

# Equipment Specifications

## Computed Tomography Scanner

VISN 19/Cheyenne Veterans Affairs Medical Center/442

442-B90027

### A. REQUIREMENT OVERVIEW

A computed tomography scanner (CT) is required for activation of the new Northern Colorado super-CBOC. This will be a part of the Cheyenne VAMC and will expand coverage and access to more Veterans across the state. It will need to integrate with Vista and AGFA PACS. Advanced applications such as cardiac, perfusion, and pulmonary scans are required. The CT will be used for routine non-contrast and contrast enhanced studies of brain, abdomen, spine, etc. This will also be used for examinations of fixation hardware, joint replacements, colonography and various image guided procedures.

Facility	Quantity
Northern Colorado CBOC Activation	1

### B. TECHNICAL REQUIREMENTS

#### 1. Unit physical specifications

a. Minimum number of slices	128
b. Minimum gantry aperture [cm]	70
c. Minimum detector width [mm]	40
d. Minimum detector field of view [cm]	50
e. Table height range from floor [cm]	43cm to 99cm
f. Maximum patient weight supported [kg]	250
g. Minimum 360° rotation time [s] – Vendors are encouraged to propose the fastest 360° rotation available.	0.35
h. Maximum table dimensions [cm]	95(W) x 240(L)
i. Maximum gantry dimensions [cm]	195(H) x 230(W) x 105(D)
j. Maximum system weight [kg]	2,090
k. Minimum tube heat storage (MHU)	7
l. Minimum heat dissipation rate	1800
m. Minimum spatial resolution (mm)	0.65
n. Minimum detector field of view (cm)	70
o. Maximum reconstructed slice width (mm)	0.75
p. Maximum noise at 7.5mGy	0.6%



## 2. Additional specifications

<input checked="" type="checkbox"/>	a. The CT scanner shall provide the ability for the user to independently operate the table, gantry, and from the control room.
<input checked="" type="checkbox"/>	b. The CT scanner shall provide the ability for the user to independently operate the table, gantry while performing biopsy or patient-related exams.
<input checked="" type="checkbox"/>	c. Dual Energy Imaging (either at the radiation source or in the detector)
<input checked="" type="checkbox"/>	d. Ability to display CTDIvol (dose) before scan
<input checked="" type="checkbox"/>	e. Ability to display DLP (dose) after exposure
<input checked="" type="checkbox"/>	f. Modeled iterative reconstruction/Noise reduction. Vendors are encouraged to propose the greatest available noise reduction.
<input checked="" type="checkbox"/>	g. Gantry- or ceiling-mounted contrast injector with proven reliable synchronicity.
<input checked="" type="checkbox"/>	h. Full UPS
<input checked="" type="checkbox"/>	i. Ability to lock protocols
<input checked="" type="checkbox"/>	j. Ability to facilitate regular protocol optimization and reduced radiation dose to the patient, including but not limited to iterative reconstruction technology
<input checked="" type="checkbox"/>	k. Gantry tilt

## 3. Workstation Requirements

<input checked="" type="checkbox"/>	a. Minimum acquisition workstation monitor size [in]	19
<input checked="" type="checkbox"/>	b. Minimum acquisition workstation hard drive size	1TB
<input checked="" type="checkbox"/>	c. Minimum number of processing workstations	1
<input checked="" type="checkbox"/>	d. Minimum processing workstation monitor size [in]	19
<input checked="" type="checkbox"/>	e. Minimum processing workstation hard drive size	1TB
<input checked="" type="checkbox"/>	f. LCD monitor(s)	
<input checked="" type="checkbox"/>	g. UPS for the acquisition workstation	
<input checked="" type="checkbox"/>	h. UPS for the processing workstation(s)	

## 4. Advanced Applications

<input checked="" type="checkbox"/>	a. Interventional Imaging Software w/ foot pedal integration
<input checked="" type="checkbox"/>	b. CT Perfusion
<input checked="" type="checkbox"/>	c. CT Cardiac
<input checked="" type="checkbox"/>	d. Lung CAD
<input checked="" type="checkbox"/>	e. Dose Tracking
<input checked="" type="checkbox"/>	f. Integration to Advanced Visualization System – [CT Perfusion Package, Smart Prep. MAR technology]

Each vendor is to respond with advanced applications that meet the criteria listed above. Please include in quote an advanced visualization system. Please include all other advanced applications offered by your company in the optional section on the quotes.

5. Security/Connectivity requirements

<input checked="" type="checkbox"/>	a. Latest DICOM print, store, commit, radiation dose structured report (RDSR), and modality worklist
<input checked="" type="checkbox"/>	b. Encrypted hard drive
<input checked="" type="checkbox"/>	c. PACS compatibility – [AGFA]
<input checked="" type="checkbox"/>	d. OEM-supported operating system

6. Added Value

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
<input checked="" type="checkbox"/>	b. Post-warranty remote diagnostic service program
<input checked="" type="checkbox"/>	c. Version/platform long-range plan
<input checked="" type="checkbox"/>	e. Embedded OS must be Windows 10 or later

## C. TRAINING REQUIREMENTS

1. Clinical Training

<input checked="" type="checkbox"/>	a. On-site clinical applications training for [4] technologists during go-live
<input checked="" type="checkbox"/>	b. On-site follow-up clinical applications training for [4] technologists once technologists have hands-on experience with the system
<input checked="" type="checkbox"/>	c. Off-site clinical applications training for [3] technologists
<input checked="" type="checkbox"/>	d. On-site clinical applications training for [3] radiologists
<input checked="" type="checkbox"/>	e. Technologists who complete the clinical applications training shall receive continuing education credits (CMEs).
<input checked="" type="checkbox"/>	f. 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="checked" type="checkbox"/> | a. VA has no trade-in units to offer. |
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