

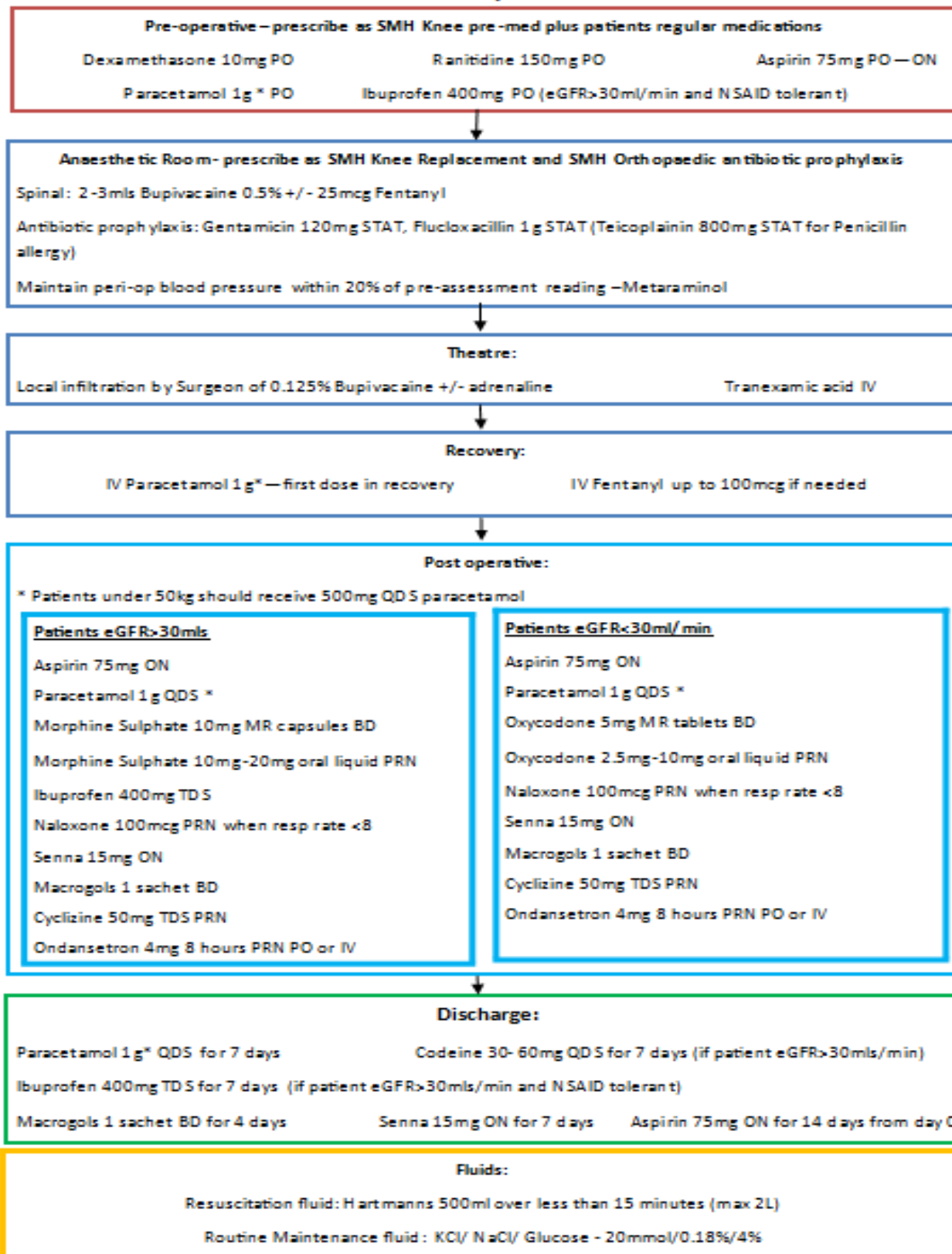
# **Enhanced Recovery Programme for Total Knee Replacement Clinical Guideline**

**V1.1**

**August 2021**

# Summary

## Enhanced Recovery Elective Knees



# 1. Aim/Purpose of this Guideline

1.1. To enhance the recovery of patients having primary knee replacements by a multimodal programme which helps facilitate early mobility and discharge.

1.2. This version supersedes any previous versions of this document.

## **Data Protection Act 2018 (General Data Protection Regulation – GDPR) Legislation**

The Trust has a duty under the DPA18 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed and documented. We cannot rely on opt out, it must be opt in.

DPA18 is applicable to all staff; this includes those working as contractors and providers of services.

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# 2. The Guidance

## 2.1. Introduction

2.1.1. The concept of multimodal, evidence-based interventions to improve post-operative outcome (enhanced recovery) was introduced more than a decade ago and is now well documented in several recent reviews to hasten post-operative recovery and reduce the need for hospitalisation and morbidity. Multimodal analgesia aims to improve patients' comfort and to decrease side effects and opioid consumption. The goal is to target different mechanisms of pain pathways. This can be achieved through the use of multiple drug classes or administration techniques.

