Trust Standard Operating Procedure

Main Recovery Operational Management

Issue Date	Review Date	Version
November 2018	July 2021	V1.0

Purpose

- Define the key roles and responsibilities within Main Recovery
- Description of the processes for the Operational Management of Main Recovery
- A detailed method for articulating patient acuity/ dependency and routes of escalation when demand exceeds capacity

Who should read this document?

- Recovery staff
- Theatre staff
- Trust site team
- Other users of the Recovery department i.e. Interventional Radiology

Key Messages

- A designated Post-Anaesthetist Recovery Department providing immediate post-anaesthetic care
- Clear guidelines for admissions and discharges within the Recovery department
- Outlines the Clinician support required for patients in the Recovery department
- Definitive process for articulating acuity and dependency

Core accountabilities	
Owner	Katie Moore- Junior Sister and Catherine Martin- Senior ODP
Review	Theatre and Anaesthetic Clinical Governance Committee
Ratification	Clinical Director Anaesthetics Theatre Central
Dissemination	Cindy McConnachie – Senior Matron Theatres and Anaesthetics
Compliance	Theatre Central Management Team

Links to other policies and procedures

- Use of Red Flags within Safe Care- Standard Operating Procedure
- Resuscitation Policy
- Decontamination Guidelines & Procedures
- TRW.OPS.FRA.935.2 Escalation Plan Framework
- Infection prevention & control framework
- Main Recovery Clinical Management: Standard Operating Procedure
- (OP01) Operational Policy for the Intensive Care Unit
- Clinical handover of care and internal transfer of Adults (Excluding Maternity) Standard Operating Procedure

Version History

V0.0		Initial SOP

The Trust is committed to creating a fully inclusive and accessible service. Making equality and diversity an integral part of the business will enable us to enhance the services we deliver and better meet the needs of patients and staff. We will treat people with dignity and respect, promote equality and diversity and eliminate all forms of discrimination, regardless of (but not limited to) age, disability, gender reassignment, race, religion or belief, sex, sexual orientation, marriage/civil partnership and pregnancy/maternity.

An electronic version of this document is available on Trust Documents. Larger text, Braille and Audio versions can be made available upon request.

Standard Operating Procedures are designed to promote consistency in delivery, to the required quality standards, across the Trust. They should be regarded as a key element of the training provision for staff to help them to deliver their roles and responsibilities.

Main Recovery Operational Management

Standard Operating Procedure (SOP)

1 Introduction

- This Operational Management SOP for Main Recovery provides guidance for the daily management of the department, in order to provide safe and effective patient care.
- There is a detailed method for articulating patient acuity/ dependency and a clear process of escalation when demand exceeds capacity.

2 Definitions

PFC	Patient Flow Co-ordinator
MRI	Magnetic Resonance Imaging
ICU	Intensive Care Unit
HDU	High Dependency Unit
PMH	Previous Medical History
PACU	Post Anaesthetist Care Unit
DVT	Deep Vein Thrombosis
BNF	British National Formulary
PILS	Paediatric Immediate Life Support
HCA	Health Care Assistant

3 Regulatory Background

- The Association of Anaesthetists of Great Britain and Ireland (AAGBI)
- Nursing and Midwifery Council (NMC)
- The Royal College of Nursing (RCN)
- The Health and Care Professions Council (HPCC)

4 Key Duties

- The Recovery department will be led on a day to day basis by a Recovery Co-ordinator who should be a senior member of staff.

- The Recovery Co-ordinator should not be expected to directly care for patients except in exceptional circumstances, whilst maintaining the safety of the unit and patients at all times.
- The Recovery Co-ordinator is directly responsible to the Recovery Team Leader or in their absence the Duty Senior Band 7 and must raise and highlight with them any issues that will directly impact on the performance of Recovery and Patient care.

- The Recovery Co-ordinator will liaise with all Theatre team leaders after the daily briefing to discuss the relevant Theatre lists and identify any predicted problems or concerns. This includes Maternity Theatres.

- The Recovery Co-ordinator should participate in the Theatre Operational Meeting, in the absence of the Recovery Team Leader, to discuss bed availability and capacity within the Recovery department.

- The Recovery Co-ordinator should attend the Site Operational Meetings, in the absence of the Recovery Team Leader to identify and communicate demand and capacity issues affecting Main Recovery.

- The Recovery Co-ordinator must ensure the control drugs are checked at every handover and a signature to confirm the correct stock is done.
- A verbal and written handover must occur during every handover between co-ordinators.

