Clinical Standard Operating Procedure (SOP)

REFERRAL HANDLING AND DEPLOYMENT

SETTING	Service-wide
FOR STAFF	All staff
PATIENTS	All patients

Introduction

This SOP describes the process for accepting referrals and tasking teams to referring hospitals. It details the call-handling process including cascade of calls to Retrieve clinicians as well as the triage and prioritisation process dictating the urgency of response.

Referral process – telephone calls

All requests for transfers within the region will arrive via the service's single-point of contact number (0300 030 2222) operated by Bristol Ambulance EMS (BAEMS). There are two origins for these calls:

- Direct referral from clinician in a hospital
- Referral passed via South Western Ambulance Service NHS Foundation Trust (SWASFT) 999 system from a hospital

The BAEMS call handler will ask which hospital the caller is calling from (Appendix 1) and, using this, will pass the call to the Duty Consultant (DC) in the relevant base.

If the first-call DC is unavailable for any reason, the call will pass down the call-referral cascade (Appendix 2) until answered. If the call cannot be disposed of via Retrieve, the call-handler will offer the caller one of two options. As the referring clinician with direct knowledge of the patient, they will remain responsible for selecting the option of:

- Call-back by Retrieve within 15 minutes
- The caller rings 999 instead

If the caller selects a call-back option and the call still cannot be handed to a Retrieve clinician within this time, BAEMS will recall the caller and confirm this. Depending on the urgency of the case, they may continue to await call-backs or default to 999, at their own discretion and responsibility. Any call reaching this stage of the call must be notified to the Base Lead Nurse for the respective base via email. They will be responsible for:

- Contacting the referring hospital and offering an apology for not being able to answer the call
- Requesting enough core information about the patient to log the referral on ARCEMS
- Completing a DATIX and investigating the cause(s)

Referral process – telephone assessment

Once the call has been passed to the Retrieve Team by BAEMS, they should request a focussed hand-over from the referring clinician to enable triage and prioritisation of the referral as further described below. The call should ideally include all members of the Retrieve team. To facilitate this,

it can be taken on speakerphone (if in a quiet environment) or the BAEMS call handler can add a second mobile phone number to the conference call. It also allows:

- The DC to focus on discussion with the referring clinician
- The TP to populate the ARCEMS record with the initial information

Referral triage and prioritisation

The clinical information from the call should be used to rapidly determine the urgency of response required. This has two elements:

- Triage Categorisation – assigning a patient one of three possible categories. Triage is dynamic and patients may move between categories during the course of the referral
- Clinical Prioritisation – assigning priority of transfer timing for one patient relative to another. Patients with a higher Triage Category will always have higher Clinical Priority than those of lower Category.

The response time will be dictated by the categorisation of the call. Patients of higher triage category will always take priority over those of lower category. Patients of one triage category may, at the discretion of the DC, be prioritised over other patients of the same triage category. Additional clinical information may become available and this should dynamically affect triage and/or prioritisation wherever necessary.

Triage

In each of the categories defined below, an indication is given of the expected speed of response (further defined in the Retrieve Governance and Accountability Policy which includes nationally and regionally agreed Quality Outcomes and Metrics) as well as clinical examples. These lists are relatively extensive but are by no means exhaustive. This emphasises the necessity for consultant-level decision-making in triage and subsequent prioritisation.

Appendix 3 is a matrix which may help Duty Consultants in decision-making about patients in- and out-of-scope.

Red

- Definition: patients requiring transfer to specialist care for immediate (within 1 hour of arrival) life, limb or sight-saving intervention to reduce risk of imminent death or severe or long-lasting morbidity
- Response: **call-to-decision 5 minutes, decision-to-depart 5 minutes, collect-to-depart 20 minutes**
- Examples:
  - Any intracranial pathology requiring immediate craniotomy/craniectomy, burr-hole or therapeutic EVD on arrival e.g. EDH, SAH with hydrocephalus, blocked VP shunt (excludes monitoring-only ICP devices)
  - Mechanical thrombectomy for stroke
  - Immediate surgery for aortic rupture or dissection
  - Interventional radiology for life-threatening haemorrhage which has not been arrested by damage control surgery or is not amenable to non-IR treatment

