This handbook and H@N information is available on ICID (select speciality H@N).
All staff should be aware of the protocols and policies that guide the working of the H@N service.

The H@N is operational between the hours of 2030 and 0800
Contents
The Hospital at Night (H@N) Team 3
Roles & responsibilities 4
Emergency Department (ED) 7
H@N handovers 10
Medical handover 11
The H@N Trauma Team 11
The H@N Crash Team 11
Rest requirements for the H@N 12
Direct Surgical Admission from ED 12
Notes for the Medical SpR (bleep 1361) 13
Paediatrics 15
Plastic surgery 22
Plastic Surgery Acute Clinic - out of hours 25
Burns assessment, treatment and referral to the Burns Service 25
General Surgery 29
Urology 31
Catheter management in urology 31
ENT 34
Ophthalmology 36
Maxillary Facial 39
Orthopaedics and Trauma 40
Booking # NOF for surgery 41
Neutropenic Sepsis 42
Thrombolysis in stroke 44
Salisbury Hospice 45
Clarendon Suite 46
Duke of Cornwall Spinal Unit 46
Additional support within the hospital 47
What to do if someone dies 50
Contact and feedback 50
Escalation Process 51

**Urgent** - any 1 of the following
Airway
- Patient is not maintaining an airway
Breathing
- Respiratory rate > 30 or < 8
- Sudden decrease in oxygen saturations to < 80%
Circulation
- Systolic blood pressure < 90
- Heart rate < 40 or > 150 with a decrease in systolic blood pressure
Disability
- Sudden loss of consciousness

**Escalation Process**

1. Patient triggers 3 or more on EWST OR O2 saturation OR urine output
2. Initiate ½ hourly or hourly cardiovascular observations
3. Nurse in charge must assess patient

**Non Urgent**
Inform doctor

- Assess patient
- Implement and document management plan
- Review within 1 hour
- Has the patient responded to treatment?

**Urgent**
Fast bleed - doctor and CCCT to attend immediately

- Assess patient
- Consider immediate escalation for senior review
- Implement and document management plan
- Review within 1 hour
- Has the patient responded to treatment?

**Document actions and rationale on reverse of observation chart**

Yes
- Inform SpR and consultant
- Inform CCCT
- Consider referral to Radiology Ward

No
- Continue 2 hourly observations for a minimum of 4 hours

Yes
- Continue 1 hourly observations for a minimum of 4 hours

No

- Do you need to escalate?

Yes
- Nurse must document actions on reverse of observation chart and confirm DNAR status

No
only dealt with if early result will effect management of patient, if not item from 1-4.

c. 2200 to midnight. The following will be dealt with if requested by SpR or consultant and management decision relies on microbiology:
   1. joint aspirates
   2. tissue (including bone)
   3. abdominal pus
   d. After midnight - CSF only.

Any other cultures would not be significant by 0900 the following day.

If there are concerns, the relevant consultant should contact the duty medical microbiologist to discuss.

What to do if someone dies

The ward staff will inform the Site Co-ordination team who will verify an expected death and support the team. A doctor must see and verify patients when death is not expected.

Contact and feedback

- Clinical Leads
- Chair H@N Service - Graham Branagan
- Clinical Manager H@N Service - Julia Galley.

Something missing in this booklet that you think would be helpful?

Any suggestions to improve this booklet with relevant content that you feel is missing can be sent via email to katrina.glaister@salisbury.nhs.uk.

The Hospital at Night (H@N) Team

The H@N team consists of a multidisciplinary team who, between them, have the full range of skills and competencies to meet patients’ immediate needs and ensure effective operational management of the hospital at night.

Senior on-call clinical and operational staff are available to provide specialist advice and support when required.

A formal handover process supports the transfer of professional responsibility for the care of patients, to and from, the H@N Team. Escalation to senior staff must be actioned when indicated. Where there is a difference of opinion around patient management at a trainee level, a consultant opinion must be sought. This will ensure a safe and timely service to patients at night.

The H@N Clinical Co-ordinator filters all clinical bleeps and requests from the wards and is clinical co-ordinator of the team. The Medical Registrar is the Lead Clinician for the Team. To ensure timely patient care, clinical tasks will be assigned to an individual with the skills and availability to carry them out. The service requires a flexible approach to workload, moving appropriately skilled staff to meet patient needs, not restricted by specialty boundaries. The Site Co-ordinator manages all operational bleeps and calls before handing over to the H@N Co-ordinator at 01.00.

Job titles

Within this booklet, wherever we have referred to SHO doctors, this includes F2, CMT 1&2, CT 1&2, GP Trainees and fixed term specialist posts.

Where we have referred to SpR this includes ST3’s and above.
Roles & responsibilities

Medical SpR (bleep 1361)

The Medical SpR is the most senior doctor available on full shift at night and is the Lead Clinician for the H@N Team. His/her responsibilities are as follows:

- to lead the H@N handover at 2030
- to act as the clinical leader of the H@N Team
- to co-ordinate and support the assessment and clinical management of all emergency patients admitted under the medical team
- to provide clinical assessment and opinion on any patient within the hospital where appropriate. This may involve a medical opinion for emergency surgical patients likely to require an anaesthetic
- to communicate, where necessary, with senior colleagues on call concerning clinical and operational decisions
- to lead the Crash Team
- to provide advice to primary care where necessary
- to be immediately available, circumstances permitting, to respond to urgent referrals or give advice to the emergency department (ED) junior medical staff on the management of any patients within the ED. The ED staff can also contact the on-call ED consultant for clinical advice 24/7
- to provide clinical assessment and opinion on any patient within the hospital where appropriate. This includes the ED particularly after midnight, when the staffing is minimal, and the GPVTS / F2 doctors are reliant on H@NT support for the safe treatment of our patients; the ED will also support H@NT when possible.

Physiotherapy

Physiotherapy provide a non-resident on call service (attendance within 30 mins) between the hours of 16.45 and 08.30hrs. They will provide advice or attend to treat a patient if required.

This service is for patients with immediate needs, not routine work. The patient must be assessed by the CCOT nurse (or H@N co-ordinator after 20.30) who will arrange the call out via switchboard.

Chaplaincy

The Chaplaincy team are available via Switchboard for the spiritual support of patients, relatives and staff.

Infection Control

Advice can be obtained from the on call microbiologist overnight via Switchboard.

