SECTION ONE – GENERAL INFORMATION

The General Information Section describes how the Emergency Department service at Antrim works and how doctors are expected to work within the Emergency Department team.

There is a lot of important information in this section and Emergency Department Doctors need to know it all, so they are expected to study this section in depth during their two week Induction Period.

About the Emergency Department

- ***"Senior help and advice is always available."***

The Emergency Department at Antrim Hospital treats just over 90,000 new patients each year, i.e. it is a medium-sized department in UK terms. The hospital provides a wide range of inpatient services including medicine, cardiology, surgery, paediatrics, obstetrics & gynaecology, ENT and intensive care. As well as this there are outpatient-only services that include fractures, orthopaedics, ophthalmology, maxillofacial surgery and plastics. There are resident F1, and resident F2s in medicine, surgery, obstetrics, paediatrics and anaesthetics. A liaison psychiatry service is provided by the neighbouring Holywell hospital.

The Emergency Department forms a vital link between the community and the hospital –in fact it could be described as the hospital's " shop window". Around 75% of patients 'self-refer', 13% come by emergency ambulance and 12% are referred by their GP. The main purpose of the Emergency Department service is to treat major trauma, minor trauma and all sorts of emergencies. As well as fulfilling this main role, we can help people to gain access to a wide range of services in primary care (general practice), community care and hospital outpatient departments. Our catchment area extends from the northern outskirts of Belfast, to towns like Antrim, Magherafelt, Ballymena and Larne. We also serve a large rural population and the villages along the Antrim Coast. The result is endless variety! We have to cope with classical 'inner city' patients including the socially deprived. This will include drunk and aggressive patients at times as well as a large number of patients who probably should have gone to their general practitioner but found the hospital more convenient! We also see the classical rural patient who only seeks medical attention as a last resort; often with florid pathology.

This is a very challenging environment in which to practice medicine but it is an excellent place to learn. There is a good mixture of minor and major cases in medicine, paediatrics, surgery, general practice, psychiatry etc. and an opportunity to follow up the patients who you have seen.

The Emergency Department medical team has eight consultants, four staff grades, six ST4+ and twelve doctors in training…. *SENIOR HELP AND ADVICE IS ALWAYS AVAILABLE*.

The department has three senior nursing sisters (main department &observation ward), over 65 nurses and a plaster technician. The senior nursing staff have extensive experience as well as a knowledge of how things are usually done in the hospital. This will be particularly helpful for doctors who are new to the department. There is always a 'Triage Nurse' on duty. He/she sees all patients within fifteen minutes of arrival and prioritises them according to medical need. Many of the nurses have extended skills such as cannulation, venepuncture and suturing. There are Nurse Practitioners who independently treat patients with a range of minor conditions. A nurse practitioner is on duty from 9am - 9pm or later each day.

Working in Emergency Department

- ***"It is essential that you always look like a doctor"***
- ***"Treat patients and their relatives in the way that you would like to be treated in the same situation"***
- ***"If you are having difficulty with the treatment of a seriously ill patient get help immediately."***

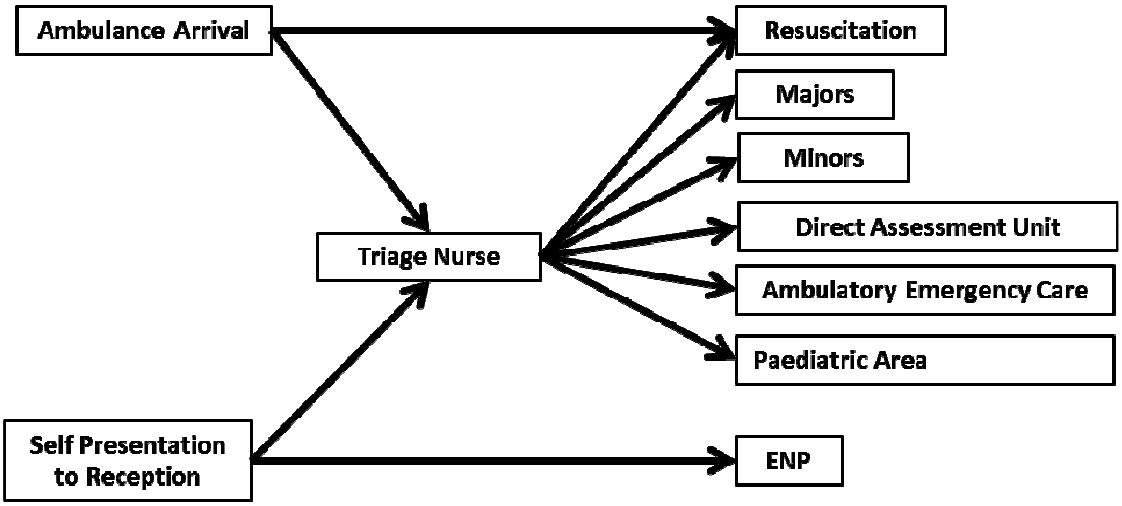
In order to become a good ED doctor you need to develop the ability to deal with patients very rapidly and to never appear to rush them, while making sure that you make the right decisions about their management. This is, of course, virtually impossible! If you don't learn to work quickly when there are a large number of patients in the department, you may rapidly become overwhelmed by the queues waiting for your attention. At the same time, it is important that you are tolerant with your patients and that you always appear to have time for them - even when you don't.