Amber

- Definition: patients requiring transfer for ongoing time-sensitive management to reduce risk of death or significant morbidity
- Response: **call-to-decision 10 minutes, decision-to-depart 15 minutes, collect-to-depart 30 minutes**
- Examples:
  - A ventilated patient with intracranial pathology not requiring immediate surgical intervention on arrival
  - Unstable cervical spine fracture requiring fixation
  - Acute cauda equina, spinal abscess/haematoma requiring decompression
  - Urgent organ transplantation
  - Burns patients requiring burns centre care
  - Major trauma patients not otherwise specifically categorised by their injuries as Red or Green

Green

- Definition: patients requiring transfer for elective intervention or ongoing care (including continuation or repatriation transfers)
- Response: **call-to-decision 60 minutes, decision-to-depart N/A, collect-to-depart 45 minutes**
- Examples:
  - Isolated pelvic fracture fixation (haemodynamically stable patient)
  - Rib fixation surgery
  - Other thoracic services e.g. management of BPF or empyema
  - Acute coronary-artery bypass grafts
  - Acute cardiac valve replacement surgery without life-threatening cardiac failure
  - Burns patients not requiring burns centre care
  - Non-acute IR procedures e.g. TIPSS, tertiary-level aneurysmal management (non-bleeding)
  - Continuation of care (e.g. transfer to specialist renal ward from critical care; transfer home for end-of-life care)
  - Repatriation from specialist services
  - Capacity management for high operational pressure

Prioritisation

Prioritisation describes the process of sequencing taskings based on relative clinical urgency within a triage category i.e. deciding which of two pending Amber patients to attend first. This process will be at the discretion of the DC and will be based on dynamic clinical judgement. Whilst it is true that triage categories will dictate the priority of higher-category patients the following conditions should prompt consideration of other options for transfer of a patient e.g. deferring a task to the referring hospital or air ambulance team:

- Amber tasking waiting for >6hrs from point of referral acceptance due to excess Red work or higher priority Amber work
- Green tasking waiting >24hrs from point of referral acceptance

Input from accepting specialist clinicians regarding triage and prioritisation should be considered as required. If input from accepting specialists is required to assist in prioritisation, the DC should liaise with consultant specialists directly (remember the BAEMS switchboard can accommodate teleconferences with up to 7 separate callers). If two or more accepting consultants believe there is a need for concurrent transfers to be undertaken, the DC should defer one of the patients SWASFT (see below). The DC should determine which of the pending referrals Retrieve should undertake and, ideally, complete SWASFT liaison for the second patient whilst en-route to the first, so as to minimise delay. All such discussions/decisions should be clearly documented in the ARCEMS record of both patients (in a way which maintains confidentiality). Ensure all communications are undertaken via BAEMS switchboard as this ensures the calls are recorded for future reference.

Delayed tasking or deferment to SWASFT

Owing to the nature of Retrieve's work and the capacity of the Service, it is inevitable that from time to time, the team is unavailable or unable to immediately deploy, risking delay. This is most likely to apply to Red referrals but may also apply to Amber.

- **Scenario 1 – The Retrieve team are completing an existing task and will imminently be available and can reach the referring hospital within 60 minutes of referral.**

Retrieve transfers the patient. It should be remembered that one benefit of a consultant-to-consultant referral system is protecting clinical discretion; if the referring clinician and DC agree that a delay of >60 minutes would be acceptable if it allows Retrieve to undertake the transfer, this is entirely acceptable.

- **Scenario 2 – The Retrieve team cannot reach the referring hospital without introducing an unacceptable delay.**

SWASFT, air ambulances, referring hospitals transfer the patient

- The referring hospital assumes responsibility for identifying an appropriately trained and experienced team to undertake the transfer in line with existing national and South West Critical Care Network guidelines.
- SWASFT is responsible for selecting and dispatching the most appropriate type of conveying resource in accordance with the triage category advised by the DC.
- The DC retains responsibility for liaising with SWASFT (via 0300 369 0097) to organise the transport. They should then call back with the referring clinician (via BAEMS switchboard) to confirm the transport is booked and pass them the SWASFT incident number. The DC must capture sufficient information for an ARCEMS entry in all of these cases.

