BELDEN

Enhancing Patient Experiences through Converged Connectivity Solutions

Set new standards in enhancing patient experiences, inspiring staff satisfaction and optimizing facility efficiency

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The Healthcare Market of Today Needs to Prepare for Tomorrow

The healthcare landscape faces a mix of challenges and opportunity for innovation. While advancements in technology and care delivery hold promise for improving outcomes, obstacles prevent many healthcare facilities from moving in this direction. Issues related to access, cost, equity and workforces must be resolved in order to build a more equitable, efficient and patient-centered healthcare system.

Key Value Drivers

These four key value drivers impact healthcare decision-making:

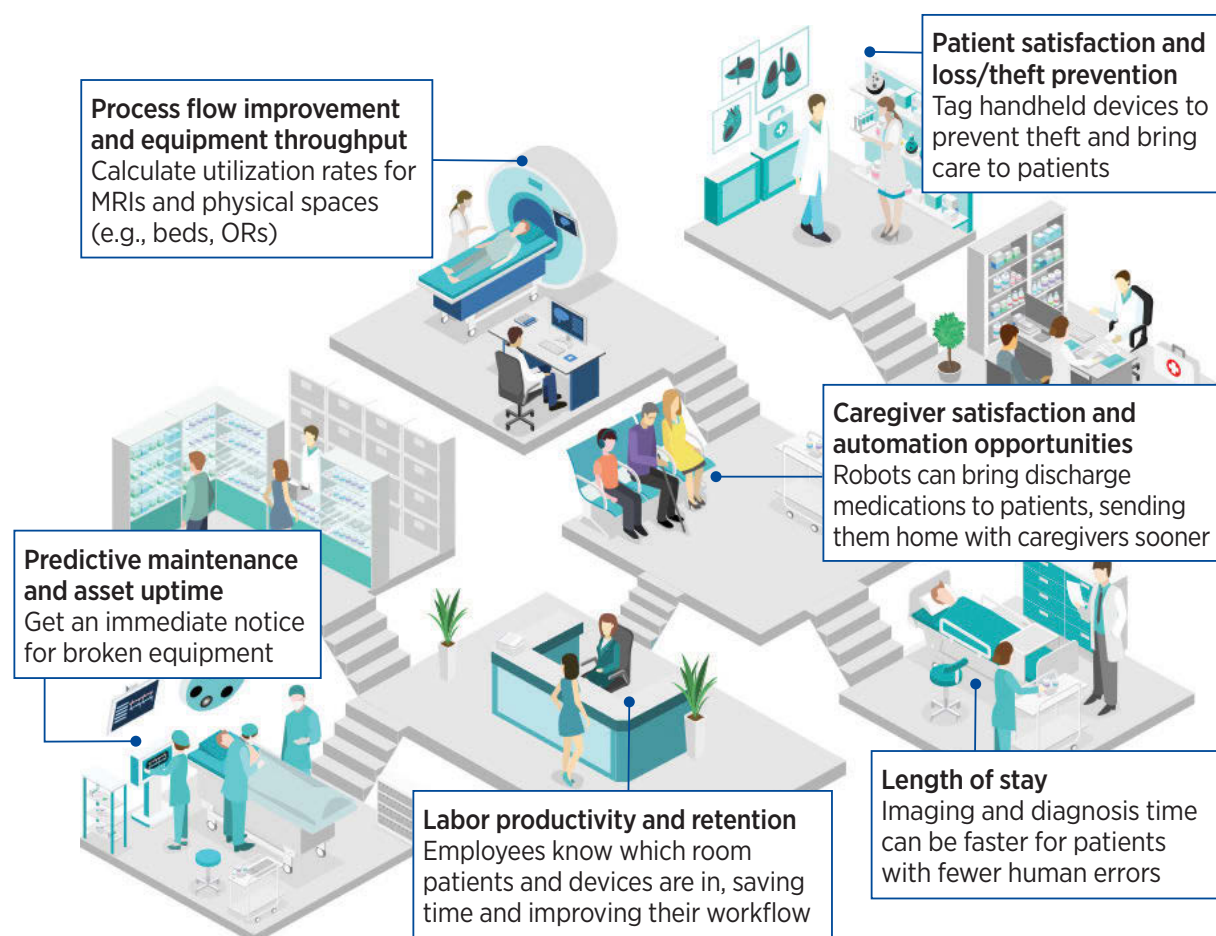| Value Drivers	Implication in Healthcare
Reliability	Delivering timely, efficient and effective care
Cost Optimization	Balancing the costs of frontline clinical staff and equipment
User Experience	Taking a patient-centered, equitable approach to every step in the hospital experience
Safety & Sustainability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

