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contabil
Date: 2020.05.20 15:15:56 +0300

SECȚIA/COMPARTIMENTUL/BIROUL
LRIM : 335/08.04.2020

AVIZAT
SERVICIU CONTABILITATE
Ec. Amelia GALE



APROBAT
MANAGER,
Ec. Carmen LUCUTA



REFERAT DE NECESITATE URGENT!

1. Anexă produse, servicii, lucrări:

<i>Nr. Crt.</i>	<i>Denumire achiziție</i>	<i>Specificații tehnice</i>	<i>Cantitate</i>	<i>Preț estimat al achiziției fără TVA/bucata</i>	<i>Valoare totală fără TVA</i>
<i>1</i>	<i>CT 128 slices + modul incita container</i>	<i>Oferta</i>	<i>1</i>	3.163.000,00 lei	3.163.000,00 lei
<i>2</i>					

2. *Durata procedurii (contractului) de achiziție: (se va completa de serviciul achiziții)*

3. Tipul procedurii: (se va completa de serviciul achiziții)

4.Cod CPV (conform Regulamentului nr.213/2008 privind vocabularul comun al achizițiilor publice): (se va completa de serviciul achiziții)

5. Justificarea necesității achiziției publice (se va completa de secțiile, compartimentele, birourile):

Achitizia sistemului CT 128 slices instalat in incinta modulara tip cointainer pentru indeplinirea recomandarilor
Comisiei de Radiologie Imagistica Medicala si Medicina Nucleara din cadrul Ministerului Sanatatii nr 44/27.03.2020
in contextul epidemiologic actual **al infectiei cu COVID 19** , de explorare Low Dose CT a pacientilor coronavirus
pozitivi evaluati in UPU si ce vor fi examinati in cadrul **LRIM al SCJU Arad**. Aceasta comisie recomanda existenta
unui **aparatus CT dedicat pentru SARS-COV 2 si definirea unor circuite separate** (cai de acces) pentru pacientii
SARS-CoV-2 astfel incat acestia sa nu se intersecteze cu pacientii sau personalul ce nu a fost contaminat si infectat cu
acest tip de virus.

6.Fondurile alocate (surse proprii sau alte surse)/poziția bugetară:

se va completa de serviciul contabilitate)

Cons. Fund - debt, capital

ÎNȚOCMIT,

Fiz Med SCJU Arad
Bioing Med Naghiu Violeta

Aprobat,

Sef LRIM
Dr Amza Oana Lucia

VIZAT SERVICIUL ACHIZITII,

OFERTA ECHIPAMENTE MEDICALE



Data: 08.04.2020

Catre: S.C.J.U. Arad, Arad

Buna ziua,

În urma corespondentei si discutiilor anterioare, va transmitem in continuare propunerea noastra pentru echipamentul de computer tomografie Revolution EVO 128 slices.

Va stau la dispozitie pentru eventuale informatii suplimentare.

Cu stima,

Georgiana Novac

Account Manager

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Cuprins

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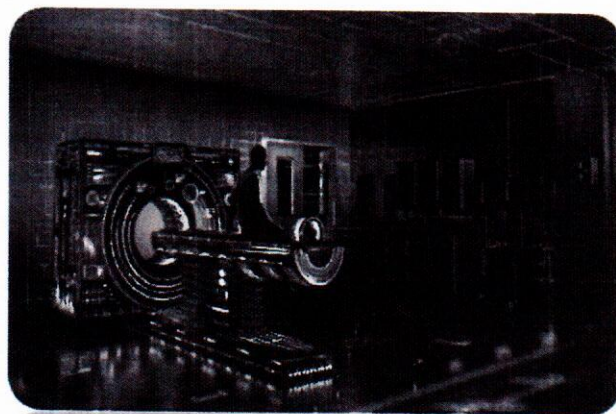
Prezentare GE HEALTHCARE



Viziunea noastră "Healthymagination" pentru viitor invită lumea să se alăture nouă în călătoria noastră, pe măsură ce dezvoltăm continuu inovații axate pe reducerea costurilor, creșterea accesului și îmbunătățirea calității în întreaga lume.

GE Healthcare oferă tehnologii și servicii medicale de transformare care modelează o nouă epocă de îngrijire a pacienților.

Expertiza noastră vastă în imagistica medicală și tehnologiile informației, diagnosticarea medicală, sistemele de monitorizare a pacienților, descoperirea medicamentelor, tehnologiile de fabricație biofarmaceutice, soluțiile de îmbunătățire a performanței și performanță ajută clienții noștri să ofere o mai bună îngrijire mai multor persoane din întreaga lume la un cost mai mic.



În plus, suntem parteneri cu liderii în domeniul sănătății, care lucrează să influențeze modificările de politică globală necesare pentru a pune în aplicare o schimbare reușită către sisteme de sănătate durabile.

OFERTA FINANCIARA

Va transmitem in continuare oferta General Electric Healthcare pentru echipamentul de imagistica medicala solicitat:

<u>Nr. Crt.</u>	<u>Echipamente</u>	<u>Valoare RON fara TVA (19%)</u>	<u>Valoare RON cu TVA (19%)</u>
1.	<u>Sistem CT Revvolution Evo 128 slices cu statie de post-procesare</u> Accesorii incluse: a) Tablou electric b) Injector substanta de contrast c) Sorturi radio-protectie d) Router e) Autorizatii CNCAN f) <u>Constructie modulara de tip container in urmatoarea configuratie:</u> ➤ Pereti exteriori din panouri termoizolante, usa si fereastră pe peretii exteriori ➤ Profile de consolidare sub gantry ➤ Scara metalica exterioara ➤ Blindaje de pb de 2.5 mm pe patru pereti si tavan ➤ Usa Pb, fereastră Pb ➤ Finisaje obisnuite ➤ Mobilier (birouri, scaune) ➤ Aer conditionat ➤ Ventilator de extractie ➤ Instalatie electrica interioara ➤ Chiuveta in camera de scanare (<u>pentru</u>	3.163.000,00	3.763.970,00



	<u>aceasta va fi necesar ca Spitalul sa traga racordurile pentru canalizare)</u> ➤ Cabina dezbracare pacient ➤ Camera operator inchisa, cu usa normala (configuratie atasata)		
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Condițiile de vanzare:

✦ **Garantia**

Garantia echipamentelor : **60 de luni** de la data instalarii, dar nu mai mult de 61 de luni de la data livrării.

