

# Equipment Specifications

## Ultrasound

VISN 21/Northern California Healthcare System

612-B96005

### A. REQUIREMENT OVERVIEW

The is a request for a general ultrasound for the Northern California Healthcare System, Sacramento VA Medical Center. The ultrasound will be used in the Mather Radiology Department for interventional radiology procedures such as biopsies and drain placement. The machine should also have the capability to perform diagnostic examinations.

| Facility                     | Quantity |
|------------------------------|----------|
| Sacramento VA Medical Center | 1        |

### B. TECHNICAL REQUIREMENTS

#### 1. Unit physical specifications

|   |                            |
|---|----------------------------|
| a. Minimum screen size [in]                   | 23"                        |
| b. Minimum active screen size [in]            | 14"                        |
| c. Minimum number of split screens            | 2                          |
| d. Minimum monitor rotation [degrees]         | 360 degrees                |
| e. Minimum tilting [degrees]                  | 45 degrees                 |
| f. Monitor height range from floor [in]       | 44"                        |
| g. Minimum control panel rotation [degrees]   | +/- 30 degrees from center |
| h. Control panel height range from floor [in] | 32"                        |
| i. Minimum number of transducer ports         | 4                          |
| j. Minimum image storage [days or TB]         | 512TB                      |
| k. Maximum equipment weight [lb]              | 295 lb                     |

#### 2. Scanning modes

|                                     |                                      |
|-------------------------------------|--------------------------------------|
| <input checked="" type="checkbox"/> | a. Two-dimensional (2D)              |
| <input checked="" type="checkbox"/> | b. Three-dimensional (3D) – freehand |
| <input checked="" type="checkbox"/> | c. Navigation Software               |
| <input checked="" type="checkbox"/> | d. Image Fusion Software             |
| <input checked="" type="checkbox"/> | e. Tissue Harmonic Imaging           |
| <input checked="" type="checkbox"/> | f. M-Mode                            |
| <input checked="" type="checkbox"/> | g. Simultaneous M-Mode               |
| <input checked="" type="checkbox"/> | h. Pulsed Wave Doppler               |



|                                     |                            |
|-------------------------------------|----------------------------|
| <input checked="" type="checkbox"/> | i. Continuous Wave Doppler |
| <input checked="" type="checkbox"/> | j. Velocity Color Doppler  |
| <input checked="" type="checkbox"/> | k. Color Power Doppler     |
| <input checked="" type="checkbox"/> | l. Tissue Doppler Imaging  |
| <input checked="" type="checkbox"/> | m. Pulsed Wave Doppler     |

### 3. Doppler displays

|                                     |   |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | a. Frequency  |
| <input checked="" type="checkbox"/> | b. Velocity   |
| <input checked="" type="checkbox"/> | c. Power (microvascular/directional)                                  |
| <input checked="" type="checkbox"/> | d. Duplex   |
| <input checked="" type="checkbox"/> | e. Triplex  |
| <input checked="" type="checkbox"/> | f. Steering for color Doppler is required to be 3° increments or less |

### 4. Control panel specifications

|                                     |   |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | a. Physical keyboard  |
| <input checked="" type="checkbox"/> | b. Touchscreen monitor  |
| <input checked="" type="checkbox"/> | c. Keyboard on touchscreen  |
| <input checked="" type="checkbox"/> | d. Black-and-white printer  |
| <input checked="" type="checkbox"/> | e. Articulating support arm to allow for vertical and horizontal adjustment of the monitors for viewing from anywhere in the room |

