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VOALTE NURSE CALL BUYER'S GUIDE

**Choosing the Right Solution for
Your Hospital Construction Project**

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WHAT IS A NURSE CALL SYSTEM?

A Nurse Call System is a communication and information management system that powers communications within the nursing unit and patient rooms — connecting patients, clinicians and caregiving technology.



FOR CLINICIANS AND PATIENTS

It is a vital connection between patients and care teams, impacting patient stays and clinical workflows.



FOR IT TEAMS

It is a robust communication investment that can easily integrate the care environment.



FOR REGULATORY BODIES

It is life-safety technology required for hospitals to open.



DID YOU KNOW?

Nurse Call implementations are regulated by the Facility Guideline Institute (FGI) and various state-level regulations. Refer to all appropriate guidelines in your planning process.

WHAT DOES IT DO?

A modern Nurse Call System is a workflow tool that makes life easier for hospital staff as they tend to patient care throughout their shifts. By providing a fast, reliable connection between patients and clinicians, it can help:



Impact patient and staff satisfaction



Support improved patient safety by connecting patients to their clinicians



Simplify system administration and management

A NURSE CALL SYSTEM IS A DECADE-LONG INVESTMENT

It is an IT investment with far-reaching applications and benefits — not a simple piece of hardware to mount on the wall. So when your healthcare construction project calls for a Nurse Call System, you should:



Know the important aspects to look for when planning for your next expansion, renovation or construction project.

Go beyond the basics of hardware and key feature requirements. Look at value-drivers built into the system and understand which will be most important to your hospital client.

Futureproof. Even if your client is not ready to deploy every feature right away, leave room for the system to grow with them.



MORE THAN A CALL BELL

In the past, you may have heard these systems referred to as “call bell” or “call light” systems. These outdated monikers no longer cover the broad capabilities of modern Nurse Call Systems. Today, these systems can impact every corner of an organization, from facilities to clinical to IT to finance — and their implementations are regulated accordingly.

WHAT TO KNOW. WHAT TO ASK. WHAT TO EXPECT.

This guide will share the top five considerations for construction firms, planners and architects when selecting a Nurse Call System. Within, you will find information on:



1.
Technology That's
Ready to Scale —
Securely



2.
Solutions Designed for
Clinical Workflows



3.
Integrations That Play
Well With Others



4.
Actionable Data That
Drives Continuous
Improvement



5.
Reliable Services
Tailored For Each
Hospital

And at the end you'll find a quick list of helpful vendor questions to help you choose the right solution for each hospital.

LET'S GET STARTED.



TECHNOLOGY THAT'S READY TO SCALE — SECURELY

Cybersecurity is top of mind for healthcare organizations everywhere. Data breaches and improper exposures can lead to fines and legal action — but even more importantly, protecting patient data is an important part of protecting patient safety.



DID YOU KNOW?

More than 5,000 healthcare data breaches of 500+ records were reported to the HHS Office for Civil Rights between 2009 and 2022. They resulted in the exposure or impermissible disclosure of 382,262,109 healthcare records — more than 1.2x the population of the United States.¹

Cybersecurity should be a key consideration when selecting a Nurse Call system that will connect to, or even reside on, any hospital network. What does that mean in the planning phases of a healthcare construction project?

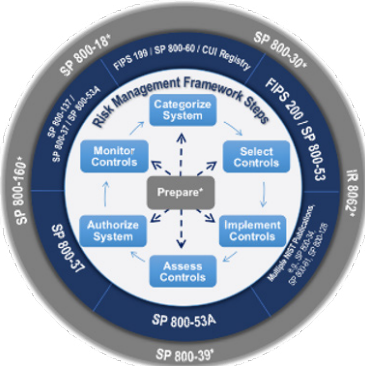
Cybersecurity should be a key consideration when selecting a Nurse Call system that will connect to, or even reside on, any hospital network. What does that mean in the planning phases of a healthcare construction project? Here are three things to look for:

SECURITY CREDENTIALS

Ask hospital IT leaders which cybersecurity credentials and validations are most applicable — or even non-negotiable. Their answers may include certifications like:



FIPS Compliance



NIST Risk Management Framework



TLS 1.2 for Server Communications

Ensure your chosen system supports the latest available software/server operating systems. The vendor’s roadmap should also include regular software updates to help protect against new security threats.



