FUNDAMENTAL SURGERY

ISCP Mapping V1.0

Mapping of the use of simulations in orthopaedic training is currently evolving in the United Kingdom. We look forward to responding to the challenges the future may bring.

Our current simulations align with two of the entry requirements for ST3-level orthopaedic training and beyond. Entry to ST3 training requires observation of total hip arthroplasty and total knee arthroplasty. Both of these procedures have been strongly recommended as opportunities to deploy simulations into the UK (ISCP) training curriculum. During the development of our simulations, we have maintained a focus on those steps requiring the most skill acquisition. By the time trainees apply for certification many years later, they must accrue a minimum of 40 cases of each of total hip arthroplasty and total knee arthroplasty.

Mapping of the use of simulations in orthopaedic training is currently evolving in the United Kingdom. We look forward to responding to the challenges and opportunities the future will bring as the value of surgical simulators is more widely recognised in terms of surgical training and patient outcomes.

Hip	Extracapsular reduction and insertion of DHS
	Intracaspular - hemiarthroplasty replacement
	✱ Trauma and Orthopaedic Surgery PBA: PRIMARY- HIP - Total Hip Replacement*
Knee	✱ Trauma and Orthopaedic Surgery PBA: PRIMARY - KNEE - Total Knee Replacement*
	Knee arthroscopy
Ankle	Open reduction of fracture/dislocation
	Ankle - ORIF lateral malleous fracture
Wrist	Closed reduction and cast
	Closed reduction & percutaneous k-wires

*Training in these procedures has been strongly recommended to involve simulations by the ISCP

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Trauma and Orthopaedic Surgery PBA: PRIMARY- HIP - Total Hip Replacement

Competencies and Definitions Rating		**N/D/S**
V. Intra operative technique: global (G) and task-specific items (T)		
IT1	Follows an agreed, logical sequence or protocol for the procedure	*
IT2	Consistently handles tissue well with minimal damage	*
IT3	Controls bleeding promptly by an appropriate method	N
IT4	Demonstrates a sound technique of knots and sutures/staples	N
IT5	Uses instruments appropriately and safely	*
IT6	Proceeds at appropriate pace with economy of movement	*
IT7	Anticipates and responds appropriately to variation e.g. anatomy	N
IT8	Deals calmly and effectively with untoward events/complications	N
IT9	Uses assistant(s) to the best advantage at all times	N
IT10	Communicates clearly and consistently with the scrub team	N
IT11	Communicates clearly and consistently with the anaesthetist	N
IT12	Dislocates hip safely	N
IT13	Cuts femoral neck appropriately to match design of implant	*

IT14	Demonstrates familiarity and understanding of acetabular preparation including osteophyte trimming medially and at rim	*
IT15	Broaches the femur properly and prepares the bony surface	*
IT16	Uses trials and checks component orientation properly	*
IT17	Fix acetabular component appropriately	*
IT18	Implants femoral component appropriately	*
IT19	Performs final reduction and checks for stability	*

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Trauma and Orthopaedic Surgery PBA: PRIMARY - KNEE - Total Knee Replacement

Competencies and Definitions Rating		N/D/S
V. Intra operative technique: global (G) and task-specific items (T)		
IT1	Follows an agreed, logical sequence or protocol for the procedure	*
You really IT2	Consistently handles tissue well with minimal damage	*
IT3	Controls bleeding promptly by an appropriate method	N
IT4	Demonstrates a sound technique of knots and sutures/staples	N
IT5	Uses instruments appropriately and safely	*
IT6	Proceeds at appropriate pace with economy of movement	*
IT7	Anticipates and responds appropriately to variation e.g. anatomy	N
IT8	Deals calmly and effectively with untoward events/complications	N
IT9	Uses assistant(s) to the best advantage at all times	N
IT10	Communicates clearly and consistently with the scrub team	N
IT11	Communicates clearly and consistently with the anaesthetist	N
IT12	Demonstrates familiarity and understanding of the use of alignment jigs	*
IT13	Understands tibial and femoral referencing	*
IT14	Understands flexion and extension gap balance	*
IT15	Demonstrates ability to achieve a balanced tibial femoral and patellofemoral implantation	*

IT16	Demonstrates ability to cement the components into place	N

✱ Fundamental Surgery simulations aligns with elements of the ISCP procedure-based assessment guidelines

N Not applicable to simulation-based training

References:

The Intercollegiate Surgical Curriculum: Educating the surgeons of the future. Core surgery (https://www.iscp.ac.uk/static/public/syllabus/syllabus_core_2017.pdf)