Prin intermediul programului **On Watch**, pus la dispozitie de compania GE, cei mai importanti parametri de functionare sunt monitorizati 24/7. Astfel, se pot anticipa defectiuni iminente ce pot provoca perturbarea programului de lucru, minimizandu-se practic impactul acestor evenimente asupra fluxului de lucru cu pacientii.

✦ **Termen de livrare**

Termen de livrare: **3 saptamani** de la data semnării contractului si platii avansului sau conform conditiilor contractuale

✦ **Termeni de plata**

Conform conditiilor contractuale

✦ **Training**

Compania GE instaleaza, instruieste personalul medical si asigura service-ul echipamentelor pe toata perioada garantiei. In acest sens, in configuratia echipamentului sunt incluse **10 zile de training on-site** ce pot fi livrate in sesiuni saptamanale de 2-4 zile in functie de necesitatile de training ale personalului dvs.



În vederea optimizării modului de utilizare a echipamentelor și a menținerii standardelor de pregătire ale personalului dvs. la un nivel cât mai actual, vă propunem următoarele:

- **Acces la serviciul APPSLINQ** pe durata perioadei de garanție
 - Serviciul APPSLINQ presupune intervenția și instruirea de la distanță cu privire la eventuale probleme de aplicatie ale personalului dvs. sporind astfel nivelul de încredere în modul de utilizare a echipamentului. Totodată, prin intermediul APPSLINQ se oferă utilizatorului acces la un portofoliu de cursuri online ce se adresează în mod țintit anumitor tehnici imagistice.
 - În prezent serviciul APPSLINQ este oferit în limbi de circulație internațională urmând ca pe viitor să poată fi oferit și în limba română.
 - Serviciul APPSLINQ este accesibil prin intermediul consolei de operare a sistemului și presupune partajarea ecranului consolei de achiziție cu specialistul dedicat oferind acestuia un control limitat la funcționalitățile consolei pe durata partajării. Serviciul este oferit cu respectarea legislației aplicabile în vigoare.
- **Acces la platforma GE Cares**, platforma dedicată utilizatorilor premium de produse GE ce oferă oportunități precum:
 - Învățarea de tehnici noi și dezvoltarea abilităților de lucru în rutina zilnică prin acces la tutoriale, training-uri online sau webinare clinice dezvoltate de experți pentru experți.
 - Acces la baze de date cu protocoale de examinare create de experții GE.
 - Posibilitatea de a publica conținut reprezentând experiențe noi sau rezultate remarcabile precum și de a fi la curent cu realizările altor experți.
 - Posibilitatea de conectare cu alți experți din aria de interes și dezvoltarea rețelei personale în funcție de specialitate și locație.

✦ **Autorizații**

Echipamentele au toate autorizațiile necesare instalării și funcționării în România.

Cheltuielile legate de autorizarea spațiului (unde se aplică) în vederea instalării și funcționării cad în sarcina utilizatorului.

✦ **Post Garanție**

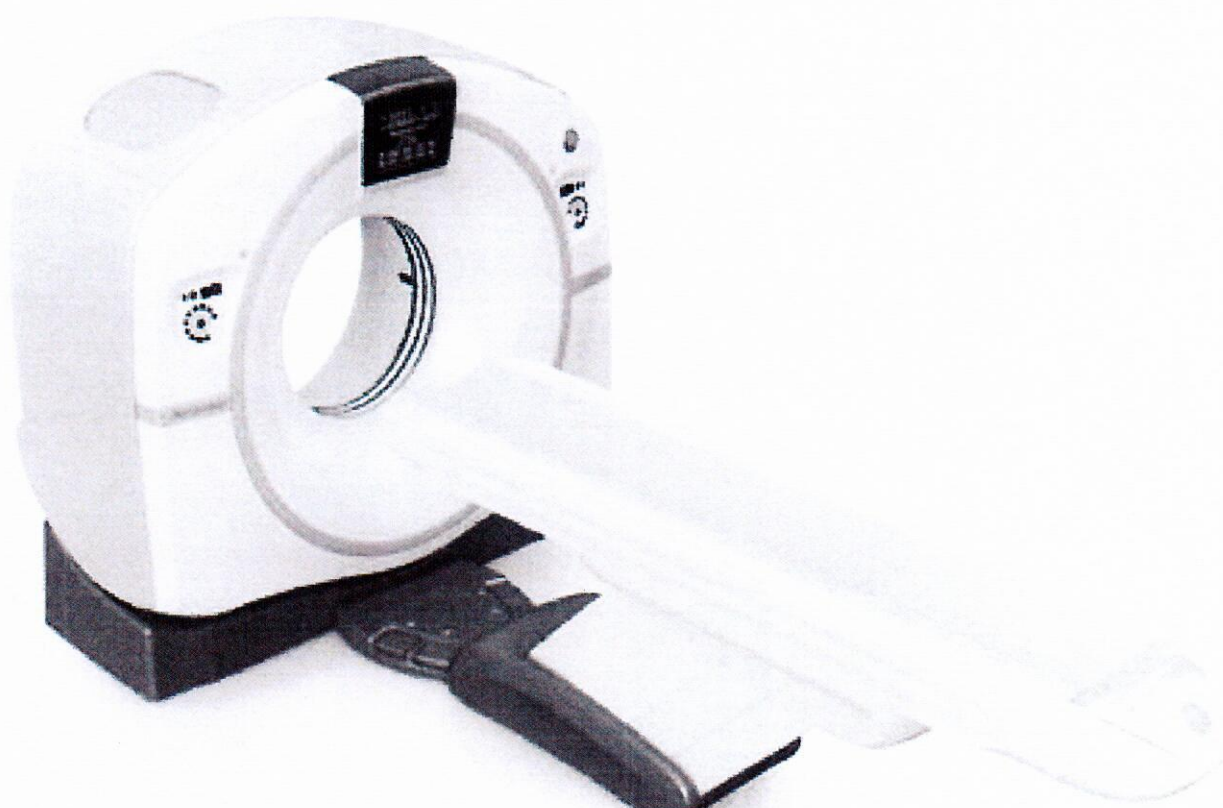
Compania GE vă oferă service și piese de schimb post garanție pe o perioadă de 10 ani de la momentul livrării pe baza de contract ferm.