- The Patient Flow Co-ordinator supports the Recovery Co-ordinator with liaising with the wards regarding bed availability. This is normally part of the Band 3 HCA role, Monday-Friday 8am-9pm.

    - Out of hours and during weekend working, patient flow co-ordination will be undertaken by the designated Recovery team leader.

- The PFC will check the e-discharge status for daycase patients when they arrive into Recovery and will follow this up with the surgical team if needed.

    - This must not delay the discharge of the patient from the Recovery department.

- It is the responsibility of the night staff to carry out the daily safety checks and maintain an accurate record of completion in the designated folder within Recovery

(Appendix1).

- If these checks have not been done during the night, it is essential to inform the Recovery Co-ordinator at handover.

- The role of the Duty Floor Anaesthetist (DFA) is to support the Anaesthetic team during working hours (8am-6pm). They are also available to support the Recovery department if required. The DFA must be involved when the escalation policy is activated in Recovery (see section 10 for details).
- The role of the Black Triangle (▲) is for Anaesthetic support, however, they are available to Recovery staff if assistance is required urgently. Contact should be made via the bleep 0196 or the Theatre they are working in.

- The role of the Recovery Star (★) is to support Recovery with any Anaesthetic issues, when the responsible Anaesthetist is unavailable. Contact should be made to the Theatre they are working in or to the assigned phone, this will be determined by the DFA in the morning.

5 Procedure to Follow

- The Recovery department, level 4, is a 14 bedded unit designed to provide immediate post-operative care to patients from Main Theatres (14 Theatres) and Maternity (2 Theatres).
    - Maternity Recovery is a stand-alone 2 bedded unit adjacent to the Maternity Theatres.
        - There must be one Recovery trained Practitioner per patient.
        - There is a requirement for one Main Recovery Practitioner to attend Maternity Recovery when there is a post-operative patient in that department, until the patient meets the discharge criteria.
        - This member of staff must be supported by a Scrub Practitioner from Maternity Theatres.
        - The Recovery Practitioner is only responsible for care of the mother while baby remains responsibility of the assigned midwife during this period.
        - This satellite area must take priority over the Main Recovery workload. Where this is not achievable, the Recovery Co-ordinator must escalate to the Duty Senior or Senior Nurse out of hours (0355) and support must be provided from Theatre or Anaesthetic Practitioners to backfill Main Recovery. See section 10 for further details.
    - There is a requirement for Main Recovery to provide post anaesthetic care to patients from areas outside of the normal working remit.
        - These include, but are not limited to Interventional Radiology, Neuro X-Ray, CT scan, MRI and Endoscopy.
- The Recovery department must be staffed 24 hours, 7 days per week.
- There must be no fewer than two Registered Practitioners present when a patient is in the Recovery department.
- Staffing levels need to vary according to the number of Operating Theatres requiring Recovery services and Patient acuity. This is to ensure that patients can be cared for

on a one to one basis (until the patient's clinical condition has met the discharge criteria or Patient acuity dictates otherwise).

    - The Recovery Co-ordinator must escalate to the Duty Senior if staffing levels do not meet the demand of Patient acuity or dependency.
- The Recovery department is sited within the theatre suite to allow easy access from the Operating Theatres, however there should be a separate outside access for transfer of patients to wards, HDU and ICU as required by the level of surgery performed.
- Each recovery space must be large enough to allow unrestricted access for beds or trolleys without obstruction. Monitoring; including capnography, pipeline oxygen and suction supply must be available at each space.

6 General Considerations

- All equipment must have had the yearly safety check prior to use, cleaned between uses and any faulty equipment removed and reported to Estates or Clinical Engineering department. As per the Decontamination Guidelines and Procedures document.
- Emergency resuscitation equipment must be kept within easy access and checked daily and after each use, in line with Local Resuscitation policy.
    - All staff must attend the yearly mandatory training to use this equipment.
- Hand washing facilities with non-touch taps must be closely available.
- Personal protective equipment (PPE) must be accessible to each bay.
- Utility and sluice facilities must be situated adjacent to the area.
- The Recovery department should have positive pressure ventilation to ensure that any exhaled anaesthetic gases are removed effectively.
- The Recovery department must have an isolated area and adhere to Local policy for managing infected patients. Liaising with Infection Control team for support and guidance as required.
    - Bed space number 12 is the allocated bay for patients requiring infection control precautions. However, if single room isolation is required, the patient must remain in Theatre and be recovered by the Theatre team, unless advised otherwise by Infection Control team.
    - When the patient has been discharged, the bed space used must be closed until the appropriate cleaning has been carried out, as per the Local Infection Control Policy.
- Up to date resources, including contact details for support teams, must be available within the department for learning disabilities and dementia care.
- The privacy and dignity of the patient must be maintained at all times, utilising screens or curtains, in line with Local Infection Control Policy.
- Equipment must be available to reduce the risk of Hypothermia.
- Facilities should exist for carers/relatives/security/custodial staff to be allowed access if necessary.
- Lifting aids, including hoists must be available.

