Imaging and Radiation Oncology Core (IROC) Houston QA Center (RPC) credentialing

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Purpose:

To provide information pertaining to IROC Houston QA Center's (RPC) credentialing process for institutions participating in NCI-sponsored National Clinical Trials Network (NCTN) trials. IROC Houston's main purpose in the credentialing process is to verify an appropriate level of competency at participating institutions in an attempt to minimize patient deviations. Levels of credentialing, depending on the protocol, may involve institutions, radiation oncologists, physicists, TPS or treatment modality.

Methods and Materials:

IROC Houston issues credentials for institutions and staff at NCI sponsored study group member institutions. Requirements for credentialing might include any combination of questionnaires, knowledge assessment forms, benchmarks, or phantom irradiations.

Credentialing requirements for specific protocols can be found on IROC Houston's website (http://irochouston.mdanderson.org). This website shows active and inactive protocols categorized by network group.

The website houses the credentialing status inquiry (CSI) form, as shown in Figure 1. This form includes basic institution information that allows IROC Houston, to look up your institution and determine if it is credentialed for the requested protocol, example of a protocol shown in Figure 2. An IROC Houston physicist assistance (PA) will contact the institution to explain any remaining requirements of the specified protocol.

Some institutions require an updated facility questionnaire that must be sent to IROC Houston, shown on Figure 3. Some protocols require special facility questionnaires that are available through the IROC Houston website.

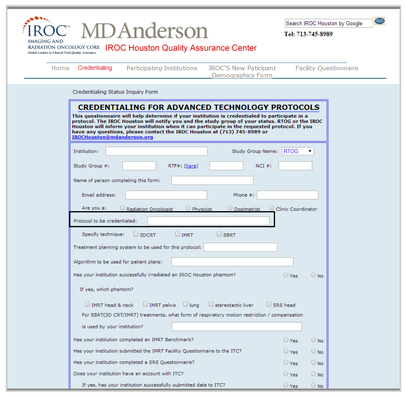

Figure 1. Online credentialing form.

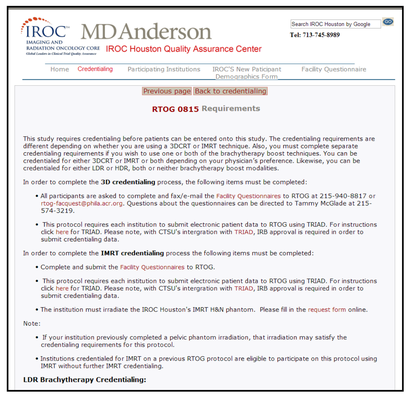

Figure 2. Example of an active protocol requirements.

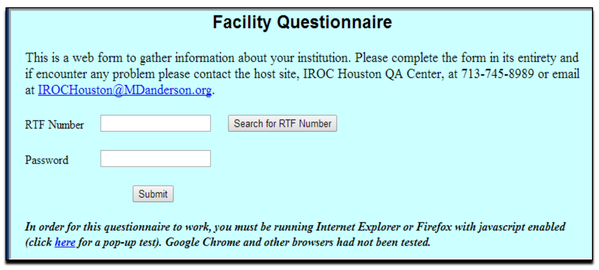

Figure 3. IROC Houston facility questionnaire.

Methods and Materials:

There are different levels of credentialing. The most basic, which all radiotherapy institutions must do, is to fill out the facility questionnaire. Other categories may include the irradiation of one of IROC Houston's phantom, complete a benchmark case, an electronic data submission or submission of an imaging guided radiotherapy (IGRT) plan.

If an IROC Houston phantom irradiation is required, the phantom request must be submitted through the online request form found on IROC Houston's website. Once the form is filled out, institutions will be placed on a wait list for the requested phantom. Institutions are then prioritized based on a multitude of factors including Internal Review Board (IRB) approval of the protocol and IGRT approval when relevant. Once the requested phantom becomes available a PA will contact the physicist to arrange the logistics of the process. At this time the physicist at the institution must agree to irradiate and return the phantom within 10 business days. IROC Houston currently has multiple types of phantoms available, one of the most popular for credentialing is the IMRT Head & Neck Phantom. We also have lung, liver, prostate and spine phantoms, some shown in Figure 4.