Microbiology

Emergency clinical advice is available by contacting the duty medical microiologist via Switchboard.

Specimens for microbiological examination will be dealt with as follows:

a. At any time - CSF
b. Between the hours of 1730 and 2200 the following will be dealt with when requested by the H@N team:
   1. joint aspirates
   2. tissue (including bone)
   3. samples taken during removal of infected prosthesis
   4. abdominal pus
   5. ITU*
   6. Neonatal ITU*
H@N Clinical Co-ordinator (bleep 1309)

The H@N Co-ordinator is a band 6 or 7 nurse with critical care skills. Their role is to:
- receive all clinical bleeps & calls from the ward staff
- facilitate effective team working and H@N service
- assess and prioritise the work of the team according to patients’ needs
- allocates the most appropriate team member to respond to patients’ needs
- ensure timely escalation for senior review/intervention
- support medical and nursing staff in managing patients at night
- co-ordinates rest breaks when requested by members of the H@N team
- to attend the H@N handover at 2030 and 0800
- to attend the medical specialist morning handover at 0830.

Clinical Site Coordinator (bleep 1312)

The Clinical site Co-ordinator is on duty until 2230, before handing over to the H@N clinical site practitioner. Their role is to:
- ensure effective capacity management and placement of patients
- to act as a Senior Nurse providing operational leadership, clinical support and advice
- to ensure effective deployment of nursing manpower
- to act as a member of the Crash and Trauma Teams
- to attend the H@N Handover at 2030.

H@N Clinical Site Practitioner (CSP’s) 2200 - 0730hrs (Bleep 1312)

The CSP’s hold the hospital bed state and will manage the beds and emergency admissions during the night,
any complex requirements or outlying of patients will be managed by the H@N Co-ordinator. The CSP’s also have a range of clinical skills for example, escorting patients within the hospital, IV cannulation, phlebotomy and assisting CCOT with complex patients. They carry bleep 1312, any bed management or staffing issues should be directed to them during their working hours. Clinical referrals should go through the H@N Co-ordinator (bleep 1309).

**Medical SHO (bleep 1355)**
- to provide clinical advice, assessment and management of medical and spinal unit patients
- to attend the medical handover at 2100 and 0800 on Whiteparish Ward
- to act as a member of the Crash Team.

**Surgical SHO (bleep 1201) Night Shift**
- to provide clinical advice, assessment and management of surgical patients
- to hold the surgical referral bleep and attend referred ED patients
- to provide advice and supervision for the H@N F1
- to act as a member of the Trauma Team
- to attend the H@N handover at 2030
- to act as a member of the Crash and Trauma team as part of their educational development.

**H@N F1 (bleep 1125)**
- to provide clinical advice, assessment and management of hospital in-patients
- to attend the H@N handover at 2030 & 0800
- to attend the medical specialty morning handover at 0830.

**Critical Care Outreach Team (CCOT) (bleep 1374)**
- to provide patient assessment, clinical advice, and Critical Care Outreach

---

**Additional support within the hospital**

A full laboratory service is available overnight. Contact via Switchboard.

An out-of-hours medical records service operates between 1700 and 2300 Mon - Fri and 0800 to 2300 on weekends and bank holidays. The Medical Records Library can be contacted on ext 4317 or bleep 1676. Between 2300 and 0800 urgently required notes are retrieved by the ED receptionists if the notes are in the Library.

**Additional Support - on call**

**Radiology**

X-ray bleep for ward x-rays at night is 2014.

**Pharmacy**

A key to access the Emergency Drug Cupboard is available from Switchboard.

ID will be required. Additional Pharmacological support is accessible from the Pharmacist on call via the Clinical Site Co-ordinator.
Clarendon Suite

Patients on Clarendon Suite may be NHS or private patients. If the patient is a private patient the nurse in charge of Clarendon should contact the Consultant in charge of the patient and they will decide whether to come in, or delegate to H@NT. All other patients will be managed by H@NT, the usual escalation via the H@N Co-ordinator. In case of any emergency the H@N team will attend and manage the patient. If this is a private patient, the Consultant should be informed and the patient will then be transferred to the main hospital and become an NHS patient.

Duke of Cornwall Spinal Unit

The spinal injuries centre has 42 open beds and admits people with spinal cord injuries/lesions from the age of 16, with no upper age limit. Patients can be admitted within 24hrs of injury and will usually stay for rehabilitation until they are discharged back into the community.

The Spinal Centre’s medical team comprises of 3 Consultants, a rehabilitation registrar, a ward SHO and 2 spinal nurse practitioners. Out-of-hours (weekends and 17:00 - 09:00 weekdays) medical cover is delivered by the on-call medical team unless the patient has been admitted for a surgical procedure (commonly urology), in which case they are under the care of the admitting team and the relevant on-call team will be contacted.

There is always a Spinal Centre Consultant on call 24 hours a day who can be contacted via main switchboard. A junior doctors guide to spinal cord injuries can be found at the nurses’ station on both wards (Avon & Tamar). The Spinal Centre is situated off the south corridor close to Day Surgery and can be accessed either through the main corridor or via the lower ground floor entrance next to the tennis courts. Access between 22:00 and 06:00 requires a swipe card.

H@N Assistant (bleep 1264) (20.00 - 02.00)

• to act as a member of the Adult Crash and Trauma Teams
• to attend the H@N handover at 2030 and 0800.

ITU/HDU Anaesthetic SpR (bleep 1319)

• to be the clinical lead on ICU/HDU
• provide an anaesthetic service to the obstetric department
• to provide clinical advice, assessment and management of critically ill and deteriorating patients
• to attend the H@N handover at 2030 and 0800
• to be immediately available, circumstances permitting, to respond to urgent referrals or give advice to the emergency department (ED) junior medical staff on the management of any patients within the ED. The ED staff can also contact the on-call ED consultant for clinical advice 24/7.