7 Management of Paediatric patients in Main Recovery

- The Recovery department must have designated Paediatric area for the recovery of Paediatric patients.
- A full range of Paediatric equipment, including emergency resuscitation equipment must be present and all staff must be familiar with its use.
- Staff must have access to a current Paediatric BNF (available online if hard copy not available) and relevant protocols.
- Paediatric resuscitation guidelines must be available and all Registered Practitioners must attend the yearly mandatory PILS training.
- All Registered Practitioners must receive training & updates at level 2 in Child Protection.
    - Support regarding child protection can be sought from the staff on the Paediatric wards.

Provision must be made for parents or carers to stay with the child

8 Anaesthetic cover

- During working hours emergency medical cover is provided by the recovery star (if the anaesthetising Anaesthetist is unavailable). If neither the anaesthetising Anaesthetist nor the recovery star is available, anaesthetic support must be sought from the DFA or the black triangle (see section 4 for details).
- Outside of working hours the point of contact will be the on-call Anaesthetist on bleep 0196. If they are unavailable then advice should be sought from the duty Consultant Anaesthetist. If the patient's condition is life threatening and no medical cover is available within Theatres, then the Trust policy must be utilised.
    - Call 3333 for a medical emergency
    - Call 2222 for a cardiac arrest

9 Admission into the Recovery department

- Patients admitted into the Recovery department should be escorted with an Anaesthetist and a Scrub Practitioner, unless clinical need exempts this. Handover must be given to a Recovery Practitioner, following the handover checklist (Appendix 2).
- All patients admitted into the Recovery department must have a named consultant who is then responsible for the patient. This must be confirmed and the named consultant aware prior to the admission. The patient must be admitted on iPM (out of hours support will be from MAU ward clerk).
- Elective extended stay requests must be made via the 'Outlook calendar' and include a completed request form. These can be sourced from and emailed to the Theatre Co-ordinators.
    - Maximum of two bookings per day are permitted.
    - Day of surgery extended stay requests must be made to the Recovery Co-ordinator.

    - The patient must be in recovery by 2pm to ensure sufficient staffing available for the duration of the extended stay in order to manage the demand on service.
- Areas outside of Main Recovery's remit (as detailed in section 5) should liaise with the Recovery Co-ordinator, prior to arrival, for the safe transfer of patients to the Recovery department.
    - A clear handover and on-going care plan must be given to the Recovery Practitioner. This must be documented in the patient's notes.
    - When the responsible Doctor (Surgeon or Anaesthetist) becomes unavailable i.e. needs to attend to another patient or is off duty, they must ensure on-going medical cover is in place. The named person must be communicated to the Recovery Practitioner.
- In the situation where ICU have no bed capacity and request escalation into Main Recovery, the Co-ordinator must escalate this request to the Recovery Team Leader, or in their absence the Duty Senior, who must liaise with the Site Team to discuss this escalation.
    - In line with the 'Operational Policy for the Intensive Care Unit' this must depend on sufficient staffing numbers and experience within the Recovery department and must not impact on the operational work in Main Theatres.

10 Long-stay patient: Clinician support

- Recovery Co-ordinator should liaise with the ICU bed Co-ordinator (bleep 1033) at 0800 hrs regarding overnight patients that are:
    - ICU outliers, who must be reviewed by the ICU team as part of their ward round.
    - Not fit for the allocated ward and require an ICU review once a referral by the responsible Anaesthetist has been made.
    - Fit for the ward but unable to go due to a non-clinical bed delay. This will impact on the decision towards any 'go at risk' elective HDU/ICU operations.
- ACT should be aware of any ICU outliers in Recovery in order to support and assist with care delivery.
- All overnight or outlier patients must have a morning review by the responsible surgical/medical team.
- A clinical review must occur for any patient who has been in Main Recovery for 24hrs, with a view to discuss on-going care, irrespective of any previous reviews that have taken place.
    - A plan must be communicated to the relevant or admitting team, patient/ patient family (as appropriate) and documented in the patient's notes. The DFA should be consulted during this review.
    - This should include an ICU discussion/review.

