

CT+MR Sim Imaging QA Checklist
(9/28/2016 EP)

Patient: _____ RT #: _____

Date: _____ Tumor Site: _____ MD: _____

Treatment: New Rescan Boost Scan Orientation: HFS HFP FFS FFP

CT Sim: (RT Therapist: _____)

<u>Yes</u>	<u>N/A</u>	<u>Item</u>
<input type="checkbox"/>	<input type="checkbox"/>	Target volumes centered within CT bore (to extent possible)
<input type="checkbox"/>	<input type="checkbox"/>	Abdomen/Chest: Headphones molded into alpha cradles/vac-locs
<input type="checkbox"/>	<input type="checkbox"/>	Immobilization devices fit within MR bore template and RF coil plugs have clearance
<input type="checkbox"/>	<input type="checkbox"/>	Contrast Administered: IV GI
<input type="checkbox"/>	<input type="checkbox"/>	IV contrast CT image series description labeled with "contrast"
<input type="checkbox"/>	<input type="checkbox"/>	Images screened for cropping (can the patient be shifted and rescanned?)
<input type="checkbox"/>	<input type="checkbox"/>	Prostate: Patients notified to arrive 30 min early for MR Sim and to drink before hand Filling protocol: _____ mL water in _____ minutes
<input type="checkbox"/>	<input type="checkbox"/>	Setup reference defined in MIM: BB Iso

MR Sim: (Scanning Technologist: _____ Documenting Technologist: _____)

<u>Yes</u>	<u>N/A</u>	<u>Item</u>
<input type="checkbox"/>	<input type="checkbox"/>	Review prior imaging of patient on PACS
<input type="checkbox"/>	<input type="checkbox"/>	Patient setup (Prone Breast: styrofoam blocks; otherwise flat table overlay)
<input type="checkbox"/>	<input type="checkbox"/>	Patient orientation (Brachy: FFS; otherwise note Scan Orientation above)
<input type="checkbox"/>	<input type="checkbox"/>	Abdomen/Chest/Pelvis: Large RF flex coils supported by coil bridges
<input type="checkbox"/>	<input type="checkbox"/>	Abdomen/Chest/Pelvis: Headphones placed on patient
<input type="checkbox"/>	<input type="checkbox"/>	Chest: ECG leads placed on patient
<input type="checkbox"/>	<input type="checkbox"/>	Cholangio/Bile Duct: Nasal cannula placed on patient with oxygen at 2-3 Liters/min
<input type="checkbox"/>	<input type="checkbox"/>	Cholangio/Bile Duct: Injector loaded with Eovist
<input type="checkbox"/>	<input type="checkbox"/>	Brachy/Abdomen/Pelvis: 0.5mg glucagon IV at start, midway of exam
<input type="checkbox"/>	<input type="checkbox"/>	Prostate: Bladder, rectum fill check
<input type="checkbox"/>	<input type="checkbox"/>	Cervix: Bladder empty; inject vaginal gel
<input type="checkbox"/>	<input type="checkbox"/>	High order shim volume (adjust volume) optimized and copied to each series
<input type="checkbox"/>	<input type="checkbox"/>	B0 map acquired with body coil (not flex coils); magnitude and phase (2 series) in browser
<input type="checkbox"/>	<input type="checkbox"/>	Additional diagnostic sequences added for MR Sim with Interpretation
<input type="checkbox"/>	<input type="checkbox"/>	High bandwidths or Advanced WARP used for metal (hip prostheses, spine hardware)
<input type="checkbox"/>	<input type="checkbox"/>	Brachy: 3D SPACE images acquired as straight axials
<input type="checkbox"/>	<input type="checkbox"/>	Abdomen/Chest: Breath holds at end expiration
<input type="checkbox"/>	<input type="checkbox"/>	Coverage sufficient: <ul style="list-style-type: none"> • Check EPIC for specific instructions • Brachy 3D SPACE: 2cm superior of uterus (page MD) • Brachy 2D T2s: Cover cervix and uterus • Prostate: Full bladder coverage • Sarcoma: 5cm superior/inferior of markers for post-op patients
<input type="checkbox"/>	<input type="checkbox"/>	Images screened for artifacts. Did fat-sat, Dixon separation work? (re-run if necessary)
<input type="checkbox"/>	<input type="checkbox"/>	Spine/Sarcoma: Ctrl+3,4 to align upper+lower axial groups; merge as 1 series in 3D viewer
<input type="checkbox"/>	<input type="checkbox"/>	3D distortion correction applied to all images
<input type="checkbox"/>	<input type="checkbox"/>	3D distortion-corrected images (images with _DIS3D suffix) sent to MIM_Clinical
<input type="checkbox"/>	<input type="checkbox"/>	Non-distortion corrected images (images with _ND or _DIS2D suffix) deleted from PACS
<input type="checkbox"/>	<input type="checkbox"/>	Advanced Imaging: Raw k-space data transferred with Yarra client (Ctrl+Esc → Transfer Raw Data)