Emergency Department (ED)

ED consultants regularly attend the handover at 20.30, they will offer support to the team if needed, until midnight. The ED Consultant will be in the ED until midnight, 7 days a week and can be asked about general queries on cases, especially if the team / senior from another speciality is unavailable. Don’t be afraid to ask the ED Consultant to cast an eye over an X-ray if it improves patient care. We are all on the same team! The ED senior may suggest you contact another specialism and the advice is there to guide you as well as being part of your educational development.
From midnight until 08.30 the ED is staffed by 2 junior doctors with a Consultant on-call for the department and trauma. The ED has no middle grade tier at all, hence after midnight (until 08.30) the H@NT responsibilities include supporting the ED and vice versa. This is a two way street, the ED (if quiet) will help with expected patients, doing bloods, arranging ECGs / TTOs etc, likewise, if the ED is very busy or needs support, they may well ask H@NT - this may be in the form of general medical advice / direct support from the medical and anaesthetic teams, or may be in the form of X-ray interpretation from a previous ED trainee. It may consist of keeping patient details until the morning handover for urology, or assistance in reducing a shoulder dislocation.

This arrangement of mutual support is there for the F2s, nursing staff and fundamentally the patients, to make sure that our patients get the best care possible whilst maintaining a sustainable service.

Internal escalation for ED

The ED is the primary access of admission at night for most specialties. When the ED is overloaded with patients, the Clinical Site Co-Ordinator, ED Shift Co-ordinator or the ED doctor will start an escalation procedure. This means calling for help from other doctors within the hospital. This will include the H@N doctors.

This is done to make the operation of the ED safer for the patients.

ED Help for H@N Surgical SHO

If the H@N Surgical SHO is overloaded with admissions waiting in the ED for review, the ED doctors are obliged to help the H@N doctor if their ED work is completed. This help may be in the form of clerking the patient and then handing over to the H@N Surgical SHO or helping by ordering appropriate x-rays or taking appropriate bloods.

Salisbury Hospice

Salisbury Hospice is part of Salisbury NHS Foundation Trust and is situated in SDH South next to car park 12. By foot cross the zebra crossing next to Hedgerows Cafe and continue down the long corridor. It is just beyond The Glanville Centre.

It is a 10-bedded unit where patients with life-limiting illnesses are admitted for specialist palliative care. Many patients are admitted for a period of symptom control and discharge home is anticipated, often with a prognosis of many months/years. Those patients admitted for terminal care may have complex symptom control or psychosocial issues.

We have experienced nurses on duty who are able to deal with many of the issues that arise out of hours. A senior palliative care doctor is on-call for advice and guidance at all times. Nursing staff will have discussed any situation with them before requesting the H@N team to attend.

Situations may include:
- clerking an out-of-hours admission. Admissions only to be accepted by a senior palliative care doctor. Please discuss with on-call palliative care doctor after clerking.
- re-writing IV fluids
- siting IV cannula
- warfarin dosing
- blood transfusion problems e.g. rigors
- hypo/hyperglycaemia
- patient acutely unwell: confusion, septic bleeding, arrhythmias, CCF (where treatment is to be considered)
- drug chart alterations
- looking up blood results.

Contact The Palliative Care Team at all times on ext 2113 for support and guidance with any palliative care issue.
This will facilitate communication with the Haematology/Oncology teams about patients presenting to the Trust with complications related to malignancy or its treatment and also to try to speed up appropriate review.

**Thrombolysis in stroke**

Salisbury District Hospital offers a 24 hour, 7 day per week thrombolysis service for patients with ischaemic stroke. Your role is to identify patients who may be eligible for this treatment - particularly if you are asked to review someone on the ward.

1) Any patient with the onset of stroke symptoms < 4.5 hours should be considered for thrombolysis.

2) Regardless of time of day you must act very quickly - time is brain. Arrange for immediate CT scan.

2) Thrombolysis is delivered by the stroke team during normal working hours (bleep 1490).

3) Outside of normal working hours the service is delivered by the ED consultants or the on call medical SpR.

4) Please follow the laminated guidelines on the wall in ED or on the stroke unit. These will inform you of exclusion criteria and who to contact. It will also give you details of aftercare that is required.

5) If the patient is an inpatient (i.e. has a stroke on one of the wards) the Stroke Unit (Farley ext 4448/4186) should be contacted immediately.

6) If the patient is in ED - keep them there until you have received senior advice. Patients are only thrombolysed in Farley and ED (sometimes starting the infusion in the CT department).

The ED nursing staff will also usually help with investigations according to their Scope of Practice (X-rays & blood investigations).

**Operations after midnight**

These should be life or limb-saving operations. They should not be operations that were not done during the day due to insufficient theatre time.

If there are no patients waiting or expected in ED and the H@N F1 does not need support, the H@N F2 doctor may attend theatre.

If the H@N F1 needs help on the wards the H@N F2 must support their colleague.

If there are H@N patients waiting in ED, the H@N F2 has a duty to attend to their admissions.

**Contacting the H@N Surgical SHO in theatre**

There should be no occasion when communication with the H@N Surgical SHO is not possible. The H@N doctor must ensure that their H@N bleep is given to a specified member of theatre staff to alert them that they must respond to the need of H@N F1 doctors or patients in ED. H@N Surgical SHO doctors are not to be unavailable to undertake their duties due to assisting in theatre.

If the ED Shift Co-ordinator or ED F2 doctor has attempted to contact the H@N doctor and has been informed that he/she is scrubbed in theatre and will not be available to review patients, then the ED Consultant will be informed. Any unauthorised absence from H@N duties is unacceptable. Unless there is a valid reason, absence may be reported on an adverse event report form and may be reported to the F2 Educational Supervisor.
Consultant requires H@N Surgical SHO in theatre

On the rare occasion the H@N Surgical SHO attends theatre, their duties must be allocated to other members of the team.

1. Support for the H@N F1 must be handed onto the Medical Registrar.
2. The Surgical Consultant will need to request authorisation for the H@N patients, not yet admitted, to be seen by the ED F2 doctors.

The Surgical Consultant will need to phone the ED Consultant on call to explain the requirement of the H@N Surgical SHO in theatre. The ED Consultant will decide if the patients in ED are safe and receiving appropriate care. The ED consultant will check with the ED Shift Co-ordinator. In the unusual circumstance that the H@N Surgical SHO is essential to an operation in theatre, the ED consultant may authorise for ED doctors to temporarily take on the duties of clerking, investigation, treatment and admission of patients referred to H@N specialties.

H@N handovers

The H@N Handover takes place at 2030 and at 0800 in the H@N handover room (Pembroke seminar room - 1st right, Pembroke Corridor level 2). The H@N team and representatives of the outgoing teams attend 2030 handover to transfer care of patients to H@N. The H@N team and representatives of incoming teams attend handover at 0800 for patients to be transferred back to the day teams.