With Belden acting as a hospital's central nervous system, technology revolutionizes the design of healthcare facilities by transforming and integrating smart systems to create truly intelligent healing spaces.

A converged network integrates and unifies clinical technologies, such as your enterprise network, wireless, nurse call systems and patient engagement and entertainment platforms on to a single control plane.
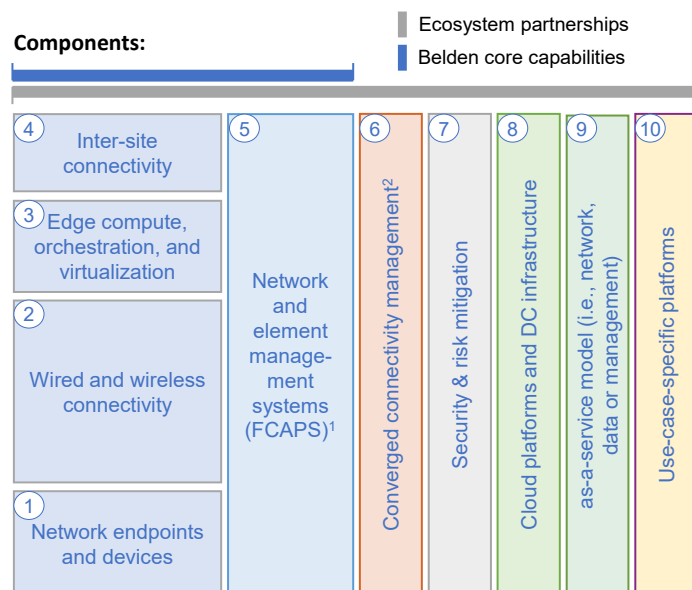
By converging these innovative technologies, Belden delivers an improved, patient-centered experience that:

- 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

Process flow improvement and equipment throughput
Calculate utilization rates for MRIs and physical spaces (e.g., beds, ORs)

Patient satisfaction and loss/theft prevention
Tag handheld devices to prevent theft and bring care to patients

Caregiver satisfaction and automation opportunities
Robots can bring discharge medications to patients, sending them home with caregivers sooner

Predictive maintenance and asset uptime
Get an immediate notice for broken equipment

Labor productivity and retention
Employees know which room patients and devices are in, saving time and improving their workflow

Length of stay
Imaging and diagnosis time can be faster for patients with fewer human errors

Bringing Technology, People and Data Together

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

Components:

Legend:
- ▮ Ecosystem partnerships
- ▮ Belden core capabilities

④ Inter-site connectivity	
③ Edge compute, orchestration, and virtualization	
② Wired and wireless connectivity	
① Network endpoints and devices	

⑤ Network and element management systems (FCAPS)^1

⑥ Converged connectivity management^2

⑦ Security & risk mitigation

⑧ Cloud platforms and DC infrastructure

⑨ as-a-service model (i.e., network, data or management)

⑩ Use-case-specific platforms

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 that offer a simpler, smarter and more secure path to achieve your goals.

We can help you connect every corner of your hospital: equipment, people, processes and technology.