✦ **Valabilitatea ofertei**



Oferta este valabila 3 zile de la data emiterii

ECHIPAMENT COMPUTER TOMOGRAFIE REVOLUTION EVO 128 SLICES



1	B75092DA	Revolution EVO system
1	B79792CB	Operator console monitors
1	B76542CB	Revolution EVO - European Kit
1	B7599ZZ	Euro misc keyboard kit
1	B76062CB	Long Cable Collector Kit
1	B76472CB	VT1700 Patient Table
1	B78672CB	ASiR Option
1	B77772CB	0.35 Sec Rotation Software Option for Cardiac
1	B77732CB	72KW Option
1	B77942CB	64ch / 128sl Option
1	B75572RE	Workflow Package
1	B77232CB	Smart MAR
1	E80171KD	Ivy 7800 cardiac monitor kit with cardiac cable kit for IPC - EMEA
1	B75862RE	Low-Dose cardio pkg
1	B75372CA	Low Profile Head Holder
1	B75342CA	Coronal head holder
1	E8016AZ	Cushion sealed in slicker for CT with GT1700 Table - 1700 Systems (2-pc Set)
1	B78552CA	Optima Operator Console Desk (Wide Design)
1	B77322CA	CT chair (no armrest)
1	B78792CB	UW protocol for Revolution EVO
1	R23053AC	Standard service tools L3 - warranty period
1	M81521KA	AW VolumeShare 7 with 32GB of RAM
1	M80281AA	AW workstation monitors
1	M81501PG	AW HP Workstation Power Cords Kit for EMEA and ASIA
1	M80501DV	Field Engineer Letter



1	M81521BS	OncoQuant Multi-Modality Package - this contains OncoQuant and Integrated Registration - Full Fusion.
1	B79921TA	CardIQ Function Xpress
1	B79821RE	CardIQ Xpress 2.0 Reveal
1	B79821PE	CT Comprehensive Neuro Package
1	B79821HC	Hepatic VCAR
1	B77021RA	CT PERF 4D NEURO
1	B79971JH	SmartScore 4.0
1	B79821WF	Thoracic VCAR and Lung VCAR Package
1	B77121BK	VesselIQ Xpress & AutoBone Xpress
1	B79821WC	Colon VCAR EC
1	M85101BD	DoseWatch Starter Kit-1 Connection(CT/CVIR)
1	A11181CT	Start Me Up 8 days CT
1	A33331CT	Make Me an Expert CT
1	W50671CT	60 months warranty for Revolution EVO EX
1	W40031CT	60 months Power Package Prepaid for CT
1	W90571CT	60 months Prepaid Option 72kW option for Revolution EVO
1	TC_CT_QMS-R_LSI	Item is Dual Head Injector Medrad Salient
1	NI_OTH_CONSTRUCTION	Box for CT COVID-19
1	TC_CT_QMS-R_LSI	PDB
1	TC_CT_QMS-R_LSI	Remote service (Router)



B75092DA - Revolution EVO system

Revolution EVO is the next generation Volume CT with Clarity Imaging Chain and advanced iterative reconstruction. Clarity Imaging Chain consists of Clarity Detector, DAS, Performix*40 Plus X-ray Tube and Iterative reconstruction, and delivers high resolution imaging to meet various customer needs in real clinical situations. Clarity Imaging Chain delivers higher spatial resolution, lower noise, or less-artifact.

Clarity Imaging Chain

Revolution EVO's Clarity Imaging Chain consists of Clarity Detector, DAS, Performix*40 Plus X-ray Tube and ASiR-V reconstruction, to deliver high resolution imaging.

Clarity Imaging Chain provides the following:

- For better performance Volume CT, Clarity Imaging Chain provides enhancement of spatial resolution up to 20% compared with previous GE technology.
- Designed as analog cable free between ASIC and Diode, and has a capability to reduce electric noise.
- Designed for less heat generation, up to 90% compared with previous GE technology and all in one DAS / Detector. It has capability to reduce electric noise.
- Designed for less floor-noise, up to 44% compared with previous GE technology and it has capability to reduce electric noise.
- Optimized collimator with ability to reduce scatter noise.
- Performix40* Plus X-ray tube provides less focus movement.
- A liquid bearing tube that has a capability of less-wear of Tube bearing and is enabled up to 0.35sec rotation speed option with a routine scan. Revolution EVO allows users to utilize helical pitches up to 1.531 and 0.35sec rotation speed option that meets GE's image quality specifications for lower pitch acquisitions. This high pitch and 0.35sec rotation speed enables faster scan times which may allow for shorter breath holds, and may help to avoid sedation, simultaneously (or "as well as") reducing motion artifacts from patient and organ movement. As an example, using this higher pitch, a full-body trauma scan of 1000 mm can be acquired in as little as 6 seconds.

Key Features:

- Silent design of Revolution EVO gantry allows significant reduction of audible noise compared with previous GE technology.
- IQ Enhance (IQE) reconstruction reduces helical Artifact Index in thin slice helical scanning. This reduction in artifacts makes it possible to scan at faster helical pitches.
- GE's protocol management is improved with the addition of a workflow improvement feature, which allows easy configuration of back to back Axial or helical scans of the same anatomy at two different X-ray energies (kVps). To further improve registration accuracy, patient immobilization may be utilized. The additionally acquired dual energy data can be post-processed on console or AW workstation using Add/Sub function to gain additional clinical information.



- Adaptive Enhance Level Adjustment (AELA) may improve visual spatial resolution while maintaining pixel noise standard deviation and artifact.
- Organ Dose Modulation provides reduction of radiation dose via X-ray tube current modulation for superficial tissues, such as breasts.
- AutomA/SmartmA* modulates X-ray tube mA to account for specific patient anatomy - based upon data gathered from the scout image. The system predicts the optimal setting for the exam and adjusts mA to these settings.
- Dynamic Z-axis tracking provides automatic and continuous correction of the x-ray beam shape to block unused x-ray at the beginning and end of a helical scan to reduce unnecessary radiation.
- Xstream Display is a multi-purpose LCD display and Xstream Display can show basic patient information on the gantry monitor. The user can confirm patient information in the scan room, enhancing workflow improvement with preset positioning (Default Patient positioning) on gantry display.
- Direct MPR with Auto-Batch feature, affording automatic real-time direct reconstruction and transfer of fully corrected multi-planar images, also allows users to move from routine 2D review to prospective 3D image review of axial, sagittal, coronal, and oblique planes while enabling automated protocol-driven batch reformats to be created and networked to their desired reading location.
- Dose Check provides users with tools to help them manage CT dose in clinical practice and is based on the standard XR-25-2010 published by The Association of Electrical and Medical Imaging Equipment Manufacturers (NEMA).
- Dose Reporting: CTDIvol, DLP, Dose Efficiency displays during scan prescription and provides dose information. The CTDIvol, DLP, and Phantom size used to calculate dose is automatically saved once the user selects End Exam.
- DICOM Structured Dose Report generates a CT Dose Report, which can enable tracking of dose (CTDIvol and DLP) for the patient by the hospital radiation tracking system/RIS/HIS.

