

SMITH AND NEPHEW VISIONAIRE MRI IMAGING REQUIREMENTS

1. **For MRI Conditional 30 scanners only**—the center of the patient's knee (we consider the best view of the PCL to be the center) must be within 30mm from isocenter. So, the RIGHT or LEFT center of the knee on the images must be 30mm or less from isocenter.
2. It is fine to let the patient externally rotate their knee in the imaging coil for patient comfort. In order to correct for the externally rotated knee, you must angle the slices on your axial localizer/scout so that the slices are perpendicular to the posterior femoral condyles. **This will allow for the true sagittal scan we require.**
3. We prefer to be able to visualize equal amounts of tibia shaft and femur shaft on the images. If you are unable to position the patient to achieve this due to body habitus issues, then we **require at least 75mm of visible femur shaft and at least 75mm of visible femur shaft on the submitted images.**
4. Please be sure to immobilize the patient so that we receive images that are as motion free as possible.
5. If at all possible raise the TR high enough (as high as 8500ms) in order to acquire the scan in one acquisition (unfortunately some Philips scanners are unable to achieve this) as we stack the images in order to build a 3D model of the knee. If the scan is acquired with more than one acquisition and the patient changes position between the acquisitions, the resulting images will shift direction too much in the Anterior to Posterior position and/or too much in the Superior to Inferior position.
6. For patients with **Implanted metal**—once you have run the localizer and see implanted metal, please double your bandwidth in order to help alleviate the metal distortion artifact on the images.