speed internet, voice services and video streaming in their rooms and public spaces.

### Simplified cabling infrastructure:

Converged networks are faster and easier to deploy, significantly reducing the amount and complexity of cabling and hardware needed. They also make it easier to connect devices directly to the network for data collection and sharing.

### Enhanced staff collaboration:

Staff members can use unified communication tools to connect, share information and collaborate on patient requests or operational tasks. This improves staff efficiency, coordination and service delivery.

### Internet of Things (IoT) integration:

Hospitals can deploy smart room controls, environmental monitoring systems, energy management solutions and security systems connected to the network and each other. This enables centralized control and monitoring, energy efficiency, predictive maintenance and enhanced patient comfort and security.

### Data analytics and insights:

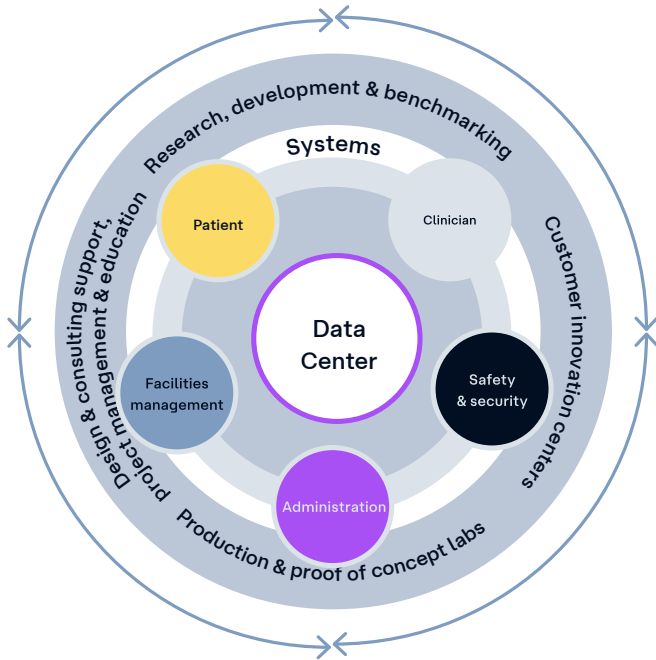
Hospitals can gather and analyze data about patient behavior, preferences and operations to gain valuable insights that improve performance.

### Scalability and future-readiness:

Hospitals can scale network infrastructure to support new services, additional devices, evolving patient expectations and technological advancements.



# Our approach to shaping the future of Healthcare





Our comprehensive approach to network connectivity and infrastructure support has earned the trust of healthcare facilities for decades. With the expertise of our Customer Innovation Centers, we ensure reliable and innovative solutions for your needs.

As your single infrastructure partner, we streamline communication and information sharing. We support your journey toward transformation every step of the way. Together, we can shape the future of healthcare excellence.

From administration to facilities management, Belden provides the foundation for reliable network connectivity. We help you optimize your healthcare technology to improve efficiency, innovation and patient care.

Systems Groups	Facility systems	Networking				Connectivity					Infrastructure support				Production and proof of concept labs			
		Cybersecurity, zero trust & firewall	Ruggedized and machine O/T optimized wireless LAN	Ruggedized and O/T optimized switches	Secure KVM and matrix switching (Thinklogical)	Fiber cabling systems	Category & single pair Ethernet cabling systems	Instrumentation, broadcast & control cabling	Instrumentation, broadcast & control cabling	Class 4, DC and PoE cabling	Racks, cabinets, enclosures & cable management	DC power and airflow management systems	DC environmental monitoring	DC security and access control	Production and Proof of Concept Labs	Customer Ideation and collaboration centers	Research, development, test & evaluation	Design, consulting, project mgmt., service & education
Administration	<b>General communications</b> (IP, voice, Wi-Fi, cellular, DAS, first responder systems)	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
	<b>Operational systems</b> (capacity management, portering, food services)	X					X	X	X						X	X		X
	<b>Patient administration</b> (records, accounting, dictation)						X									X		X
	<b>AV &amp; broadcast</b> (conference rooms, theater, patient TV, digital signage)	X			X	X	X	X		X	X	X	X	X	X	X	X	X
	<b>Miscellaneous systems</b> (kiosks, 3rd-party vendors, fleet management, PoS)	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
	<b>Network security</b> (cyber, compliance, command & control)	X			X	X	X		X		X	X	X	X	X	X	X	X

<b>Production and proof of concept labs</b>	Design, consulting, project mgmt., service & education	X	X	X
	Research, development, test & evaluation	X	X	X
	Customer ideation and collaboration centers	X	X	X
	Production and Proof of Concept Labs	X	X	X
<b>Infrastructure support</b>	DC security and access control	X		
	DC environmental monitoring	X		
	DC power and airflow management systems	X	X	
	Racks, cabinets, enclosures & cable management	X	X	
<b>Connectivity</b>	Class 4, DC and PoE cabling	X	X	X
	Instrumentation, broadcast & control cabling			X
	Instrumentation, broadcast & control cabling	X	X	X
	Category & single pair Ethernet cabling systems	X	X	X
	Fiber cabling systems	X	X	
<b>Networking</b>	Secure KVM and matrix switching (Thinklogical)			
	Ruggedized and O/T optimized switches			
	Ruggedized and machine O/T optimized wireless LAN			
	Cybersecurity, zero trust & firewall	X		X
<b>Facility systems</b>	<b>Patient communications</b> (bedside phone, neutral carrier, guest Wi-Fi, wayfinding)			
	<b>Patient systems</b> (engagement, TV/entertainment, education, training & therapy)			
	<b>Room systems</b> (thermostats, lighting, blinds & shades)			
<b>Systems Groups</b>				