End-of-shift tasking

Inevitably some referrals will be made at the very end of an operational shift. Retrieve has a dual responsibility to deliver the best care for as many patients as possible whilst also ensuring the safety and well-being of its staff – the latter must always take precedence. To that end, it is accepted that, from time-to-time a late referral may lead to a shift overrun. To minimise the effects of fatigue for team and patient safety, this should generally be limited to 2 hours after planned shift end. This will mean that, for more distant referring centres, referrals need to be considered on a case-by-case basis, using professional judgement as to the clinical urgency vs. team fatigue considerations. The

decision to accept a referral which will clearly lead to an overrun, even of <2 hours, must be unanimous by the whole team. The driver must only be told of the expected overrun NOT the triage category so that they can make a clear judgement about their safety to drive in complete isolation from clinical pressure. A dynamic decision should be taken to hold transfers for the oncoming shift if this is deemed clinically appropriate.

Blue-light driving times from base to referring hospitals and onward to receiving centres are given in the Travel Table (Appendix 4). This information is useful for providing ETA information to referring and receiving teams. This is then further extrapolated into a full, round-trip time based on the following assumptions:

- 15 minutes to accept and mobilise
- Blue light travel to referring hospital (20% time saving over standard road speed)
- 30 minutes to collect
- Blue light travel to accepting hospital (20% time saving over standard road speed)
- 30-minute turnaround at hospital
- Normal road-speed return to base
- 15 minutes for post-deployment checks

Vehicle only operations

In rare circumstances, where no clinical Retrieve team are available in either sub-region, there may be a decision to deliver a vehicle only shift. Details can be found in the 'Vehicle only SOP'.

Documentation

All decisions and rationale for these must be documented in ARC-EMS in the 'Referral comment' box. Key to recording an accurate patient record and allowing reporting of the Quality Metrics required by the service specification is use of the time stamps in ARC-EMS. The following definitions have been agreed to ensure uniformity:

Time to Retrieve

- Must appear first
- Is the time the phone call was answered (you can get this information from the mobile phone you used)
- This time is auto-populated when a new referral is logged and must be changed to the time the phone call was answered.

Task Accepted

- Is the time the team accept the transfer to be completed by Retrieve, even if the team do not intend to / cannot deploy immediately.
- In the vast majority of cases this will be a few minutes after the 'Time to Retrieve' timestamp. The time should reflect the point in the referral discussion where it was clear we should accept the referral (not necessarily the time the call ends).

- This is auto-populated when you select 'Accepted' on the referral form and must be changed.
- Remember that Pending referrals must be time stamped as Accepted first before selecting Pending in ARCEMS.

Task Declined

- Same description as Task Accepted, but different decision outcome

Mobile to referring hospital

- **1a Mobile to referring hospital (from base)**
  - Time ambulance wheels moving en-route to referring hospital from base.
- **1b Mobile to referring hospital (other)**
  - Time ambulance wheels moving en-route to referring hospital from any other location, other than base.
  - If team are already present in the same hospital as the referred patient, time trolley wheels moving en-route to referred patient

Arrive referring hospital

- Ambulance wheels stopped outside referring hospital
- If already at referring hospital record the same time as '1b Mobile to referring hospital (other)'

Arrive patient bedside

- Time that the patient is positively identified.

Depart patient bedside

- Time trolley wheels move to depart bedspace.

Depart referring hospital

- Time ambulance wheels moving en-route to receiving hospital.

Arrive receiving hospital

- Time ambulance wheels stop outside receiving hospital.

Depart receiving hospital

- Time ambulance wheels moving away from receiving hospital.

Diverted

- Time ambulance or trolley wheels moving en-route to referring hospital / patient.