Emergency medicine is very challenging. Many of your patients will be so ill that you will have to start resuscitative treatment before you have any idea what is wrong with them. Others will have symptoms which sound very serious but which are due to relatively harmless conditions. One of the best ways of saving time is to work on your clinical skills so that you can make reasonably accurate diagnoses without ordering unnecessary blood tests and x-rays. The CLINICAL section of this book will be invaluable. There is more information about how to approach emergency medicine problems and about common diagnostic pitfalls later in this section. Practical sessions on resuscitation during the Induction Course should give you the confidence required to commence resuscitation in every situation. *If you are having difficulty with the treatment of a seriously ill patient get help immediately*

- ***It is essential that you always look like a doctor*** **- unfortunately this means dressing professionally -hospital "scrubs". Be sure to introduce yourself to every patient and their relatives as well as wearing your identity badge. If you involve junior or senior colleagues in a patient's care, introduce them as well.**
- ***Treat patients and their relatives in the way that you would like to be treated in the same situation*****- patients appreciate this more than anything else. Remember that you are going to make mistakes - your patients will usually forgive a great deal provided you have treated them considerately.**
- **Be careful about people who are 'just visiting' the Emergency Department. Please do not bring unauthorised visitors into an area where patients are being treated. The medical students in the department are your responsibility and remember that any patient is entitled to refuse to be seen by students.**
- **Students must never *treat* children (e.g. by suturing, taking blood etc)**
- **Doctors who are not part of the Emergency department's staff cannot come and work here without the Emergency Department consultants' permission.**
- **NO doctor in the hospital should use the Emergency Department to self-treat or self-medicate except for minor aliments**

The Patient's Journey

- ***Triage means rapidly assessing patients so that the critically ill receive prompt treatment***
- ***Triage and streaming are a dynamic process and they are the responsibility of doctors as well as nurses.***



1. Patient Streaming

Each patient's visit to the ED is a journey through a series of assessment/treatment locations (rather like the series of windows you stop at when you go to the Drive-Thru at McDonalds!). Each stream has a dedicated treatment area. The purpose of streaming is to enable patients to receive treatment and to "flow through" the system as smoothly as possible. The doctor/nurse teams in each location must keep up with patient arrival loads in their area or the whole department will seize up - there can be no weak links in the chain.

THE STREAMS ARE:

1. **RESUSCITATION (Incorporating Adult and Children's Resuscitation)**
2. **ADULT MAJORS**
3. **PAEDIATRICS**
4. **MINORS**
5. **AMBULATORY EMERGENCY CARE**

Allocation to the streaming system operates as follows:-

- All non-walking patients (ie, mainly ambulance stretcher patients) enter via the ambulance door to be received by the ambulance triage nurse who takes handover from the ambulance crew and carried out a rapid triage.
- Assessment in Resuscitation is for patients who have been phoned in by NIAS as a "Standby" or have been triaged as a Red or Orange category. This is a rapid assessment of the patient so that tests can be started, pain can be relieved and the seriously ill stabilised. A

working plan should be made for the patient. This may include the use of point of care testing, sending specimens to the lab, ECG recording. The relevant specialties should be involved early for the seriously ill/injured/ MI or Stroke. If the patient is obviously requiring admission then fill out the whole ED record quickly and arrange admission. Even though care is rapid in resuscitation you must carefully document treatment and complete your computer work as you go along.

- All walk-in patients report to Reception to register via the public emergency department entrance. The registration details entered by receptionists include the type of complaint that the patient is presenting with – eg "abdominal pain", "ankle injury". During the registration process, patients are invited to self-select to the *Minors Direct Service* by receptionists who will explain that the "Minors Direct" option is open to any patient with any minor condition except a head injury. Such patients then join a queue to be seen in order of arrival* and are <u>not</u> assessed by the Triage nurse. All other walk-in patients, including those who are unsure if they are eligible for "Minors Direct" are assessed by the Triage Nurse.

2. <u>Triage</u>

In practice, the main purpose of *triage* is to allocate walk-in patients (who have not already self-triaged to minors) to a treatment location:

After a brief assessment, the triage nurse direct appropriate patients back to the waiting room to join the queue for minor treatment.

i. If a patient of any age is *acutely unwell* the triage nurse escorts him/her into majors or resuscitation area and notifies staff there.

ii. *Stable paediatric patients* (16 and under) excluding those with minor injury, are directed through to the Paediatric area.

iii. *Stable adult patients* with non-minor conditions undergo basic observations eg, vital sign measurement, urinalysis and the "WEAD+" before being directed to the Waiting Room. From there a member of the Major's nursing staff calls them into their area in order of arrival.

Along with streaming, the triage/streaming nurse use the Manchester Triage scale. This is shown below. This allows the nurse to direct you to the most seriously unwell patient first as opposed to first come first seen.

Red and orange - should be seen immediately
Yellow - within one hour
Green - within 2 hours
Blue - within 4 hours

Ideally, all patients should be seen in a timely fashion.