Scan mode: Helical

- Helical Scan Speeds: Full 360° rotational scans: 0.7, 0.8, 0.9, 1.0 second
- Helical Pitch (nominal): 0.516 to 1.531
- Cardiac Pitch: 0.16 to 0.325
- Selectable kV: 80, 100, 120, 140
- Selectable mA: 10 to 560, 5mA increments
- Reconstruction Algorithms: Soft Tissue, Standard, Detail, Chest, Bone, Bone Plus, Lung, Ultra, Edge, Edge Plus

Scan Mode: Axial & Cine

- Scan Speeds: 0.7, 0.8, 0.9, 1.0, and 2.0 second full scans (360° acquisition).
- Selectable kV: 80, 100, 120, 140
- Selectable mA: 10 to 560, 5mA increments
- Scan Plane Geometry: $\pm 30^\circ$ gantry tilt, 0.5° increments



- Reconstruction Algorithms: Soft Tissue, Standard, Detail, Chest, Bone, Bone Plus, Lung, Ultra, Edge, Edge Plus

Image Quality

- 0.28mm high resolution

System Components:

Gantry Advanced slip ring design continuously rotates the generator, Performix*40 Plus, Clarity detector and data acquisition system around the patient.

- Aperture: 70 cm
- Maximum SFOV: 50 cm
- Rotational Speeds: 360 degrees in 0.7, 0.8, 0.9, 1.0 seconds
- Tilt: +/- 30 degrees, speed 1 degree/sec
- Multi-purpose LCD touch screen display with workflow features
- Integrated start scan button with countdown timer to indicate when x-ray will turn on.

X-ray Tube: Performix*40 plus liquid metal bearing tube unit offers an optimized design for exams requiring a number of scans without tube cooling.

- Performix*40 Plus with 7.0MHU of storage and capability of 72 kw operation provides increased helical performance with greater patient throughput
- Wide range of technique (10 mA to 560 mA, in 5 ma increments) gives technologist and physician flexibility to tailor protocols to specific patient needs for optimizing patient dose.
- Heat storage capacity: 7.0MHU(Performix*40 Plus)
- Dual Focal Spots:
 - Small Focal Spot: 0.7 (W) x 0.6 (L) Nominal Value; (IEC 60:193)
 - Large Focal Spot: 0.9 (W) x 0.9 (L) Nominal Value; (IEC 60:193)

High Voltage Generator: High Frequency on-board generator allows for continuous operation during scan.

72kW based system

- kV: 80, 100, 120, 140
- Max Power: 72kW
- mA: 10 to 600mA, 5mA increments

48kW based system

- kV: 80, 100, 120, 140
- Max Power (Hardware): 72kW
- mA: 10 to 400mA, 5mA increments



Clarity Detector:

64ch based system

54,272 individual elements composed by 64 rows of 0.625mm thickness at isocenter. All data is acquired as thin slice at 0.625mm with the option of thicker slice from image reconstruction or processing. 98% absorption efficiency.

32ch based system

54,272 individual elements composed by 64 rows of 0.625mm thickness at isocenter. All data is acquired as thin slice at 1.25mm with the option of thicker slice from image reconstruction or processing. 32x 0.625mm or 32x1.25mm scan mode. 98% absorption efficiency.

Clarity DAS (Data Acquisition System): The Clarity DAS dramatically reduces noise and improves image performance.

- 2,460 Hz maximum sample rate.
- 861 - 1968 views per rotation.

Revolution EVO Operator Console:

- 2,100GB Disk (system, image, scan disks) stores up to 460,000 512*2images and 3520 scan rotations at 64 slice mode or up to 1,500 scan data files, or up to 300 exams.
- Reconstruction speed with Standard reconstruction: Up to 50 frames per second.

Warranty: The published Company warranty in effect on the date of shipment shall apply. The Company reserves the right to make changes.

General Electric Company reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation.

Laser alignment devices contained within this product are appropriately labeled according to the requirements of the Center for Devices and Radiological Health.

Asterisk*: Trademark of General Electric Company

B76062CB - Long Cable Collector Kit

Revolution EVO and Optima CT660 Long Cable set

B76472CB - VT1700 Patient Table

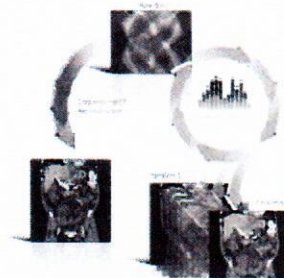
VT1700 is designed for flexible positioning with 1700mm long scannable range and 500lb (227kg) patient weight capacity.



B78672CB - ASiR

ASiR* (Adaptive Statistical Iterative Reconstruction) dose reduction technology.

- ASiR reconstruction technology may enable reduction in pixel noise standard deviation (a measurement of image noise). The ASiR reconstruction algorithm may allow for reduced mA in the acquisition of images, thereby reducing the dose required.
- A reconstruction technology that may enable improvement in low contrast detectability.



B77772CB - 0.35 Sec Rotation Software Option

0.35 second gantry rotation - provides the necessary software and hardware to enable a 360-degree rotation in 0.35 seconds to lower temporal resolution while scanning the heart. This software will also enable an additional rotation time of 0.37 sec in a 360-degree rotation. These additional rotation times will enhance the user's ability to acquire cardiac images of the heart with less motion. These faster rotation times are supported by the Performix™ Pro tube/generator combination which will supply the peak power required to maintain IQ with drastically reduced imaging times.

NOTE: This item does not contain any other hardware or software for cardiac acquisition or analysis.

B77732CB - mA Power Option

The mA power option upgrades the maximum allowable mA selection of the on-board high frequency generator by 40% from 400 mA max to 560 mA. More mA can be used to image large patients or at faster rotation times you can maintain the mAs prescribed.

B77942CB - 64ch / 128sl Option

64ch-128sl option will provide 0.625 mm acquisition for the full 40 mm of detector coverage. Combined with the overlapped reconstruction feature, it enables 128 slices per rotation in axial scanning modes and delivers improved Z-axis visualization performance relative to non-overlapped reconstruction.

B75572RE - Workflow Package

Workflow package is software package for productivity enhancement. This package includes Image check and One-stop scanning mode.

Image Check provides 340x340 matrix images for confirming reconstructed image coverage in real time and tracking up to 1800mm length with less than 1 sec delay.