Stood down

- Time team decide to stand down.

Arrive at base

- Time ambulance wheels stop outside the base.

*Time of onset

- Completed from pre-hospital paperwork for all time-critical escalations of care transfers.
- Time (and date) of symptom onset or the injury occurred, if this is unavailable then record time of 999 call / first presentation

*Time of admission to referring hospital

- Completed from referring hospital paperwork.
- Time (and date) patient is booked in / admitted to referring hospital.

*Time of acceptance by receiving hospital or speciality

- Completed from referring hospital paperwork.
- Time (and date) patient is accepted by receiving hospital or speciality.

Document Change Control

Date of Version	Version Number	Lead for Revisions	Type of Revision	Description of Revision
08/2024	2.8	Retrieve Lead Nurse	Minor	Updated call cascade
01/2024	2.5-2.7	Retrieve Lead Consultant	Minor	Update to call cascade to reflect shift time changes, move to 24/7 and night phone numbers

Document Governance

References	
Related Documents and Paging	Minimising team fatigue
Authorising Body	
Safety	
Queries and Contact	Retrieve Leadership Team

Appendix 1 – Call handler script

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retrieve Call Handling

"Hello, thank you for calling the Retrieve Adult Critical Care Transfer Service. Which hospital are you calling from?"

Are you making an ECMO referral?

Yes

ECMO

Connect ECMO Specialist Nurse 07741 123467

They will ask to conference in Duty ECMO Consultant and provide name (number on Google Sheet)

"Please hold, I am connecting you to the Bristol ECMO Coordinator"

Not answered

ECMO

Follow ECMO cascade

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No

08:30 – 20:30

SEVERN

Gloucester Royal
Cheltenham
Great Western Swindon
Royal United, Bath
Southmead
Bristol Royal Infirmary
Weston General
Musgrove Park, Taunton
Yeovil

PENINSULA

North Devon, Barnstaple
Royal Devon & Exeter
Torbay
Derriford, Plymouth
Royal Cornwall, Truro

"Please hold, I am connecting you to the [Peninsula] OR [Severn] Duty Consultant"

REMOTE DUTY CONSULTANT COVER
If BA have been asked by Retrieve to use 'Remote DC', connect call directly to Duty Consultant personal mobile

Answered

Connect call to Duty Consultant (or Remote DC) in correct region

Not answered

Follow day call cascade

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No

20:30 – 08:30

ALL HOSPITALS

Night Duty Consultant

Google Sheet for name and contact number

"Please hold, I am connecting you to the NIGHT Duty Consultant"

Answered

Connect call to Duty Consultant

Not answered

Follow night call cascade

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Appendix 2 – Call-referral cascade: in hours

Page 2

retrieve

Day call-referral cascade 08:30 – 20:30

PENINSULA	SEVERN
"Please hold while I try the Duty Consultant again"	
Rapidly proceed through this cascade	
Duty Consultant Peninsula	Duty Consultant Severn
Transfer Practitioner Peninsula	Transfer Practitioner Severn
Duty Consultant Severn	Duty Consultant Peninsula
Duty Consultant Peninsula	Duty Consultant Severn
Peninsula Lead Consultant, David Ashton-Cleary	Severn Lead Consultant, Scott Grier
Severn Lead Consultant, Scott Grier	Peninsula Lead Consultant, David Ashton-Cleary

"I'm sorry I have been unable to connect you to our Duty Consultant at this time. I will put you though to SWASFT

Put call through to SWASFT HCP line 0300 3690097

Explain you are calling on behalf of Retrieve Adult Critical Care Transfer Service and have been unable to contact our Duty Consultant and this call will need to be dealt with by SWASFT

If HCP line unanswered contact SWASFT via 999

Please notify the BAEMS Duty Manager who will notify Retrieve via Retrieve.Transfer@nhs.net

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Call-referral cascade: out-of-hours

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retrieve

Night call-referral cascade 20:30 – 08:30

"Please hold while I try the Duty Consultant again"

Try to connect again

No Answer

Try alternative number on Google Sheet (or primary number for 3rd time)

