

Facility Questionnaire

PART I (General Information for 3DCRT and IMRT)

The following items are required before you can enter cases on any RTOG protocol that requires data submission to the Image-Guided Therapy QA Center (ITC). This includes 3DCRT, IMRT or IGRT protocols supported by the ITC. Some of these protocols could require additional information relating to motion management or heterogeneous dose calculations when treating targets in or around the thorax. Additionally, some protocols might require you to complete two or more additional forms. For example, you must complete multiple forms for a protocol that requires or allows IMRT, IGRT and motion management. The additional forms are available through the ITC. If you have completed this or any of the other forms for previous credentialing and now wish to enter patients on another protocol requiring digital data submission, please request a copy of your previous application forms from the ITC. You should update any information on these forms that has changed since your earlier credentialing.

1. Submit this completed Facility Questionnaire to:

Radiation Therapy Oncology Group (RTOG Headquarters)
 RT Quality Assurance Department
 1818 Market Street; Suite 1600
 Philadelphia, PA 19103

Email: rtog-facquest@phila.acr.org

Phone: 215-574-3219

FAX: 215-940-8817

2. Contact the ITC (jtc@castor.wustl.edu) and request an FTP account for digital data submission
3. Submit and successfully complete any required protocol specific Dry-Run test
4. A successful phantom experiment may also be required depending on the specific protocol requirements

Institution Name: _____	RTOG Institution #: _____
If Affiliate, Name of Member Institution: _____	
Date Questionnaire Submitted: ____/____/____	RTF# _____
List the best contact individuals for general question regarding RTOG protocols	
Physicist: _____	e-mail: _____
Address: _____	

Telephone: _____	Fax: _____
Research Associate: _____	e-mail: _____
Telephone: _____	Fax: _____
Dosimetrist: _____	e-mail: _____
Telephone: _____	Fax: _____
Responsible Radiation Oncologist _____	
Telephone: _____	e-mail: _____

A. Delivery Resources (TABLE 1)

List the treatment units you use for 3DCRT, IMRT or IGRT protocols. **(NOTE: If units differ in the type of multileaf collimator or IGRT capabilities, you should list them separately. Please be sure to list all units that will be used with the protocol for which you are credentialing. Also, if you do not intend to credential for IMRT, you can skip the last column.)**

ID #	Local identifier(s) of unit	Vendor	Model	Photon Energies Used for IMRT	Number of identical units	MLC or other beam modulator (footnote 1)	Uses (Check applicable boxes)		IMRT Method (see footnote 2)				
							IMRT	IGRT	SMLC	DMLC	Helical tomotherapy	Serial tomotherapy	other
1							<input type="checkbox"/>	IMRT	<input type="checkbox"/>	SMLC			
							<input type="checkbox"/>	IGRT	<input type="checkbox"/>	DMLC			
							<input type="checkbox"/>		<input type="checkbox"/>	Helical tomotherapy			
							<input type="checkbox"/>		<input type="checkbox"/>	Serial tomotherapy			
2							<input type="checkbox"/>	IMRT	<input type="checkbox"/>	SMLC			
							<input type="checkbox"/>	IGRT	<input type="checkbox"/>	DMLC			
							<input type="checkbox"/>		<input type="checkbox"/>	Helical tomotherapy			
							<input type="checkbox"/>		<input type="checkbox"/>	Serial tomotherapy			
3							<input type="checkbox"/>	IMRT	<input type="checkbox"/>	SMLC			
							<input type="checkbox"/>	IGRT	<input type="checkbox"/>	DMLC			
							<input type="checkbox"/>		<input type="checkbox"/>	Helical tomotherapy			
							<input type="checkbox"/>		<input type="checkbox"/>	Serial tomotherapy			
4							<input type="checkbox"/>	IMRT	<input type="checkbox"/>	SMLC			
							<input type="checkbox"/>	IGRT	<input type="checkbox"/>	DMLC			
							<input type="checkbox"/>		<input type="checkbox"/>	Helical tomotherapy			
							<input type="checkbox"/>		<input type="checkbox"/>	Serial tomotherapy			
5							<input type="checkbox"/>	IMRT	<input type="checkbox"/>	SMLC			
							<input type="checkbox"/>	IGRT	<input type="checkbox"/>	DMLC			
							<input type="checkbox"/>		<input type="checkbox"/>	Helical tomotherapy			
							<input type="checkbox"/>		<input type="checkbox"/>	Serial tomotherapy			

FOOTNOTES appear at the top of the next page

FOOTNOTES

1. Enter the letter from the following list:

- | | | | |
|----------------------------------|---|---------------------|----------------------------------|
| a. Varian 80 leaf | b. Varian Millennium 120 leaf | c. Elekta 80 leaf | d. Elekta 80 leaf Beam Modulator |
| e. Tomotherapy Binary Collimator | f. NOMOS Binary Collimator | g. Seimens 58 leaf | h. Siemens 82 leaf |
| i. 3D Line | j. Radionics | k. BrainLAB 52 leaf | l. BrainLAB Tx 120 leaf |
| m. physical compensators | n. Cyber Knife using circular collimators | | |
- o. other _____

2. If you have checked the box for other in the last column of the above table, please explain in the space provided above and place additional information here. _____

B. List Protocols (TABLE 2a)

If the information listed in Part I of this form is different for various RTOG protocols, enter additional data here. That is, if specific individuals are responsible for particular protocols at your institution, please list them in the table below. Please update earlier information, and add the new protocol you are currently credentialing for at the end.