H@N handover in the evening is led by the Medical Registrar. Workload should be delegated according to the competencies of the team members and the needs of the patients, not necessarily the discipline or seniority of the team member.

Other symptoms and signs include:
- Influenza-like symptoms
- Drowsiness or confusion
- Hypotension
- Tachycardia
- Vomiting
- Obvious focus of infection (e.g. mouth, chest, urine, central line, diarrhoea).

Patients at risk of neutropenic sepsis include:
- Patients undergoing, or who have recently received, cytotoxic chemotherapy: time of greatest risk is usually 7-10 days after chemotherapy
- Patients with haematological malignancies (leukaemia, lymphoma, myeloma, myelodysplastic syndromes).

Haematology and Oncology patients known to be at risk of neutropenic sepsis are asked to carry alert cards, but other patients may also be at risk e.g. rheumatology patients on methotrexate, so vigilance is essential.

Ideally patients with neutropenic sepsis should be treated on Pembroke Ward. If the patient is on another ward, administer first dose of antibiotics and inform both the bed manager and Pembroke Ward who will arrange for the patient to be transferred.

Other haematology/oncology admissions

The Haematologists and Oncologists want to be informed if any patients under their treatment or active follow-up are admitted, especially if the reason for admission might relate to their disease or its treatment.

A baton bleep (bleep 1480) is held 24 hours a day by a member of the nursing team on Pembroke Unit. This should be used to inform the team of any Haematology or Oncology patients requiring admission or urgent assessment.
Neutropenic Sepsis

NEUTROPENIC SEPSIS IS A MEDICAL EMERGENCY

If suspected do not wait for the patient’s FBC result before commencing antibiotics.

Please use ‘Initial management of suspected neutropenic sepsis’ guideline and put the attached and completed sticker into the patient’s notes. This guidance can be found on ICID and in the following locations:

- Pembroke Ward
- Whiteparish Ward
- Emergency Department.

Please also refer to the gentamicin level interpretation advice for subsequent gentamicin doses on ICID.

Failure to treat promptly can result in death. Intravenous antibiotics MUST be given within 60 minutes of arrival in the hospital or within 60 minutes of the signs and symptoms developing if the patient is an in-patient.

You must contact the on-call haematology consultant to advise them of the admission of patients with suspected neutropenic sepsis and for further advice. This can be done via switchboard.

Signs and symptoms of neutropenic sepsis are:-

- Fever of 38.5°C on one occasion or 38°C on two occasions 1 hour apart in patients with neutrophil count <1.0 x 10⁹/L
- Fever is usually the first (and may be the only) sign of neutropenic sepsis, but neutropenic sepsis can occur in the absence of fever, especially in patients on corticosteroids or following administration of paracetamol.

Medical handover

The medical handover between day and night teams happens at 2100 after the H@N meeting. Any medical patients requiring CCOT review should be discussed at the H@N meeting. At 0830, a member of the in-coming speciality medical team will attend handover in the H@N handover room (Pembroke Seminar Room) to hand back patients seen overnight who are still causing concern.

H@N electronic patient list

All deteriorating or at risk patients must be added to the H@N patient list. This should be generated by all specialities before 2000. The list will be printed and provided at handover.

The H@N Trauma Team

The Trauma Team consists of:

- H@N surgical SHO
- Anaesthetic SpR - Trauma Lead after midnight
- ED Team (F2/SHO after midnight)
- Clinical Site & CCOT senior nurse.

The General Surgical SpR (until 2300) or consultant (after 2300) will be called in at the discretion of the ED Team. The Trauma call will be put out by the ED including informing the non-resident General Surgery SpR on-call via Switchboard.

Duty ED consultant who is 1st on call to attend and lead every trauma call.

The H@N Crash Team

The Crash Team consists of:

- Medical SpR & SHO
- Anaesthetic SpR & SHO
- Clinical Site & CCOT senior nurse
- F1 (for experience only).
Rest requirements for the H@N

If you work a full shift rota, which may include working a full or part night duty, you no longer have access to on-call facilities, as you are expected to work at night.

The rest requirements for a full shift rota are 30 minutes continuous rest after each 4–5 hour period worked. Rest requirements should be achieved on at least 75% of occasions.

If you work an on-call rota, the rest requirements are 30 minutes minimum during the duty period and 5 hours continuous rest between 2200 and 0800.

A baton bleep is provided which only transmits crash and trauma calls. This allows team members to give their H@N bleep to another member of the team to allow a bleep free break. All designated staff are required to attend crash and trauma calls.

Recliner chairs are available in the H@N Rest Room (level 4) in the orthopaedic corridor for rest and sleep during break periods.

Direct Surgical Admission from ED

Direct surgical admissions from ED may only take place if the H@N SHO is busy. In this case direct surgical admission will be undertaken by the ED SHO who can then admit the patient directly to an appropriate ward (in discussion with the Clinical Site Co-ordinator or H@N clinical site practitioner after 22:00). These will usually be Green category patients according to the flow sheets in place.

The following criteria need to be met to permit direct admissions:

1. A clear diagnosis
2. An overnight management plan has been made and is clearly written in the patient health care records

Booking # NOF for surgery

Points to note:

- The H@NT SHO must inform the on-call Orthopaedic Registrar by 7am, sooner the better.
- The registrar will know the theatre capacity in theatres for the flowering day and will plan ahead. Patients are now booked via the Theatre Man system. The Older People’s Clerking document (green proforma) has been updated. There are now sections about the patients’ Resuscitation Status, Consent-informing the NOK ASAP before surgery, the Nottingham Hip Fracture Risk score, regarding patients’ risks of dying in theatres, hence informing the nok, the administration of Fascia Iliaca Compartment Blocks pre-op to those who are eligible to have this for pain relief.
- Bloods that need doing pre-op MUST include Group and Save, Bone and Liver profile, Vitamin D levels, FBC, U’s and E’s.
- Any doubts over fitness for surgery, the on-call anaesthetist must be informed especially if there is a trauma list in the morning. There is a section in the clerking proforma called the A-Z checklist which must be completed on admission.
- For patients on Warfarin with an INR of more than 1.5, 10mg of Vitamin K IV should be given or follow the protocol in the clerking proforma.
3. A prescription chart has been completed
4. An overnight fluid regime is prescribed (if necessary)
5. Patient data has been entered onto the H@N system list for handover
6. The H@N SHO must be informed verbally by the ED SHO.