11 Escalation procedure

The aim of this process is to ensure that effective communication is maintained between Theatres, Recovery and the site management team regarding the level of care required for each patient in Recovery and the overall Recovery status.

These will be subject to frequent change and it will therefore be essential that all relevant information is communicated within Main Theatres and during the applicable Trust operational meetings, to ensure that a clear and accurate picture of the Recovery status is visible. Within Main Theatres, the Recovery status must be visible in Main Recovery and at the Theatre Co-ordinators desk.

Considerations should be made for Recovery staffing level, demand on service and patient acuity when evaluating the Recovery status.

Daily planning

Early co-ordinator role at 8am

- Assess current departmental status
  - Are there any patients in the department? What are their nursing needs, on-going plan and acuity level? Has ICU escalated to Recovery? Liaise with ICU bed Co-ordinator if necessary (see section 10).

- Assess staffing levels for the day and night (capacity and capability)
  - Consider agency/NHSP use, skill mix

- Review each Theatre lists with the Theatre team leaders (patient acuity and dependency). Refer to the Recovery status framework for guidance.
  - Mark on the Theatre list next to each patient's name a green, amber or red dot for level of acuity identified and expand in the Recovery log book (amber or red only)
  - Discuss potential problems and post-operative requirements i.e. post-op bed level

- Liaise with Theatre co-ordinator, DFA, Duty Senior and Matron
  - Discuss the above three points and identify Recovery status against Theatre demand
  - Ensure a decision has been made regarding how achievable this is, action plan is required when we are amber or red

Review at 13:45

- With Team Leader, DFA, Matron and Theatre co-ordinator to discuss any changes from 08:00 plan and take to the 14:00 Theatre operations meeting.

Review at 16:45

- With Duty Senior, DFA and Theatre co-ordinator to discuss current status in Recovery and plan for the evening shift, take to 17:00 Trust operations meeting.