### 5. Additional specifications

|                                     |   |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | a. Panoramic mode   |
| <input checked="" type="checkbox"/> | b. Multi-modality display   |
| <input checked="" type="checkbox"/> | c. Image annotation   |
| <input checked="" type="checkbox"/> | d. One-button image optimization  |
| <input checked="" type="checkbox"/> | e. One-button Doppler optimization  |
| <input checked="" type="checkbox"/> | f. Programmable protocols   |
| <input checked="" type="checkbox"/> | g. Built-in, customizable PACS-compatible form  |
| <input checked="" type="checkbox"/> | h. Ability to create patient worklist without order or network connection                             |
| <input checked="" type="checkbox"/> | i. Specific applications and workflows for all imaging specialties, including interventional guidance |
| <input checked="" type="checkbox"/> | j. Shear wave and strain-based elastography   |
| <input checked="" type="checkbox"/> | k. Beam steering  |
| <input checked="" type="checkbox"/> | l. Ability to enter standby mode or sleep mode  |
| <input checked="" type="checkbox"/> | m. Needle enhancement   |
| <input checked="" type="checkbox"/> | n. Multi-function foot pedal control (programmable preferred)   |



|                                     |   |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | o. Image editing – easy video editing and annotation                  |
| <input checked="" type="checkbox"/> | p. Phantom to be used for quality control testing                     |
| <input checked="" type="checkbox"/> | q. Digital calipers   |
| <input checked="" type="checkbox"/> | r. Ability to receive ECG information via leads connected to patients |

6. Security/Connectivity requirements

|                                     |   |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | a. OEM-supported operating system   |
| <input checked="" type="checkbox"/> | b. Latest DICOM print, store, commit, and modality worklist                                   |
| <input checked="" type="checkbox"/> | c. Wireless connectivity to VA network – Compatible with 802.11b/g/n and FIPS 140-2 compliant |
| <input checked="" type="checkbox"/> | d. Encrypted hard drive   |
| <input checked="" type="checkbox"/> | e. PACS compatibility – [Philips PACS IntelliSpace]   |

7. Analysis packages

|                                     |   |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | a. Procedural                                     |
| <input checked="" type="checkbox"/> | b. Abdominal                                      |
| <input checked="" type="checkbox"/> | c. Musculoskeletal Clinical                       |
| <input checked="" type="checkbox"/> | d. Small Parts                                    |
| <input checked="" type="checkbox"/> | e. Vascular – measurement and analysis of vessels |
| <input checked="" type="checkbox"/> | f. Pelvic   |
| <input checked="" type="checkbox"/> | g. Urology  |
| <input checked="" type="checkbox"/> | h. Obstetric                                      |
| <input checked="" type="checkbox"/> | i. Breast   |
| <input checked="" type="checkbox"/> | j. Cardiovascular Clinical                        |
| <input checked="" type="checkbox"/> | k. Mitral Valve Navigator                         |
| <input checked="" type="checkbox"/> | l. Cardiac 3D Quantification                      |

Vendors must include in their offers analysis packages that meet the criteria above. Please include all other analysis packages offered by your company in the optional section on the quotes.

8. Transducers

| Description           | Qty | Frequency Range [MHz] |
|-----------------------|-----|-----------------------|
| a. Convex probe       | 1   | 1-7 MHz               |
| b. Endocavity probe   | 1   | 3-12 MHz              |
| c. Linear array probe | 1   | 3-12 MHz              |
| d. Linear array probe | 1   | 4-18 MHz              |
| e. Linear array probe | 1   | 2-9 MHz               |

Vendors must include in their offers transducers that meet the criteria above. Please include all other transducers offered by your company in the optional section on the quotes.



## 9. Added Value

This section can be used to list preferred system specifications. Vendors who cannot meet the specifications listed in this section will not be excluded from consideration; however, vendors who can meet the specifications listed in this section can be evaluated based on the added value these characteristics provide. In compiling this document, feel free to move specifications listed elsewhere to this section and specifications listed in this section to other sections as appropriate for the present requirement.

Specifications listed below are not required, but preferred. Vendors who do not include the below specifications in the submitted offer will not be docked or excluded from consideration. Specifications listed below will be evaluated based on added value.

