August 2025 through January 2026 Therapeutic and Diagnostic Machine Medical Reportable Events (MRE)	
April 2026 Meeting	
Therapeutic	
1.	A patient was prescribed treatment with 6 MeV Electrons to treatment site 'Rt lower flank.' The prescription was for a total dose of 9 Gy in 3 fractions to be delivered at 3 Gy per fraction. After the third fraction, it was discovered that the total dose delivered was 10.9 Gy which differed from intended prescribed dose of 9 Gy by 21.1%. Customized electron cutouts and build-up materials were being used to determine output factors. Human error in build-up conditions caused erroneous results, which were very subtle and not recognized by the physics review team before treatment was complete. The physician had requested that in-vivo dosimetry be performed (using Optically Stimulated Luminescence [OSL] detectors). The OSL measurements noted higher than expected readings. It was determined that there was an error in the dose measurements that determined the output factor, yielding an incorrect MU setting used for treatment. The current QA process does not dictate that a medical physicist must have a visual of the cut-out shape/size and/or compare the measurement against typical values for a given cut-out shape and size. There was no clinical impact to the patient. Corrective Actions 1. Explore commissioning of electron Monte Carlo algorithm to replace cutout measurements. 2. Pictures of electron cutouts will be taken to enhance physicist checks. 3. A set of typical output values per electron cutout shape was developed as a guide. 4. Additional record and verify checks required for physicists.7/2025
2.	Patient was scheduled for 3fx SBRT to two sites (rib and sternum). For the first fraction, the patient was aligned incorrectly (1 vertebral body superior of the intended target), leading to 1000cGy being delivered outside of the intended target. Corrective Action The SBRT Bone treatment instructions will be revised to include language that states if the target is in the thorax, then kV imaging should include C7 and/or L1. 9/2025
3.	The patient was planned for 5 fractions of 640cGy each for metastasis on the penis. The treatment was contoured by physician A using imaging from March 2025 as the scan of 6/25 reported that the metastasis was not visible. On 9/29 the first fraction was oversaw by Dr. B as Dr. A was away for a week. Dr. B noted alignment was difficult but once aligned the fraction was delivered. On 9/30 Dr. B contacted Dr. C to review the set up for future fractions. Dr. C determined target volume missed the intended lesion by 2.5cm although still within the penis. Dr. A was contacted and he concurred. Dr. C put the remaining fractions on hold so the treatment could be scheduled for a later date. Corrective Action More explicit and detailed imaging and alignment instructions will be provided for non-prostate genitourinary tumors. For rare diagnoses, prospective peer review of contours will be conducted prior to planning and that immobilization is suitable and reproduceable for treatment sites. 9/2025

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4.	Patient was scheduled for 3 fractions. On fraction 2, the patient's arms were positioned incorrectly and received an unintended dose of 330 cGy. The intended target varied by approximately 1%. After the first fraction was completed, a picture was taken after the patient had lowered his arms from above his head. A review of the prior day imaging showed the arms above the head. There is no medical consequence to the patient. Staff will be reeducated on the information included in the treatment planning. 11/25