Standard Operating Procedure (SOP)

REFERRING TO RETRIEVE

SETTING	Service-wide
FOR STAFF	All referring clinicians
PATIENTS	Adult (≥16 years) patients with critical illness or injury requiring transfer

Summary

Retrieve is the South West's dedicated Adult Critical Care Transfer Service. We operate 7 days a week and provide the following for critically ill and injured patients requiring transfer from any hospital in the South West:

- 24-hour, consultant triage, coordination and decision support for all adult critical care transfer referrals.
- Daytime (0830-2030) consultant-led transfer team.
- Nighttime (2030-0830) consultant-led, practitioner-delivered transfer team. The majority of these cases will require a medical escort from the referring hospital.

We have a unique relationship with South Western Ambulance Service NHS Foundation Trust (SWASFT) that ensures an appropriate-priority ambulance is dispatched to support your local clinical team should the patient require transfer when we are already committed with another transfer or unavailable.

When should I contact Retrieve?

Please contact Retrieve for any critically ill or injured adult (≥16 years) patient who requires transfer between hospitals. This includes patients:

- Who are intubated and ventilated
- Requiring blood pressure management
- Require invasive monitoring
- Require other interventions en-route
- Who are at significant risk of deterioration
- From any hospital location including the Emergency Department, Critical Care Unit, Theatres, Cath Lab, Interventional Radiology suite and ward locations, amongst others.

As a rule of thumb, if you would send a 'medical escort' with a patient, then they are likely to be in the scope of Retrieve. If you are in doubt, please call and discuss the case with us. **We encourage early referrals, particularly for time-critical patients.**

How do I contact Retrieve?

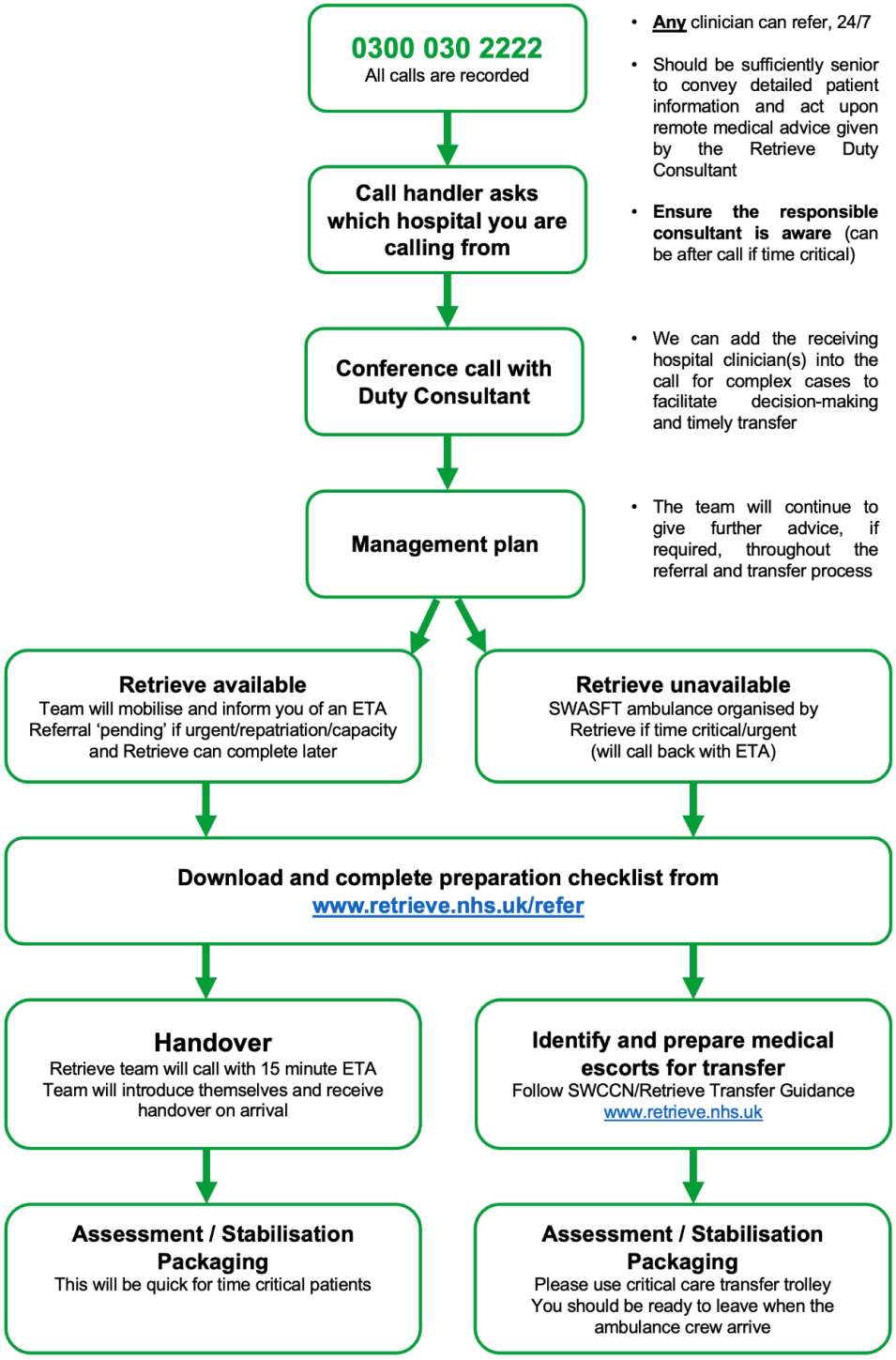
Retrieve's single point of contact telephone number is 0300 030 2222. This is available 24/7/365 and is answered by a call handler who will ask where you are calling from before putting you through to a conference call with our Duty Consultant.

