DIGITAL DATA SUBMISSION PROCEDURES FOR SELECTED PROTOCOLS

DIGITAL DATA FORMAT

For digital data submission, an institution's treatment planning system must have the capability of exporting data in one of two formats:

- RTOG Data Exchange Format, Version 3.20 or later (specifications at http://itc.wustl.edu/exchange_files/tapeexch400.htm); or
- DICOM 3.0 in compliance with the ATC's DICOM 3.0 Conformance Statement

A list of commercial systems that are known to have this capability are listed on the ATC website (http://atc.wustl.edu/credentialing/atc_compliant_tps.html).

The capability for QARC to accept digital RT data using the method described below has been developed with the Advanced Technology Consortium (NIH grant CA81647).

Institutions may submit treatment planning data in one of these formats on a <u>CD</u> or <u>electronically</u> via ftp to QARC. Institutions must obtain a username and password for submission of data via ftp. To request an FTP account, please contact QARC at 401-454-4301 and ask to speak with the FTP Account Manager or complete the FTP Account Request Form and email it to <u>ATCDICOMRT@QARC.org</u>. Please include your name and your institution's name and address as well as the best way to contact you (i.e. phone number, e-mail address, etc.). **Allow 3 business days to process your account request**.

REQUIRED PROTOCOL DIGITAL DATA

Digital data submitted to QARC must include the following in accordance with the appropriate protocol requirements:

- CT Images
- Target volumes and normal structures per protocol;
- Beam geometry or brachytherapy source parameters
- 3D Dose distributions in <u>absolute dose</u> for each phase of treatment (concurrently treated beams) and for the total treatment
- DVHs of target volumes and normal structures specified by the protocol for the total (composite) plan

Hardcopy color isodose plots for the total dose plan in 3 planes, axial, sagittal, and coronal, through the center of the target volume must be submitted along with total dose DVHs, for digital data validation.

SUBMITTING DIGITAL DATA VIA THE INTERNET

Digital patient treatment planning data in RTOG Data Exchange or DICOM RT format can be submitted to QARC over the Internet using FTP. Please use the following steps to submit data via FTP:

- 1. Complete the FTP Account Request Form and e-mail it to ATCDICOMRT@QARC.org to obtain an FTP account.
- 2. Connect to ftp://ftpatc.qarc.org using a web browser or FTP client program (either the command-line "ftp" program in Windows or UNIX, or other FTP client software) and login with the provided username and password.
- 3. Change to the "incoming" directory. (CD incoming)
- 4. Create a new sub-directory within "incoming" with a name that is pertinent to the data that you are submitting (mkdirCase01423totalplan). **Please** do not use spaces in directory names or filenames.
- 5. Upload files using binary mode.
- 6. Send e-mail to ATCDICOMRT@QARC.org to indicate that you have uploaded protocol case data. Please identify the study group, protocol, and case number for the submission as well as your contact information.
- 7. In order for QARC to confirm that your data has been received and imported correctly, please send images showing structures and the dose distribution in three orthogonal planes along with total dose DVHs. These may be screen dumps sent via e-mail as jpeg, bitmap, or tiff files or they may be hardcopies mailed to the address below.

SUBMITTING DIGITAL DATA VIA CD

Digital patient treatment planning data may be written to CD and the CD mailed to QARC. Be sure to label the CD. In order for QARC to confirm that your data has been imported correctly; please include hardcopies showing structures and the dose distribution in three orthogonal planes along with total dose DVHs and send to:

Quality Assurance Review Center 272 West Exchange Street, Suite 101 Providence, RI 02903

Contact QARC at <u>ATCDICOMRT@QARC.org</u> or 401-454-4301 if you have any questions.