UK national triage scale		
1	Immediate resuscitation	Patient in need of immediate treatment for preservation of life
2	Very urgent	Seriously ill or injured patients whose lives are not in immediate danger
3	Urgent	Patients with serious problems, but apparently stable condition
4	Standard	Standard cases without immediate danger or distress
5	Non-urgent	Patients whose conditions are not true accidents or emergencies

3. Ongoing care of Major Cases

- ***Patients requiring ongoing resuscitation will remain in Resuscitation, other patients move on to be treated in the "Majors" area of the department.***
- ***In majors, patients will generally be seen in order of arrival unless nursing staff inform you of patients requiring priority***

Adult Majors: Following their assessment in Majors, the vast majority of patients will require to be seen again in Majors to allow decisions to be made about disposal and treatment. Many will have undergone laboratory/point of care testing and most will go to the Radiology Department for x-ray, ultrasound or CT examination. Ambulant patients should walk to x-ray, guided by the floor signs. For non-ambulant patients, wheelchairs should be used if possible thus keeping trolley-movement to a minimum. After x-ray patients will return to the Adult Majors area (ambulant patients will report to majors reception where they will directed to the seating area. A detailed review of the patient taking into account x-rays and results will be undertaken by the doctor who initially saw the patient. When the decision-making process is complete, patients will be admitted to a ward or discharged for ongoing treatment in the community (see admissions policy below). Doctors in training grades should regularly consult their senior colleagues about admission / discharge decisions until they become familiar with this department and document that this is done.

Children: Unless seriously ill, children will be directed to the paediatric area accompanied by their parents. Paediatric Majors is generally suitable for children aged 16 and under. The patients will undergo basic observation and assessment by the nurse stationed in the area and then they will be assessed by a member of the medical team. (see admissions policy below).

4. Senior Sign off

Groups such as Under 1 with a temp, >18yr olds with non-traumatic chest pain and Unplanned re-attenders should be discussed with the most senior doctor ST4+ prior to discharge. The ST4+

should enter their details under "signoff" on the Symphony system. A note should be made that makes reference to the consultation.

5. Patients requiring admission and use of the Observation Ward.

Medicine & Surgery: The hospital has a *direct admissions* policy for adult medical, surgical and cardiology patients who have been assessed in the Emergency Department. Decision rules about admission are given in the CLINICAL section of this book. If the emergency department doctor decides to admit, the patient flow co-ordinator is notified via the electronic tracking screen and the doctor notifies the appropriate doctor on the take-in team of the patient's condition. For medical admissions, the Medical SHO on-call, bleep 5149, should be contacted. ("Vetting" of admissions by take-in teams is not permitted – any concerns they have about the appropriateness of admission can be passed on to the senior emergency physician on duty who should re-evaluate the patient.)

The Observation Ward: The *Observation Ward has a set number of conditions with a single focussed goal on admission; this is not "to make them better".*
The Protocols must be adhered to and are available in folders in Majors and Observation Ward.
Any deviation from these eg Consultant protocol over-ride must be discussed with a named consultant and documented on the proforma.

Other Specialty Wards: Admissions to paediatrics, gynaecology, ENT are via the take-in SHO or Middle Grade doctor in the relevant specialty. Where possible He/she will choose to accept the admission on the basis of telephone information. If a doctor in any of the above specialties wishes to "vet" the admission by examining the patient, DHSS rules stipulate that this must be completed within two hours of the patient's registration. The visiting doctor MUST inform the ED doctor about the outcome of his/her assessment so that the admission/discharge process including computer screens can be completed (Non-ED doctors must never discharge patients!)

Patients with Mental Health Problems: The first task of the emergency clinician is to exclude an organic cause for mental symptoms, so patients presenting with a mental health symptom are evaluated. Disturbed patients should be sedated promptly and effectively if appropriate by the most experienced doctor on duty. See CLINICAL section. Patients with an organic cause of their psychosis should be admitted under the medical team. Patients with self harm should be treated appropriately according to TOXBASE and / or have proper wound management. Patients requiring Mental Health Assessment by the MHLS team should be referred at triage or as soon as possible therefore. They may be admitted to the Observation Ward (on a proforma) if there is a requirement for a washout period of drugs/ alcohol or medical treatment is required.

6. Care of Minors

Whenever possible, minors patients will be seen in order of arrival twenty-four hours a day

The minors area incorporates 6 cubicles, ENT and eye examination facilities and general examination facilities. There is a seated sub-waiting area near reception. The ENP/doctor team in minors will see patients according to time of arrival (although patients who cannot be treated by

nurse practitioners may occasionally be overtaken by those who can). Patients will be called to the minors area and put in a cubicle when it becomes available. Patients returning from x-ray will be directed to return to the small seating area to await reassessment. Fracture reduction (not requiring procedural sedation) will be carried out in the Procedure Room.

7. Communication and patient tracking

In the Emergency Department, relatively large numbers of patients flow through a sequence of assessment and treatment areas that are physically separated from each other. Staff in each area will be constantly receiving and handing over patients so effective communication between areas is essential. The *electronic tracking system* is central to the administration of patient flow through the Emergency Department. The 'Symphony' system enables an appropriate member of reception, nursing or medical staff to mark each stage of the patient's journey on an electronic tracking system as each element of registration, assessment or treatment is completed. This live tracking data is displayed in each treatment area and in reception. This will allow patients to be located accurately at all times, moreover staff will be alerted to the number of patients waiting for their treatment area and senior nursing and clinical staff in the department will be able to monitor the flow of patients overall. The tracking data must be entered accurately and in real-time by staff 24 hours each day – it is confidential and should not be viewed by unauthorised personnel.