The Benefits of a Converged Network

Cost Efficiency:
Eliminate the need for separate voice and data infrastructures, leading to equipment, maintenance and management cost savings. 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 so they can enjoy high-speed internet, voice services ad video streaming for their rooms and in 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 with each other, share information and collaborate with patient requests or operational tasks. This improves staff efficiency and coordination and enhances service delivery.

Internet of Things (IoT) Integration:
Hospitals can deploy smart room controls, environmental monitoring systems, energy management solutions and security systems that are 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.
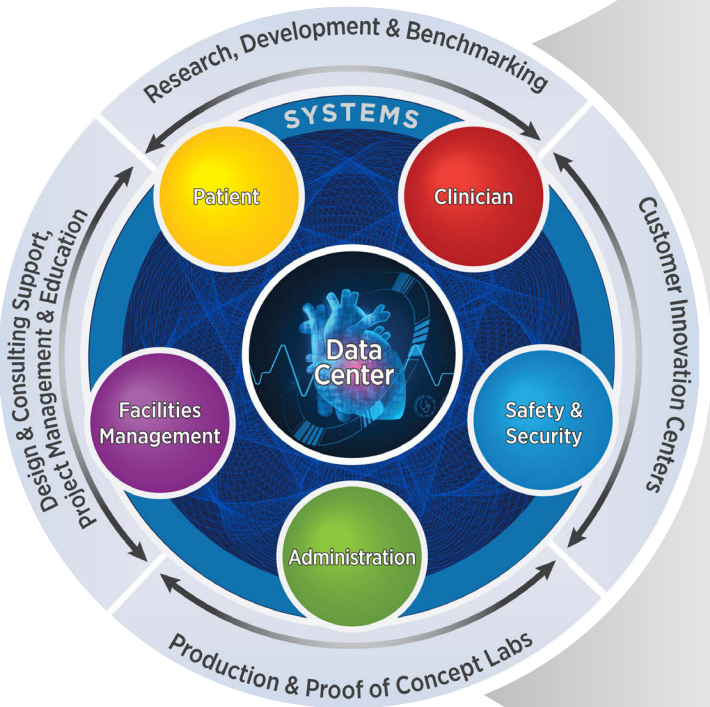
Scalability and Future-Readiness:
Hospitals can scale network infrastructure to support new services, additional devices, evolving patient expectations and technological advancements.

Our Approach to Shaping the Future of Healthcare

Our comprehensive approach to network connectivity and infrastructure support systems, combined with the expertise housed within our Customer Innovation Centers, has earned the trust of healthcare facilities for decades.

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

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

SYSTEMS GROUPS / FACILITY SYSTEMS

Administration
- **General Communications** (IP, Voice, WiFi, Cellular, DAS, First Responder Systems)
- **Operational Systems** (Capacity Management, Portering, Food Services)
- **Patient Administration** (Records, Accounting, Dictation)
- **AV & Broadcast** (Conference Rooms, Theater, Patient TV, Digital Signage)
- **Miscellaneous Systems** (Kiosks, 3rd Party Vendors, Fleet Management, PoS)
- **Network Security** (Cyber, Compliance, Command & Control)

Patient
- **Patient Communications** (Bedside phone, neutral carrier, guest WiFi, Wayfinding)
- **Patient Systems** (Engagement, TV/Entertainment, Education, Training & Therapy)
- **Room Systems** (Thermostats, Lighting, Blinds & Shades)

Clinician
- **Clinical Communications** (Red Phones, Nurse Call, Paging & Annunciation)
- **Equipment Systems** (Smart Beds, Clocks, Medical, Blood Banks, Pharmacy Distribution, Telemetry)
- **Diagnostic Systems** (Radiology, MRI, Blood, X-Ray)
- **Monitoring** (Patient Tracking, Patient/Staff Location, Temperature, PhysMon, FetalMon)
- **Other Systems** (EPR, Synchronized Clocks, OR Integration, Anesthesia, Specimen, Pneumatic Tube System)

