

## Philips Big Bore RT Training Program



At Philips, we recognize that clinical excellence is dependent upon technologically advanced systems and is supported by dedicated, highly skilled, and effectively trained healthcare professionals.

Following installation of a Philips product or system, we are committed to providing our customers with a level of education to maximize the performance, effectiveness, and efficiency of our products and systems.

The benefits of timely and effective customer education will be evident in our customers' satisfaction of the product. Well-trained customers are more confident, better able to use the advanced product features, and may achieve better results using our products.

Philips offers a comprehensive training program designed for your staff to realize the full potential of your Philips advanced imaging systems.

As our training programs are continuously updated, this guideline is subject to change. Please consult your equipment quotation for specifics of your training program including number of on-site training hours.

## Philips Clinical Services

### Oncology

## Training program overview

The Philips training program consists of off-site and on-site training including initial handover enablement and follow up training tailored to your requirements.

	Training event 1	Training event 2	Training event 3	Training event 4 (if IMR is purchased)
Title	Session 1: Big Bore Pre-Handover Off-site Training	Session 2: Initial Handover On-site Training	Session 3: Follow-up On-site Training	Session 4: IMR On-site Training
Location	Cleveland, Ohio	Customer Location	Customer Location	Customer Location
Duration	25.5 Hours	24 Hours	24 Hours	24 Hours
Prerequisites		Session 1: Big Bore Pre-Handover Off-site Training	Session 2: Initial Handover On-site Training	Session 3: Follow-up On-site Training



All elements of training must be used within one year of the installation of the equipment or a charge will be incurred for future use. Session 1 courses (off-site training) will not be converted to additional on-site training sessions for any reason. Session 1 courses provide the framework necessary for a successful Clinical Handover (Session 2).

## Training events

The following sections list and describe the training events that are included in the training program.

### Session 1: Big Bore Pre-Handover Off-site Training

Pre-Handover training for the Philips Big Bore RT powered by iPatient. This interactive off-site session is held at the Cleveland, OH training facility and is attended prior to, or during, the CT scanner installation period. It is intended for two designated Radiation Therapists and is a prerequisite to the Session 2 Initial Handover On-Site training at your facility. Travel package sold separately. See course agenda for details.

## Session 2: Initial Handover On-site Training

Clinical use: Big Bore RT On-Site Training. (Tuesday-Thursday 8:00am – 5:00pm) Training is intended to fine tune and expand upon knowledge learned during Session 1. The training will focus on general to advanced oncology scanning and Tumor Localization, scanner QA, maximizing scanning techniques, reconstruction parameters and exam cards.

Trainees should be the same two therapists from Session 1 and up to one more radiation therapist with simulation experience. In addition to the therapists there should be a dosimetrist, physicist and physician available for selected responsibilities throughout training. Physics must be available during day 1 of the training to assist with scanner QA procedures, treatment machine definition in Tumor LOC, reconstruction options and generation of Exam Cards for patient scanning.



Limiting the number of patients scheduled is necessary to ensure the quality of your on-site training, otherwise complete coverage of all material cannot be guaranteed. The scheduled Philips Clinical Applications Specialist will also work with you prior to all on-site events to ensure your department's training needs are met. A Clinical Applications Specialist will be contacting your facility once the training has been scheduled and confirmed by our scheduling department. All Philips oncology specialists are registered Radiation Therapists and/or Certified Medical Dosimetrists with an expert level of knowledge related to CT simulation and treatment planning. Please share these guidelines with your staff to be trained, as well as, the dosimetry and physics staff.

Example schedule:

	Morning	Afternoon
Day 1	(No patients) Machine definition and Exam Card generation with Physics	(1 patient) Startup/shutdown, system QA, system overview, scanner workflow, introduction to Tumor LOC
Day 2	(1-2 patients) Continued scanner workflow, CT Directory overview, CT Viewer, Dose management tools	(1-2 patients) Off-line reconstructions, Tumor LOC overview
Day 3	(1 patient) Tumor LOC continued, 4D CT introduction	(1 patient) 4D CT continued



Regarding start and end times and days: The training schedule is designed to accommodate Monday travel and physics acceptance testing. Training will commence on Tuesday morning.

## Session 3: Follow-up On-site Training

Clinical use: Tumor Localization on Console and Pulmonary Toolkit. (Tuesday-Thursday 8:00am – 5:00pm) Training is intended to fine tune and expand upon knowledge learned during Session 2. The training will focus on Tumor LOC, and the Pulmonary Toolkit. Trainees should be the two therapists from previous sessions and a core group of staff that will implement the Pulmonary Toolkit/Correlated Imaging (4D CT) process.



**Note**

If any 3rd party device (i.e. Varian RPM) will be interfaced with the Big Bore RT Scanner to acquire data for Respiratory Correlated Imaging (4D CT), it is a prerequisite that 3rd party vendor training is completed prior to this training session. Philips personnel will not be able to provide 3rd party vendor training. Limiting the number of patients scheduled is necessary to ensure the quality of your on-site training.

	Morning	Afternoon
Day 1	(1-2 patients) 4D CT Acquisition and Exam Card review.	(1-2 patients) Respiratory waveform Tag Editing for image quality improvements, and waveform review.
Day 2	(1-2 patients) Amplitude and Phase based binning.	(1-2 patients) Pulmonary Viewer for review of 4D CT data.
Day 3	(1-2 patients) Generating Intensity Projections within Tumor LOC.	(1 patient) Export of 4D data to TPS.