ARCHITECTURE THAT FITS THEIR WORKFLOWS

Nurse Call System design should be easily customizable to meet each organization's system administration and management preferences. For example, the solution should be able to accommodate:

- Nurse Call system administration at the individual unit level or scaled across multiple facilities
- Connectivity to other hospital software platforms (e.g., EMR, wireless platforms, infusion pumps, patient monitors, etc.)

And since a Nurse Call system is a long-term IT investment, it should be easy to scale as organizations grow and change. Your Nurse Call vendor should have a track record of evolving their solution over time to accommodate new trends in technology management. Your client's IT leaders need to stay ahead of the curve — and so does their Nurse Call System provider.



TIP:

Ask the Nurse Call vendor to explain the long-term IT vision for their solution. It should be immediately apparent they have future challenges in mind.

INFRASTRUCTURE OPTIONS

A Nurse Call System should offer flexible infrastructure options to meet each organization's IT standards and preferences. For example:

- On-premise servers (either physical or virtual machines) can reduce costs and provide tighter control for IT teams with the resources to manage them
- Hardware flexibility matters. Your client may already be standardized on certain equipment, like Power over Ethernet (PoE) switches. The Nurse Call System should have broad compatibility with many, while staying within regulations.



ROADMAP TO THE CLOUD

The vendor's roadmap should illustrate its expertise when it comes to IT infrastructure. For example, ask about roadmaps for cloud-based hosting — something many hospitals will be considering for future years.

FLEXIBLE ROOM CONTROL UNIT ARCHITECTURE

Some traditional Nurse Call Systems use a daisy-chain design. While this may simplify electrical installation, it is often not the best setup for the hospital. Consider the following scenarios:

- If a control unit in a patient room goes down at 2:00 am in a daisy-chain setup, the hospital needs to locate the point of failure. This could mean technicians need access to multiple patient rooms, multiple patients may need to be relocated and someone needs to come pull electrical in the middle of the night.
- Instead, with 1-1 or 1-2 room control units, the problem is limited to only the affected unit(s), and may be solved by simply plugging an ethernet cable into a computer and replacing the affected unit.



TIP:

Consider the use cases beyond installation. It's about survivability, but it's also about serviceability and real-world impacts on patient care (even at 2:00 am).

SOLUTIONS DESIGNED FOR CLINICAL WORKFLOWS



Nurse Call Systems can impact how clinicians work throughout the hospital. Accordingly, their hardware and software components should be designed not just to fit into, but to help optimize clinical workflows and support care teams.

There are several hardware and software considerations to take into account.

HARDWARE CONSIDERATIONS

Flexible Communication Stations

Patient room, unit and floor designs vary from one hospital to another. So Nurse Call communication stations need to be flexible enough to deliver the needed benefits in any configuration.

Functionality

Advanced features with unique software applications offer workflow automation, easy collaboration and access to specific patient needs.

Fully customizable action request buttons allow clinicians to activate routine workflows in one click (e.g. toileting, water, blankets, etc.)

Care teams can manage critical bed functions like setting bed exit right from the patient station.