The Maintenance of computerised records is a clinical governance issue - persistent failure by an individual to fill out and update patients data, will be dealt with via the Trust's formal disciplinary procedure. Being "too busy" is NEVER an acceptable excuse in a modern ED!!

Wherever possible patient enquiries from relatives (either via external phone or internally via reception) should dealt with by the liaison officer who will confirm the patient's location in the department via the tracking screen. A member of nursing or medical staff will only be consulted for information about seriously ill patients or those whose assessment in majors is complete (see telephony policy).

8. Patient records

Permanent patient records will be held electronically on the department's 'Symphony' system. After registration admin or clinical staff will print out a multidisciplinary paper flimsy at a print station. Patient labels can be generated at the same time. Once patients are discharged from the ED and after completed flimsies are scanned onto symphony, the paper version can be sent to a ward or fracture clinic etc (see Symphony Policy) The data eg your name, diagnosis and "DADT" generate an automatic GP letter so you MUST complete these EVERY time AS YOU GO ALONG – not optional and no-one else can do it for you.

9. Care of friends and relatives

With the exception of parents, or those who care for disabled or vulnerable adults, relatives should be limited to one per patient at any time during their journey through any part of the Emergency Department. They should be invited to remain in the waiting room and should be reunited with the patient only when assessment and initial treatment are complete. Relatives of gravely ill or distressed patients should be escorted to the relatives room by a senior nurse or doctor. ALL staff are asked to help the department by preventing unauthorised people from coming through controlled-access doors and by politely escorting wandering relatives to the main waiting room

Friend or relative enquiries about a patient's progress through the department can be answered by the majors phone desk via the main receptionist.

10. Night Time

3 Doctors will work overnight; one senior and 2 more junior. Any queries on patient care should be initially directed to the senior doctor who will advise on their management, if necessary they may need to contact the Consultant on call.
When the department is busy "barn door" admissions should be speedily referred on to the speciality teams with the minimum of ED input provided they are STABLE. Rules for access for relatives and members of the public apply all night. The phone desk may be switched off, diverting calls to all extensions. Doctors on night shift should not leave the department.

11. Access/Egress

Access, egress and patient flow will be strictly controlled by door-locks and code access. Unauthorised personnel (public or staff) are not permitted in the department. All essential staff who are required to visit the ED will be circulated with information about how to access the department. The ED will not be used as a through way at any time.

12. Junior Doctor Working Model

Junior and senior doctors work together in Antrim Hospital Emergency Department to provide the best care possible for our patients. There will be a daily allocation sheet of where you are supposed to work as a junior doctor. You will also be allocated a middle grade or consultant member of staff to work with you. In the past junior staff medical staff asked for help whenever they felt they needed it. Senior input was often sought at the end of a patient journey. In this department we want to have input at the start of a patient's journey. This most commonly means after history and examination you explain your plan to your "buddy" for the day. There will always be a named consultant for an area. If you have any concerns it is your duty to report to this consultant.

Consultants will conduct ward rounds at 8am afternoon and 10pm. The consultant and senior nurse will review all the patients in the department. This is to aid in decision making and it is recognised as good practice by our College. Decisions should not be left to this stage. It is merely a process to make sure the correct decisions have already been made.

The ED is an excellent training area for junior doctors. Our working pattern is not supposed to stop you from thinking or working. This is an aid so you can see as many patients as possible and to teach you how to make the right decisions. We want you to use the right tests for the right patients. There will be a senior doctor working beside you 24/7. We expect everyone to work together in this team-working model.

"THE FOUR-HOUR TARGET"

- ***Patients should have their DADT screen completed within*** **3 h 00 m** ***of registration***
- ***Patients in Majors or Minors must be seen in order of 'Time in department'***

Each doctor and ENP's individual performance will be audited continuously via the Symphony computer system (patients seen per hour and 3hr 00min DADT breaches). Doctors who cannot learn to treat patients SAFELY, EFFECTIVELY and PROMPTLY will not be able to progress in the specialty of Emergency Medicine and may be given restricted clinical allocations

Delays in the Emergency Department are usually related to inefficient use of resources- especially the doctor's time and the treatment cubicles- rather than being simply due to the number of patients attending. Inexperienced doctors must study the clinical section of this book to gain the knowledge required to assess patients promptly.

Do's and Don'ts that prevent long waiting times

- **DON'T get too engrossed with one patient - make rapid decisions or if you don't know what to do ask for help. You don't have to make a complete diagnosis to plan an Emergency Department patient's management – learn to make the relevant decision as quickly as possible and treat/refer accordingly.**
- **DO ensure that patients waiting for admission, x-rays etc. are moved out of assessment / treatment cubicles to allow new patients to be brought in - keep things moving! If there is a major problem with space, the nurse-in-charge can implement our escalation plan.**
- **DO stay with the patient stream that you have been given on the daily allocation sheet**
- **DON'T spend ages on the phone trying to contact other doctors/ arrange transfers. Ask the patient tracker or ward clerk to continue to try to contact the person you are looking for. At times there will be one of the reception staff manning the phones.**
- **DON'T request unnecessary x-rays, blood tests etc.; they cause long delays. (See Defensive Medicine)**
- **DON'T hang around in *Resuscitation Area when you are no longer actively involved in treatment* there (this is a common cause of extra-long waiting times).**
- **DO be NICE!! People who have been waiting for longer than 90minutes can't help getting frustrated and irritable. They appreciate an apology or at least some empathy. They may be anxious, in pain or have young families to contend with. Some acknowledgement of this makes it much easier for you to deal with them - disgruntled patients become a nuisance to everyone and its amazing how easy it can be to pacify them.**
- **DON'T go off duty if there are a large number of patients waiting to be seen or if the waiting time is long (this is a professional obligation for all doctors and junior doctors' pay-banding calculation allows for this).**
- ***DON'T forget that staff are important too. Make sure you take a break now and again no matter how busy you are!" Breaks are rostered into your shift; ensure that you take them in full and on time.***

The Emergency Department Consultation – 'what is the problem and what should be done now?'