No Answer

Try Severn Night Phone (07464 493011)
Try Peninsula Night Phone (07464 492896)

No Answer

Try Lead Consultant (Scott Grier, 07764 756739)

"I'm sorry I have been unable to connect you to our Duty Consultant at this time. If this referral is time critical, I can put you though to SWASFT. If it is not time critical I will keep trying and call you back within 15 minutes"

TAKE NAME AND CONTACT NUMBER

Time Critical

Non-Time Critical

Attempt to call Duty Consultant 3 times. When successful, conference in referrer

No Answer

If unsuccessful or 15 minutes has elapsed, call referrer back and contact SWASFT via HCP line

SWASFT HCP line 0300 3690097

Explain you are calling on behalf of Retrieve Adult Critical Care Transfer Service and have been unable to contact our Duty Consultant and this call will need to be dealt with by SWAST

If no response contact SWASFT via 999

Please notify the BAEMS Duty Manager who will notify Retrieve via Retrieve.Transfer@nhs.net

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NHS
University Hospitals Bristol and Weston
NHS Foundation Trust

ECMO call referral cascade 24/7

"Please hold while I try the ECMO Co-ordinator again"

Rapidly proceed through this cascade

Bristol ECMO Co-ordinator 07741 123467

Bristol ECMO Consultant (Google Sheet)

Bristol ECMO Co-ordinator

Bristol ECMO Consultant (Google Sheet)

UHBW Intensive Care Unit Nurse-in-charge 0117 3427238

UHBW First On-call ICU Consultant (Google Sheet)

ECMO Lead Consultant, Stefan Gurney 07967 078856

"I'm sorry I have been unable to connect you to the Bristol ECMO Co-ordinator at this time. Please try the following telephone number 07741 123467

Please complete an online referral at www.referapatient.org and the Bristol ECMO team will get back to you as soon as possible

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Appendix 3 – Scope matrix

This matrix demonstrates the referring (left side) and receiving (top) locations and is intended to be of help to the Duty Consultant to determine if calls may be within the scope of *Retrieve*. The matrix does not remove the individual Duty Consultant's ability to make decisions on a case-by-case basis. Note: certain receiving hospitals may stipulate an initial pit-stop in ED before moving to theatres, interventional radiology etc.

FROM↓ TO →	Critical Care L3	Critical Care L2	Enhanced Care L1	Theatres / IR	Ward L1	Ward L0
Critical Care L3						
Critical Care L2						
Enhanced Care L1						
Theatres / IR						
ED L3						
ED L2						
ED L1						
Ward L1						
Ward L0						

	Fully in scope
	Possibly in scope – should be discussed with Duty Consultant and may be accepted on case-by-case basis
	Unlikely to routinely occur
	Not in scope

Appendix 4 – Travel table

Blue-light times to arrive at referring hospitals and make the onward blue-light run to common receiving centres.

Destination → / Origin ↓	Base-to-pickup	Onward blue-light times by destination			
Severn		Southmead	BRI	Swansea	
Gloucester Royal	00:35	00:39	00:40	01:28	
Cheltenham General	00:43	00:42	00:44	01:32	
Great Western, Swindon	00:38	00:41	00:40	01:32	
Southmead	-	-	00:14	01:09	
Bristol Royal Infirmary	00:12	00:14	-	01:08	
Royal United Bath	00:31	00:31	00:30	01:22	
Weston General	00:28	00:34	00:36	01:22	
Musgrove Park, Taunton	00:49	01:09	01:11	02:01	
Yeovil District	01:07	01:20	01:09	02:14	
Peninsula		Derriford	Exeter	Southmead	Swansea
North Devon, Barnstaple	01:01	01:29	01:07	02:00	02:56
Royal Devon & Exeter	00:42	00:47	-	01:28	02:22
Torbay	00:52	00:43	00:31	01:44	02:39
Royal Cornwall, Treliske	00:45	01:15	-	02:54	03:53
Derriford, Plymouth	00:42	-	-	01:58	02:53