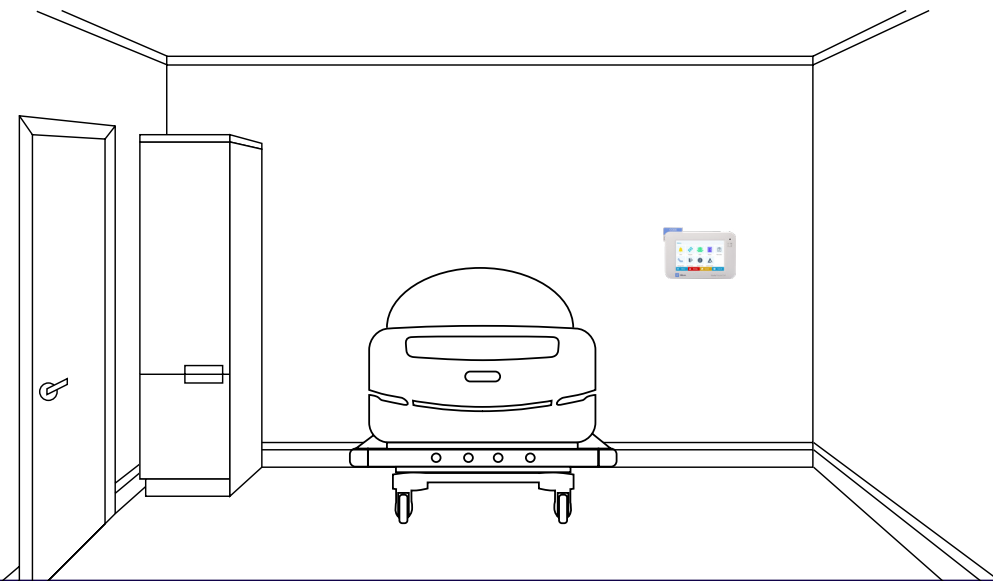
Automated reminders help care teams meet clinical goals for things like regular rounding and more.

Placement

Traditionally, many nurse call units have been plugged in directly behind the head of bed. This placement can be problematic for nurses, who must reach over their patients to access the console. This can lead to:

- Artificially long response times in system reports, since the nurse may address the patient's need and move equipment/family members safely out of the way before disabling the request
- Uncomfortable situations for nurses and patients if the nurse must lean over the patient to access the unit

Look for a system with the flexibility to place audio stations anywhere in the room while maintaining critical bedside functions and meeting all applicable placement guidelines.



TIP:

Try it out. Set up a scenario where a shorter “nurse” must get through a patient request, move family members safely out of the way, and then reach over the patient to mark the request as complete. How long does it take? What is the experience like for the nurse? For the patient? Real-world scenarios make a difference in accurate reporting — and satisfaction metrics like HCAHPS scores.

VALUE-ADD:

AUTOMATIC CALL COMPLETION BASED ON NURSE PRESENCE

Some Nurse Call Systems use real-time locating data to automatically mark a call as complete when a nurse enters the room — no manual intervention required. Ask about features like this, which can also help simplify placement considerations.



Master Consoles That Do More

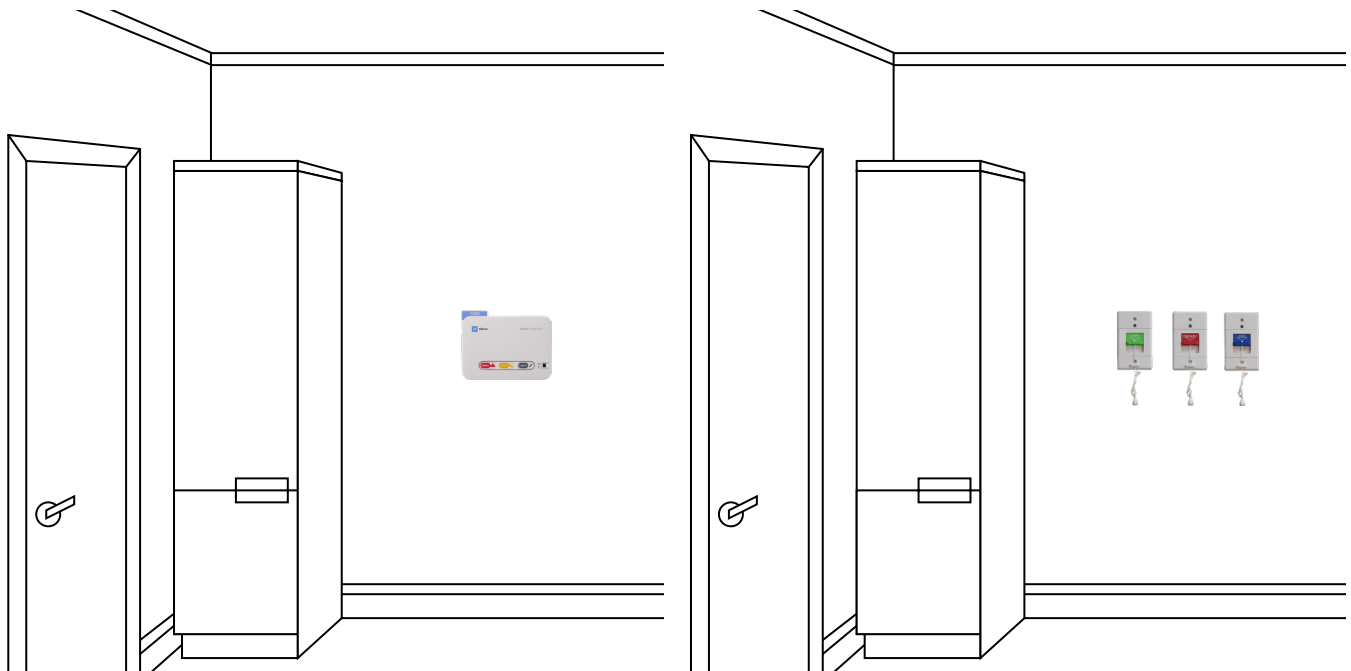
Clinicians at the nursing station need as much information as possible to respond quickly and effectively. The master station console should provide more than just the name of the patient calling. Look for master consoles that provide full visibility for better patient care, including:

- Visual call indication
- Detailed call routing
- Future-proof support for tomorrow's expectations (e.g., built-in cameras for video calling)



TIP:

Consider receiving two types of calls as a clinician. One tells you to attend to the patient in room 123. The other tells you that patient needs ice and help going to the bathroom. Which one sets you up to handle the needs faster?



Support for Desired Aesthetics

Your client wants everything in their hospital to show they're ready for the future. Their Nurse Call System, which is visible throughout the facility, should look the part. Look for systems providing audio communication, emergency assist and code in a single device. With all functionality in one unit, you can provide the services they need with fewer holes in the walls — and without dated “pull switches” detracting from the aesthetic.

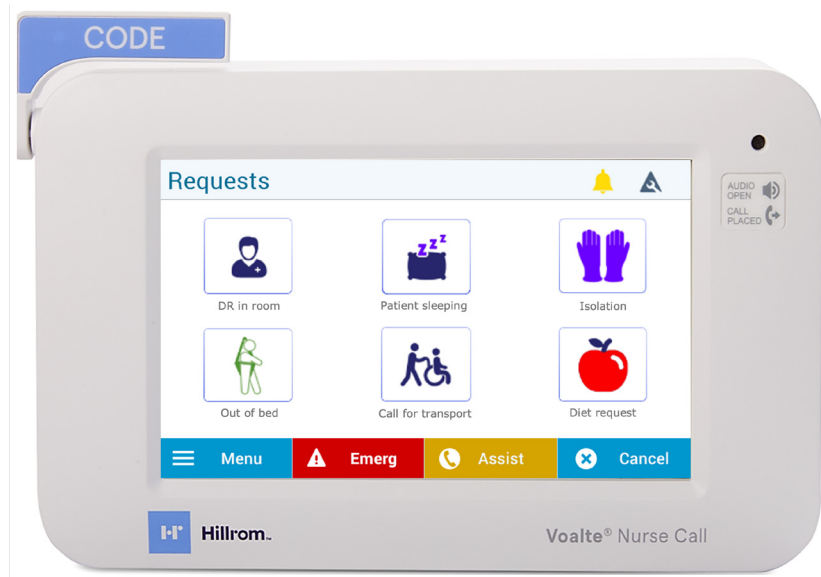
SOFTWARE CONSIDERATIONS

Customizable Interface & Actions

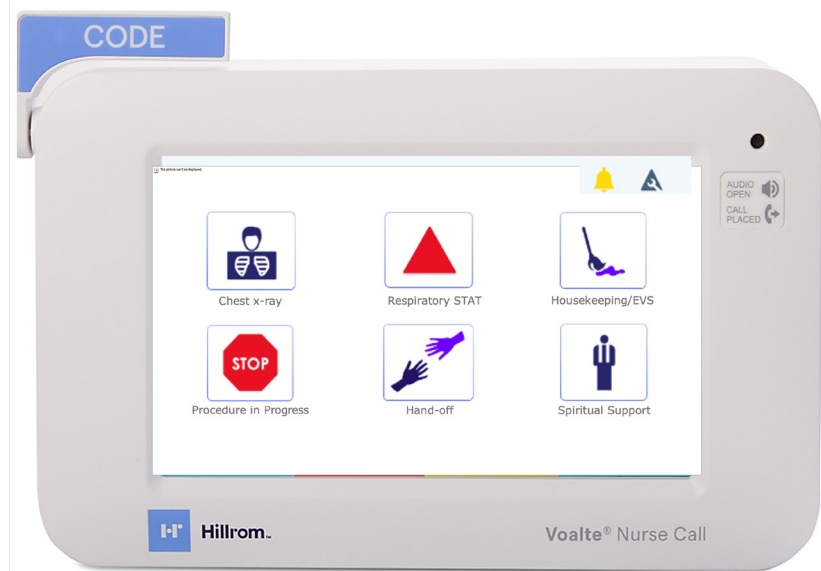
Modern Nurse Call software will allow for unique use cases while maintaining a consistent, familiar user experience across the organization. Look for a system that lets users customize it for their unique needs while maintaining standardized workflows.

For example:

Program caregiver actions by unit (e.g., med-surg may prioritize different actions than the ICU)



Med Surg Example



ICU Example

Set unit-level dashboard views

Code Blue 1204N, Cardiology ICU N Tower														2 of 10 units Morrisville Medical Center		Hillrom			
Nursing Unit	Room	Patient	Notes	Risks	Safety Status	Calls	Wait Time	Assigned Staff	Rounding Due In	Turn Due In	Staff In Room	Bed Rails	Bed Exit	Bed Low	Brake On	HOB	Weight	Med-Surg North	
Cardiology 12N Morrisville M...	1201	Am...A	Hard of hearing, Latex allergy			▲ Bed Height Alert	<1m	Maryanne M Narayan R	RN CNA	1h 5m			✓	▲	✓	43.3"	Not Taken	CHARGE NURSE Chly O 555-5599 Meds	
Cardiology 12N Morrisville M...	1202	Do...D	Contact precaution					Eduardo E Polty P	RN CNA	1h 5m	overdue 4m ● Polty P		✗	✗	✓	32.2"	48.1 kg	UNIT CLERK David S 555-5599 Unit Desk	