Figure 4. IROC Houston different phantom designs.

Protocols may also require for credentialing the submission of electronic data, such as Transmission of Imaging and Data (TRIAD), http://www.rtog.org/corelab/TRIAD.aspx, as shown in Figure 5. TRIAD is a standards-based system built by the American College of Radiology (ACR) to provide seamless exchange of images and data for accreditation of clinical trials and registries. TRIAD anonymizes and validates the images and information objects as they are transferred via the internet.

Some protocols require IGRT credentialing. IGRT credentialing is now anatomic site based. The four anatomical sites that can be credentialed are head and neck, thorax, abdomen, and extremities. The need for credentialing will be determined by the protocol PIs and IROC.

Methods and Materials:

Some protocols may also require the physicians to get involved in the credentialing process through completion of a knowledge assessment. The knowledge assessment is a quiz for the content of a specified protocol. To be able to answer the questions physicians must have read through the details of the protocol. Example of a knowledge assessment is shown in Figure 6.

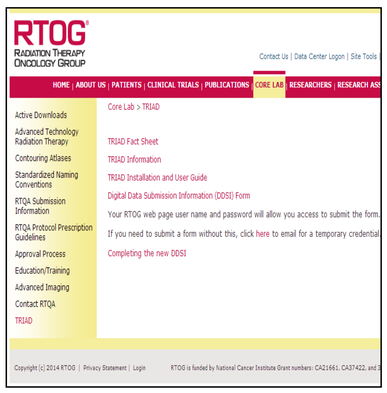

Figure 5. Transmission of Imaging and Data (TRIAD) website

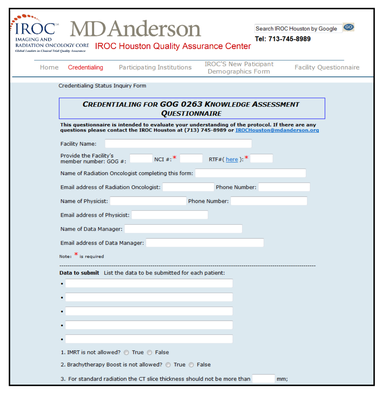

Figure 6. Example of knowledge assessment for GOG

Results:

Since 2010 IROC Houston has received 1313 credentialing status inquiry forms. We received 317 in 2010, 266 in 2011, 324 in 2012, and 406 in 2013, as shown in Figure 7. On average we receive 35 phone calls per week with multiple types of credentialing questions.

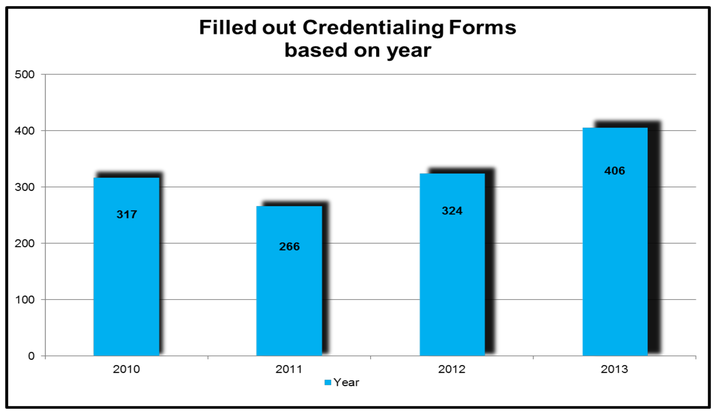

Figure 7. Number of filled out credentialing forms per year.

Conclusions:

IROC Houston will issue radiation therapy credentials for the NCI trials in the National Clinical Trials Network. Requirements and the CSI form can be found online. The numbers of CSI forms submitted and credentials issued is expected to increase as IROC Houston begins to credentialed institutions for all NCTN study groups.

In the course of ten years, the phantom program has grown in phantom types and number available for each. This is correlated with the number of advanced technology clinical trials groups requiring the phantom as one of their credentialed requirements.

Support:

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