Physics and Dosimetry Breakout Session

Meeting Minutes

February 2 & 3, 2026

Summary:

The meeting covered updates and discussions on radiation therapy practices, including physics data quality metrics, patient categorization, and new quality measures for various treatments. Presentations highlighted data trends in prostate, lung, and breast treatments, with emphasis on imaging techniques, fractionation, and positioning approaches. The team addressed concerns about patient suitability for different treatment positions and discussed the impact of guidelines on hypo fractionated radiation therapy usage across institutions.

Next Steps:

1. All physics leads: Fill out the Blue Cross Blue Shield of Michigan Biennial CQI Survey (contact Melissa or the support email if the link was not received).

2. Interested participants: Email support@mrock.org to be added to working group meeting invites and receive calendar invites for upcoming working group calls (weeks of March 16th and March 23rd).

3. Martha (and possibly clinical team): Follow up with Danielle after the physics breakout to discuss collection of relevant outcomes data (e.g., rib pain/rib fracture) for lung SBRT patients and potential collaboration between physics and clinical teams.

4. MROQC team: Add a standard response option for "dose discounts" to the relevant database question for future data collection, as discussed regarding re-irradiation physics consult outcomes.

Physics Data Quality Updates 2026

Maggie led a Physics and Dosimetry breakout session, outlining key updates for 2026, including changes to physics data quality metrics and new quality measures. She emphasized the use of RT start date for categorizing patients and introduced a new measure for hypo fractionated lung cancer treatment, highlighting the importance of adhering to MROC consensus quality guidelines. Maggie also discussed the schedule for 2026 meetings, noting the cancellation of the February collaborative-wide meeting and the plan for check-in meetings with exempt facilities later in the year.

Radiation Oncology Data Analysis Review

Nate presented data highlights from various radiation oncology projects, focusing on prostate, Bone Mets, and lung treatments. He showed trends in MRI usage for prostate contouring and PTV margin data across different dose fractions. Maggie shared Bone Mets data on short course treatments and radiation re-treatment physics consults, noting high compliance with quality measures. Nate concluded with lung project data on fractionation and OARs within 2 centimeters for SBRT cases. The team discussed the utility of different imaging techniques and the importance of physics consults for radiation re-treatment.

Radiation Therapy Guidelines and Outcomes

Martha discussed the impact of guidelines on hypo fractionated radiation therapy (Hypofrac) usage across institutions and highlighted the need to monitor changes over time. She expressed interest in examining outcomes data for SBRT cases, particularly regarding great vessel or bronchial tree toxicity, and suggested potential quality improvement work. Lana inquired about the collection of rib pain or rib fracture as a follow-up point, prompting Martha to agree to follow up with the clinical team. Maggie presented breast project highlights, focusing on patient positioning and the reasons for supine treatment despite prone treatment being a potential option. She noted that the most common reasons for not treating prone included facility lacks prone treatment equipment and PBI or APBI treatments.

Radiation Therapy Practices and Data

The meeting focused on several key topics related to radiation therapy practices and data. Lana raised concerns about identifying suitable patients for prone breast treatments, and participants discussed various approaches to patient positioning and communication. Maggie presented breast treatment data, highlighting improvements in nodal prescription and mean heart dose constraints. The group also discussed brain metastases treatments, with Lana reporting on a recent survey of physician practices. Maggie concluded by announcing upcoming working group meetings and requesting feedback on working group meeting formats from participants.