Cardiology 12N Morrisville M...	1203	Sa...S			✓	Normal Call	6m	Maryanne M Narayan R	RN CNA	5m			✓	✓	✓	27.4"	121.3 kg		
Cardiology 12N Morrisville M...	1204	Mi...M	Open chest, Airborne plus, ...		✓	Code Blue	1m	Eduardo E Polty P	RN CNA	27m			✓	✓	✓	36.5"	73.4 kg	Located Staff	
Cardiology 12N Morrisville M...	1205												✗	✓	✓	0.0"	Not Taken	Addison M 555-9877 1308	
Cardiology 12N Morrisville M...	1206	Am...A	C diff, TB			▲ Bed Exit Alert	<1m	Eduardo E Polty P	RN CNA	overdue 6m			▲	✓	✓	33.7"	78.7 kg	David S 555-9877 Unit Desk	
Cardiology 12N Morrisville M...	1207	Jo...J			✓			Maryanne M Narayan R	RN CNA	27m	56m		✓	✓	✓	43.8"	91.1 kg	Eduardo E 555-8222 Staff Lou...	
Cardiology 12N Morrisville M...	1208	Jo...J			✓			Eduardo E Polty P	RN CNA	14m		● Addison M	✗	✗	✗	11.0"	56.8 kg	Gregorio S 555-2234 1215	
Cardiology 12N Morrisville M...	1209	Mi...M						Teri L Narayan R	RN CNA	16m		● Narayan R	✗	✓	✓	35.9"	Not Taken	Jackson H 555-1234 1213	
Cardiology 12N Morrisville M...	1210	Am...A	Spanish only			▲ Bed Disconnect Alert	3m	Eduardo E Polty P	RN CNA	56m	33m							Ruby R 555-5599 Staff Lou...	
Cardiology 12N Morrisville M...	1211	Po...P				Normal	12m	Teri L Narayan R	RN CNA	23m			✗	✗	✓	39.1"	99.0 kg	Maryanne M 555-3456 1213	
Cardiology 12N Morrisville M...	1212																	Nancy O ——— Hallway	
Cardiology 12N Morrisville M...	1213	Mi...M			✓			Eduardo E Polty P	RN CNA	44m		● Jackson H ● Maryanne M	✗	✓	✓	28.2"	78.4 kg	Narayan R 555-6789 1209	
Cardiology 12N Morrisville M...	1214	Jo...J			✓	Normal Call	1m	Eduardo E Polty P	RN CNA	27m	40m		✓	✓	✓	0.8"	76.6 kg	Chly O 555-1234 Meds	
Cardiology 12N Morrisville M...	1215										● Gregorio S		✗	✓	✗	15.4"	Not Taken	Polty P 555-7345 1202	
Cardiology 12N Morrisville M...	1216	Am...A	C diff, TB					Teri L Polty P	RN CNA	1h 20m		● Teri L		✓	✓	33.5"	86.1 kg	Stevens S ——— Unit Desk	
Cardiology 12N Morrisville M...	1217	Qu...Q						Maryanne M Narayan R	RN CNA	5m			✗	✗	✓	27.6"	37.9 kg		
Cardiology 12N Overflow...	1218	Ri...Z	Confused			▲ Bed Exit Alarm ▲ Too Few Rails Up	2m 5m	Teri L Narayan R	RN CNA	1h 5m			▲	✓	✓	46.3"	56.5 kg		
Cardiology 12N Overflow...	1219	Mi...M						Maryanne M Narayan R	RN CNA	45m			✗	✗	✓	25.7"			