2.1.2. Pain management starts pre-operatively, with active participation in the process. To enable the patient to become involved in their pain management they must be fully informed. This includes understanding the procedure, rehabilitation involved, procedures involved to improve their pain control and medications. The patient will be given a patient guide to knee surgery and attend Joint School where this is achieved.

2.1.3. This guideline should be adjusted to the patients' individual needs. However, it is important to note that all anaesthetics for the enhanced recovery pathway should involve a local anaesthetic based technique (spinal, local anaesthetic infiltration). Standardisation is critical to achieving the aim of enhanced recovery but variation may be required due to patient/surgical factors.

2.1.4. Some patients are reluctant to take analgesia if they are not in pain. It is important to educate patients regarding the use of regular analgesia. Therefore patients should never refuse regular oral analgesia unless there is a

good reason to, for instance intolerable side effects. Patients should be taught to pre-empt pain, meaning it is better to take analgesia prior to mobilisation or physiotherapy rather than wait until after when it may take more opioids to improve their pain control, resulting in more side effects. Patients use less analgesia when using it pre-emptively. This information is given to patients in the patient information booklet and forms part of the pre-operative education class. Patients need this information reinforced by all members of the multidisciplinary team.

## 2.2. Prescribing analgesia

2.2.1. Take note of allergies, regular medications and specific contraindications

2.2.2. Avoid modified release morphine/ oxycodone if patient has sleep apnoea +/- uses CPAP – use PCA as alternative.

2.2.3. Avoid modified release morphine/ oxycodone if regular medications include more than simple opioids (i.e. already on a regular dose of slow release morphine or fentanyl patch or buprenorphine patch with strength > 35microgram/hr) – use PCA as an alternative.

2.2.4. Consider renal function.

2.2.5. Prescribe Naloxone in line with Trust Guidance

2.2.6. If gabapentin or pregabalin is already part of their regular medications, these medications should be continued at existing prescribed dose.

2.2.7. Patients on an established dose of tramadol should be managed individually and potentially have this continued alongside the regime of morphine/oxycodone MR. This is to minimise the risk of serotonergic withdrawal.

2.2.8. **Patients with pain not controlled** - Gabapentin can be used as additional pain relief if required. A titrating dose can be found on EPMA and should be prescribed with a review date of 1-2 weeks post op.

2.2.9. **Patients with chronic pain** (i.e patients who have been taking opioids for some time prior to the operation) may require individualised management. These patients should still receive the intra-articular infusion, but they should be prescribed a Patient Controlled Analgesia (PCA) pump as an alternative to morphine/ oxycodone modified release. These patients often have unpredictable analgesic requirements and their needs are better served by a PCA. These patients should also continue their pre-existing opioids into the post-operative period. It is important that analgesia patches stay in place and are re-applied as prescribed.

## 2.3. Prescribing VTE

2.3.1. Prescribe in line with VTE Policy

2.3.2. Aspirin 75mg once daily for 14 days starting on the night of the procedure

2.3.3. Standard VTE prophylaxis with either LMWH daily or Rivaroxaban 10mg once daily and Anti-embolism stockings (until discharge) should be offered where there is expected to be prolonged immobility or in the following specific instances:

- History of previous VTE
- Current active cancer
- Upper GI bleed in the last 3 months
- Aspirin allergy or intolerance

## 2.4. Prescribing laxatives

Patients should have laxatives prescribed as an inpatient and on discharge

## 3. Monitoring compliance and effectiveness

Element to be monitored	Adherence to the guideline
Lead	Dr Will Jewell and Mr Mark Norton
Tool	EPMA report to be run to follow up patients Audit and review Tool using patient documentation.
Frequency	Reports on prescribing can be run quarterly
Reporting arrangements	Reporting will occur in the Trauma and Orthopedic Governance meetings
Acting on recommendations and Lead(s)	Orthopaedic Consultants will undertake subsequent recommendations and action planning for any or all deficiencies and recommendations within reasonable timeframes for their areas
Change in practice and lessons to be shared	Lesson learned or changes to practice will be shared with all the relevant stakeholders

## 4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the ['Equality, Inclusion & Human Rights Policy'](#) or the [Equality and Diversity website](#).

