

X-RAY

bodycad

### **Introduction and Purpose**

Through its mission, The Pursuit of Orthopaedic Perfection™, Bodycad aims to bring to market personalized restorations designed from a virtual 3D model of the patient's anatomy.

Radiographs of the patient are used to have a perfect understanding of patient's situation and improve the quality of the planning.

The procedure described in this document may differ from the procedure used for diagnostic purposes. The physician is responsible for determining whether further tests are required for diagnostic purposes.

It is important to closely follow this guide, as this will produce a more accurate planning, and enhance the precision of the personalized restoration. Deviations from this guide may result in an unusable X-Ray, and potentially delay the surgery.

Please contact image@bodycad.com if you require more information.

## AP Long Standing X-Ray

#### **General Patient Position**

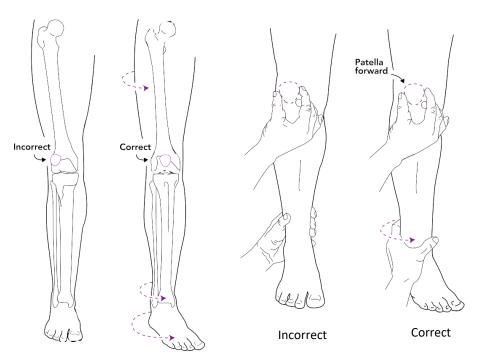
- The patient should be in a standing, weight-bearing position.
- The patient's weight should be evenly distributed between the legs.
- The arms are folded upward to the head.

#### **Limb Position**

- The knees should be in full extension, without rotation.
- The patient's patellae are placed forward. Malrotation must be avoided by aligning the patellae to the front, centered between the femoral condyles.
- The legs should be as parallel as possible, without rotation.

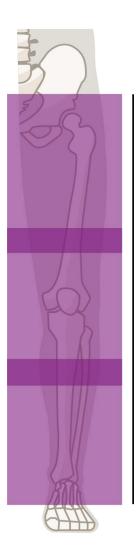






### **Acquisition Parameters**

- The X-ray must include at least the anterior inferior iliac spine to the talus (full-length).
- The patient must not move at any time during the scan. If the patient moves, the scan must be redone.
- Any non-fixed metallic objects worn by the patient must be removed.
- Support handles may be required for some patients.
- Place a marker indicating the left or right side of the patient.
- Use enough density to show the superimposed bones, and to obtain well-defined cortical outlines.



FOV after stitching

# Rosenberg Method - Knee X-Ray

#### **General Patient Position**

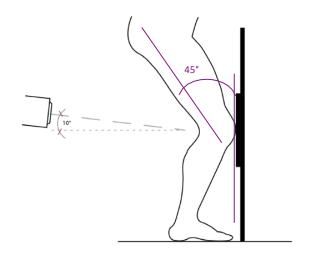
- The patient should be in a standing, weight-bearing position
- The patient's weight should be evenly distributed between the legs.



Rosenberg method - Knee X-ray

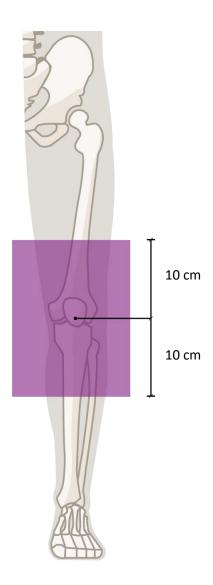
#### **Limb Position**

- The knees should be flexed at 45 degrees, without rotation.
- Anterior aspect of patient's knee can be in contact with vertical grid device.
- The ray points towards the knee joint, and is angled 10 degrees over the horizontal.



### **Acquisition Parameters**

- The X-ray must be centered on the knee joint, with 10 cm above and below knee joint.
- The patient must not move at any time during the scan. If the patient moves, the scan must be redone.
- Any non-fixed metallic objects worn by the patient must be removed.
- Place a marker indicating the left or right side of the patient.
- Use enough density to show the superimposed bones, and to obtain well-defined cortical outlines.



#### **Transmission of Images**

- Provide the complete data set of raw/original DICOM images to the surgeon.
- Lossy compression is NOT allowed (ISO\_10918\_1, ISO\_14495\_1, ISO\_15444\_1 or ISO 13818 1).
- Do not send any 3D recons, reformats, viewer software, etc.
- **Important**: Retain a permanent archive (via PACS) copy of the RAW imaging data (as scanned by the original parameters and in the uncompressed format).

#### Data anonymization and privacy

- Be sure that the required rights for transmitting data to Bodycad are respected.
- The patient's name and ID must be kept in the transmitted data.
- Upon receipt of the transmitted data, Bodycad will ascertain the correspondence between the images and the surgeon's prescription, and anonymize the data before the whole process of personalized restoration begins.
- Confidentiality of patient data is part of Bodycad's quality procedure and patient privacy guidelines.



Please direct all questions to <a href="mage@bodycad.com">image@bodycad.com</a>