Regular Updates

Because a Nurse Call System is a long-term investment, the right vendor should provide ongoing, regular software releases to enhance functionality and system performance over time. Look for a strong track record of investment in R&D.



TIP:

Ask vendors about the process for adding new functionality down the road. Will it involve hardware changes, or simple software updates?

INTEGRATIONS THAT PLAY WELL WITH OTHERS

Nurse Call Systems are important investments not only for the value they provide on their own, but also for the value they add to other hospital technologies. These robust systems should integrate with other software applications and medical devices across the hospital to help create an ecosystem that's greater than the sum of its parts.

Look for a system that uses IHE-certified protocols and open APIs to help them communicate with other applications. Ask about support for integrations like:



Electronic Health Records (EHRs)

Modern Nurse Call Systems should be able to receive inbound data like patient risk indication and Admission-Discharge-Transfer (ADT), as well as outbound information like bed exit status.

Smart Beds

In the hospital, patients spend more time in bed than anywhere else. The Nurse Call System should connect to smart beds to provide bed safety status visibility at any given moment.

Mobile Communication Apps

Send the right Nurse Call alerts directly into the hands of the right caregiver.

Middleware and Alarm Management

Centralize management of notifications, alerts and alarms to standardize alerting workflows and reduce alarm fatigue.

Real-Time Locating Systems (RTLS)

The Nurse Call System should be able to show staff location in multiple views, at a glance.

When these integrations are easy to create, it opens up new possibilities for automating processes and simplifying data access — and simplifying workflows in the process.



Don't Forget Duress

Staff locating and duress calling are important extensions of a modern Nurse Call system.

- Simplify workflows by making it easy to locate people and equipment
- Support quality metrics by quantifying how resources are used
- Help improve staff safety by letting team members call for help in potentially unsafe situations — and pinpointing their locations for quicker responses simplifying workflows in the process.



TIP:

Did you know violence in healthcare is about four times more prevalent than in any other industry?² Ask your client how concerned they are about staff safety. Duress calling, powered by the link between real-time locating systems and Nurse Call, can have a powerful impact.



ACTIONABLE DATA THAT DRIVES CONTINUOUS IMPROVEMENT

While Nurse Call Systems are required for day-to-day care delivery, you should also be considering what type of actionable data can come out of the Nurse Call system.

