

Statement of Objectives

1. Background

The existing nurse call life safety system deployed within the **VA Medical Center** is end of life, no longer supported, spare parts are no longer being manufactured and the limited workflow configuration capabilities of the system are extremely antiquated. The existing nurse call system is a legacy low voltage call bell system that predates smartphones and does not contain modern capabilities. In addition, the existing antiquated nurse call system does not meet One-VA TRM requirement and is in need of a replacement to bring the hospital up to date.

Today's modern nurse call life safety systems are software driven and are configurable to drive specific clinical workflow practices. A modern nurse call life safety system helps drive behavior, accountability, execution of clinical initiatives and improve SAIL scores like rounding, patient experience, patient safety, staff safety and initiatives.

Modern nurse call life safety systems have new capabilities such as full configurable reporting on up to 999 clinical workflow activities, high and low patient activity awareness reporting, reporting on wait, rounding, wound care, turning, and response times, configurable tamperproof wall mounted workflow touch screen panels and fully customizable clinical business analytics leadership dashboards. Modern nurse call systems are software driven clinical workflow engines that are FDA 510K Class II Certified medical systems that drive behaviors around:

- Fall Prevention
- Pain Assessment
- Veteran Satisfaction rounding
- Patient Education and Discharge Planning
- Simplify Care Team communications, Bed Turnover and Post-acute care event processes
- Code, Rapid Response, STAT Med orders, PRN Effectiveness follow-up, and Actionable care events
- In-Hospital Complications, drives Healthcare-Associated Pressure Ulcer turning Rounding, Ventilator Associated Pneumonia and CAUTI reduction
- VA approved nurse call systems are critical as they ensure integration and future capabilities that may be needed are able to be met. Specifically, the most advanced software based nurse call systems on the market provide a future-proof platform that can be configured to address real-time imperatives, as they evolve.

By updating the nurse call life safety system, the **VA Medical Center** will be positioned to leverage modern day workflow processes and will have a future-proof platform that can be configured to address clinical imperatives, as they evolve.

2. Objectives

2.1. **VA Medical Center** seeks an VA SDVOSB VetBiz verified quote for the following:

- 2.1.1. **398** Acute Care beds of Advanced Nurse Call that meets the minimum salient characteristics listed in section 5 of this SOO. The advanced nurse call solution must include all costs for the nurse call with staff terminals in all areas with multiple workflows configured, 5 years of warranty, 5 year service contract, integrated to the above smart phone platform and certification training for up to 4 **VA Medical Center** HTM staff members.

- 2.2. An SDVOSB vendor with at least 5 successful past-performances in the VA for installing advanced nurse call systems is required. The SDVOSB must have 3 successful past performances with VA Medical Centers of similar size and scope.
- 2.3. The SDVOSB vendor must be familiar with working in an active VA medical center with PIV and badged employees who with experience deploying modern nurse call technology.
- 2.4. Install all headend/control network to replace existing nurse call system.
- 2.5. Install all nurse station consoles in place of existing nurse call consoles.
- 2.6. Install all software suite components.
- 2.7. Provide a minimum of a 5-year hardware warranty on all components and software packages as applicable starting post project acceptance signoff.
- 2.8. Provide an installers warranty on all installations to be free from defect in workmanship or manufacture for a minimum of 1 year post project acceptance.
- 2.9. Provide a minimum of 4 option years for ongoing maintenance and support.

3. Mandatory Items

3.1. New advanced nurse call system

- 3.1.1. The current nurse call system is end of life and a full replacement for **398 beds** is required.
- 3.1.2. Direct SIP trunk integration for immediate voice communication in response to notifications.
- 3.1.3. Five-year manufacturer warranty
- 3.1.4. Four option years of maintenance and support

3.2. Computing Virtualized Server

- 3.2.1. A virtual server environment capable of supporting the applications in this project and have the ability to expand to meet the future needs of the **VA Healthcare System**.
- 3.2.2. The virtualized servers will support the follow applications and specifications
 - 3.2.2.1. Gateway, App, Database and Reporting Server

4. Scope of Work

- 4.1. The contractor shall provide all necessary equipment, labor, and tools required to accomplish the tasks herein.

4.2. PRE-PROJECT

4.2.1. Kick-off

4.2.2. Documentation

4.2.3. Tasks Lists

4.2.3.1. VA requirements

4.2.3.2. Contractor Requirements

- 4.2.4. Participate in all OIT coordination meetings for the development of:

4.2.4.1. IP schema

4.2.4.2. Dynamic VLANs

4.2.4.3.Server Scheme

4.2.4.4.Network Planning

4.2.4.5.Telecommunications planning/requirements

4.3. PHASE 1

4.3.1.Install and configure virtual server environment to support Nurse Call system

4.3.1.1.Nurse Call Servers

4.3.2.Build virtual server environments for Nurse Call system

4.3.3.Install and configure Nurse Call system virtual servers

4.3.4.Certify all servers and applications are working as expected

4.3.5.Test and certify function of all installed equipment and contractor installed network cabling/communication.

4.4. PHASE 2

4.4.1.Replace existing nurse call with Nurse Call system

4.4.2.Interface with the existing PBX System

4.4.3.Install 4 Nurse Call system Servers (2 with SQL) on the virtual server environment

4.4.4.Configure all servers

4.4.5.Certify all applications and integrations are working as expected

4.4.6.Provide basic user training to all nursing units on the function and use of the new Nurse Call system master consoles (this may require multiple sessions and multiple shifts).

