



Leveraging National Standards to Automate Treatment Planning Data Collection in a Radiation Oncology Registry

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BACKGROUND

The Michigan Radiation Oncology Quality Consortium (MROQC) is a collaborative group of specialists across the state of Michigan working together on quality improvement projects to impact the radiation treatment experience for patients since 2011.

MROQC's goal is to identify best practices in radiation therapy that minimize the side effects that patients may experience from radiation treatment. Through generous support from Blue Cross Blue Shield of Michigan and Blue Care Network, we have developed a registry that allows us to link together and analyze information about how radiation therapy is delivered with information provided by treating clinicians about patient outcomes, and information from the patient regarding side effects that occur during treatment.

The data MROQC collects has been broadened with the availability of the report from the American Association of Physicists in Medicine (AAPM) Task Group (TG) 263, which recommends use of standard nomenclature for structure names used for treatment planning in different software systems in radiation oncology.

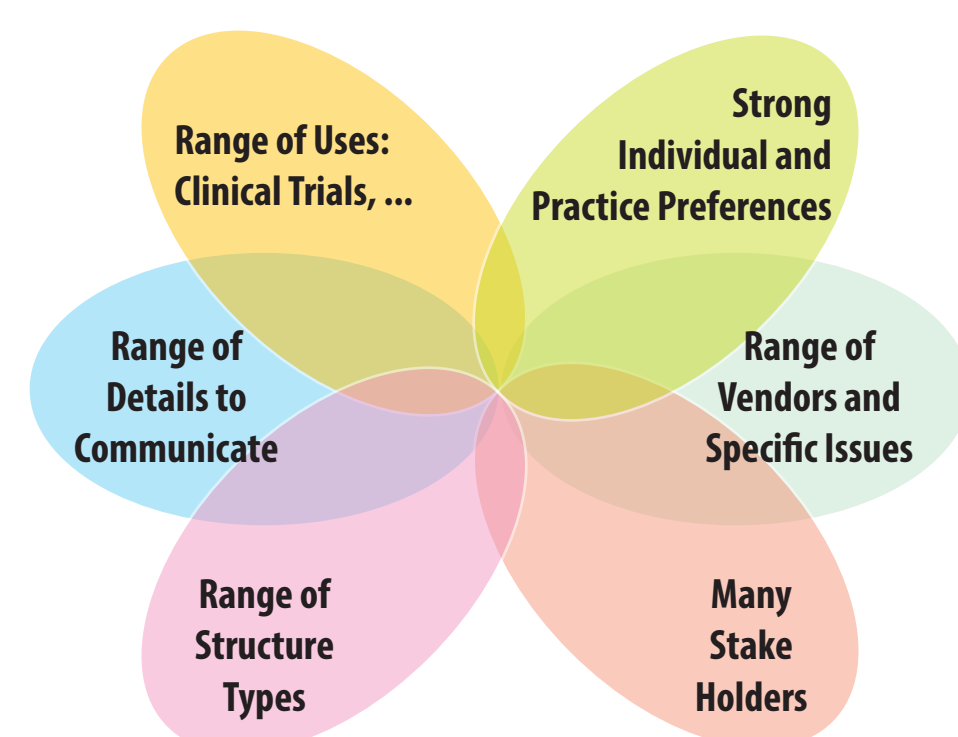
AIM

>50% compliance across MROQC with use of TG-263 for specified structures for 2019 breast and lung cancer patients.

METHODS

To facilitate a transition to the full DICOM-RT data collection needed for quality improvement efforts, tools have been designed to facilitate the adoption of the TG-263 recommended nomenclature throughout the consortium.

- ◆ Each body site project group of MROQC has defined the structure names required for their data collection.
- ◆ Software scripts for different commercial treatment planning systems have been created or are in development to create the required structure names for use in treatment planning at each member institution.
- ◆ Templates with the TG-263-approved structure names will be shared via our website.



RESULTS

To support the transition to TG-263 for MROQC, a custom report has been designed and will be provided to each participating site's data abstractor after data processing. The report includes a checklist for presence of required structures and a summary of key metrics and values to compare to their own planning system. This will aid in improving the integrity of data collection.

Tools created as a part of MROQC will be able to enhance data collection, and more importantly, quality improvement initiatives within our consortium and can also be used by institutions outside our consortium to aid in their implementation of the standard nomenclature recommended by AAPM Task Group 263.

On behalf of:

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