Recovery status framework

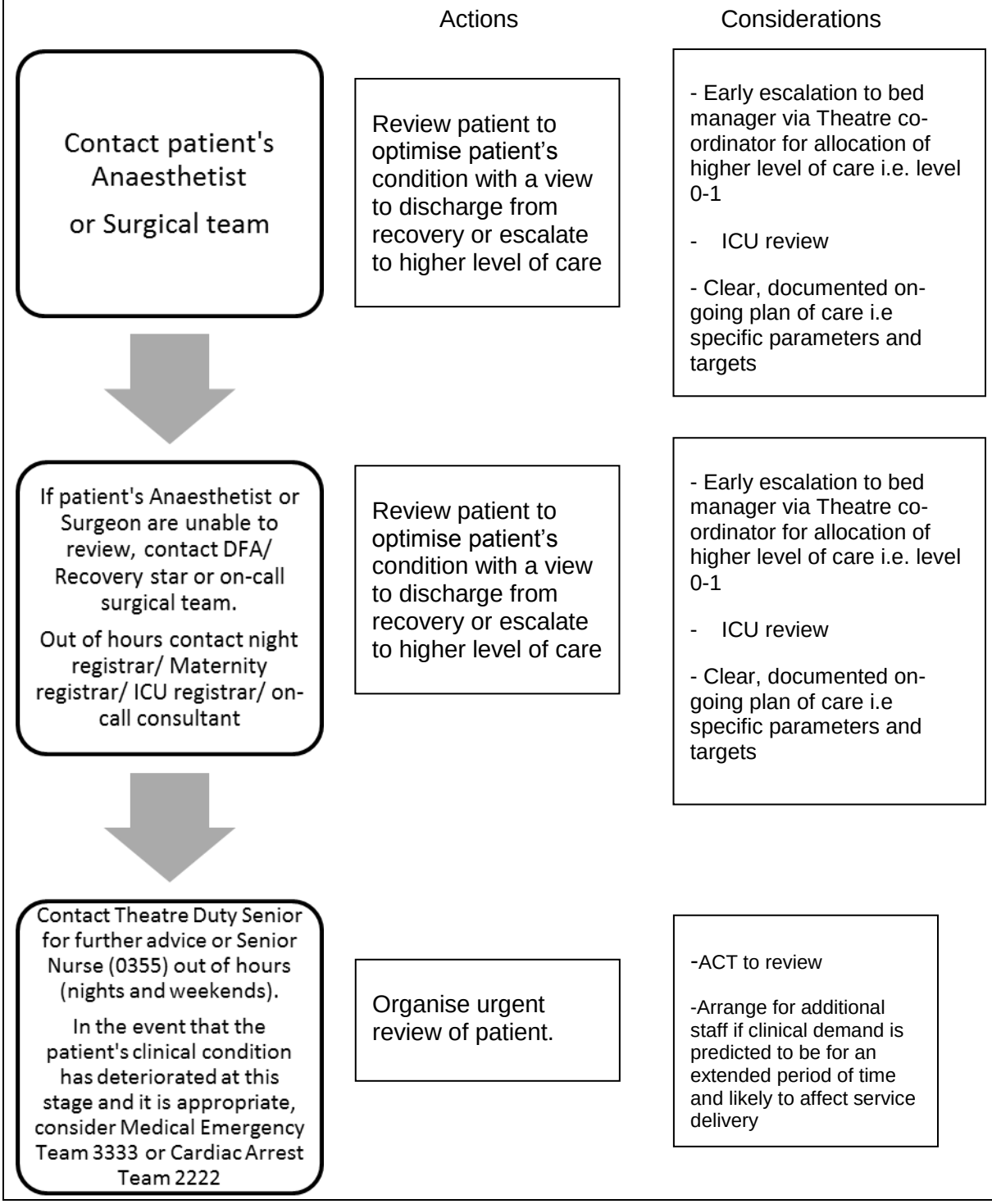
Each domain is to be graded separately

RAG status	Green	Amber	Red
Staffing	Correct staffing numbers for the Theatres in operation. Able to receive handover within 10 minutes of patient arriving in the department. Sufficient skill mix amongst the staff on duty.	Staffing numbers are at 80% in relation to the Theatres in operation. Delay in handover exceeds 10 minutes. Inadequate skill mix amongst the staff on duty.	Significantly lower number of staff for the Theatres in operation. Reduced staffing numbers are impacting on Theatre time. ICU escalated to Recovery. Unable to cover emergency service out of hours.
Demand on service	Trust OPEL status 1-3 Good throughput of patients in department. No expected delays.	Trust OPEL status 4 At 80% capacity in the department with further admissions imminent.	Trust OPEL status 4 At 100% capacity in the department. Currently unable to accept any further admissions.
Patient Acuity	No predicted problems. Staffing numbers and skill mix meet the acuity and demand.	On-going issues in recovery: ABGs, pain or fluid management, enhanced observations. Patient acuity exceeds the ability in staffing numbers and skill mix. However, actions can be taken to mitigate the risks (escalation process).	Extended stay requirement for multiple patients (not planned). Patient acuity exceeds the ability of staff numbers and skill mix and actions to mitigate risk have not been successful.