"There is more to treating the patient than treating his disease"

Sir William Osler
The famous Canadian physician

This is certainly true in Emergency Department! In most cases, an accurate and *full* history is the key to diagnosis and management of Emergency Department patients. A "directed physical examination" and the minimum of investigations follow. The clinical section will help you to devise effective assessment routines for common problems. This section gives guidance about how to carry out a time-efficient consultation.

The Emergency Department Consultation

- **Why was this patient referred?**
- **Risk Factors- 'WEAD+'**
- **What is the history?**
- **Directed Physical Examination**
- **Directed Investigations**
- **Final placement**

Why was this patient referred?

1. **Information from the "Source of referral"**
2. **Information from Next of Kin**
3. **Information from Previous Attendances and Admissions**

1. Information from the "Source of referral"

Always start by working out the main purpose for the patient's attendance. If you can do this (not always as easy as it sounds), you will find it much easier to make decisions about management.

The Source of Referral prints out on the top right hand corner of the flimsy

- **GP or GL – GP referral**
- **EM – 999 or Doctor's Urgent Ambulance Call**
- **SR or PG – self or parent referred**

Having established the source of referral you can use this information to find out more:

- ***GP or GL :*** **Scrutinise the GP referral letter. If the patient's GP sent him what did he/she want us to do? Was the letter definitely addressed to Emergency Department (written alongside "Department" on the referral sheet) or has the GP asked for direct access to physiotherapy, x-ray or outpatients? Is the patient suitable for DAU?**
- **Was the letter written today? Is admission requested or does the GP simply want an ECG or an x-ray.** ***In general we do whatever the GP requests - they know their patients better than we do.***

- ***EM:*** **Find out who sent for the ambulance and why. There are two types of ambulance call –'999' or 'Doctor's Urgent' (the latter follows a GP call to the Emergency Admissions Co-ordination Centre). Try to speak to the ambulance crew, they know lots of information about the patient's home, who was there etc. If the crew have left, ask the nurse who accepted the patient from them*. *People usually dial 999 in some sort of crisis, but it isn't always a medical crisis.***

- ***SR:*** **You need to find out (tactfully!) why the patient has decided to come to Emergency Department at this moment. Have they been to their GP? If it is a chronic problem, what has changed to persuade them that they should get help now? If they are reattending Emergency Department, are they not happy with treatment received earlier? If the complaint seems trivial, what are they worried about? What is the situation they can't cope with? These are questions that cannot be approached bluntly. Contrary to popular belief *very few people come to Emergency Department for nothing*, so never dismiss seemingly trivial complaints and never make them regret coming to our department.**

2. <u>Information from Next of Kin</u>

- ***"Don't forget relatives!* "**

Remember that relatives may have had an important role in initiating the attendance- for example, have the relatives concerns which the patient hasn't passed on to you? Try to involve them as much as possible in a patient's management and take their advice. It is essential to start your history with the relative or other carer if a patient is elderly and/or confused. If the patient comes from a private nursing home you can phone them and speak to the nurse in charge. *When relatives, especially parents of young children, are very concerned or believe that you are making a mistake they often become aggressive - don't let this influence your judgement, they may be right!* It is important you listen to parents in particular if the child is very young, disabled or has learning difficulties. Be willing to change your mind or offer them a second opinion (there is more about this later in the section).

3. **<u>Information from Previous Attendances or Admissions</u>**

The Emergency Department system will print out the words *"*Prev. episodes*: …"* at the right hand side of the flimsy's triage section if the patient has ever been to Emergency Department before. *Make sure you are checking all old records for children under 16/vulnerable adults and two years' records for adults* (this is the Emergency Department receptionists' responsibility). Information about previous episodes is essential -it might alert you to an otherwise unsuspected problem e.g. non-accidental injury, domestic violence, addiction, Munchausen's syndrome etc. Ask the patient if they have ever attended any other department in the hospital before then ask the receptionists to get their old hospital notes if this is relevant. It is also possible through the labs system and radiology systems to obtain previous reports that can sometimes help.

Record Risk Factors – 'WEAD+'

.."it takes sixty seconds!.."

WEAD+ stands for <u>W</u>arfarin/NOACs / <u>E</u>pilepsy / <u>A</u>sthma / <u>D</u>iabetes <u>plus</u> Pregnancy and Peptic ulcer disease. You rarely have time to take a lengthy previous medical history but you must record the 'WEAD' history on every patient, especially in minors, because these are high risk factors in practice

especially when prescribing. E.g. warfarin is a risk factor for bleeding after head injury; diabetes: soft tissue infection, silent infarct; epilepsy: drug interactions; asthma: NSAIDs. This will have been filled out on the front of the ED Notes.