We encourage hospitals to publicise this document, the posters that are freely available from the Retrieve website, and our website www.retrieve.nhs.uk where colleagues can find information about the referral process, our preparation checklist and useful clinical guidelines and standard operating procedures.

What information do I need?

To assist you, **Appendix 1** contains a list of the information required during the call. This list is also available on our **website** if you wish to print it out or display it.

What is the referral process?



Acceptance and mobilisation

Once a referral is accepted for transfer, we aim to mobilise a transfer team within 5 minutes for a time-critical patient and 15 minutes for non-time critical patients.

The time to the patient's bedside will be dependent on the distance to the referring hospital and other factors. The Retrieve Duty Consultant will give you an estimated time of arrival when the team have mobilised and will contact you again when they are 15 minutes away.

The distinction between time-critical and urgent transfers follows the nationally-agreed **NHS England Ambulance Services Inter-Facility Transfer (IFT) Framework**. When referring to Retrieve, it is important to know the intentions of the receiving hospital as their treatment plan may directly dictate the triage decision for the transfer:

- **Time-critical:** a patient for who is to undergo a life-, limb- or sight-saving intervention within 60 minutes of arrival
  - e.g. decompressive neurosurgery for EDH or acute hydrocephalus, mechanical thrombectomy for stroke, repair of ruptured or dissected aorta, primary PCI.
- **Urgent:** a patient requiring emergency escalation of their care but not for immediate intervention
  - e.g. neurosurgical patient requiring ICP monitoring, major trauma patient not requiring immediate surgery, non-emergency IR intervention, assessment for acute organ transplantation.

Preparing for Retrieve's arrival

- Ongoing resuscitation and stabilisation of the patient, if required, must continue to occur whilst you are waiting for the Retrieve team to arrive.
- Most patients requiring a Retrieve transfer will also benefit from support from your local intensive care and/or anaesthesia teams, if not already involved.
- **Appendix 2** contains a checklist designed to help you prepare your patient ahead of the Retrieve team's arrival. In our experience, its use helps significantly reduce the stabilisation and packaging time once they are at the patient bedside. You can access this checklist by visiting **www.retrieve.nhs.uk/refer.**

Blood products

Occasionally, patients have an ongoing blood transfusion requirement or are likely to require transfusion en-route. This will be discussed during the referral and the Duty Consultant may ask you to order blood to be available for transfer.

Retrieve have a regionally-agreed SOP for this to ensure traceability, blood products are not wasted and transfer bags are repatriated to your transfusion laboratory.

What happens when the Retrieve team arrive?

When the Retrieve team arrive at your hospital, they will make their way to the patient's location with their critical care transfer trolley and associated equipment. They will introduce themselves and identify the clinician(s) in charge of the patient.

They will positively confirm the patient identification and receive handover, following which they will take clinical responsibility for the patient. This may include a review of notes, relevant results, a

clinical assessment of the patient, and more detailed discussion with clinicians present, the receiving hospital, the patient and any next of kin.

When patients are time critical and urgent, the Retrieve team will work rapidly to expedite the safe transfer of the patient in order that they receive the care they need in the receiving hospital as soon as possible. The Retrieve team will work collaboratively with you and your team to make this process as time efficient as practicable.

What happens if Retrieve are unavailable or too far away?

When the team are already committed on another transfer or unavailable, calls **continue to be triaged and coordinated by Retrieve** and we work with SWASFT to provide an appropriately prioritised ambulance. **We can access a more timely response than the one you would receive if you call 999 or the SWASFT Healthcare Professionals Line yourself.**

For a patient requiring a transfer which a Retrieve team cannot reach for any of the above reasons, **an appropriately trained and experienced medical team from your hospital will need to accompany the patient**, Retrieve having coordinated the transport logistics on your behalf. More details about this, the transfer process, documentation required and additional useful information can be found in the South West Critical Care Network / Retrieve regional 'Adult Critical Care Transfer Guideline', available on the Retrieve website.