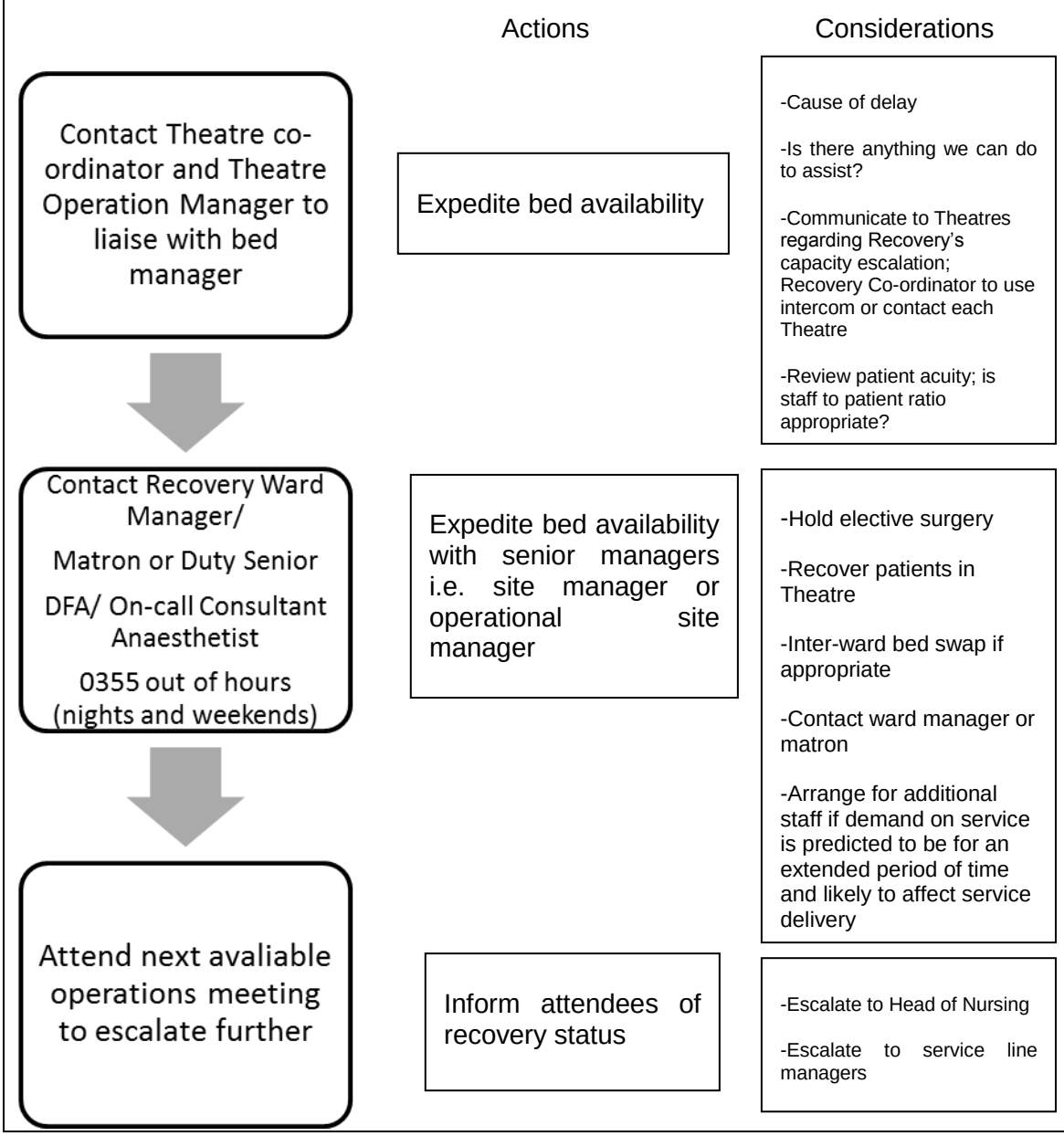
The escalation procedure below covers the responsibilities and actions for Theatre Central staff and should be commenced once the RAG status is at amber

Please inform the Ward Manager, Duty Senior and DFA when in escalation

Escalation due to increase in **clinical demand** i.e. level of patient acuity has increased in Recovery.