History

"I told the doctor in Casualty what was wrong several times but he just ignored me…"

Your time is short. You are highly dependent on an accurate history if you are to make the correct diagnosis. Don't forget to listen to what your patient is saying – failing to do so is a very common source of error and complaints in the Emergency Department. When dealing with trauma, the mechanism of injury is crucial. Don't jump to conclusions – if you miss something important in the history, you will fail to carry out the correct examination and. Take careful note of the vital signs and any other comments recorded by nursing staff in their Triage note – a discrepancy between your opinion and the nurse's opinion should ring alarm bells.

The CLINICAL section gives guidance for history-taking in specific conditions, but don't forget what Dr Richard Asher, the prominent English Physician once said,

"*Listen to your patient, she is telling you what is wrong with her..*"

Directed Physical Examination

- ***"if you haven't carried out and documented the necessary examination you will have no defence against medical negligence claims*"**

A concise and accurate directed physical examination separates the experienced from the inexperienced ED Doctor. When your history is complete you must carry out a careful but directed physical examination, concentrating on the *relevant* physical signs. You must ensure that your patient is adequately undressed for this examination – patients write official complaints if a doctor examines them through their clothes (yes…some doctors are tempted to do this. You will see why when you start working in Minors!). You must document your examination findings carefully.

The CLINICAL section will provide you with important information about directed examination. It will help you to become a more effective and efficient ED doctor.

Directed Investigations (see defensive medicine)

- ***"Over-investigating patients is the largest waste of time and resources in the Emergency Department"***
- ***Concentrate on your clinical skills of history-taking, examination.***

Good ED doctors keep investigations to a minimum - this is a difficult transition for doctors who are used to working in specialities like general medicine where good doctors often seem to order every test imaginable. You must weigh the benefits of ordering an investigation against its cost and the

time it takes. Concentrate on your clinical skills of history-taking, examination and examination. Learn the role of investigations in common emergency conditions – more about this in the CLINICAL Section. Doing a battery of investigations if
you don't know why will create a nightmare later when you have to interpret them – all results, normal or abnormal must be interpreted in a clinical context.

Blood tests

The department has two point-of-care testing (POC) machines: a biochemistry analyser that can be used to measure Hb, U&E and pH, PO_2, PCO_2 etc, an FBP machine. These are precious pieces of equipment – please leave them the way you found them. It is your responsibility to give the necessary details and sign for the blood tests you have performed.

You will be instructed in the use of the POC machines and given bar code access when you start to work in EMERGENCY DEPARTMENT but here are the five golden rules (currently under continuous audit!):

1. **Record full Patient ID (name, DOB, EMERGENCY DEPARTMENT or unit number) on machine log sheet**
2. **Record User (your) ID or use your barcode to access the test**
3. **Write "POC" and any clinically important results on the patient's flimsey (eg K+, glucose)**
4. **Any tests whose results exceed credibility range immediately MUST BE REPEATED (see guidelines on each machine). THIS IS VERY IMPORTANT!**
5. **DO NOT leave results lying around.**

Failure to do this will result in disciplinary action. *You are responsible for looking at the blood results YOU have requested.*

Never do routine admission bloods, they are the F1s responsibility. The printed results will come to Emergency Department instead of the wards irrespective of what you write on the request form.
If you request bloods it is your responsibility to ensure that you have checked the results and acted upon the result. This is known in law as the "Duty of Diligence".

NO ONE BUT YOU CHECKS THE RESULTS OF DISCHARGED PATIENTS – THINK BEFORE YOU REQUEST A TEST THAT TAKES DAYS TO RETURN –

- **"HOW WILL I FOLLOW UP THE RESULT??"**

NON-SPECIFIC "TOXICOLOGY SCREENS "must not be requested. Request specific toxicology tests only – research has established that alert patients almost never lie about what they have taken. Serum Paracetamol and aspirin should be tested in patients with unexplained coma.

The following condition specific tests should have these tests done.

ABDOMINAL PAIN FBP U&E LFT Amylase CRP Urinalysis HCG Erect CXR AXR	**CHEST PAIN** Cardiac sounding U&E Chest x-ray FBP Troponin ECG 1 ECG 2
COLLAPSE ?SEIZURE U&E Glucose LFTs Mg Ca FBP Drug levels of antiepileptics ECG Urine & HCG Chest x-ray	**GI BLEED** FBP U&E Coag LFT INR G&H BM ECG Chest x-ray
HEADACHE a. Thunder Clap headache New abnormal findings or new } CT b.With none of the above >55 years of age - ESR Obs FAST Warfarin	**NON-SPECIFIC CHEST PAIN** ECG Chest x-ray
PALPITATIONS ECG	**PV BLEEDING** Urine HCG (12-55) Obs
RULE OUT PE FBP U&E CRP D-dimer PERC score Wells score ECG CXR	**SOB** FBP U&E CRP Sats ABG if sats <92 ECG Peak Flow CXR
STROKE/TIA FBP U&E BM ECG INR (Cholesterol – supplemental test)	**SYNCOPE** U&E/Glucose FBP/CRP Elderly – Troponin ECG CXR Urine Lying/Standing BP
UNWELL ELDERLY FBP U&E Troponin CRP LFT ECG CXR Urine	

X-rays

Studies of different departments have shown a variation in x-ray rate from 26-80%. Our target is 45% -i.e. just under half of your patients. You should be able to access the RCR guidelines "Making the best use of an Imaging Department" on line or you can ask the radiology department for a booklet. (Try http://www.rcr.ac.uk/index.asp?PageID=957) Read the sections on Trauma and on Children's x-rays until you are familiar with them – they are really helpful!
You will be given access to the x-ray department's PACs system so that you can view the images you requested on screen – and also the previous ten days x-rays.