Enter protocol # below	Are you credentialing for IMRT, IGRT or both (footnote 1)	Radiation Oncologist [List Rad Onc(s) in Table 2b and enter ID #(s) here]	Research Associate [List RA(s) in Table 2b and enter ID #(s) here]	Physicist [List physicist(s) in Table 2b and enter ID #(s) here]	Dosimetrist [List Dosimetrist(s) in Table 2b and enter ID #(s) here]	Does treatment in or near the thorax require heterogeneity corrections for this protocol? (footnote 2)	Does this protocol require treatment in or near the thorax so that respiration control is required? (footnote 2)	From the list of Delivery Resources (Table 1), insert the identification # of the unit(s) that will be used for this protocol.
Protocol #								
Protocol #								
Protocol #								
Protocol #								
Protocol #								
Protocol #								
Protocol #								
Protocol #								

FOOTNOTES

1 – enter IMRT, IGRT or IMRT/IGRT

2 – enter Yes or No. If Yes, you must complete the Part V questionnaire.

. List Protocols (TABLE 2b)

List personnel here, and enter numbers from the first column in this table in the appropriate location in the table above.

The names entered below should be for those individuals routinely involved with the protocol for which you are credentialing. You can enter more than one name per protocol.

ID #	Name	Occupation (check one)				e-mail	phone
		Physicist	Research Associate	Radiation Oncologist	Dosimetrist		
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

C. Planning Resources (TABLE 3)

List your treatment planning systems here. Skip the last column if you are not credentialing for IMRT

I.D. #	Vendor	Software Version	Calculation Algorithm (Enter # from list in Footnote #1 below)	Treatment units commissioned for this system (Enter # from Table 1)	Is system commissioned for heterogeneity corrections? (Enter yes or no and see Footnote 2)	Does the system transfer beams to a phantom for QA? (Enter yes or no. If no, explain the technique you do use for IMRT QA in the blank space below.)
1						
2						
3						
4						
5						
7						

Footnote 1 (If you are using more than one calculation algorithm for a particular system, enter them separately in different rows of the table above.)

- | | | | | |
|---|--|---|-------------------------|----------------------------|
| 1. BrainLAB pencil beam | 2. Corvus pencil beam | 3. Helax pencil beam | 4. Helax collapsed cone | 5. Cadplan pencil beam |
| 6. Eclipse pencil beam | 7. Eclipse AAA | 8. PLUNK pencil beam | 9. MSKCC pencil beam | 10. Pinnacle fast convolve |
| 11. Pinnacle collapsed cone or adaptive convolution superposition | 12. XiO modified Clarkson or convolution | 13. XiO superposition or fast superposition | | |
| 14. Tomotherapy convolution superposition | 15. Other _____ | | | |

Footnote 2 If you answered “no” for the question about the system being commissioned for heterogeneity corrections, please explain? Identify each system using the # in the list. _

D. TREATMENT VERIFICATION

Note: If you use IGRT for patient positioning verification for some of your 3DCRT or IMRT treatments, you should complete the Part II questionnaire for IGRT. The RTOG has a very specific definition for IGRT. IGRT is defined here to include only those procedures where an x-ray imaging technique is used in combination with some form of computer-assisted manual or automatic registration with the image information obtained during the patient's planning CT procedure. The standard use of MV EPID images as a visual comparison to DRRs does not fall under this definition. Also, the use of silver halide film radiographs alone is not accepted under this definition of IGRT. Thus, you should use the Part II questionnaire only if you have this type of computer-assisted technology. If you are using standard EPID or radiographic imaging, please answer the relevant question below.

Do you use IGRT in your department (see RTOG definition above)? Yes No

1. TREATMENT POSITIONING VERIFICATION FOR 3DCRT or IMRT

How do you verify field positioning relative to the patient's anatomy (check all that apply)?

- port film orthogonal port films BAT ultrasound
 Other: _____

How often is positioning verification done?

- first treatment only daily weekly
 Other: _____

2. VERIFICATION OF DELIVERED DOSE FOR 3DCRT

Describe the method(s) used to conduct a check of the dose and monitor unit calculations generated by the 3DRTP system.

Are your 3DCRT treatments monitored by a record and verify system?

Manufacturer & Model:

3. VERIFICATION OF DELIVERED DOSE FOR IMRT

How do you verify that the treatment unit delivers the planned dose for individual patients?

a. Absolute dose

- point(s) measurement with

- ion chamber (chamber size____) diode TLD
 radiographic film radiochromic film
 Other: _____

b. Relative dose

- isodose distribution with
 radiographic film radiochromic film Gel dosimetry
 other _____

in _____ (#) axial planes & in _____ (#) sagittal planes & in _____ (#) coronal planes

Describe the type of phantom you use for QA:

- anthropomorphic phantom Vendor: _____
 geometric phantom: _____(material)
 shape: square Cylinder other ____
 size of phantom _____cm X _____cm X ____ cm

What agreement between planned and measured doses for individual patients is considered acceptable at your institution?

- For absolute dose in target volume (high dose) region _____
 For absolute dose in critical normal tissue region _____
 For absolute dose in low dose region _____
 For relative dose in high dose gradient region _____
 For relative dose in low dose gradient region
 in high dose region (target) _____
 in low dose region _____

Are your monitor unit calculations checked by an independent program?

- no yes Vendor: _____

You have completed this form. There are two additional forms you might have to complete. If you answered “Yes” to the IGRT question at the top of page 6 and you are credentialing for an IGRT protocol, you must complete the Part II Questionnaire for IGRT. If you answered “Yes” to the questions about motion management or heterogeneity corrections in Table 2a above, you must complete the Part III Questionnaire. Please be sure to complete all necessary forms. If IGRT is optional in the protocol you are credentialing and you do not intend to use this technology, you can simply skip that questionnaire. However, you will not be able to use IGRT in the future until you have completed this requirement.