

# Imaging protocol for

## Mako Total Hip 4.0

### Imaging requirements:

The Mako Total Hip 4.0 software allows for the input of data from preoperative lateral imaging. Angular measurements from standing lateral imaging and/or seated lateral imaging are obtained by the surgeon and manually uploaded to the Mako System by the surgeon or the Mako Product Specialist (MPS) prior to surgery. The surgeon will use the additional measurements to determine the amount of patient pelvic tilt in various poses. This data will allow the surgeon to plan the placement of the acetabular cup while taking into consideration the patient's pelvis in functional poses.

If using the pelvic tilt feature, the patient will need two preoperative images collected: a standing lateral image and a seated upright lateral image.

### Standing upright lateral image protocol (standing cross-pelvic lateral):

#### Patient positioning:

1. Have the patient stand at 90° to the direction of imaging. Feet should also be positioned 90° to the direction of imaging.
2. It is important that the patient stand as erect as possible without slouching.
3. Arms should be away from the imaging field.

#### X-ray considerations:

4. The X-ray beam should be centered at the superior aspect of the hip joint (2 to 3 cm above the greater trochanters).
5. The X-ray should include the bilateral ASIS, pubic tubercles, the sacrum and the lower lumbar spine.



### Seated upright lateral image protocol (seated cross-pelvic lateral):

#### Patient positioning:

1. Have the patient sit comfortably at 90° with the thighs perpendicular to the torso.
2. The patient should be sitting as upright as possible without slouching.
3. The patient should not twist their upper torso.
4. Thighs should be parallel to each other.
5. Thighs should be parallel to the floor.
6. Feet should be flat on the floor. Note: Consider using an adjustable chair or stool to accommodate patients of different heights.
7. Arms should be away from the imaging field and placed as shown or behind the head.
8. The patient should look straight ahead.

#### X-ray considerations:

9. The X-ray beam should be centered at the superior aspect of the hip joint.
10. The X-ray should include the bilateral ASIS, pubic tubercles (which may be obscured by the femurs), the sacrum, the lower lumbar spine and as much of the proximal femurs as possible.



## Joint Replacement

A surgeon must always rely on his or her own professional clinical judgment when deciding whether to use a particular product when treating a particular patient. Stryker does not dispense medical advice and recommends that surgeons be trained in the use of any particular product before using it in surgery.

The information presented is intended to demonstrate the breadth of Stryker's product offerings. A surgeon must always refer to the package insert, product label and/or instructions for use before using any of Stryker's products. The products depicted are CE marked according to the Medical Device Regulation 2017/745 or the Medical Device Directive 93/42/EEC. Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your sales representative if you have questions about the availability of products in your area. Stryker or its affiliated entities own, use, or have applied for the following trademarks or service marks: Mako, Stryker. All other trademarks are trademarks of their respective owners or holders.