## Session 4: IMR On-site Training (if IMR is purchased)

Clinical use: Big Bore RT Oncology Iterative Model Reconstruction On-Site Training. (Tuesday-Thursday 8:00am – 5:00pm) Training is intended to fine tune and expand upon knowledge learned during prior training sessions. This training will provide a review of dose management strategies, iDose, exam card development and introduce IMR, image quality improvements for radiation therapy treatment planning. Trainees should be the same therapists from previous sessions with a physicist and radiation oncologist available to assess resultant IMR image quality.

- Significant Noise Reduction – Useful for large patients and 4D CT
- Improved low contrast resolution. – Contouring efficacy, subtle structure conspicuity
- Maintains HU consistency
- Fast Reconstruction
- Patient-centric workflow with iPatient

	Morning	Afternoon
Day 1	Introduction and discussion of IMR implementation and advantages. Exam card construction to include IMR. Select Patient types for demonstration of IQ enhancement.	Patient scanning. Optimization of workflow and image quality. Conduct Phantom studies to demonstrate HU consistency and low contrast detail
Day 2	Patient scanning, Image quality, Exam Card review and editing	Patient scanning. Image review of IMR comparison to FBP or iDose with Physics and Oncologist. Compare contouring ease and conspicuity of structures using IMR.
Day 3	Patient scanning. Optimization of workflow and image quality to include IMR.	Patient scanning. Optimization of workflow and image quality to include IMR.

## Customer roles and responsibilities

### Site readiness

System training is performed on the final, installed system. Prior to on-site training, the following site requirements must be complete, which are the sole responsibility of the Customer except as otherwise indicated below:

- All required licenses are acquired.
- Room construction is completed.
- System installed (Philips responsibility except for items where installation is not included on the Philips product sales quotation, including stand-alone software sales) and ancillary and accessory items are installed and functioning.
- System inspection (state, local fire, building) is passed.
- Connectivity to remote destinations and PACS, if required, is completed. Please ensure your PACS administrator has had any necessary discussions with the installer(s).
- Supplies are stocked.

## Scheduling patients during on-site training

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A full patient schedule during training may negatively impact the effectiveness of the session.

Limiting the number of patients scheduled is necessary to ensure the quality of your on-site training. Otherwise, complete coverage of all training material cannot be guaranteed.

Philips recommends that you schedule your staff in a way that optimizes the time that the Clinical Applications Specialist is on-site at your facility.

## Philips responsibilities

Philips Clinical Services will provide training to customer staff for most features of the Philips equipment.

The customer is responsible for patient contact or operation of equipment during training sessions. Due to legal responsibility of Philips and the customer site, Philips personnel may not provide direct patient contact or handle operation of the equipment during scanning.

Philips Clinical Education does not provide training on 3<sup>rd</sup> party equipment.

## Staff attending the training

The outcome of this training will be the most successful utilizing the **super user** training model. This model provides comprehensive training to a small, select number of therapists called *super users*. The super user is then enabled to train others on the staff who might not otherwise be available to attend the entire training curriculum. This concept has been proven to provide proactive peer support and continuity of training.

### Super user

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A **super user** is an experienced, registered radiation therapist who attends all training events for the system. This individual is the one who will train the remainder of the department staff on the operation of the system to meet all department procedures and protocols. Since training events build on prior training content, it is important the super user is available for all training events.

We recommend at least two super users complete the entire training program.

## Training attendees

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A maximum of four Radiation Therapy staff may attend on-site training.

In order to ensure a successful handover and training, certain prerequisite experience is required, including basic modality qualifications.

The Radiation Therapists who attended the off-site training course should be present for all on-site training.

## Scheduling staff for training

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When scheduling your staff for training:

- Schedule the same Super Users throughout the training.
- Refer to the daily agenda for each training event.
- Ensure that the radiation therapists/dosimetrists, scheduled for training are relieved of all responsibilities such as making or answering phone calls, patient scheduling, and coverage for other department areas.

## Continuing education credits

### Accreditation

#### MDCB

Some training is accredited through the MDCB and acknowledged by the ARRT. Registered Radiation Therapists who attend 100% of the training are eligible to receive credits.

## Additional support

### Customer Care Solutions Center

Following equipment handover, questions regarding the operation of the system should be addressed to the Philips **Customer Care Solutions Center** +1 800 722-9377.

A Clinical Support Specialist is available to answer calls during regular business hours of 8:00 am to 8:00 pm EST, Monday through Friday, excluding holidays. Calls received outside of regular business hours will be returned the next business day. Please have Site ID#, make of equipment, and question available prior to calling.

## Scheduling

Contact your Scheduling Coordinator to schedule on-site training, order training materials, and register for off-site courses.

**Scheduling Coordinator: Barbara McCall-Walker**

**Email: [barbara.mccallwalker@philips.com](mailto:barbara.mccallwalker@philips.com)**

**Phone: 1-440-869-4565**

## Registry review

CT Cross- Training and Registry Review materials may be found by contacting Medical Imaging Consultants, Inc. Clinical off-site training, (888) 633-8266.

## Web sites

**Philips Learning Center: [www.philips.com/learningconnection](http://www.philips.com/learningconnection)**

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