

Background:

The Malcolm Randall VA Medical Center at 1601 S.W. Archer Rd, Gainesville, Florida requires Multi-Planar Reformatting and 3D Imaging Reconstruction Software and Case Planning.

Scope of work:

The requirement for the company is to perform multi-planar reformatting and 3D reconstruction of CT angiography cases for Vascular Surgical operations undertaken at North Florida South Georgia (NF/SG) Veterans Health System operating room suites in the treatment of care for the eligible veteran's beneficiaries as referred and authorized by NFSG Veterans Health System. The company will reconstruct the digital CT images for utilization for case planning for endovascular procedures as related to:

1. CT based image reconstruction – includes acquisition and assessment of digital data quality, transferring and reformatting the data to create a 3D reconstruction image suite for endovascular case planning.
2. Provision of Hard-Copy Preview Products – return by next-day services a CD containing all the original image data, the reformatted image data, the 3Dreconstruction images and the Preview Software self-contained for viewing, analysis and case planning.
3. Provision of Secure Electronic Access to preview products – electronic access via a secure password protected account to the original image data, reformatted image data, the 3D reconstructed images and preview software for remote or urgent access for viewing, analysis and case planning.
4. Provisions of software updates and technical support – regular announcement/delivery of software updates either contained within CD packaging or via online services, availability of technical support during regular business hours either online or via telephone.

General Requirements:

- a) A patient-specific self-contained CD that contains the Preview Analysis software and all the original axial CD data as well as several reformatted muliplanar surface-rendered datasets that represent the data to allow for detailed precise measurements of-vessel diameter length, angle and aneurysm volume. This CD is portable allowing for the user in the Outpatient clinic office and importantly in the OR assisting during EVAR surgery

- b) In addition to the multiplanar reformatting should provides an *Interactive 3D* reconstructed model of the patient's aneurysm thus allowing for complete 360 degree manipulation of the model for exact analysis of the morphology of the aneurysm. Its relation to adjacent arteries, and vessel angle or tortuosity, all of which critically impact the technical aspect of the EVAR procedure
- c) Allows the surgeon to place an endograft into the patients aneurism on *the computer* as a simulation to assess adequacy of repair, to troubleshoot any potential intraoperative challenges, and to select the exact device required for each case. They include device offerings from all US approved manufactures that can all be simulated in order to compare and contrast how one graft may have advantages over another for that specific case and allowing us to match the best device to the correct anatomy. This greatly improves technical success and both short and long term outcomes in our practice.
- d) Provide a suite of measurements and other tracking tools through secure website. This is an invaluable tool in case where ongoing post-operative surveillance of a veterans EVAR's is required. In this way, detailed measurements of all aspects of the repair can be tracked over time for real-time monitoring of the performance of the graft and any complaints that arise. Identification of these early, leading to prompt treatment, also greatly improves overall outcome in these patients.
1. 3D model with standardized suite of measurements,.
 2. Interactive measurement tools, including diameter, lengths, volumes (blood, thrombus, and calcified plaque) and angles,
 3. Simultaneous 2D slice and 3D model viewing - CT data viewed perpendicular to the centerline of the vessel to provide accurate assessment of diameters, lengths, angles, and volumes.
 4. Virtual GraftTM simulation with manufacturer-specific AAA/TAA Grafts.
 5. View anatomical components within the lumen separately or as a whole, including blood flow, calcified plaque, thrombus, endoleaks, and dissections

Specific Mandatory Tasks and Associated Deliverables:

1. Task One - On a case-by-case basis will need to provide a patient specific service as outlined above in the general requirements section.
2. Deliverable One – A CD with the aforementioned information will be received within 72 hours of request via overnight courier.

Schedule for Deliverables:

1. Contractor will deliver the CD within 72 hours via overnight courier as stated above.
2. If for any reason any deliverable cannot be delivered within the scheduled time frame, the contractor is required to communicate in writing to the Vascular Section the reason for the delay and the expected timeframe with which the results will be received.

Qualification/ Certifications

1. The contractor shall be qualified and have the required levels of professional and technical experience to perform the work required by this statement of work.

Scheduling of hours worked:

The 10 Holidays observed by the Federal Government are New Years Day, Presidents Day, Martin Luther King Day, Memorial Day, Fourth of July, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, Christmas Day, or any other day specifically declared by the President of the United States to be a national holiday.