The system should offer intuitive, flexible reporting to help turn all this data into actionable insights that support continuous improvement, such as:



BEDSIDE CARE IMPROVEMENTS

(e.g., showing total time spent in patient rooms)



STAFFING/PROTOCOL ADJUSTMENTS

(e.g., rounding compliance report cards)



PATIENT SAFETY AND SATISFACTION METRICS

(e.g., call response times)



TIP:

A few questions can help planning teams determine if a Nurse Call System has the reporting your client will need to maximize their investment:

- Do you offer web-based reporting?
- Do you offer subscription options for regular reporting needs (e.g., daily huddles)?
- How easy is it to scale the reporting across the health system — from micro to macro views?
- What third-party analytical tools can it work with (e.g., EHR, smart bed or locating data)?



RELIABLE SERVICES TAILORED FOR EACH HOSPITAL

Once you've found a Nurse Call solution with the functionality the hospital needs today, the flexibility they need for the future and robust reporting to help them continuously improve, there is one more consideration: ongoing support and service.

The Nurse Call vendor should have proven service offerings to ensure the hospital is supported from design to go-live and beyond. Look for a partner offering a range of low- to high-touch service plans.

Examples of Lower-Touch Service Needs:

- Software-only support
- Technical training courses

Examples of Higher-Touch Service Needs:

- Extended hardware warranties
- On-site preventative maintenance
- Break-fix service
- Remote monitoring capabilities



ASK ABOUT REMOTE SERVICE OFFERINGS

Well-designed Nurse Call Systems are durable and reliable. However, when issues arise, they are often critical since it may mean a patient cannot request the help they need. Look for a system that can support rapid, 24/7 remote troubleshooting and issue resolution before requiring an on-site technician.



TIP:

Make sure these services will be backed by expert clinical teams and OEM-certified technicians.



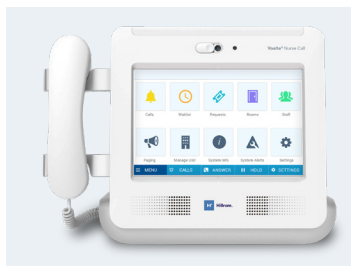
WE'RE HERE FOR YOU

Choosing the right Nurse Call System is an important part of any healthcare construction project. Our team is well versed in helping construction, architecture and planning teams select the right solutions for each unique implementation. Reach out to your Baxter partner today, or explore the following resources to find the information you need from a partner you can trust.



MEET OUR CONSTRUCTION SOLUTIONS TEAM

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DIG DEEPER INTO VOALTE NURSE CALL

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NURSE CALL PROJECT CHECKLIST:

WHAT TO ASK

The following are a few questions to ask your Nurse Call vendors to help you find the right solution for each hospital construction project.

Technology That's Ready to Scale — Securely

- What security credentials do you comply with?
- Do you support the latest server/software operating systems?
- What is your roadmap for software updates and enhancements to be ready for the future and protect against new security threats?

Solutions Designed for Clinical Workflows

- How can a hospital customize your Nurse Call interface to fit different workflows?
- How flexible are the placement options for your patient room consoles?
- Does your roadmap account for future expectations like cloud-based hosting?

Integrations That Play Well With Others

- Does your system integrate with other hospital technologies like:
 - Electronic health records?
 - Smart beds?
 - Mobile communication apps?
 - Middleware and alarm management?
 - Real-time locating systems?
- If so, do the integrations use IHE-certified protocols and open APIs?

Actionable Data That Drives Continuous Improvement

- Do you offer web-based reporting?
- Do you offer subscription options for regular reporting needs (e.g., daily huddles)?
- How easy is it to scale the reporting across the health system — from micro to macro views?
- What third-party analytical tools can the system work with (e.g., EHR, smart bed or locating data)?

Reliable Services Tailored For Each Hospital

- Do you offer remote monitoring capabilities?
- Are your services backed by expert clinical teams?
- Do you use only OEM-certified technicians?

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Contact your Baxter partner today to get answers to these questions and others,
or learn more at hillrom.com

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¹ <https://www.hipaajournal.com/healthcare-data-breach-statistics/>

² <https://www.osha.gov/sites/default/files/OSHA3826.pdf>

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