Safety & Security
- **Communications** (Blue Phones, Elevator Phones, Mass Notification, First Responder EMS)
- **Patient & Guest** (Infant Protection, Duress Monitoring, Voice Discrimination)
- **Life Safety & Security** (Access Control, Video Surveillance, Fire Detection/Alarm/Supression)
- **Facility Status** (Escalator, Elevator, Power, Generator, IAQ, Medical Gas Monitoring, OR Suite Cameras)

Facilities Management
- **Mechanical** (Environmental monitoring, Comfort Control, Plumbing, IAQ, HVAC)
- **Electrical** (Distribution & Emergency Power, Generation, Circadian/Emergency/Special Lighting)
- **Building** (IBS/BMS, Wayfinding, Facility Radios, Light Harvesting)
- **Other Systems** (Landscaping, Transportation, Parking, Food & Beverage, Sound Masking & Background Music)

	Networking				Connectivity					Infrastructure Support				CIC (Customer Innovation Centers)			
	Cyber Security, 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	Industrial / Tactical Cabling & Sensors	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, Testt & Evaluation	Design, Consulting, Ptoject Mgmt., Service & Education
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Enhancing Patient Experiences through Converged Connectivity Solutions

1 Administrative Offices

1 Data Center/Telco

4 Parking Garage

3 Radiology

Cafeteria

Retail

Surgery **3**

Patient Rooms

Nurse Station

5

2

Emergency Room

Lobby

4

5

Workstations

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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
- Medical worker safety & patient safety: bed alert, nurse call, auto locking of the facility
- Panic alarm & buttons
- Remote monitoring

5 Facilities Management
- Communications
- 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 means we can seamlessly integrate all your systems, from security to automation, to create a cohesive, intelligent and efficient hospital environment.

- Belden solutions are designed for reliability and efficiency, ensuring uninterrupted operations so you can focus on strategic initiatives rather than operational hiccups.

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

Our unique combination of people, partnerships and perspective is why healthcare systems have known and trusted Belden for decades.

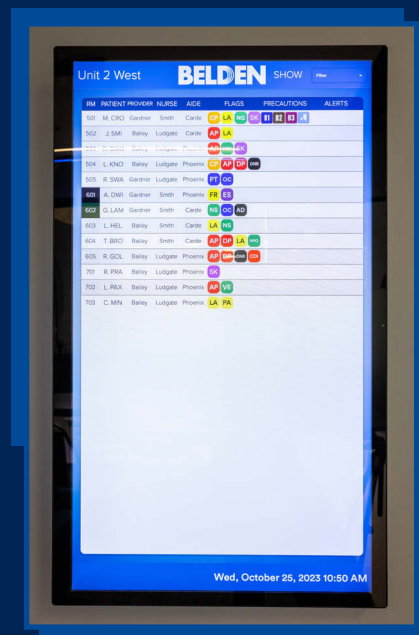| **1**	**2**	**3**	**4**	**5**
Deep expertise in connectivity for healthcare	**Broad product portfolio**	**Best-in-class innovation capabilities**	**Agnostic to your partners and other solution providers**	**Proven track record with execution**
We understand the challenges, digital use cases and have a robust network infrastructure to enable them	We can build a robust future-proof network based on our broad portfolio	We can bring the right expertise and Lab environments to develop, customize and validate the best solutions for you	We partner with different medical technology providers to deliver customized solutions faster for your facility	We have successfully delivered technology solutions to the healthcare industry for many years

Belden's Enhanced
Patient Experience Showcase

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

See what the hospital room of the future looks like – and what it takes to make it happen.

Discover what we can do:

- Safeguarding IT & medical networks so you can 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 who can help bring all your healthcare solutions together.

See our best-in-class, innovative capabilities and learn how we can co-develop the right solutions for you.

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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 www.belden.com; follow us on Facebook, LinkedIn and X/Twitter.