



Gifford Health Care

44 South Main Street., Randolph., Vermont 05060
802-728-7000

February 15, 2022

Donna Jerry
Green Mountain Care Board
3rd Floor City Center
Montpelier, Vermont 05620 - 3601

Re: Request for Jurisdictional Determination, Gifford Medical Center - Nuclear Medicine Equipment Upgrade

Dear Donna Jerry,

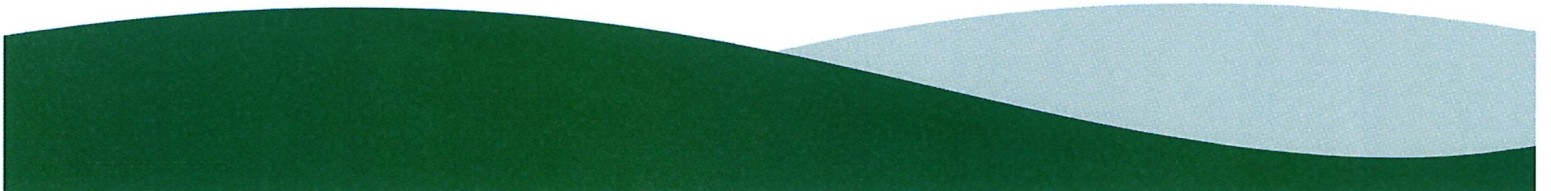
This letter is to request jurisdictional determination for a proposed upgrade project to Gifford Medical Center's Nuclear SPECT Camera. The current Nuclear Medicine Department utilizes a Siemens E-Cam SPECT Camera that is over 14 years old. This camera is beyond end of service (EOS) which means Siemens can no longer guarantee parts and/or repairs for this equipment. This leaves the department vulnerable, should the camera go down and Siemens is unable to get parts, our department would be essentially shut down. Another consideration for replacement is the technology of the camera. What we are currently using is severely outdated and should be upgraded with newer technology such as a SPECT/CT Camera.

The Project:

The proposed plan is to renovate a portion of our existing Radiology Department to accommodate the new GE SPECT CT Gamma Camera. The current camera will remain operational while the space for the new camera, directly adjacent to this current space is renovated. Displacement, demolition and reconstruction of a section within the current footprint will allow for the installation of lead lined wall systems, control room, new flooring, electrical and HVAC upgrades to accommodate the new equipment.

With the new GE SPECT/CT camera, our Nuclear Medicine Department will not be offering any new exams, however it will enhance the image quality of our current exams and allow us to accommodate patients of size. Our current SPECT camera has a weight limit of 400 lbs. and the new SPECT/CT camera can image patients up to 500 lbs. This is a significant increase and will allow more of our patient population to be imaged locally.

Our current camera uses Gadolinium attenuation correction to remove artifacts caused by excess body



mass, breast tissue and diaphragm. This attenuation includes additional radioactive sources on the camera and software programming to apply it to the images. Its purpose is to enhance and improve the image quality for the reading Physician to allow more precise interpretation. The Gadolinium attenuation correction is part of the outdated technology and on newer cameras it has been replaced with CT attenuation correction.

The new GE SPECT/CT is not capable of performing stand alone or diagnostic CT scans. The CT portion of the camera is only to enhance the nuclear medicine images by using a low dose CT scan for attenuation correction purposes only. Another benefit in the advanced technology of the new camera is it will allow us to use smaller doses of radioisotopes, reducing patient's radiation exposure. It will also allow for shorter imaging times which will greatly improve patient comfort during exams.

These are the exams we currently perform here in our Nuclear Medicine Department

- Myocardial Perfusion (Nuclear Stress Testing) – this is a non-invasive procedure which looks at the blood flow to the heart muscle to determine whether or not the patient needs a cardiac catheterization which is an invasive procedure and should be avoided if unnecessary
- Nuclear Medicine Bone Scans – we perform a variety of bone scans which can diagnose bone metastases from a primary cancer such as Prostate, Breast or Lung. These scans can also diagnose stress fractures not seen on x-ray and osteomyelitis which is an infection within the bone
- Hepatobiliary (HIDA) Scan – is done to assess the gallbladder function or detect a bile leak
- Renal Scans – are done to evaluate renal function and/or diagnose ureteral obstruction
- GI Bleed – these are done on an emergency basis to locate the site of a gastrointestinal bleed; a positive test usually results in the patient being sent to the OR for surgical intervention
- Pulmonary Ventilation & Perfusion (V/Q scan) – used for diagnosing pulmonary embolism (PE), CT scans are the preferred exam for this now, but for patients with renal impairment or who are allergic to the CT contrast, V/Q scans are the best alternative
- DaTscan – a relatively new procedure that helps diagnose Parkinsonian Syndrome vs. Essential Tremor. We have been performing these studies since February of 2019, previously patients would've had to travel to UVMHC or DHMC to have this test done
- Tagged White Blood Cell Imaging – this is done to locate the site of an infection, usually for diabetic ulcerations or for fever of unknown origin

The multiple exams we perform with this camera are imperative to providing quality care for our patients at Gifford, whether it is emergent or not, as we are able to perform these promptly and without having our patients travel or be transferred. About 80% of our Nuclear Medicine procedures here at Gifford are Myocardial Perfusion or Nuclear Stress Tests. This is also the test that will benefit

the most from upgrading to the new SPECT/CT with the improved attenuation correction. With this newer technology we will be able to provide better images to the interpreting Radiologist which can lead to more accurate interpretation and reduce or avoid unnecessary transfers and/or invasive procedures.

Our Nuclear Medicine Department is accredited by the American College of Radiology (ACR) and follows all procedure standards according to the Society of Nuclear Medicine and Molecular Imaging guidelines. We follow all Nuclear Regulatory Commission (NRC) guidelines and adhere to our Radioactive Materials license from the Vermont Department of Health.

The anticipated Project Cost:

We anticipate that this project will require a total capital expenditure of \$1,041,971.14

- Capital Expenses:
 - Capital Equipment cost: \$562,971.14. Includes all associated licensing, electrical UPS, disconnect switches and control panels
 - IT related Capital equipment purchase (server): \$20,000
 - Capital Renovation costs: \$459,000
 - No additional capital expenditures beyond year 1
- Annual Operating Expenses:
 - Current Equipment Service contract/Annual Operating costs: \$34,444/yr.
 - New Equipment Annual Operating cost YR 1: \$0.00 (Service under Warranty)
 - New Equipment Annual Operating costs YR 2: \$46,000 (Service contract)
 - New Equipment Annual Operating costs YR 3: \$46,000 (Service contract)
 - There are no additional annual operating expenses beyond the service contract as this is an existing department within the organization.

I believe that this letter describes the initial project proposal. If you have any questions or require further information please let me know.

Sincerely,

Doug Pfohl



V.P. Support Services
Gifford Medical Center
PO Box 2000
Randolph VT 05060
802-728-2240