The use of portable x-rays should be restricted to the critically ill only – they are less diagnostic than films taken in the x-ray department and this may result in delayed or missed diagnoses.

These are the 6 commonest types of *unnecessary* x-ray in this department:

1. ***Chest*: patients with COPD, asthma etc. don't need an x-ray every time. Use your clinical judgement about this. Patients with suspected rib fracture due to low impact trauma who have equal air entry do not require an x-ray. Children with known asthma do not require an x-ray**
2. ***Abdomen:* abdominal x-rays are required if there are clinical grounds to suspect intestinal obstruction/ intussusception (supine film only), perforation (erect chest x-ray) or renal stones('KUB'), although all adults who require surgical admission for abdominal pain should have a straight x-ray abdomen with erect chest.**
3. ***Skull* : Indicated only for detection of FB in wounds or suspected NAI in children**
4. ***Spine (cervical or lumbar):* See CLINICAL Section for a back pain management algorithm. Don't x-ray for non-traumatic neck or back pain present for less than *six weeks* unless you suspect vertebral collapse. Patients under fifty years old rarely need x-ray lumbar spine for back pain. In over fifties check ESR and perform general examination as well.**
5. ***Ankle* & *Knee:* We use the Ottawa Ankle and Knee rules. See CLINICAL SECTION**

General Guidance on X-rays and the Emergency Department

- **Women aged 15-50 should not have x-ray of the abdomen, pelvis or lumbar spine except within ten days of their last period unless they provide written confirmation to the radiographer that there is *no possibility* of pregnancy (i.e. not sexually active, sterilisation etc). *Negative urine or serum HCG tests do not exclude early pregnancy.* If you consider x-ray absolutely essential, (i.e. trauma) explain this to the patient & obtain her consent. You can then tell the radiographer that you are overriding the 10-day rule on clinical grounds.**

- **Doctors are often sued for failing to x-ray patients who subsequently turn out to have a fracture - *if a patient has been recently injured, any tender bones must be x-rayed. This is particularly important if the patient has a history of osteoporosis.***

- **The radiographers are generally very experienced and they can often advise you about which views to request etc.**

- **The final responsibility for irradiating the patient rests with the Radiographer. If a radiographer refuses to do an x-ray that you have requested, you must explain the indications for the x-ray to them in person. If this does not resolve the situation, speak to a radiologist (make written of record conversation) or notify the Emergency Department consultant or ST4+ on duty immediately.**

- **You will have access to all the Radiologists' old reports on the Emergency Department PACS system or radiographers' computer - this is invaluable. Don't hesitate to look at or ask for old films as well – a lot of abnormalities, especially on chest x-rays, are long-standing.**

Final Placement (Part 1): Discharging and arranging follow-up

- ***"your management plan is at least as important as your history and examination – equal care should be taken with devising and recording it"***

'Final Placement' or 'disposal' are the rather unfortunate terms used by Emergency Departments for what you decide to do with your patient after you have completed their management. Your decision *must* be recorded in writing and by 'x'-ing the final placement column at the bottom of the flimsy AND on SYMPHONY.

This section covers:
Discharge Planning
Reviewing Patients at the Emergency Department
Direct Access to outpatients
Handing Back to GPs
Prescribing in the Emergency Department

Discharge / referral Plan
This is at least as important as your history and examination – equal care should be taken with devising and recording it**.**

When you are discharging a patient your written management plan should include:
- **clinical management**
- **verbal +/- written advice (and who receives it)**
- **follow-up arrangements**
- **Suggestions for action by GP* (Please consider…)**
- **drugs (generic) dispensed or prescribed ***
- **who is to care for the patient outside hospital***

*** where appropriate.**

Specific advice about the follow-up arrangements & advice necessary for patients with common conditions can be found in the CLINICAL section.

When you have made an initial diagnosis and management plan it is essential to explain the diagnosis and prognosis to the patient. For many of the common conditions we have a written advice sheet and the patient should receive one of these as well as a verbal explanation. You must learn the prognosis for common Emergency Department conditions especially soft tissue disorders so that you can advise patients correctly. We have tried to include all the relevant information in the CLINICAL SECTION.

Patients/carers should be advised to return to the department if there is any unexpected deterioration or if things do not improve as quickly as they should- but not for a "Check Up" irrespective of how they are. This advice is usually recorded by clicking the 'return promptly…." Option on the Symphony discharge menu. Specific advice given should be recorded. This system prevents large numbers of unneeded clinical reviews and it works extremely well. Tell patients that

they can re-attend or phone between 9 am-12 mid-day, Monday-Friday unless they have to come back urgently. Explain that a consultant or another senior colleague should be available to see them at that time.

Discharging Safely

Don't forget to check that your patient will receive adequate help after discharge. Patients (excluding those with minor complaints) who are to be discharged from the Emergency Department should not be allowed to go home unless a responsible adult is available to care for them there. Try to mobilise support from the family or friends for the person living alone. If the patient insists on going home alone they should be given our telephone number and follow hospital procedure for "contrary to advice" discharges. For the elderly or those with limb problems the gait assessment should be recorded on the flimsy.

