



## Data Collection Worksheet

**Please Note:** The Data Collection Worksheet (DCW) is a tool to aid integration of a PhenX protocol into a study. The PhenX DCW is not designed to be a data collection instrument. Investigators will need to decide the best way to collect data for the PhenX protocol in their study. Variables captured in the DCW, along with variable names and unique PhenX variable identifiers, are included in the PhenX Data Dictionary (DD) files.

### **Part I: Summary of the Radiographic Procedure Manual for Examinations of the Knee, Hand, Pelvis and Lower Limbs from the Osteoarthritis Initiative: A Knee Health Study**

The Radiographic Procedure Manual for Examinations of the Knee, Hand, Pelvis and Lower Limbs is designed for obtaining radiographs by use of conventional radiographic equipment with exposure of radiographic film. The manual also contains information for applying its procedures with the use of digital radiographic equipment.

The manual contains information for preparing X-ray participants, proper participant positioning, and information for assisting participants in maintaining proper positioning.

In addition, the manual contains instructions for obtaining unilateral posteroanterior (PA) fixed flexion knee radiographs with fluoroscopy, PA semiflexed knee radiographs with fluoroscopy, lateral knee radiographs for controls, and unilateral and bilateral hand radiographs (including pictures of proper and improper positioning), positioning of the X-ray tube, documentation, and quality control.

Instructions for obtaining the Radiographic Procedure Manual for Examinations of the Knee, Hand, Pelvis and Lower Limbs can be found in the Source section. Sections 3.3 and 3.6-3.8 of this manual are for obtaining knee radiographs. The first part of section 3.4 (pages 24-36) is for obtaining hand radiographs, whereas the second part of section 3.4 (pages 37-42) is for obtaining pelvic radiographs, which include the hip joints.

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### **Part II: Kellgren-Lawrence Grading Scale®**

Once the radiograph(s) is obtained, the PhenX Skin, Bone, Muscle and Joint

Working Group recommends that a radiologist use the Kellgren-Lawrence Grading Scale<sup>©</sup> for interpretation.

#### Kellgren-Lawrence Grading Scale<sup>©</sup>

Grade 1: doubtful narrowing of joint space and possible osteophytic lipping

Grade 2: definite osteophytes, definite narrowing of joint space

Grade 3: moderate multiple osteophytes, definite narrowing of joints space, some sclerosis and possible deformity of bone contour

Grade 4: large osteophytes, marked narrowing of joint space, severe sclerosis and definite deformity of bone contour

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Protocol source: <https://www.phenxtoolkit.org/protocols/view/170201>