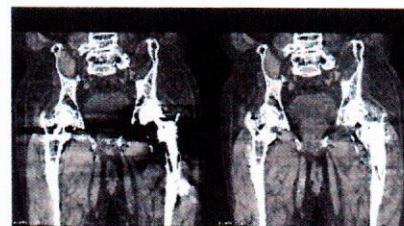
Reconstruction time is up to 55 fps.

Revolution EVO's exceptional one stop scanning mode provides a streamlined workflow on the Xstream Display such as "Patient selection", "Protocol selection" and "Confirm". Pre-scanning can be accomplished in as few as five touches.

B77232CB - Smart MAR

MAR helps reduce photon starvation, beam hardening and streak artifacts caused by high Z materials in the body, such as hip implants.

The clarity of MAR images is addressing the challenges posed by metal artifacts, helping clinicians accurately contour targets and critical organs.



MAR offers:

Exceptional image quality: MAR is based on the latest in GE Healthcare smart technology, which uses a novel three-step, sinogram-based iterative algorithm.

Streamlined workflow: MAR requires only one scan, making the process of obtaining a corrected image fast and efficient.

Dose conscious: MAR requires only one acquisition.

Patient comfort: The efficient, single-scan process helps to reduce patient time inside the scanner.

Versatility: MAR is designed to enhance clarity across a range of images including scans of hip implants, dental fillings, screws and other metal objects.

B75372CA - Low Profile Head Holder

Flat Head holder

B75342CA - Coronal Head Holder

Coronal head holder to support the patient, allowing the acquisition of direct coronal images.

E8016AZ - Slicker for 1700 Table

- Increase system uptime by protecting table from spills and particulate contaminants
- Easy to install and comfortable for patients
- Will not interfere with normal operation of CT table
- Clear PVC plastic facilitates faster cleanup of blood and fluids
- Prevents contaminate build up in hard to clean areas



- Thermosealed seams and flaps
- Recommended for trauma centers and sites concerned about exposure to blood and fluid-borne disease

Two pieces/set, CT cushion and cover.

B78552CA - Optima Operator Console Desk (Wide Design)

Optima Desk is the desk designed with ergonomics. This table design enables the efficient use of space while enhancing workflow and technologist comfort. Benefits include:

- Improved ergonomics for technologist
- Wide desktop for working space improvement
- Flexible location of Console hardware



B78792CB - UW protocol for Revolution EVO

Dose-optimized protocols designed, developed and validated by a team of physicians, physicists and technologists at the University of Wisconsin -Madison School of Medicine and Public Health. Tested in a variety of settings including outpatient imaging centers, the American Family Children's Hospital and one of the nation's premier academic medical centers, these protocols are designed to be used "as is", requiring no adjustment by the operator. The protocols cover multiple clinical applications and are designed for patients of varying sizes. Each protocol has been designed to deliver diagnostic quality images while using as little dose as reasonably possible. Included with the protocols is a 300 plus page manual containing information on the proper patient set-up, contrast parameters, scan range instructions, reformatting instructions and technical acquisition parameters for each protocol.

M81521KA - AW VS7 workstation

AW VolumeShare 7 with Two Flat Panel Monitors and 32GB of RAM.

AW VolumeShare 7 is a multi-modality image review, comparison and post processing workstation built with simplicity and power at its core. Powerful software is optimized to take advantage of state of the art 64 bit technology and multiple cores to ensure leading edge performance.

AW VolumeShare 7 features include:

Hardware:



- HP Z820 Workstation
- CPU: 2x Intel Xeon E5-2630 Six Core 2.6 GHz
- CPUs with 15MB Shared L3 Cache each and 1866 MHz Dual Front Side Bus
- RAM: 32GB (8x4GB) DDR3 1866 MHz ECC DIMM
- NVIDIA Quadro NVS 310, 512MB Graphics card
- 1x 300GB SAS 10k rpm Hard Disk for OS and Apps
- 2x 300GB SAS 10k rpm Hard Disks for Data
- 2 x 19" 1280x1024 color monitors

Software:

- GE Healthcare HELiOS 6 operating system
- Volume Viewer for advanced post-processing
- Demo Exams for training and exploration
- Fast access to information you need through optional RIS integration & priors post-fetch
- Efficient workflow through dynamic load, end review and Key Image Notes features
- Productivity package to pre-process exams and allow up to 8 simultaneous sessions
- Applications usage monitor to track and view usage of your system
- Smart layouts with Volume Viewer General review protocol that optimizes comparison and single exam layouts
- Enhanced multi-modality contouring tool with support for PET SUVs
- Support for external DICOM USB media and preference management tool to exchange preferences across users
- Support for optional, broad suite of multi-modality advanced applications

M80281AA - AW VolumeShare 7 Monitors

AW VolumeShare 7 Monitors are two high-quality monitors offering bright and high contrast imagery suited to the display of medical images per the AW VolumeShare Indications for Use.

Each provides a 19" 1280x1024 (5:4 aspect ratio) display that complies with international medical and patient safety standards and offers the following specifications:

- Maximum luminance (panel typical) : 330 nit
- DICOM Part 14 calibrated luminance: 215 nit
- Contrast ratio (panel typical) : 900:1
- An ambient light sensor
- Brightness non-uniformity (measured as per DIN6868-157) : +/-25%

M80501DV - Field Engineer Letter

Field Engineer Letter - Operator Manual on paper for AW



M81521BS - ONCOQUANT MULTIMODALITY PACKAGE

The OncoQuant Multi-Modality Package contains OncoQuant and Integrated Registration - Full Fusion.

OncoQuant is an oncology workflow enhancement tool that provides multi-modality image and dataset reviews. It provides user-friendly tools to follow lesion size over time, apply study criteria and provide tabulated results to the Oncology team. It is an optional package available on both the GE AW VolumeShare7 and the AW Server 3.2 platforms.

OncoQuant is fully integrated within the standard Volume Viewer 7 protocols and therefore works as a toolset rather than a standalone application. Because of this tight integration, OncoQuant, as a product, benefits from the new Volume Viewer 7 improvements.

Major features and enhancements are:

- An integrated kit of Oncology Tools compatible in any standard reading protocol in Volume Viewer 7 to aid routine oncology reads.
- Adaptable Workflow for standard clinical reading to advanced research using tools supporting RECIST 1.0, 1.1 and WHO criteria.
- A Multi-Modality reading platform allowing comparison and correlation of CT, MR, PET/CT, and 3D X-Ray data. Features:
- Automatic Multi-Modality full coverage and regional registration (CT, MR, PET, 3D X-Ray) if the user has purchased Integrated Registration.
- Dedicated smart PACS-like layout for facilitating oncology review and follow-up studies from the Volume Viewer 5.
- Full access to entire set of 3D visualization tools.
- One consistent contouring tool for all modalities (CT and MR images and PET SUV's).
- Benefit from Lung VCAR algorithms and DCA as a tool inside the routine oncology workflow if the user has purchased Lung VCAR.
- Advanced support for output with new oncology save state.
- New intuitive Summary Table of Findings supporting guided follow-up for standard or more advanced studies like RECIST.
- Export statistical results (for excel) and images to USB and in DICOM to the filmer.