If the H@N SHO is busy in theatres, then Amber Category patients may also be directly admitted provided the above criteria are met.

Notes for the Medical SpR (bleep 1361)

Bleep numbers
On call Team
F2 1355  SpR 1361  Referrals 1361

Handover(s)
The medical SpR is the leader of the Hospital at Night Team (H@N). It is therefore vital that they attend evening handover sessions - attendance is not optional. The night SpR chairs the evening handover meeting.

H@N handover is at 0800 and 2030 promptly in the H@N handover room, Pembroke Seminar Room, Level 2. Medical directorate handover follows H@N handover - Unwell patients from the take and ward should be handed over at this time.

Out-of-hours referrals
Surgical referrals: Ward referrals should be directed to the Surgical F2. The general surgical SpR on call can be contacted on bleep 1501.

Neurosurgery: Referral to be made to Southampton General Hospital. An online referral must be made: http://www.neurorefer.co.uk the referral should be followed up by a
phone call to the neurological SpR on call.

**Cardiology:** Switchboard will contact Southampton General Hospital who will contact the SpR on call for cardiology.

**Renal Medicine:** The SpR on call at Portsmouth Hospital can be contacted via the main switchboard.

**Hepatology:** Kings Liver Unit can be contacted via the main switchboard.

**Endoscopy:** Contact the on call endoscopy nurse via Salisbury switchboard.

**ITU Referrals:** Consultant to consultant referrals in the OOH period. The ITU SpR bleep is 1319.

**Radiology:** Requests for CT out of hours must be discussed with the medical consultant on call before discussing with the consultant radiologist.

**Non Invasive Ventilation:** Clear indications for use are available in the folder on Whiteparish ward. NIV can be started on Tisbury, Whiteparish and ED only and can be managed on Tisbury, Whiteparish and Pitton. CCOT must be called if a patient is to be started on NIV.

**Telemetry:** on Tisbury, CCU and Whiteparish only.

**Location of Medical Directorate protocols**
1. GI bleed including confirmed variceal bleeding - clerking proforma on Whiteparish ward.
2. ST elevation MI - ED
3. Acute Coronary Syndrome - Whiteparish ward
5. Respiratory - NIV folder on Whiteparish & Tisbury wards.
6. Antibiotic Protocols - Whiteparish ward. OOH microbiology advice can be obtained from a consultant via switchboard.
7. Endocrinology - DKA protocol on Whiteparish ward.

Specialty Information
Paediatrics

New paediatric referrals
Age < 18
2100 - 0900

Abdominal Pain?

Stable patient
Refer to paediatric SHO (bleep 1164)
If a H&N doctor is phoned about a child with abdominal pain at night by a GP or ED, then the call can be passed directly to the paediatric SHO. Paediatric team will review and liaise with surgical team as required.

Unstable patient
Observations abnormal?
Follow guidance for escalation to paediatric team

Stable patient
Clerked by H&N team in ED if required:
• Cannulate
• Prescribe analgesia/fluids/other medication
• Organise theatre/consent
Handover to paediatric SHO if any concerns about patient likely to require further medical input once admitted (bleep 1164)

Please remember that if you are concerned about a child, advice or clinical input is available from the paediatric team. If you are worried that a child is unwell (e.g., shocked, tachycardic, septic) then please call the paediatric team for an urgent review. There is an escalation policy for children who have abnormal physiological parameters and you should be familiar with this.

Paediatric SHO bleep 1164
Paediatric middle grade 1165 (this bleep may be held by a consultant out of hours).

General prescribing advice
1) All children should be weighed on admission. For very sick children the weight can be estimated using a formula (applies only for children 12 months to 12 years old).

   (Age in years + 4) x 2 = weight in kg

   e.g. for a 3 year old (3 + 4) x 2 = 14 kg
2) If a child needs analgesia, consider whether they are likely to need something prescribed regularly. Use the BNF for Children, or the paediatric analgesia wheel, for appropriate choice of analgesia and doses.

3) You should ALWAYS check the BNF for Children before prescribing ANYTHING.

4) All children who are being admitted who require analgesia, fluids or antibiotics should have these prescribed by the H@N doctor before admission to the ward.

Abdominal pain
All children less than 16 with abdominal pain should be referred directly to the paediatric team by a GP or the emergency department. If the paediatric team is busy with an emergency elsewhere then you may be called to admit these patients. In general, children who are less than 5 years old where there is a concern that they may need abdominal surgery should be seen by the paediatric team first as their presenting symptoms and signs can be difficult to assess and often have non-classical symptoms and signs.

Admitting 16 - 17 year old patients
For some conditions, adolescents between the ages of 16 and 17 who require admission to hospital should be given a choice of ward environment (paediatric or adult). This is dependant on several factors, including bed availability and admitting speciality. Full guidelines and patient information are available on ICID.

Trauma / safeguarding children and young people
As a general rule, any child who is seen because of an injury, should be assessed for the presence of any other injuries. If the child is not old enough to talk then this should include a thorough examination all over the skin to look for bruising or other injuries (take off the nappy). Clinic by 09.00 the following morning. Patients should also be handed over to the Ophthalmology trainee on-call at the morning H@N meeting. The notes will then be triaged by the Ophthalmology trainee and patients will be contacted with follow-up appointments according to the EEC Triage Protocol. Please ensure patient’s contact details (including telephone number) are available.

From Monday to Thursday 20.30 - 08.00, the Salisbury Consultant on call may be contacted by telephone via switchboard. Please note, this should be reserved for urgent advice only.

Weekends: Friday 17.00 to Monday 08.00
On Friday nights and at weekends, supra-regional cover from Southampton is in operation.
On Friday 17.00 – 20.30 and Saturday and Sunday 08.00 - 20.30, there is an Ophthalmology trainee on-call in Salisbury with supra-regional cover.
From Friday to Sunday 20.30 - 08.00, patients should be referred to the H@N Team.
If urgent advice or review is needed overnight, this is available from the supra-regional cover based in Southampton.
If patients seen overnight require less urgent ophthalmic review, the H@N SHO should hand this over to the Ophthalmology trainee on-call at the morning H@N meeting. The patient will then be contacted to arrange follow-up according to the EEC Protocol. Please ensure patient’s contact details (including telephone number) are available.

Southampton telephone out of hours 0238079 6595/8600
Emergency Admissions
All patients requiring admission should be discussed with ENT SpR on call.