When we cannot reach the patient immediately, but the patient requires an urgent, continuation, repatriation or capacity transfer, the Retrieve Duty Consultant will help determine team composition, referral priority and speed of mobilisation. If possible, and clinically appropriate, they will hold a referral as 'Pending' until the next available opportunity arises for a Retrieve team to complete it. This reduces the resource burden on your hospital and SWASFT.

What happens overnight?

From 20:30 to 08:30, Retrieve provide a Transfer Practitioner-delivered service. Once a hospital clinician has referred the patient to Retrieve, a Transfer Practitioner with all the necessary equipment, critical care transfer trolley and drugs will mobilise in the Retrieve ambulance. **An appropriately trained and experienced doctor from your hospital will need to accompany the patient in most cases.**

Once the handover has been completed in the receiving hospital, return of the doctor should be accomplished by a local taxi company organised by the referring hospital – Retrieve will not repatriate clinical team members. It is recommended that the taxi is requested to leave for the destination hospital at the same time as the transfer commences as this should see it arrive approximately at the same time as the clinical team have finished handing over the patient.

Next of kin

Please inform your patient's next of kin that they are being transferred. We find it helpful if they know the receiving hospital and location. It is usually preferable to give the next of kin an estimated time of arrival at the destination just as we leave with the patient, rather than any earlier in the transfer process. This minimises the anxiety which can result from unexpected delays. Typically, we are able to contact the next of kin on arrival to inform them their loved one has arrived safely and also to put them in contact with the receiving hospital team. Please signpost our patient information webpage (**www.retrieve.nhs.uk/patients**) or print out and give them our **Patient Information Leaflet**.

We do not usually allow next of kin to travel in our ambulance. In exceptional circumstances, we may consider how we support this if there is a clear need and benefit to the patient. The decision to transfer next of kin lies solely with the Retrieve team.

Infusions

Retrieve strongly encourage all referring and receiving hospitals to use the **Intensive Care Society's Standard Medication Concentrations**. All infusions prepared by Retrieve follow these national standards. When medication is prepared prior to arrival of the Retrieve clinical team, we will accept correctly labelled syringes and will commonly ask for spares (where appropriate) for the journey.

Additional equipment (e.g. intra-aortic balloon pumps)

Occasionally, patients require specialised equipment that the Retrieve team do not carry (e.g. intra-aortic balloon pumps, intracranial pressure monitors, etc.). **In such situations when there is a requirement for this device to continue to be used**, it may be necessary to transfer the patient with this piece of equipment.

The Retrieve team will clean the device, ensure its safety and usually return it to their base (Launceston or Bristol) where collection can be arranged the next working day. Responsibility for arranging collection and any costs incurred are borne by the referring hospital.

Long distance transfers

Retrieve frequently undertake transfers to hospitals outside the South West. Time-critical and urgent transfers (e.g. for specialist liver and cardiac care) can occur across the 24-hour period and the team will do their best to support these including, where appropriate, the use of air transportation.

Some patients require repatriation from the South West to distant locations. These transfers are rarely time-sensitive and we welcome early contact from referring hospitals so that we can discuss these cases in detail. This may mean we arrange a short case conference so we can better understand the patient's requirements and discuss how to meet these. **Appendix 3 is designed to facilitate discussions and preparation for these particular transfers.**

Occasionally, the distance is too far to reasonably travel by road and we may refer you to the Adult Critical Care Transfer Service that specialises in fixed wing transfer or one of a number of private fixed-wing air ambulance companies (Retrieve has no formal or financial relationship with any of these commercial providers).

Repatriation of patients from out-of-region specialist centres back to the South West is the responsibility of the commissioned Adult Critical Care Transfer Service in that region. In exceptional circumstances, these teams may request mutual aid from Retrieve if they are unable to complete the transfer; these requests will be subject to South West demand and prioritised appropriately.

Appendix 1 – Information required during the referral to Retrieve

You	Referring clinician's name Location (the hospital you are calling from and the exact location of the patient within it – please be prepared for Retrieve to ask for directions if the location is unusual) Contact number (ideally telephone nearest patient or mobile phone number of referring clinician) Your grade and specialty
Type of transfer	Escalation to specialist care (please tell us if you believe the referral to be time critical) Repatriation Capacity
Patient demographics	Name Gender Date of birth Address NHS number Weight (approximate if not known – this is to ensure we use the correct trolley)
Receiving hospital	Receiving hospital and destination within it (e.g. ED, theatres, ICU, etc) Accepting specialty Accepting consultant name Contact number for receiving destination
Patient history and current status	Succinct history Key observations including HR, BP, RR, SpO_2, temperature, GCS Relevant interventions Oxygen requirements and ventilator settings (if applicable) Drugs and infusions administered
For transfers Retrieve cannot meet	Number of medical escorts (ensure they are of appropriate grade, experience and specialty) Are you using your critical care transfer trolley? When will the patient be ready to move?