B79921TA - CARDIQ FUNCTION XPRESS

CardIQ Function Xpress CardIQ



Function Xpress is an Integrated post processing image analysis software for Cardiovascular CT on GE's Advantage Workstation and AW Server.

CardIQ Function Xpress allows users to Non-Invasively Image the Functional Parameters of the Heart such as ejection fraction (EF) and ventricular volumes. CardIQ Function Xpress uses multi-phase cardiac gated datasets for processing.

The software automatically detects endocardial and epicardial contours for assessment of left ventricular (LV), right ventricular (RV) and left atrial functional parameters.

- Automatically select each chamber of the heart for individual chamber volume analysis. The software automatically selects the LV 97%, LA 87% and RV 96% of the time.
- Automatic end diastolic and end systolic selection for LV, RV and LA ejection fractions >91% of the time.
- Behind the scene processing & loading of function data for real time review of ejection fraction, volume analysis and myocardial analysis.
- One click activation for 4D beating heart
- Automatic selection of epicardium and endocardium for myocardial analysis.
- Bulls eye plots representing wall motion, wall thickness and wall thickening.
- Automatic left atrium volume calculation with exclusion of the pulmonary vein.
- Single click visual wall motion activation with short axis images in the basal, mid and distal orientation along with a 2-chamber long axis view.
- Flexible reporting tool with graphical representations.
- Display table of key functional parameters for instant visualization.

System requirements:

AW Workstation with VolumeShare 7 or later or AW Server 3.2 or later.
Requires AutoLaunch and Pre-Processing.

B79821RE - CARDIQ XPRESS 2.0 REVEAL

CardIQ Xpress 2.0 Reveal is an integrated post processing image analysis software for Cardiovascular CT on GE's Advantage Workstation.

The optional CardIQ Xpress Reveal software can be used to effectively display, reformat and analyze 2D, 3D, and GSI CT images for qualitative or quantitative assessment of the anatomy of the heart and coronary artery vessels from single or multiple cardiac phase image data sets. When used with CardIQ Function, CardIQ Xpress Reveal can also provide functional assessment including relative perfusion information.



CardIQ Xpress Reveal can be launched directly or from within Volume Viewer applications using gated axial, helical or GSI CT images; including images created using the SnapShot Freeze intelligent motion correction option.

The software includes a variety of different 2D, 3D or reformatted protocols including:

- Display of the coronary vessel tree, angiographic view
- 2D and 3D rendering of single or multiple coronary artery vessels or grafts
- Automatic reformation of cross sectional cardiac images into planes along short or long axis of the heart
- One-touch cath views for 3D or reformatted images
- 3D angiographic view phase registration
- Color mapped plaque density measurements
- IVUS-like views
- 3D ejection fraction
- 4D aortic and Mitral valve views
- Relative perfusion
- Transparency views and beating heart images from single or multiple cardiac phase image data sets.

CardIQ Xpress Reveal combines simplified user workflow with SnapShot Freeze intelligent motion correction imaging.

- Pre-processing the images & models including SnapShot Freeze exams, for faster review
- Loading images into the auto launch area area for real-time review of multiple exams
- Easy switching from one protocol to the other without exiting the application
- Single click one-touch cath views
- Batch movie output within cardiac reformat
- User defined layouts within vessel analysis for simplified viewing and filming
- Multi-phase load to single phase review

The CardIQ Xpress reveal option allows the user to:

- Rendering and display of 2D/3D coronary vascular tree images with automatic vessel tracking & labeling with single click of a protocol. Images can be reviewed in axial, reformat, curved, oblique MPVR, and cross section views
- Measurements of coronary arteries including: stenosis, density and length of stenotic area
- PlaqID to color code non-calcified and calcified plaque with volume measurements.
- 2D reformat review with predefined views to review all coronary vessels.
- Color enhanced relative perfusion defect pattern recognition for detection of ischemic heart disease with 4 color patterns



- Automatically render data for streamlined reading to include: 3D rendered heart, angiographic view, tree VR, and ejection fraction.
- Reformat standard axial CT images of single or multiple cardiac phases automatically into short, long and two chamber long axis of the heart for easy review Perform functional evaluation of the heart and cine capabilities for multiphase beating heart images with one easy click
- Extraction of the left ventricle and automated ejection fraction and volume measurements. Note: CardIQ Function Xpress is needed if myocardial wall motion, mass, wall thickness or chamber volumes for the Right Ventricle, Left Atrium, Right Atrium is needed.
- 4D aortic valve and mitral valve views with one touch
- Ability to select different protocols without exiting the application
- Pre-defined VR IVUS-like views for virtually determining plaque compositions
- One touch angiographic view protocol displays coronary vessel tree and myocardium with automatic removal of heart chambers for cath comparative view
- Heart transparency model allowing for full visualization of coronaries in relations to the heart chambers with the ability to fade out the chambers of the heart
- Oblique reformat views in the standard cath angles for easy analysis of the coronary vessels
- Load multi-phase images, review the data and decide which phase or phases will be reviewed for further processing by dropping the non-essential phases
- Phase registration - ability to register images from different cardiac phases into a unique data set. The data set can then be saved as a 3D object and/or used for further analysis

System requirements:

- AW VolumeShare 7 or AW Server 3.2
- Auto Launch and Preprocessing Option

B79821HC - HEPATIC VCAR

Hepatic VCAR Hepatic VCAR is a CT post processing software application. It provides enhanced productivity with automation for whole organ and lesion segmentation, tumor burden calculation, treatment planning tools (liver lobes & segments separation). Hepatic VCAR provides the tools to streamline workflow and enhance diagnostic confidence.

Hepatic VCAR provides a comprehensive reading workflow solution for detecting liver lesions and assessment of liver morphology with exceptional flexibility and performance. With it you can visualize and measure the entire liver volume, liver segments and liver lesions, determine tumor burden and assess change over time. Hepatic VCAR is built with full integration to



Gemstone Spectral CT (GSI) allowing for use with GSI data. A clear, concise clinical report allows for easy communication of all measurement results.