4.5. PHASE 3

4.5.1.Provide a plan for nurse call hardware upgrade

4.5.1.1.Clearly identify any VA responsibilities (electrical, carpentry, network, etc.)

4.5.2.Remove all existing nurse call hardware

4.5.3.Replace with new Nurse Call system hardware

4.5.4.Coordinate and provide basic hardware training to staff

4.5.5.Certify Nurse Call system hardware fit and function

4.6. PHASE 4

4.6.1.Coordinate training plans for

4.6.1.1.End User

4.6.1.2.Super User

4.6.1.3. May require multiple shifts over multiple days

4.7. CLOSE OUT

4.7.1. Provide any follow-up // touch-up training

4.7.2. Provide clear and thorough documentation of all new hardware

4.7.3. Provide clear and thorough documentation of all new networking setup

4.7.4. Provide any certification documentation for all Phases

5. Bill of Materials:

5.1. Base Year Pricing

Market research estimated cost for this project is \$3,572,000.00 for all 398 acute care inpatient beds.

5.2. Option Years 2 to 5 Maintenance and License Support Pricing

Beyond base-year pricing, there is necessary maintenance assurance for the option years 2 through 5. The vendor pricing must include all costs for a period of 5-years.

6. Minimum Salient Characteristics

- 🍏 *The nurse call system must provide an IP68 rated fully waterproof Pull Cord Stations.*
- 🍏 *The Nurse Call system must be able to provide local service within 2 hours as needed 24 hours a day in case of emergency support requests that may be made by the VA MEDICAL CENTER.*
- 🍏 The Nurse Call system must provide the VA facility full ownership of all nurse call system data. The Department of Veteran Affairs requires ownership of all data that resides in the nurse call system.
- 🍏 The Nurse Call system equipment must be manufactured in the USA.
- 🍏 The Nurse Call system must have a FDA 510K Class II Listing.
- 🍏 The Nurse Call system must have a FCC Part 68 compliance for interface to the wireless phone switch.
- 🍏 The Nurse Call system must provide an open architecture platform for interoperability to other systems.
- 🍏 The Nurse Call system must provide two-way audio bath stations which support Fall Prevention Protocols.
- 🍏 Nurse call devices must be plug-n-play, replaceable by MAC address.
- 🍏 Nurse call system must be VoIP based.
- 🍏 Nurse call system audio must be full duplex. One way and two-way walkie-talkie will not be accepted.
- 🍏 Shower pull cords must be IP68 certified.
- 🍏 Nurse call system devices must not utilize legacy dip-switches.
- 🍏 Nurse call system must include 5-years of software licensing, firmware upgrades, hardware warranty replacement and annual software assurance/maintenance with help desk support.
- 🍏 Nurse call system must include alarm overtime escalation notification controls at the staff and unit levels.
- 🍏 The Nurse Call system must provide local system administration training for up to 4 VA Biomed HTM engineers. It is critical the VAMC Biomedical staff be fully trained to administer and manage the nurse call system.
- 🍏 The proposed Nurse call vendor must provide patient stations with the following minimum functionalities:

- Code blue/staff assist push button
 - Call cancel button
 - Call placed LED indicator
 - Bed out LED indicator
 - Pillow speaker receptacle/call cord
 - Must have capabilities to control hospital grade TV and overhead lights
 - Must have direct channel select and staff assist push buttons (i.e. pain, toilet assist, water)
 - Audio microphone and speaker
 - Capable of multiple call-in priorities
 - Auxiliary device receptacle with separate call-in priority setting
 - IV and bed exit alarm capabilities
 - Capability of disconnecting handset for cleaning
 - Must integrate with VA TRM approved medical systems
- 🍏 *The Nurse Call system must include an option to integrate with Active Directory for staff and employee provisioning. It is critical that the nurse call system have the ability to access employee information from the active directory to eliminate the need to enter data that changes frequently on a daily basis in multiple systems.*
- 🍏 *The Nurse call system must provide Audio and Non-Audio Pull-Cord Stations with the following minimum functionalities:*
- *Two-way audio to bathroom*
 - *Pull cord*
 - *Call-in button*
 - *Waterproof IP68*
- 🍏 *The Nurse call system must provide LED Corridor Light with the following minimum functionalities:*
- Seven (7) color corridor light with customizable icons placed outside:
 - Placed outside patient rooms
 - Hallway bathrooms
 - Any room with code blue/staff assist push buttons
- 🍏 *The Nurse call system must provide Nurse Station components with the following minimum functionalities:*
- Nurse Console
 - VoIP capabilities
 - Customizable one-touch functions
 - Staff Terminal
 - capable of displaying/answering calls
 - Capable of placing calls

- Customizable functions

- 🍏 The Nurse Call system must include real-time visibility of the all events including date, time, unit, event type, recipients, status, delivery history, and action taken.
- 🍏 The Nurse Call system must provide a set of predefined reports and ad hoc reporting capabilities based of exported data.
- 🍏 The Nurse Call system must include audit trail reporting for the Joint Commission.
- 🍏 The Nurse call system must provide e-Learning modules that will fully educate clinical staff.
- 🍏 The Nurse call system must provide onsite training after activation for up to 2 weeks.