The majority of ENT emergencies will not require admission. Those requiring admission will fall into the following categories:
1. epistaxis
2. severe or complications of sinusitis
3. severe or complications of ear infections
4. severe or complications of throat infections
5. foreign bodies of throat, nose and ear
6. airway compromise.

Post-operative ENT patients
Only require intervention at night when complications develop.

Ophthalmology
Acute presentations will initially be managed in the ED, to the level of the ED team’s capability. If further assessment, treatment or admission is required the patient should be referred to the Ophthalmology trainee on call (08.00 – 20.30) or H@N Team (20.30 – 08.00). As for all other specialties, eye patients should be examined fully (including visual acuity) prior to referral.

Weekdays: Monday 17.00 to Friday 08.00
From Monday to Thursday 17.00 – 20.30 there is an Ophthalmology trainee on call at Salisbury.
From Monday to Thursday 20.30 – 08.00 patients should be referred to the H@N Team.

If patients seen overnight require review in the Emergency Eye Clinic (EEC), the ED notes should be taken to the Eye

Remember to think about whether the injury could have been inflicted, or caused by neglect. Warning signs for non-accidental injury include:
- delay in presentation
- pattern of injury with an account that is unsuitable (an account that is implausible, inadequate or inconsistent with the presentation, age or developmental stage of the child)
- any fractures in children not old enough to walk
- change in the story of how the injury occurred between parents, or between accounts over time
- unusual behaviour from the child or parents
- any discrepancy between what the child says happened and what the parents say happened
- bite marks, genital injuries, burns
- other unexplained injuries or bruises.

If ANY of the above warning signs are present, or if there is ANY SUSPICION of non-accidental injury or neglect then YOU MUST admit the child to hospital and discuss with the paediatric team. Under these circumstances, the child would not be discharged without a paediatric review and a phone call to social services/health visitor/etc. Discuss this with the paediatric middle grade if you are unsure what to do.

The ED clerking proforma has a list of safeguarding triggers which should be reviewed for each child. Every child seen in ED should then have the ‘Outcome of Assessment’ section of the ED notes completed and signed.

Venous access
- venous access can be difficult in younger children, particularly if less than 2 years old. If you require help with IV access then contact the paediatric team who will come and assist you if they are able to do so. If in doubt ask an experienced paediatric nurse.
- if there is a history of difficult IV access previously then
discuss these patients with the paediatric team before attempting IV access.
- multiple attempts at IV access should not occur (maximum of 2 attempts per doctor).
- a nurse should assist in all such procedures.

Inpatients on Sarum ward

The paediatric SHO will be the first point of call for the nursing staff on Sarum if there are concerns about any inpatients. They will call you if the paediatric team are busy with an emergency. Please call the paediatric SHO yourself if you are admitting a child who may need their involvement.

The paediatric team will not help with:
- a. Decisions to take to theatre
- b. Practical arrangements for surgery
- c. Taking consent
- d. Orthopaedic procedures (splints, POP etc).

Escalation in paediatrics

When to IMMEDIATELY call ED consultant and/or Paediatric bleep 1165.
- any persistent tachypnoea > 10 above normal parameters
- any persistent tachycardia > 10 above normal
ENT

Contact details
Specialist ENT registrar, contact via Southampton or Salisbury switchboard. Consultant ENT surgeon; to be contacted after discussion with SpR via Southampton or Salisbury switchboard.

The role of the H@N in the care of ENT patients
• to care for ENT in-patients: post operative patients mostly Downton/Sarum
• to admit and care for ENT emergency patients requiring hospitalisation
• to manage ENT emergencies affecting non ENT in-patients
• to liaise with ENT SpR as per guidelines.
(Downton ward has an ENT trolley, with relevant equipment, in the examination room for use at night).

The majority of ENT emergencies can be managed in ED, the majority of which will not require admission.
The GP should liaise at night with ED over ENT emergencies that need to be seen and triaged and very few will require admission. H@N will be contacted if a patient is admitted.

If specific ENT advice is required, the query will need to be passed on to the SpR.

Paediatric crash call
When to paediatric crash call (have a low threshold to use crash call for the above criteria also)
• paediatric cardiorespiratory arrest
• any child with impending complete airway obstruction
• any severely unwell child
• any child responding only to pain
• status epilepticus (seizures >30 mins)

All children who have had any abnormal physiological parameter must be discussed with ED consultant or paediatric middle grade (bleep 1165) prior to discharge.

Fluid prescribing in children
In children prescribed fluids must be individualised according to a clinical assessment of hydration status and serum electrolytes. Children on IV fluids must have renal function and electrolytes checked regularly (every 24-36 hours or more frequently if values previously abnormal).
If a child has abnormal renal function or electrolytes please contact Paediatrics for advice on fluid prescribing.

### Guidance for maintenance fluid requirements

<table>
<thead>
<tr>
<th>Child’s Weight in Kg</th>
<th>Fluid requirement for 24 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 10 Kg</td>
<td>100 mls/Kg/Day</td>
</tr>
<tr>
<td>10 – 20 Kg</td>
<td>Requirement for 1st 10kg (i.e. 1000 mL) + 50 mL for each additional kg, per day</td>
</tr>
<tr>
<td>&gt; 20 Kg</td>
<td>Requirement for 1st 20kg (i.e. 1500 mL) + 20 mL for each additional kg, per day</td>
</tr>
</tbody>
</table>

**For example**

Weight = 24 Kg

Daily fluid requirement = (10 x 100) + (10 x 50) + (4 x 20)  
= 1580 mls/Day  
= 65.8 mls/hr

gauge radiologically placed nephrostomy tubes become blocked, try a flush with 10 mls hep/saline. Large bore tubes rarely block, but may be flushed with normal saline.

**Mitrofanoff**

- a continent catheterisable urinary stoma
- problems relating to these procedures should be referred to the on call urologist.

**Unable to remove the catheter or deflate the catheter balloon?**  
**Contact the on-call urologist**
 Blocked long term urethral catheter:
  • try a flush with normal saline.
  • if unsuccessful replace the catheter if it does not drain freely flush with normal saline. Before replacement of any catheter check patients notes for a history of bladder neck or prostate surgery which may alert you to the risk of a false passage.
  • remember that if you cannot aspirate your flush easily then the catheter is usually not in the bladder.