Appendix 2 – Checklist: preparing for a Retrieve transfer

Consider printing this to aid preparation		Tick
Airway & Breathing	Endotracheal tube or tracheostomy adequately secured for transfer (do not cut tube)?	
	Lung protective ventilation?	
	CXR required?	
	Tracheostomy spares: inner cannula, cleaning brushes, humidification device, speaking valve, spare tracheostomy tube	
Circulation	IV access x 2	
	Arterial line (intubated patients, vasopressor requirement) and if time allows	
Neuro & Sedation	Regular pupil assessment	
	Sedation and analgesia adequate?	
GI	Is NG required?	
	Administer prophylactic antiemetic in awake patients: ondansetron 4mg IV	
Renal	Urinary catheter (all intubated patients)	
Micro	Infection control issues?	
	Undertake rapid COVID test if result not already known	
	Antibiotics administered?	
Blood	Blood products requested in transport box if required for transfer? If uncertain, discuss with Retrieve	
Drugs	Patient allergy status confirmed?	
	Administer medication that is due	
	Does the patient have any medications that need transferring with them?	
	Prepare adequate infusions for journey and any additionally requested by Retrieve. At a minimum for a ventilated patient, please prepare: ● 2 x 50ml propofol (1% or 2%) ● 1 x 20ml fentanyl (1000mcg in 20ml) ● 1 x 10ml rocuronium (100mg) [or 1 x atracurium (100mg)] ● 1 x 40ml metaraminol 20mg in 40ml 0.9% NaCl (0.5mg/ml) [or if CVC available 1 x 50ml noradrenaline 8mg in 50ml 5% Dextrose]	
Temperature	Keep patient warm	
Identification	2 patient identification bands	
Documentation	Discharge summary (or transfer letter)	
	Copy of relevant patient notes	
	Copy of drug chart	
	Copy of blood and microbiology results	
	Imaging electronically transferred to receiving hospital? If uncertain, speak to your local PACS team	
Next of kin	Aware of transfer and destination? Signpost **www.retrieve.nhs.uk/patients** or give printed Information Leaflet	

Appendix 3 – Long distance transfers

Referral considerations	Indication for transfer
	Timescale (please contact Retrieve **early** as this helps us plan for these transfers)
	If repatriation, does patient need to move now or can they complete their critical care stay first (reduces the risk associated with transfer)?
Patient preparation on day of transfer	Use Retrieve Checklist in Appendix 2 and the additional elements below
GI	NG feeding is not possible en-route, does the patient require maintenance IV fluid?
	Will the patient require a meal en-route?
	Avoid administration of laxatives on morning of transfer
	Prophylactic anti-emetic: Ondansetron 4mg IV
Renal	Empty catheter bag prior to departure
Drugs	Are additional infusion spares required due to transfusion duration?
	Can infusions be rationalised? Electrolyte and antibiotic infusions are rarely required (with the exception of potassium), or can be given over shorter duration. (Retrieve have 5 syringe pumps and 1 volumetric pump per trolley – if more are required, inform team during referral)
	Will the patient require essential medication during the transfer (e.g. anti-convulsants, anti-hypertensives, nimodipine, Parkinson's disease medication etc)
Patient-issued controlled drugs	Will the patient require administration of oral CDs en route? (Retrieve can only accept oral CDs that have been dispensed as a TTA (to take home) medication. Please discuss with your pharmacist early)
Pressure area, skin and wound management	Ensure pressure-related skin damage and areas of concern are clearly documented and handed over to Retrieve team
	Deliver skin care and any current topical treatments prior to transfer
	Ensure dressings are clean, intact and secure
Care needs	Does the patient have specific communication or care requirements that Retrieve should be aware of?
	If awake, are there any things that the patient finds comforting or useful to pass the time (e.g. music, reading, etc)?

Document Change Control

Date of Version	Version Number	Lead for Revisions	Type of Revision	Description of Revision
12/2023	3.0	Retrieve Lead Consultant	Major	Updates for 24/7 operating

Document Governance

References	N/A
Related Documents and Paging	Referral handling and deployment SOP
Authorising Body	Division of Surgery, University Hospitals Bristol and Weston NHS Foundation Trust
Safety	Adequate patient information is required to accurately triage, coordinate and provide decision-support for critical care transfers. Ongoing resusciration and stabilisation must continue whilst awaiting transfer. Local critical care teams should be involved in this process.
Queries and Contact	Retrieve Leadership Team