Annex: Service Specification for Specialised Orthopaedics (Adults)

1. Purpose

1.1. This document has been published as an annex to the existing service specification for Specialised Orthopaedics. It should be read alongside the currently published service specification and expands the detail in Appendix B with regard to revision knee surgery. https://www.england.nhs.uk/wp-content/uploads/2013/06/d10-spec-orthopaedics.pdf

1.2. The delivery of Revision Knee Surgery via regional networks is accompanied by changes to the National Tariff Payment System, which will be **piloted** in England from April 2020 and evaluated after 12 and 24 months.

1.3. This document sets out the surgical procedures that fall under the remit of this pilot and the regional Network model that will support service delivery. Standards for Revision Knee surgery are also referenced under section 6.

2. Background

2.1. The GIRFT review of adult elective orthopaedic services in England highlighted significant variations in clinical practice and outcome.

2.2. The report, published March 2015 (https://gettingitrightfirsttime.co.uk/wp-content/uploads/2017/06/GIRFT-National-Report-Mar15-Web.pdf) recommended that revision surgery should be approached on a regional basis and delivered by networks of appropriately experienced surgeons in a smaller number of centres, with guidance issued on minimum volumes of surgical procedures.

2.3. NHS England and NHS Improvement have worked with GIRFT and the professional associations (British Association for Surgery of the Knee (BASK), the British Orthopaedic Association (BOA) to support the implementation of this GIRFT recommendation. This document defines the standards for the delivery of Revision Knee Replacement (KR) Surgery from 1 April 2020.

3. Population covered by this annex to the existing service specification

3.1. This document applies to Revision KR surgery in adults only, under the remit of Specialised Orthopaedic Services.

3.2. All Revision KR surgery must be undertaken in Major Revision Centres (MRCs) or Revision Units (RUs)

3.3. All centres undertaking revision KR surgery must perform a minimum of 30 revision knee cases per year.

3.4. A revision is defined as any procedure generating a National Joint Registry (NJR) K2 form.

3.5. The following procedures are ‘in scope’ of the Revision Knee pilot project:

Revision of a Partial Knee Replacement

Procedures

- Revision of a Unicondylar Knee Replacement
- Revision of a Patellofemoral replacement of the knee

Diagnoses

- Progression of osteoarthritis or failure of implant.

Infected Joint Replacement

Procedures

- DAIR
- Single stage revision
- 2-stage revision TKR
- Arthrodesis
- Amputation

Diagnoses

- Infection

All Revision Joint Replacements

Procedures

- 1 or 2-stage revision Knee Replacement
- Unconstrained, semi-constrained, constrained and hinged knee replacement
- Mega-Endoprosthesis

Diagnoses

- Infection
- Loosening
- Wear
- Stiffness
- Instability
- Trauma

4. Model for Service Delivery

Each region will comprise an agreed number of Major Revision Centres, Revision Units and Primary Arthroplasty Units that will work together in a Network, led by the Major Revision Centre. All cases being considered for Revision Knee Replacement require discussion at Multidisciplinary Team Meetings (MDT) and all complex revisions require discussion regionally.

Major Revision Centres (MRCs)

MRCs will be responsible for leading and coordinating regional multidisciplinary discussions with RUs about all infected knee revisions and complex revision knee arthroplasty.
A high volume revision knee unit with established tertiary referral practice. An indicative target prospective number of 50 revision knee replacements per year.
A unit with multiple surgeons already supporting a regional practice.
Demonstrable support from senior management and finance director to be a regional lead centre for complex revision work. The Unit must have a nominated Clinical Lead prepared to play a significant leadership role within the new network. Willingness to share data for annual review in a transparent fashion. In addition to the requirements for RU units MRC units should have ready access to plastic and vascular surgical support, ideally on site or within the same trust. Post-

operative surgical units (POSU) and/or HDU facilities for elective orthopaedic patients are essential. The MRC unit should coordinate a regional revision MDT and an infection MDT. This may be a combined meeting or two separate meetings. Complex cases will be referred to the MRC from the RU as outlined below.

Revision Units (RUs)

RU units must reach minimum surgeon and unit volume requirements and provide the following infrastructure:

- Revision KR units should not routinely use or require loan implant equipment.
- Revision KR units should provide ring-fenced, dedicated elective beds in an orthopaedic ward.
- All revision KR patients should have access to advanced post-operative nursing care (level 1.5 or post-operative surgical unit) for their first 24-48hrs.
- All revision KR surgery should be performed in dedicated clean elective arthroplasty theatres.
- Access to plastic surgeons and allied specialties should be available, either locally or through a regional network.
- A nominated revision KR lead will be appointed in each MRC and RU who will act as contact and liaison between the network. Their job-plan must include dedicated time for revision KR workload such as processing referrals and MDT discussions.

Primary Arthroplasty Units (PAUs)

Some units that currently undertake a low volume of revision knee surgery (<30 cases per year) will be required to stop undertaking procedures that generate a K2 form and become Primary Arthroplasty Units (PAU). These units must link into their regional RU and MRC through a robust referral mechanism and be able to participate in the regional MDT as clinical case-load dictates.

PAUs must refer all cases to the Regional MDT for review.

The Revision KR MDT

The MDT will assess each case and decide where the surgery should be carried out - either in the MRC itself, or at the RU within that catchment area.

- Formal communication between MRCs and RUs will take place at regular (minimum twice-monthly) regional MDT meetings.
- Members of both MRC and the relevant RU must attend (either in person or via teleconference). *This must be part of job plans for the revision KR leads in all MRCs and RUs.*
- The revision KR MDT should comprise orthopaedic surgeons, and where possible, specialist nurses and rehabilitation teams.
- Access to plastic surgeons and allied specialties should be available either locally or through a regional network.
- If cases of suspected or confirmed infection are discussed, infectious disease physicians or microbiologists must be involved in the MDT.
- The purpose of the MDT is to ensure that a plan is agreed and documented by those present in advance of the surgery.
- All MDT discussions must be standardised and recorded (with submission to NHS E/I commissioned referral management system/database).
- Outcomes should be audited as per the national GIRFT outcome standards.

Service Requirements

- All revision KR patients should have access to advanced post-operative nursing care level 1.5 or Post-Operative Surgical Unit (POS) for the first 24-48hrs following surgery.
- HDU facilities must be available in MRCs.

5. Outcomes and Applicable Quality Standards

Add the Quality Indicators that have been developed for the existing service specification (D10) and any metrics to be agreed by the IT subgroup

6. Applicable Service Standards

6.1. **National standards to be met by commissioned providers:**

The following BOA standards for Trauma and Orthopaedics (BOASTs) have been developed by the BASK Revision Knee Working Group in partnership with the BOA and GIRFT:

- Revision Total Knee Replacement Surgical Practice Guidelines: BOA/BASK/GIRFT <insert link to BOA website when published>
- Investigation and Management of Patients with Problematic Knee Replacements: BOA/BASK/GIRFT <insert link to BOA website when published>
- Investigation and Management of Prosthetic Joint Infection in Knee Replacement: BOA/BASK/GIRFT <insert link to BOA website when published>

7. Abbreviations and Acronyms Explained

BOA	British Orthopaedic Association
BASK	British Association for Surgery of the Knee
BOASTs	British Orthopaedic Association Standards for Trauma & Orthopaedics
DAIR	Debridement, Antibiotics & Implant Retention procedure for infected total knee replacement
GIRFT	Getting it Right First Time
MDT	Multidisciplinary Team
TKR	Total Knee Replacement

Date published <insert>