<b>Production and proof of concept labs</b>	Design, consulting, project mgmt., service & education	X	X	X
	Research, development, test & evaluation	X	X	X
	Customer ideation and collaboration centers	X	X	X
	Production and Proof of Concept Labs	X	X	X
<b>Infrastructure support</b>	DC security and access control	X	X	
	DC environmental monitoring	X	X	
	DC power and airflow management systems	X	X	
	Racks, cabinets, enclosures & cable management	X	X	
<b>Connectivity</b>	Class 4, DC and PoE cabling	X	X	X
	Instrumentation, broadcast & control cabling		X	X
	Instrumentation, broadcast & control cabling	X	X	X
	Category & single pair Ethernet cabling systems	X	X	X
	Fiber cabling systems	X	X	X
<b>Networking</b>	Secure KVM and matrix switching (Thinklogical)			
	Ruggedized and O/T optimized switches			
	Ruggedized and machine O/T optimized wireless LAN			
	Cybersecurity, zero trust & firewall	X	X	
<b>Facility systems</b>	<b>Clinical communications</b> (red phones, nurse call, paging & announcement)			
	<b>Equipment systems</b> (smart beds, clocks, medical, blood banks, pharmacy distribution, telemetry)			
	<b>Diagnostic systems</b> (radiology, MRI, blood, X-ray)			
	<b>Monitoring</b> (patient tracking, patient/staff location, temperature, PhysMon, FetalMon)			
<b>Other systems</b> (EPR, synchronized clocks, OR integration, anesthesia, specimen, pneumatic tube system)				
<b>Systems Groups</b>				





# Enhancing patient experiences through converged connectivity solutions



## 1

### Administration

- General communications
- Operations systems
- Patient administration
- AV & broadcast
- Miscellaneous systems
- Network security

## 2

### Patient

- Patient communication
- Patient systems
- Room systems

## 3

### Clinician

- Clinician
- Clinical Communications
- Equipment Systems
- Diagnostic Systems
- Monitoring

## 4

### Safety & security

- Electronic security systems

## 5

### Facilities management

- Patient & guest systems
- Life safety & security
- Facility status



# Why choose Belden?



- Belden understands that one size does not fit all. Our solutions are tailored to your hospital's unique needs, ensuring optimal performance and compliance.
- Our integration expertise allows us to seamlessly integrate all your systems, from security to automation. This creates a cohesive, intelligent, and efficient hospital environment.
- Belden solutions are designed for reliability and efficiency, ensuring uninterrupted operations. This lets you focus on strategic initiatives rather than operational issues.

We transform communication and information to support your digital transformation journey.

Our unique blend of expert personnel, cutting-edge technology, strategic partnerships and relentless innovation has earned the trust of healthcare systems for decades.

1

## Deep expertise in connectivity for healthcare

We understand the challenges, digital use cases and have a robust network infrastructure to enable them

2

## Broad product portfolio

We can build a robust future-proof network based on our broad portfolio

3

## Best-in-class innovation capabilities

We can bring the right expertise and Lab environments to develop, customize and validate the best solutions for you to enable them

4

## Agnostic to your partners and other solution providers

We partner with different medical technology providers to deliver customized solutions faster for your facility

5

## Proven track record with execution

We have successfully delivered technology solutions to the healthcare industry for many years





## Belden's Enhanced Patient Experience Showcase

Discover how we're transforming the healthcare landscape by seamlessly integrating technologies to elevate patient satisfaction and boost staff retention.

Experience the hospital room of the future and learn what it takes to make it happen.

### Discover what we can do:

- Safeguard IT and medical networks to monitor and protect your critical healthcare infrastructure.
- Unify data management by integrating multiple protocols, including your building management system, into one cohesive platform.
- Connect you with our extensive network of trusted partners to bring all your healthcare solutions together.

---

Discover our best-in-class, innovative capabilities and learn how we can co-develop the right complete connection solution for you.



# Connect to what's possible.

Solution Brief



## About Belden

Belden Inc. delivers the infrastructure that makes the digital journey simpler, smarter and secure. We're moving beyond connectivity, from what we make to what we make possible through a performance-driven portfolio, forward-thinking expertise and purpose-built solutions. With a legacy of quality and reliability spanning 120-plus years, we have a strong foundation to continue building the future. We are headquartered in St. Louis and have manufacturing capabilities in North America, Europe, Asia, and Africa.

For more information, visit us at:  
**[belden.com](https://www.belden.com)**

follow us on



© 2025 | Belden and its affiliated companies claim and reserves all rights to its graphic images and text, trade names and trademarks, logos, service names, and similar proprietary marks, and any other intellectual property rights associated with this publication. BELDEN® and other distinctive identifiers of Belden and its affiliated companies as used herein are or may be pending or registered or unregistered trademarks of Belden, or its affiliates, in the United States and/or other jurisdictions throughout the world. Belden's trade names, trademarks, logos, service names, and similar proprietary marks shall not be reprinted or displayed without Belden's or its affiliated companies' permission and/or in any form inconsistent with Belden's business interests. Belden reserves the right to demand the discontinuation of any improper use at any time.