4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

## Appendix 1. Governance Information

<b>Document Title</b>	Enhanced Recovery Programme for Total Knee Replacement Clinical Guideline V1.1		
<b>This document replaces (exact title of previous version):</b>	Enhanced Recovery Programme for Total Knee Replacement Clinical Guideline V1.0		
<b>Date Issued/Approved:</b>	July 2021		
<b>Date Valid From:</b>	August 2021		
<b>Date Valid To:</b>	November 2022		
<b>Directorate / Department responsible (author/owner):</b>	Victoria Ling, Lead Pharmacist for Trauma and Orthopaedics		
<b>Contact details:</b>	01872 253531		
<b>Brief summary of contents</b>	A guideline for the enhanced recovery programme for total knee replacement		
<b>Suggested Keywords:</b>	TKR, total knee replacement, knee surgery,		
<b>Target Audience</b>	RCHT ✓	CFT	KCCG
<b>Executive Director responsible for Policy:</b>	Medical Director		
<b>Approval route for consultation and ratification:</b>	Trauma and Orthopaedics Anaesthetics Medicine Practice Committee		
<b>General Manager confirming approval processes</b>	Chloe Parr		
<b>Name of Governance Lead confirming approval by specialty and care group management meetings</b>	Suzanne Atkinson		
<b>Links to key external standards</b>	None required		
<b>Related Documents:</b>	Nil		
<b>Training Need Identified?</b>	No		
<b>Publication Location (refer to Policy on Policies – Approvals and Ratification):</b>	Internet & Intranet	✓	Intranet Only
<b>Document Library Folder/Sub Folder</b>	Clinical / Trauma and Orthopaedics / Elective		

## Version Control Table

<b>Date</b>	<b>Version No</b>	<b>Summary of Changes</b>	<b>Changes Made by (Name and Job)</b>
October 2019	V1.0	Initial version	Victoria Ling Lead T&O Pharmacist
July 2021	V1.1	New Template only – no further changes to Guideline	Nicki Jannaway, Theatre Service Manager

**All or part of this document can be released under the Freedom of Information Act 2000**

**This document is to be retained for 10 years from the date of expiry.**

**This document is only valid on the day of printing**

### **Controlled Document**

This document has been created following the Royal Cornwall Hospitals NHS Trust Policy for the Development and Management of Knowledge, Procedural and Web Documents (The Policy on Policies). It should not be altered in any way without the express permission of the author or their Line Manager.

## Appendix 2. Equality Impact Assessment

<b>Section 1: Equality Impact Assessment Form</b>						
<b>Name of the strategy / policy / proposal / service function to be assessed</b> Enhanced Recovery Programme for Total Knee Replacement Clinical Guideline V1.1						
<b>Directorate and service area:</b> Trauma and Orthopaedics			<b>Is this a new or existing Policy?</b> Existing			
<b>Name of individual/group completing EIA</b> Nicki Jannaway, Theatre Service Manager			<b>Contact details:</b> 07584 604024			
1. Policy Aim Who is the strategy / policy / proposal / service function aimed at?		To ensure consistent and appropriate prescribing the enhanced recovery programmed for total knee replacements				
2. Policy Objectives		To ensure patients are provided with a consistent and appropriate prescribing in-line with the enhanced recovery programmed for total knee replacements				
3. Policy Intended Outcomes		To ensure patients are comfortable and not in pain post a total knee replacement. To ensure that patients have appropriate medication to prevent a VTE. To ensure patients have appropriate medication to prevent constipation				
4. How will you measure the outcome?		Patients pain control and VTE occurrence				
5. Who is intended to benefit from the policy?		Patients who have had a total knee replacement				
6a). Who did you consult with?		Workforce	Patients	Local groups	External organisations	Other
		x		x		
b). Please list any groups who have been consulted about this procedure.		<b>Please record specific names of groups</b> Orthopods Anaesthetists Pharmacy				
c). What was the outcome of the consultation?		The proposed enhanced recovery was recognised as the most effective outcome				



<b>7. The Impact</b>				
Please complete the following table. If you are unsure/don't know if there is a negative impact you need to repeat the consultation step.				
Are there concerns that the policy <b>could</b> have a positive/negative impact on:				
Protected Characteristic	Yes	No	Unsure	Rationale for Assessment / Existing Evidence
<b>Age</b>		<b>X</b>		
<b>Sex</b> (male, female non-binary, asexual etc.)		<b>X</b>		
<b>Gender reassignment</b>		<b>X</b>		
<b>Race/ethnic communities /groups</b>		<b>X</b>		
<b>Disability</b> (learning disability, physical disability, sensory impairment, mental health problems and some long term health conditions)		<b>X</b>		
<b>Religion/ other beliefs</b>		<b>X</b>		
<b>Marriage and civil partnership</b>		<b>X</b>		
<b>Pregnancy and maternity</b>		<b>X</b>		
<b>Sexual orientation</b> (bisexual, gay, heterosexual, lesbian)		<b>X</b>		
<p><b>If all characteristics are ticked 'no', and this is not a major working or service change, you can end the assessment here as long as you have a robust rationale in place.</b></p> <p>I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.</p>				
<b>Name of person confirming result of initial impact assessment:</b>			Victoria Ling	
<p><b>If you have ticked 'yes' to any characteristic above OR this is a major working or service change, you will need to complete section 2 of the EIA form available here:</b></p> <p><a href="#">Section 2. Full Equality Analysis</a></p> <p><b>For guidance please refer to the Equality Impact Assessments Policy (available from the document library) or contact the Human Rights, Equality and Inclusion Lead <a href="mailto:india.bundock@nhs.net">india.bundock@nhs.net</a></b></p>				