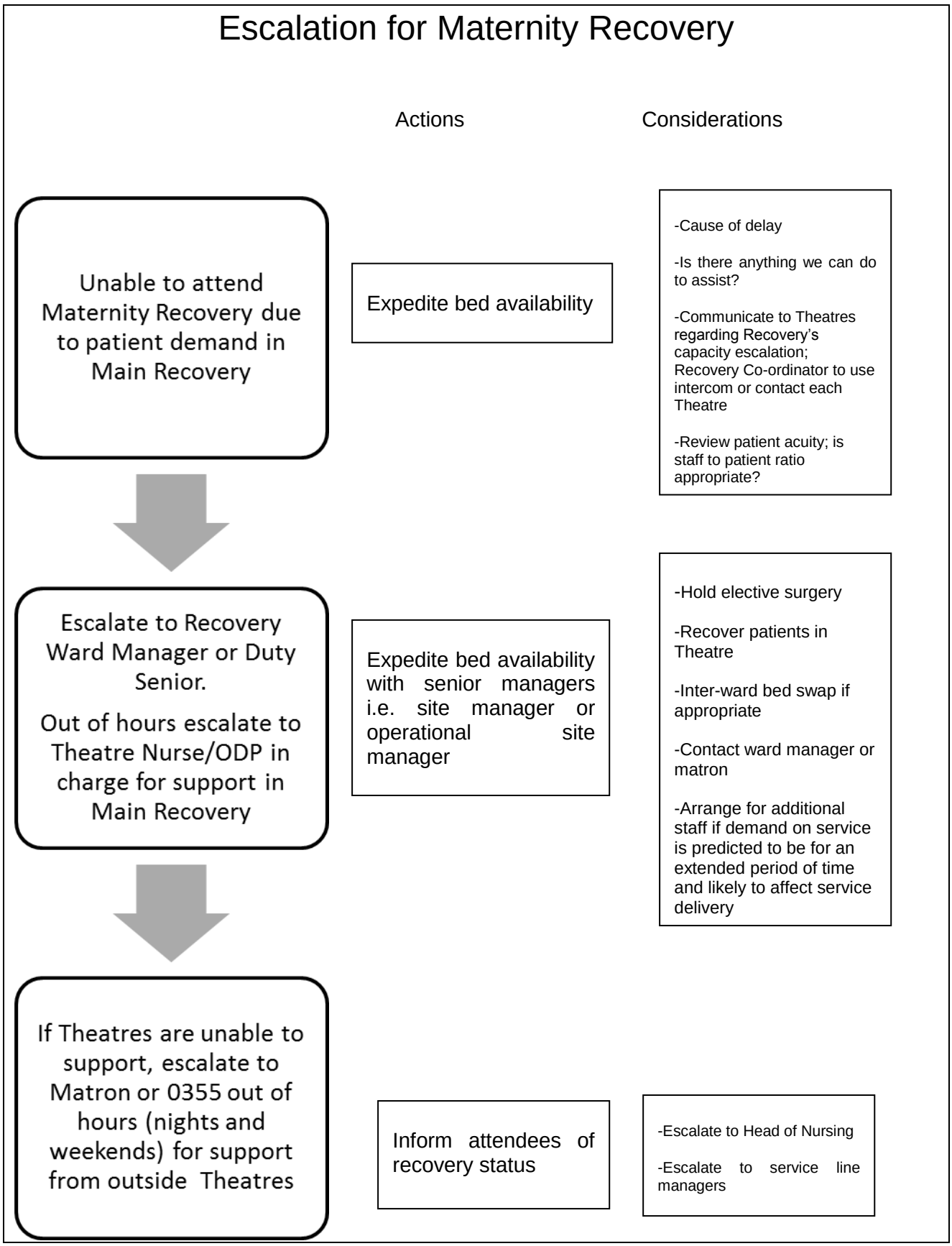


Escalation due to increase in **non-clinical demand** i.e. ward bed not available, Recovery at maximum or near maximum capacity.



<u>Cover for Emergency Theatres must be maintained at all times</u>

Escalation for Maternity Recovery



Cover for Emergency Theatres must be maintained at all times

12 Discharge and Handover

- Patients must meet the discharge criteria (Appendix 3) prior to leaving Recovery. In certain circumstances where exceptions are made, the rationale must be documented in the patient's notes.
- Patients should be transferred to the ward accompanied by at least 2 members of staff one of whom should be suitably trained (see table below).

Healthcare Professional	**Level of care on discharge**			
	Level 0	Level 1	Level 2	Level3
HCA 3	√ (no IV infusions)			
AP	√			
RN/ODP	√	√	√	
Anaesthetist				√

- Refer to the 'Clinical handover of care and internal transfer of Adults (Excluding Maternity) Standard Operating Procedure' for the level of care classification.
- Patients requiring level 1 and above care must be monitored during the transfer.

13 Document Ratification Process

The design and process of review and revision of this procedural document will comply with The Development and Management of Formal Documents.

The review period for this document is set as default of five years from the date it was last ratified, or earlier if developments within or external to the Trust indicate the need for a significant revision to the procedures described.

This document will be reviewed by the Endoscopy User Group and ratified by the Theatres Clinical Director or clinical lead.

Non-significant amendments to this document may be made, under delegated authority from the Theatres Clinical Director or clinical lead, by the nominated author. These must be ratified by the Theatres Clinical Director or clinical lead and should be reported, retrospectively, to the Endoscopy User Group.

Significant reviews and revisions to this document will include a consultation with named groups, or grades across the Trust. For non-significant amendments, informal consultation will be restricted to named groups, or grades who are directly affected by the proposed changes.

14 Dissemination and Implementation

Following approval and ratification, this procedural document will be published in the Trust's formal documents library and all staff will be notified through the Trust's normal notification process, currently the 'Vital Signs' electronic newsletter.

Document control arrangements will be in accordance with The Development and Management of Formal Documents.

The document author(s) will be responsible for agreeing the training requirements associated with the newly ratified document with the Theatres Clinical Director or clinical lead and for working with the Trust's training function, if required, to arrange for the required training to be delivered.

15 Monitoring and Assurance

Personal Protective Equipment (PPE) is attire issued by the trust to protect its employees from physical harm in the work place and is define in the health and stafety executive regulations as "all equipment (including affording protection against the weather) which is intended to be worn or held by person at work and which protects them against one or more risks.