Key features of the Hepatic VCAR package:

- Automatic liver segmentation in under 30 seconds.
- Automatic detection of arterial and portal venous phases.
- Intelligent user guided segmentation algorithms to size liver lesions.
- Built in lesion overlap detection and avoidance functionality.
- Tumor burden calculations linked to segment, lobe or whole liver.
- Efficient management of lesions and tumor burden for longitudinal exams.
- Integration with Spectral CT allows for quantification of Iodine to aid in lesion characterization when used with GSI datasets.
- Clinical report of all measurements and images automatically generated with easy export functionality. Requirements:

Hepatic VCAR is compatible with AW Server 3.2 and later and AW VolumeShare 7 or later
B77021RA - CT PERF 4D NEURO

CT Perfusion 4D Neuro CT Perfusion 4D Neuro Package is an image analysis software package that allows the evaluation of dynamic CT data following an injection of a compact bolus of contrast material, generating information with regards to changes in image intensity over time.

The software provides a quick and reliable assessment of the type and extent of cerebral perfusion disturbances by providing qualitative and quantitative information on various perfusion related parameters, which may be related to acute stroke, brain tumor angiogenesis and treatment thereof.

The key perfusion parameters that CT Perfusion 4D Neuro Package generates are:

- Regional Blood Volume (BV; ml/100g)
- Regional Blood Flow (BF; ml/min/100g)
- Regional Mean Transit Time (rMTT;s)
- Capillary Permeability Surface Area Product (PS)
- Time of Arrival (IRF T0)
- Transit Time to IRF Peak (Tmax;sec)

The user now has the ability to visualize all the information in true volumetric form.

Additional elements of Perfusion 4D include Smart Map, a new algorithm that improves the image quality of the functional maps in the presence of noise.



Perfusion 4D also includes a new streamlined workflow for Tissue Classification. Tissue Classification may aid the clinician in determining the status of the tissue based on blood volume and one of blood flow, mean transit time, or Tmax.

Productivity is enhanced through the protocol driven design of the user interface. An example of this is the Brain Stroke Protocol (Automatic) that completes the processing with one touch reducing the time required to process the exam and to enhance repeatability.

Perfusion 4D is compatible with AW Server 3.2 and AW VolumeShare 7

B79971JH - SmartScore 4.0

SmartScore 4.0 provides a valid baseline test that helps detect calcium plaque burden using minimal radiation dose. It allows to better assess a patient's overall risk for coronary artery disease and communicate results to patients in comprehensive, easy-to-read reports.

Automatic detection reduces or eliminates the need for manual visual detection of lesions, with all scorable lesions above a threshold highlighted in bright green. Lesions are also correctly classified in a 3D space with fewer mouse clicks.

SmartScore 4.0 uses the conventional Agaston-Janowitz calcium scoring technique with a threshold of 130 HU and is adjusted for the appropriate image slice thickness.

The Mass scoring algorithm is quickly being adopted as an objective measuring tool, reported in milligrams, for a more quantifiable calcium calculation. SmartScore 4.0 also computes a Volume score algorithm for calcium quantification in cubic millimeters.

Features:

- Fully integrated patient reports
- Personalized reports (from a patient's overall cardiac history to exam-specific images, diagrams, tables and calcium rankings.
- Calcium distribution and population graphs
- PACS function for future retrieval

B79821WF - THORACIC VCAR AND LUNG VCAR

Thoracic VCAR is a CT post processing software package designed to provide the user with a set of tools that allows the physician to make quantitative measurements that can assist in the diagnosis of lung diseases like COPD.

The software combines segmentation of the lung and airways with analysis tools to provide advance analysis of the lung parenchyma and airways. The analysis comprises of 2D and 3D wall thickness and diameter measurements which provide an integrated approach to a comprehensive evaluation of a CT lung exam.

Key features include:



- Quick basic 2D review with one-click measurements of wall thickness derived from airway and lumen diameters with display of inner and outer contours for added reference
- Simple workflow with segmentation of right and left lung and airways
- One touch 3D airway tracking with measurements for airway analysis
- Lobe segmentation - Segmentation of the left and right lung with additional tools to separate and visualize by distinct lobes.
- Once segmented they can be displayed with color overlays with volumes displayed by lobe
- Airway analysis - Segments the airways from the trachea to the bronchi, which is tracked for lumen analysis

Lung VCAR takes a new direction in application design, leveraging the power of high resolution, volume scanning. This new technology is enabled by the Automatic Detection, Precise Segmentation and Interactive Quantitative Analysis that enhances analytics and improves data management.

Key features include:

- Digital Contrast Agent (DCA) - Automatically visualizes and highlights abnormal and potentially cancerous pulmonary solid nodules
- Bookmarking Tools for ease of image review and analysis
- Correlated Workflow-Synchronized 2D, DCA and Segmented Analysis
- One Click Solid Nodule Segmentation from vessels and pleural wall
- Segmentation Analysis of all nodule types Solid, Non-Solid and Part Solid

Automatic Nodule Analysis Provides:

- Percent Growth
- Doubling Time
- Volumes Image Display
- Tools for comparison of initial and follow-up exams
- Automatic Bookmark Propagation from previous to current or current to previous exams
- Automatic Image Registration for image review synchronization
- Customizable Personal Review Layouts
- Interactive Patient Reporting (DICOM SR) Provides both structure and flexibility

Both Thoracic VCAR and Lung VCAR require AW VolumeShare7 and later or AW Server 3.2

B77121BK - VesseliQ XPRESS AND AUTOB



VesselIQ Xpress & AutoBone Xpress VesselIQ Xpress provides an optimized non-invasive application to analyze vascular anatomy and pathology and aid in determining treatment plans from a set of CTA images.

There are new features introduced in the VolumeShare 7 release including:

- Auto Abdominal Aorta Vessel tracking which is a completely automated protocol with autobone removal, auto vessel tracking and automatic labeling of the abdominal aorta vasculature.
- Fast Tracking which provides automatic real-time feedback for auto-detected centerlines to speed up vessel tracking.
- New editing tools that allow for flexibility in editing based on the size of the vessel being edited.

This software supports the physician in:

- Assessment of aneurysms with or without thrombus (false lumen) for size and volume measurements with the capability to track the size and volume over time, stenosis analysis, pre/post stent and surgical planning and directional vessel tortuosity visualization.
- Automatic tools for the segmentation of bony structures in the brain and neck and other vascular areas for accurate identification of the vessels, single or double click vessel analysis.
- Sizing the vessel, analyzing calcified and which is a completely automated protocol non-calcified plaque to determine the densities of plaque within a vessel, measure areas of abnormalities within a vessel (like stenosis, plaque, thrombus, dissection or leakage).
- Semi-automated detection and segmentation of thrombus for subsequent measurements within the application.
- Dedicated anatomy based protocols for improved workflow.
- Compare a patient's previous exam to their current exam in order to measure and track any changes over time of their vascular structures.
- After review of the exams, there are multiple ways to film, archive and capture information for future review.