 Post operative blocked urethral catheter

 TURP:
  • saline bladder washout (60ml syringe)
  • restart irrigation
  • if unsuccessful replace with >22fg 3 way catheter.

 TURBT:
  • washout, restart irrigation or replace catheter >22fg 3 way catheter.

 Open bladder surgery, radical prostatectomy or urethroplasty:
  • contact on call urology registrar or consultant
  • do not attempt to replace the catheter.

 Suprapubic catheters (SPC)
  • may be changed if the track is at least 2 months old
  • only insert a new SPC if the bladder is easily palpable, there is no previous lower abdominal surgery/ scars, and always aspirate urine first
  • use hydrogel coated rather than a silicone catheter.

 Nephrostomy tube:
  • a drain placed in the renal pelvis to drain urine, usually inpatients with ureteric obstruction or post percutaneous nephrolithotomy (PCNL). If the narrow

 Choice of fluid

 Do not use 0.18% Sodium Chloride and 4% Dextrose

 In most children maintenance fluid can be prescribed as 0.45% Sodium Chloride and 5% Dextrose.

 Young children should be prescribed maintenance fluid containing dextrose, as there is an increased risk of hypoglycaemia.

 Potassium may be added to maintenance fluids though the preferred option is ‘pre-made bags’ of 10mmol or 20mmol potassium in 500mls fluid. Children’s potassium requirements are usually 1-2mmol/Kg/Day. Additional potassium may be required if there are large GI losses. Potassium should be omitted from fluids if there are concerns regarding oliguria or renal function.

 Children with large GI losses may require additional fluid to replace losses on a ml by ml basis (e.g. NG losses) this is usually prescribed as 0.9% Sodium Chloride with 10mmol Potassium Chloride.

 Hydration is assessed clinically. Children who are significantly dehydrated may require additional fluid to correct dehydration slowly over 24 – 48 hours. This is usually given as an isotonic fluid (0.9% Sodium Chloride).

 Children who present with signs of shock (intravascular volume depletion) are very unwell and it is essential that the paediatric team be contacted immediately. Please remember that hypotension is a late sign of ‘shock’ in childhood. Whilst awaiting paediatric assessment a fluid bolus of 10mls/Kg 0.9% Sodium Chloride may be commenced. Further fluid boluses may be necessary following paediatric advice.
Plastic surgery

- General Practitioner call to generic surgical SHO
- SHO receives tertiary referral to the Burns Unit
- Patient arrives at the Emergency Department
- Refer immediately to the SpR
- Patient self-referred to the Emergency Department
- Patient clerked by the generic surgical SHO

- Home +/- clinic appointment for the morning
- Patient admitted to the Ward

- Hand injury with no neuro-vascular compromise
- Pre-tibial laceration
- Facial laceration
- Simple/closed fracture of hand bones, volar plate injuries

- Can be managed by the HGN team

Urology

- General Practitioner call to generic surgical SHO
- Patient arrives at the Emergency Department
- During busy periods the SHO doctors may cross cover for each other
- Patient clerked by the generic surgical SHO

- Home +/- clinic appointment for the morning
- Patient admitted to the ward

- Renal colic
- Urinary retention from any cause
- Epididymo-orchitis
- Haematuria (with or without clot retention unless resolved)
- Paraphimosis

- Obstructing stones in a single kidney
- Bilateral obstructing stones
- Ruptured urethra
- Ruptured kidney
- Ruptured bladder
- Catheter related problems following a radical prostatectomy
- Obstructing infected kidney
- Urinary problems associated with urethral surgery
- Urinary problems associated with artificial urinary sphincter
- Unresolved clot retention

- Can be managed by the HGN team

- SpR/ST must be informed

- SpR/ST must assess the patient
Abscess Pathway - for SAU
See on SAU to confirm diagnosis of abscess.

Assessment
- discuss with anaesthetist and request assessment if necessary
- obtain consent for operation
- information given - operation, post-operative treatment
- contact theatre to book operation.

<table>
<thead>
<tr>
<th>Operation expected &lt; 2100</th>
<th>Operation expected &gt; 2100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admit</td>
<td>Assess for deferred operation</td>
</tr>
<tr>
<td>ITO’s</td>
<td>Book bed on SAU for 0730</td>
</tr>
<tr>
<td>D/N arranged</td>
<td>Book Theatre for 0800</td>
</tr>
<tr>
<td></td>
<td>TTO’s</td>
</tr>
<tr>
<td></td>
<td>D/N arranged</td>
</tr>
</tbody>
</table>

Suitable for deferred operation (all criteria must be met):
- agreement to deferred operation
- not diabetic
- pain controlled with oral agents
- temperature < 38°C
- responsible adult to transfer to and from hospital
- ASA 1/2.

There are broadly three patient categories: hand traumas, burns and other.

When accepting Plastic Surgical referrals, there are a number of criteria that should be met. Remember that Plastic Surgery is a regional speciality referrals are received from a very large geographical area (not just Salisbury District Hospital), and therefore you need to ask very specific questions when accepting referrals. The site coordinator will confirm plastic surgery bed availability at the H@N handover.

Take a summary of the history. Remember to ask:-
1. What is the patient's name, DOB, hospital number, age and sex?
2. Which limb (i.e. right or left) is involved?
3. Is the patient right or left handed?
4. What is the patient’s job
5. What time did the injury occur? (Very important for amputations)
6. What was the mechanism of injury?
7. Is the patient otherwise fit and healthy?
8. When did the patient last eat or drink?

Make sure that the referring doctor sends all relevant X-rays and a clearly written referral letter.

After taking a full history and examination, you should book the patient for theatre promptly. You are not allowed to book the patient for theatre before the patient has arrived at the hospital (apart from an expected re-implantation).

Hand Trauma
These can be tendon injuries, nerve injuries, vascular injuries, open/closed fractures, amputations/sub-amputations.

Tendon and nerve injuries are not life or limb threatening and
therefore can be brought up the following day if referred in the middle of the night. They should be seen in the PSAC Clinic held in Plastic Outpatients from 10.00 Monday, 8.30am Tuesday to Friday. At weekends they can be seen in ED from 11am.

Vascular injuries should be dealt with promptly, and should be discussed with the registrar on-call.

Open fractures should also be dealt with promptly. At night they can be assessed and dressed and the patient admitted to Laverstock Ward. From outside the region, those patients can be seen the following morning in the PSAC clinic as above.

