**Supplemental Digital Content 1.** ICD-10 diagnosis codes and Nordic Medico-Statistical Committee Classification of Surgical Procedures (NOMESCO) surgery codes

**ICD-10 diagnosis codes**

Primary knee osteoarthritis (OA) ICD-10 codes include DM170 (primary bilateral knee OA), DM171 (primary unilateral knee OA) and DM179 (knee OA other, not otherwise specified).

Amputation ICD-10 codes include DS780 (traumatic amputation in hip joint), DS781 (traumatic amputation between hip and knee), DS789 (traumatic amputation in the hip region or thigh, not otherwise specified), DS880 (traumatic amputation in the knee joint), DS881 (traumatic amputation in the lower leg) and DT055 (traumatic amputation of both legs).

**NOMESCO surgery codes**

Knee arthroplasty NOMESCO codes include KNGB (primary prosthesis in the knee) and KNGC (secondary prosthesis in the knee).

Amputation NOMESCO codes include KNEQ (amputations in the pelvic area), KNFQ (amputations and other related surgeries on the hip and thigh) and KNGQ (amputations and other related surgeries on the knee and lower leg).

Knee fusion NOMESCO codes include KNGG (joint resections, arthroplasties and arthrodeses in the knee).

External fixation NOMESCO codes include KNFJ25 (external fixation of fracture in the distal femur), KNGJ20 (external fixation of fracture in the patella), KNGJ21 (external fixation of fracture in the proximal tibia) and KNGJ29 (external fixation of knee fractures, not otherwise specified).

Open reduction internal fixation (ORIF) including reduction NOMESCO codes include KNFJ0 (closed reduction of a femur fracture), KNFJ05 (closed reduction of a distal femur fracture), KNFJ1 (open reduction of a femur fracture), KNFJ15 (open reduction of a distal femur fracture), KNFJ3 (internal fixation with bio implants of a femur fracture), KNFJ35 (internal fixation with bio implants of a distal femur fracture), KNFJ4 (internal fixation with wires, rods, cerclage wiring or pins/needles of a femur fracture), KNFJ45 (internal fixation with wires, rods, cerclage wiring or pins/needles of a distal femur fracture), KNFJ5 (internal fixation with intramedullary nail of a femur fracture), KNFJ55 (internal fixation with intramedullary nail of a distal femur fracture), KNFJ6 (internal fixation with plate and screws of a femur fracture), KNFJ65 (internal fixation with plate and screws of a distal femur fracture), KNFJ7 (internal fixation with screws only of a femur fracture), KNFJ75 (internal fixation with screws only of a distal femur fracture), KNFJ8 (internal fixation with other or combined method of fracture in the femur), KNFJ85 (internal fixation with other or combined method of a distal femur fracture), KNFJ9 (other surgical fracture treatment in the femur), KNFJ95 (other surgical fracture treatment in the distal femur), KNGF2 (fixation of articular surface fragment in the knee), KNGJ0 (closed reduction of fracture in the knee), KNGJ00 (closed reduction of a patellar fracture), KNGJ01 (closed reduction of a proximal tibia fracture), KNGJ09 (closed reduction of fracture in the knee, not otherwise specified), KNGJ1 (open reduction of a knee fracture), KNGJ10 (open reduction of a patellar fracture), KNGJ11 (open reduction of a proximal tibia fracture), KNGJ19 (open reduction of a knee fracture, not otherwise specified), KNGJ3 (internal fixation with bio implants of a knee fracture), KNGJ30 (internal fixation with bio implants of a patellar fracture), KNGJ31 (internal fixation with bio implants of a proximal tibia fracture), KNGJ39 (internal fixation with bio implants of a knee fracture, not otherwise specified), KNGJ4 (internal fixation with wires, rods, cerclage wiring or pins/needles of a knee fracture), KNGJ40 (internal fixation with wires, rods, cerclage wiring or pins/needles of a patellar fracture), KNGJ41 (internal fixation with wires, rods, cerclage wiring or pins/needles of a proximal tibia fracture), KNGJ49 (internal fixation with wires, rods, cerclage wiring or pins/needles of a knee fracture, not otherwise specified), KNGJ5 (internal fixation with intramedullary nail of a knee fracture), KNGJ51 (internal fixation with intramedullary nail of a proximal tibia fracture), KNGJ59 (internal fixation with intramedullary nail of a knee fracture, not otherwise specified), KNGJ6 (internal fixation with plate and screws of a knee fracture), KNGJ60 (internal fixation with plate and screws of a patellar fracture), KNGJ61 (internal fixation with plate and screws of a proximal tibia fracture), KNGJ69 (internal fixation with plate and screws of a knee fracture, not otherwise specified), KNGJ7 (internal fixation with screws only of a knee fracture), KNGJ70 (internal fixation with screws only of a patellar fracture), KNGJ71 (internal fixation with screws only of a proximal tibia fracture), KNGJ79 (internal fixation with screws only of a knee fracture, not otherwise specified), KNGJ8 (internal fixation with other or combined method of a knee fracture), KNGJ80 (internal fixation with other or combined method of a patellar fracture), KNGJ81 (internal fixation with other or combined method of a proximal tibia fracture), KNGJ89 (internal fixation with other or combined method of a knee fracture, not otherwise specified), KNGJ9 (other surgical fracture treatment in the knee), KNGJ90 (other surgical fracture treatment in the patella), KNGJ91 (other surgical fracture treatment in the proximal tibia) and KNGJ99 (other surgical fracture treatment in the knee, not otherwise specified).