THE UNIVERSITY OF TEXAS MDAnderson Cancer Center

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Purpose:

credentialing То process for describe the randomized photon vs. proton NCI sponsored trials.

Methods:

IROC-Houston issues credentialing letters for approximately 75 different NCI NCTN clinical trials and this number is ever growing. The complexity of qualifying requirements for sites of newer trials is also growing. To more effectively and efficiently deal with these growths, we utilize an in-house program written in MATLAB that pulls all relevant information from several databases and organizes them into a credentialing letter that our staff can issue via email (Fig. 4).

Specifically, these randomized photon vs. proton NCI sponsored trials incur a large amount of complexity due to requiring two sites, a photon and proton site, to be independently verified by our inhouse program but credentialed simultaneously via one credentialing letter issued to both sites. The process for receiving credentialing begins with a Credentialing Status Inquiry (CSI) Form as seen in Fig. 1, which is completed by a site that would like to be credentialed or to inquire about their missing requirements for a specific protocol.

This questionnaire will help determine if your institution is credentialed to participate in a protocol. IROC House and the study group of your status. The study group or IROC Houston will inform your institution when it can p requested protocol. If you have any questions, please contact IROC Houston at (713) 745-8989 or IROC-Credentialing@MDAnderson.org Please note: You will be contacted via email or phone within 2 business days. Once we determine that all require credentialing email (PDF letter for a few protocols) will be issued within 5 business days. Institution: Study Group of person completing this form: Phone #: Email address: Are you a: Radiation Oncologist Physicist Dosimetrist Clinic Coordinator
Institution: Study Grows RTF#: (Don't know, click here) NCI #: Name of person completing this form: NCI #: Phone #: Email address: Are you a: Radiation Oncologist Physicist Dosimetrist Clinic Coordinator
RTF#: (Don't know, click here) NCI #: Name of person completing this form: Phone #: Email address: Are you a: Radiation Oncologist Physicist Dosimetrist Clinic Coordinator
Name of person completing this form: Phone #: Email address: Are you a: Radiation Oncologist Physicist Dosimetrist Clinic Coordinator
Phone #: Email address: Are you a: • Radiation Oncologist • Physicist • Dosimetrist
Are you a: ORadiation Oncologist OPhysicist ODosimetrist OClinic Coordinator
Protocol to be credentialed:
Specify technique: 3DCRT IMRT SBRT Proton Brachytherapy
Freatment planning system to be used for this protocol:
Algorithm to be used for patient plans:
Is your institution planning to use IGRT on this protocol, if applicable? O Yes O No
For randomized photon vs. proton protocols, please list the RTF# of your partner proton center: (Don't know, click he

Fig. 1: A CSI form from IROC-Houston's webpage.

Imaging and Radiation Oncology Core (IROC) Houston QA Center's Credentialing Letters for Randomized Photon vs Proton NCI Trials.

ston will notify you participate in the irements are met, a oup Name: RTOG 🔹

Methods (cont.):

sites must meet the protocol's Individually, requirements which range from having an updated Facility Questionnaire and phantom irradiation for both proton and photon to receiving baseline approval for proton sites. The baseline proton approval consists of a site visit, proton Facility Questionnaire, TLD output check, and successful completion of the baseline phantoms (prostate and spine for all modalities, plus the lung phantom for pencil beam scanning). Distinctively new for credentialing of these protocols is the submission of a Letter of Intent (LOI) by both sites to NRG Oncology Regulatory to participate as partners in the given trial. An example of these requirements can be seen in Fig. 2 with a flowchart in Fig. 3 that describes the general procedure for being credentialed for a randomized proton vs. photon trial.

NRG BN005 Requirements

This trial will utilize TRIAD for dosimetry digital treatment data submission. TRIAD is the American College of Radiology's (ACR) image exchange application and it is used by the RTOG. See here for information on installing TRIAD.

Please fill out the credentialing status inquiry form to let us know that you would like to be credentialed for this protocol.

Proton centers must have a partner photon center to be credentialed and vice versa. All sites must submit a Letter of Intent (LOI) to NRG Oncology Regulatory to receive approval to participate in this trial. For more details see NRG Oncology website.

In order to complete the **IMRT credentialing** process the following items must be completed:

- Complete or update the Facility Questionnaire.
- Irradiate the IROC Houston's IMRT H&N phantom. Please fill in the request form online.

In order to complete the **Proton credentialing** process, the following items must be completed:

- All participants must have completed baseline approval for proton therapy.
- All participants are asked to complete the Facility Questionnaire.
- Irradiate IROC Houston's proton brain phantom. Please fill in the request form online.



randomized photon vs. proton trials.

Fig. 3: Flowchart for completing credentialing for

Results:

Currently, three NCI sponsored trials exist that require this new simultaneous credentialing of photon and proton sites: NRG-BN005, RTOG-1308 and NRG-GI003. In addition, NRG-BN001 requires dual credentialing if a proton site wishes to be credentialed; however, the photon site may be credentialed on its own. As of June 2018, NRG-BN005 has accumulated 7 proton sites with 21 partner photon sites. 10 and 6 proton/photon sites have been credentialed for RTOG-1308 and NRG-GI003, respectively.

Conclusion:

Trials randomizing between protons and photons require for sites with these modalities to partner in their credentialing activities. This task can be accomplished efficiently when both sites know the requirements.

Dear,

[Proton Site Name] (RTF# ,NCI#) and [Photon Site Name] (RTF#NCI#) have completed the following credentialing requirements for NRG BN005.

[Proton Site Name] (RTF# ,NCI# , proton) -Modality Approved for Proton: PBS -Proton Facility Questionnaire was updated on 2017-12-21 -Proton Brain Phantom was approved with Pencil Beam Scanning on 2013-10-24

[Photon Site Name] (RTF# ,NCI# , photon) -Facility Questionnaire was updated on 2017-12-21 -H&N phantom was approved with Raystation on 2014-10-30

[Proton Site Name] (RTF# ,NCI# , proton) has passed the RT credentialing requirements for NRG BN005 utilizing Proton (Pencil Beam Scan) technique. This notification acts as your credentialing letter.

[Photon Site Name] (RTF# NCI# , photon) has passed the RT credentialing requirements for NRG BN005 utilizing IMRT technique for standard photon beams. This notification acts as your credentialing letter.

Effective February 9, 2017, use of the Regulatory Submission Portal will become mandatory per CTSU. Institutions will need to upload this notification to the Regulatory Submission Portal. CTSU will then update RSS. If you have an urgent situation and need to register a patient please contact the Regulatory Help Desk immediately at 1-866-651-CTSU for further instruction and guidance.

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Fig. 4: An example of a credentialing letter for a randomized photon vs. proton trial.