Closed fractures can be brought up the next day but should be put in a high arm sling and the patient should be encouraged to elevate the arm as much as possible to reduce swelling. Remember to document the position and angle of displacement and evidence of rotation. If in doubt discuss with registrar on-call.

**Amputations and sub-amputations are Plastic Surgical emergencies and must be discussed with the registrar on call!**

When dealing with these injuries, you should:
- take a history
- give the patient adequate analgesia
- dress wounds with betadine soaked gauze
- document level of amputation
- check tetanus status and give antibiotics
- inform Theatres and X-ray.

**Management of wounds**

Patients who are accepted for management here should have definitive clinical signs of structural injury. If definitive injury is unclear then wounds should be explored in ED.
Advise the following: elevation, watch for signs of infection, keep dressings clean and dry.

R/v patient at 24 - 48hrs to check for further blistering.

Please call the Burns Unit for advice if needed.

Important Paediatric considerations

- if after a burn injury, a child presents with any of the following, a full urgent re-assessment is required and discussion with the Burns Unit and paediatricians: Fever >38°C, rash, D+V, general malaise, tachycardia/tachypnoea.
- are there any safeguarding concerns?
- if Sup/Partial Thickness scald >3%, child may go to theatre for Biobrane application. Keep NBM.

Transfer within South West Burns Network

Decision for transfer to be made by Burns consultant on call.

Adults - >40% TBSA, likely transfer to Swansea once stable
Paeds - >30% scald or > 20% burn, likely transfer to Bristol
Children with inhalation injury – transfer to S’oton PICU or Bristol.

In cases where there is a clear history of an unsurvivable burn injury, the patient should not be transferred.

under local anaesthetic, cleaned and closed or dressed appropriately. Patients should be given antibiotics (flucloxacin or equivalent) and appropriate analgesia.

Plastic Surgery Acute Clinic - out of hours

The process for getting patients into the PSAC clinic OOH is:

- PSAC will bring their diary to plastics reception each evening and collect the diary with a copy of the patient’s notes each morning.
- During the weekend/Bank Holiday periods the PSAC diary will be kept in ED reception.
- ENPs/Drs to send patients to ED reception with ED notes and PSAC follow up date written on the front of the ED notes.
- Receptionist will enter the patient details in the PSAC diary and give the patient the appointment details.
- Patient notes will be scanned and left in the PSAC clinic tray for collection.
- The H@N F2 can book appointments for overnight tertiary referral patients with ED receptionist (ext 3163).

Plastic Trauma Nurses bleep 1515.

Burns assessment, treatment and referral to the Burns Service

Burns Unit: ext. 3507, direct dial – 01722 345507, nurse in charge bleep 1029.

Assessment

Size – calculate as % total burn surface area (TBSA). Do not include erythema (red, unbroken skin). Patient’s whole palm, including fingers is approx 1% of their body or use Rule of Nines or Lund and Browder chart (for Paeds).

Adult major burn = >15% TBSA (consider >10% in elderly)
Paeds major burn = >10% TBSA (consider >5% in under 1’s)
See chart below for assessment of depth:

<table>
<thead>
<tr>
<th>Depth of burn</th>
<th>Usual history</th>
<th>Appearance</th>
<th>Sensation</th>
<th>Hairs</th>
<th>Blisters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superficial erythema</td>
<td>Sunburn, minor scald</td>
<td>Red</td>
<td>Painful</td>
<td>Present</td>
<td>Absent</td>
</tr>
<tr>
<td>Superficial partial thickness</td>
<td>Scalds of limited duration</td>
<td>Red or pink with good capillary return</td>
<td>Very painful</td>
<td>Present</td>
<td>Present</td>
</tr>
<tr>
<td>Deep partial thickness</td>
<td>Scalds of long duration Flame burns or contact with high temps of limited duration, e.g. flash flame, hot fat</td>
<td>Pale pink with limited/no capillary return Sometimes bright red with fixed staining.</td>
<td>Often painful around the margins with altered sensation in deeper areas</td>
<td>Present and easily removed or absent</td>
<td>Absent</td>
</tr>
<tr>
<td>Full thickness</td>
<td>Contact with high temp for long duration, e.g. flame burns, contact burns.</td>
<td>Charred, white/yellowish, dry with thrombosed vessels.</td>
<td>Initially insensate but painful at later stages</td>
<td>Absent</td>
<td>Absent</td>
</tr>
</tbody>
</table>

**Inhalation injury** – indicators include facial or neck burns, singed nasal hairs, hoarse voice, burns to lips, history of burn/smoke in enclosed space. Patients with inhalation injury can only be accepted when the patient has had an assessment by a senior anaesthetist.

The following patients should be reviewed by the Burns Unit:

- burns > 3% TBSA in adults
- burns > 1% TBSA in children
- burns of special areas – face, hands, feet, genitalia, perineum and major joints
- full thickness burns
- electrical burns
- chemical burns
- burns with an associated inhalation injury
- circumferential burns of the limbs or chest
- burns at the extremes of age – children and the elderly
- burns injury in patients with pre-existing medical disorders which could complicate management, prolong recovery or affect mortality
- any burn with associated trauma
- any burn that has taken or is likely to take more than 2 weeks to heal.

To refer a patient contact the Burns nurse in charge on bleep 1029 or Plastics F2 on bleep 1460. If the patient does not require admission but you would like to arrange outpatient follow-up, please call the Burns Unit to arrange a time. We hold clinics every day on the Unit. **Patients cannot be seen on a casual drop-in basis.**

**Treatment**

Patients awaiting transfer to the Burns Unit can be dressed with clingfilm. Please give adequate analgesia. Fluid Resuscitation for major burns – Modified Parkands Formula. Use Hartmanns.

**Adults** – 3mls x wt (kg) x %TBSA / 2. Give half in first 8 hrs since time of injury, 2nd half in subsequent 16 hrs.

**Paeds** (new reduced volume formula) – 2mls x wt(kg) x %TBSA / 2. Give half in first 8 hrs since time of injury, 2nd half in subsequent 16 hrs. In under 1’s give 70% maintenance (N/Saline 0.45%, 5% Dex) in addition to resus fluid.

If burn does not meet criteria for referral to the Burns Service, please treat as follows:

- Deroof and debride all blisters unless tiny or completely flat. Dress with a simple dressing (e.g. Mepitel, Adaptic Touch, double layer of Jelonet, Allevyn).