System Requirements: AW VolumeShare 7 or AW Server 3.2

Note: All softwares are Non-Transferable to other hardware and are Non-Returnable.

B79821WC - COLON VCAR EC



Colon VCAR EC is a CT image analysis software package that allows visualization of 2D, 3D and dissected image data of the colon derived from CT volume image data sets. Colon VCAR EC is designed to aid the physician in evaluating the lumen and internal wall of the colon to confirm the presence or absence of colonic lesions (e.g. polyps). It provides functionality for 2D/3D rendering, bookmarking of suspected lesions, synchronized viewing of the 2D, 3D and 360-degree dissection views for data sets acquired in any position and an object oriented endoluminal display.

The Colon VCAR EC DCA (Digital Contrast Agent) tool is an automated highlight feature for the visual identification of spherical structures within the colon and is intended to be used as concurrent reading device. DCA is a 3D filter that highlights spherical anatomical regions, such as polyps. Colon VCAR EC uses color to display these highlighted areas.

Key features include:

- Electronic Cleansing for the visualization of anatomy that would previously be hidden behind tagged fluid.
- Colon VCAR's EC user interface provides a seamless integration between automatic and/or manual interactions allowing flexibility that reduces reading time.
- Synchronized prone/supine fly-through for ease of view.
- Hi-Resolution (512 matrix) 3D fly-through Image quality is not compromised in order to display fly-through.
- Quick and easy to use polyp and centerline Measurement Tools for complete reporting.
- Flexible Display Format- Leverage any combination of the synchronized 2D, 3D and 360 degree Dissection views for primary reading and problem solving.
- Variable speed navigation control.
- Automatic Segmentation and Centerline editing- Automatic Small Bowel extraction.
- Polyp color mapping for easy tracking.
- Reporting Tool - Provides fast, interactive electronic patient reporting.

System requirements: AW VolumeShare 7 or AW Server 3.2

A11181CT - Start Me Up 8 days CT

Customized on-site Application training

Get the best use of your GE Equipment with the GE CARES program.

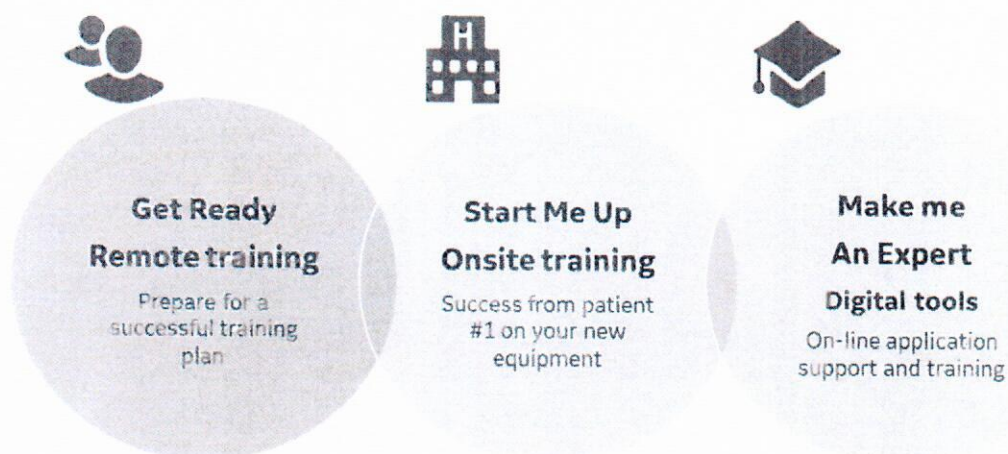
The program is divided into 3 steps, it is tailored to adapt to staff's level of expertise to deliver the most adapted training.

We define together in advance your application needs and pre-training for an efficient on-site training experience (8 days).



After your on-site application, we offer you unique access to an expert for live assistance and application training follow-up directly on your equipment.

We support you throughout the life of your imaging equipment by providing privileged access to interactive clinical webinars with experts and on-line courses



Duration: 8 days onsite training

Target attendees: Radiographers, Technologists, Radiologists, Physicians, Cardiologists

Course Leader: GE Clinical Education Specialist

Certification: GE Healthcare Education Certificate

Language: Local Language when available or English

Number of Participants: Maximum 4 people per session

Expiry date: Available during the warranty period

A33331CT - Make Me an Expert CT

Customized on-site Application training

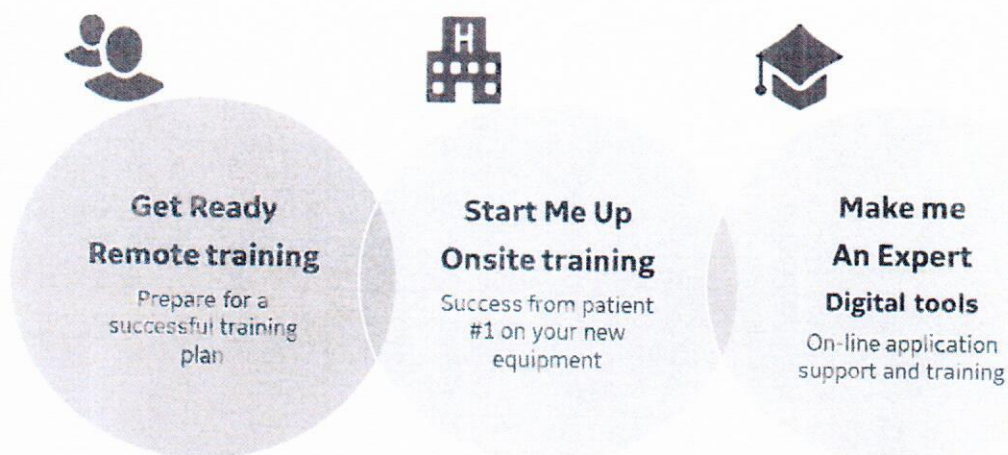
Get the best use of your GE Equipment with the GE CARES program.

The program is divided into 3 steps, it is tailored to adapt to staff's level of expertise to deliver the most adapted training.

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After your on-site application, we offer you unique access to an expert for live assistance and application training follow-up directly on your equipment.
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