- |                                     |                                   |
|-------------------------------------|-----------------------------------|
| <input checked="" type="checkbox"/> | a. Additional year(s) of warranty |
|-------------------------------------|-----------------------------------|

## C. TRAINING REQUIREMENTS

### 1. Clinical Training

|                                     |   |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | a. On-site clinical applications training for [2] technologists during go-live  |
| <input checked="" type="checkbox"/> | b. On-site follow-up clinical applications training for [2] technologists once technologists have hands-on experience with the system |
| <input checked="" type="checkbox"/> | c. On-site clinical applications training for [2] physicians during go-live   |
| <input checked="" type="checkbox"/> | d. Technologists who complete the clinical applications training shall receive continuing education credits (CMEs).                   |
| <input checked="" type="checkbox"/> | e. Vendors shall be responsible for accommodating different personnel shifts for clinical applications training during go-live.       |

### 2. Biomedical Technician Training

**Please reference the “Instructions to Offers” section 2.8.g for further information about the type of information to provide by equipment type not by specific request. Please also reference the “Instructions to Offers” section 7.3.3. for response format.**

Technical training information to include detailed information about the curriculum and length of the biomedical technical training required for each equipment type.

Although the NAC will not award this training along with the equipment, it is imperative that the customer is informed that this training is available. Vendors must demonstrate that they can provide any required off-site training, therefore off-site training should be quoted as an optional item. Off-site training will be purchased at the time of need via a modification (if the original order remains open) or via a separate order. No travel expenses for any VA employees will be included in any HTME equipment or training order.



## D. SERVICE REQUIREMENTS

1. VPN/Remote Access – The vendor shall provide any and all equipment service programs, such as remote diagnostics, during the warranty period. The vendor shall provide post-warranty remote diagnostic service program as an “Add Option” with the offer. The system shall provide vendor remote diagnostics via VPN. The vendor shall either utilize the VA national site-to-site VPN or work with the Office of Cyber and Information Security and the VAMC Information Systems Security Officer to establish a client-based VPN.
2. Service and Operator Manuals – The vendor shall provide the following documentation for the proposed systems:
  - a. Two (2) copies of operator instruction manuals (one (1) electronic and one (1) physical copy)
  - b. Two (2) copies of a service manuals (one (1) electronic and one (1) physical copy)\*Vendors can include the physical copy as a priced line item in their quote as applicable.
3. Minimum Warranty – The system and accessories shall be covered under the manufacturer’s warranty and shall include all parts and labor for one year following acceptance by the VAMC. This warranty must include PMs as required by the manufacturer. The manufacturer’s factory-trained field service representatives shall perform installation and maintenance during the warranty period.

Vendors are encouraged to include any offerings for service, warranty, and training that may exceed the minimum requirements, to include information on their service support structure during and after the warranty period. Vendors who do not include any added value offerings for service, warranty, and training will not be docked or excluded from consideration. However, any such offerings will be evaluated based on added value.

## E. OTHER INFORMATION/DOCUMENTATION REQUESTED

**Please reference the “Instructions to Offers” section 2.8a-h for further information about the type of information to provide by equipment type not by specific request. Please also reference the “Instructions to Offers” section 7.3.3. for response format.**

1. Completed pre-procurement assessment form (6550 Appendix A)
2. Completed Manufacture Disclosure Statement for Medical Device Security (MDS2) form
3. Federal Information Processing Standard (FIPS) 140-2 certification
4. Product brochures
5. Technical specification sheets, to include dimensions and weight of the system
6. Typical drawings (pdf version of the CAD drawings)
7. Technical training- Biomedical: information to include detailed information about the curriculum and length of the biomedical technical training required for each equipment type.
  - Although the NAC will not award this training along with the equipment, it is imperative that the customer is informed that this training is available. Vendors must demonstrate that they can provide any required off-site training, therefore off-site training should be quoted as an optional item. Off-site training will be purchased at the time of need via a modification (if the original order remains open) or via a separate order. No travel expenses for any VA employees will be included in any HTME equipment or training order.
8. Support information to include your company’s support structure during and after the warranty period
  - On-line or telephonic applications support and availability (include third party coverage)
  - A listing of field service engineer locations and availability
  - A listing of part depots



## F. TRADE-IN

- |                                     |                                       |
|-------------------------------------|---------------------------------------|
| <input checked="" type="checkbox"/> | a. VA has no trade-in units to offer. |
|-------------------------------------|---------------------------------------|