Standard operating procedure (SOP) is documented method of working or instruction that is authorised by the appropriate director. A SOP prescribes a procedure or strategy of a regularly occurring activity. The SOP must follow by all personnel and should be written in an uncomplicated and unambiguous way. The content of each SOP can be derived from standards, laws or publications that are publicly accessible.

What are we monitoring?	Safe care Fundaments of care Quality of patient care
How is it monitored?	Audits Daily review Saving lives Fundaments of care
Lead	Catherine Martin- Senior ODP
Validation	
Frequency	As per audit schedule
Reporting Arrangements	
Sharing the Learning	

16 Reference Material

AAGBI (2013) Immediate Post-anaesthesia Recovery 2013. *Anaesthesia* 2013; 68: 288-97

NICE (2016) Hypothermia: prevention and management in adults having surgery
https://www.nice.org.uk/Guidance/CG65

Daily Cleaning list — Appendix 1

AREA Every day	Tick box and sign each box when completed Night staff (handover to day staff if unable to complete on shift)													
Date														
Bed space checks and damp dusting: suction and water circuits														
Silver trolleys and white/blue drug trays														
Check Diazemuls and RSI drugs (fridge)														
Check emergency drugs tray														
Defib check and portable suction check (is the full check due?)														
Actichlor cleaning solution														
Centre drug cupboard: stock cannula draw, syringe/needle draw, anti-emetic draw (with syringe/needles/flushes)														

Online fridge temperature record: http://temperaturemonitoring/#/home

Recovery Handover Checklist

Before Handover: **SILENCE**	**Handover**	
	Anaesthetic	**Surgical**
Apply brakes on bed/trolley Attach oxygen to wall flowmeter Place monitor on stand Quick patient assessment **A** Airway patent **B** Adequate breathing pattern **C** Adequate blood pressure and heart rate	Patient details inc. PMH, pre-op clinical status, allergies and seizures Type of anaesthetic Anaesthetic complications/ events Current Patient acuity Intra-operative Drugs Intra-operative blood loss/ IV fluids given (turn on fluids if applicable) • Post-operative plan • Expected complications • Monitoring parameters • Analgesia plan • IV fluids/transfusion trigger • PACU investigations • DVT prophylaxis • Medication review (drug chart) • Oxygen prescription • Antibiotics • Venous/arterial access • Infection control status	Procedure Surgical complications/ events Sutures and dressings Drains Local anaesthetic infiltration Operation note complete Post-operative plan Tissue viability Patients property Sick note (if applicable) Post Recovery destination Relatives (next of kin)

Main Recovery Discharge Criteria | Appendix 3

Although the following criteria should be met prior to discharge from recovery, patients can discharged from recovery if their parameters are at a variance to the documented limits, at the discretion of the Anaesthetist, who should ensure that their reasons are documented and it is safe to do so.

- The patient must be rousable to voice, able to maintain a clear airway and has protective airway reflexes
- Breathing and oxygenation must be satisfactory. Oxygen therapy must be prescribed as appropriate.
- The cardiovascular system remains stable, with no unexplained cardiac irregularity or persistent bleeding. The specific values of pulse and blood pressure must approximate to normal pre-operative values or be at an acceptable level, ideally within parameters set by the anaesthetist.
    - Peripheral perfusion must be adequate
- Pain and postoperative nausea and vomiting must be adequately controlled and suitable analgesic and anti-emetic regimens prescribed.
    - No patient will be discharged from recovery for at least 20 minutes after the last dose of IV opiates.
- Temperature must be equal to or greater than 36°c (NICE, 2016).
    - Patients must not be returned to the ward if significantly hypothermic.
- Intravenous cannulae must be patent and flushed to ensure removal of any residual anaesthetic drugs. Needle-free closed system devices must be in place unless the patient is a daycase.
- Intravenous fluids must be prescribed as appropriate
- All surgical drains, drain sites, wounds and catheters should be checked and their state documented.
- The position of all central lines (excluding femoral lines) must be confirmed by X-ray prior to the patient being discharged from recovery and the results of the X-ray appropriately documented.
    - 3-way taps must be removed and needle-free closed system devices attached to all lumens prior to discharge, except for patients going to ICU/HDU.
- Arterial lines should be removed prior to discharge unless the patient is being transferred to ICU/HDU then they should be left in situ.
- Appropriate DVT prophylaxis must be documented.
- All health records must be complete and medical notes present.

(AAGBI, 2013)