Reviewing Patients at the Emergency Department

"The vast majority of patients can be trusted to know when they need to re-attend Emergency Department – you do not need to review patients routinely"

DO NOT, REPEAT DO NOT bring patients back for review at the Emergency Department except in the circumstances described below. If you aren't sure about a patient's diagnosis or management discuss with the senior doctor on the shop floor if the management is still not clear leave the unfinished flimsy on the consultants' desk in the computer room with an explanatory note - a decision will be made regarding follow up on the next "working" morning. Ensure that YOU have recorded the patient's current (preferably mobile) telephone number and tell them that you are going to ask for a consultant's opinion on their condition, x-ray etc. The Consultant or their secretary will then contact the patient the next working day.

The Emergency Department clinic arrangements are complicated and reception staff are not telepathic- use the information below to ensure that you have specified the correct review clinic properly. You must write ED Review Clinic (RC), DVT clinic, Injury review clinic or Fracture Clinic on the notes and on the appointment card that you give to the patient and send the patient to the Reception desk to make this appointment.

You can refer patients directly to the following clinics based in the Emergency Department:

Emergency Department Review Clinic
All significant finger tip injuries
All significant hand ligament or tendon injuries not requiring urgent orthopaedic or plastics input
Traumatic joint effusions WITHOUT ANY FRACTURE, significant ligament tears
Limping Children
? Toddler's fractures and other query # in children (negative x-rays)
***Complicated* wounds, burns etc (exclude treatment room cases)**
Compound fractures & other cases require immediate referral to RVH FC

Direct Access to Outpatients

- **Early Pregnancy Assessment Clinic - speak to Midwives (EXT 4135) or Gynae SHO**
- **ENT FOR NASAL FRACTURES ONLY - write "#NB review 5-7 days" clearly at the bottom of the flimsy. Fill out an appointment card and send the patient to reception.**
- **Fracture Clinics refer all definite fractures for fracture clinic f/u (held in Whiteabbey Hospital)**

Handing back to GPs

" please consider.."

When a patient is discharged from the Emergency Department/hospital, their GP is once again legally responsible for their care –they have been handed over. For this reason, Emergency Department doctors rarely refer patients directly to another consultant or clinic - their GP's will want to decide about this. You can make a recommendation selecting the range of "GP asked to consider" options on the drop-down menu . Advise patients that their GP will refer only if they think it is appropriate and that they should contact their surgery and arrange an appointment with him/her.

You should also ask patients to return to their GP for repeat BP checks, for review of soft tissue infections after you have prescribed antibiotics, and for reassessment of rashes, sore ears, paediatric or medical conditions etc. In general, patients who require dressings or removal of sutures should be referred to their Treatment Room.

Prescribing in the Emergency Department

- **"*Generic prescribing please!"***

1. You can *dispense* an ANTIBIOTIC or PAIN relief pack or make up seven days supply of other drugs (advice about the antibiotic and pain packs is included in the CLINICAL section). Dispensing should only be used out-of-hours or if the patient is unable to get to their pharmacist. Drugs such as diazepam should not be dispensed unless in exceptional circumstances.

2. You can *write a hospital prescription* for the drug. Computerised prescribing via Symphony is possible, so that the GP is aware which drugs have been given or recommended. In the letter to the GP. Recommend the name, dose and frequency of administration of the drug as well as the duration of the course of treatment. This information will appear on the discharge letter sent to the GP. Commonly used analgesics are paracetamol, ibuprofen and diclofenac. *Addictive drugs such as "Tylex","Kapake"and the benzodiazepines should be prescribed with care and for short duration with advice for early GP review with a view to decrease dosage*.

Children's doses are always different - they must be checked in the BNF every time
DO NOT OVERDOSE PATIENTS (esp ELDERLY) ON STRONG ANALGESICS –CONSULT BNF

Final Placement (Part 2 Assessing and treating patients who may require admission

This section covers:
Pre-Admission Assessment
The Modified Appropriateness Evaluation Protocol (Modified AEP)
Emergency Care in the Community
Emergency (Non-Nursing) Care in the Community
Home IV therapy
MHLS
Running out of beds
Patients who require admission to the wards
Transferring to other hospitals
Call and Send

a) Pre-admission assessment (NB The Modified AEP below)

Patients who have attended for pre-admission assessment generally fall into one of three categories:

- ***They require investigation by Emergency Department to rule out serious pathology***
  (Examples include ?DVT, headache, abdominal pain, chest pain).
- ***They require emergency inpatient care***
- ***They require improved social support, home therapy or nursing home care urgently***
  (Examples include the elderly patient with a fracture, poor home circumstances, poor mobility).

The number of acute hospital beds has decreased dramatically over the years because of government policy. The result of this is massive pressure on bed availability both for emergencies and for elective surgery. Pre-admission assessment can assist by diverting patients who do not require an emergency acute bed and it is one of the main roles of this department. The purpose of this system is to ensure that patients are not admitted unless this is clinically indicated, that they are referred to the correct specialty and that immediate resuscitation is carried out if necessary.

In general, you are expected to decide whether or not a patient requires admission to the wards without consulting the inpatient medical staff – the decision to admit or discharge from Emergency Department is our responsibility, often in accordance with protocols given in the CLINICAL section. This decision is not always as easy as it sounds – some patients and their GPs have unrealistic expectations and you can be put under a great deal of pressure. You must make a very careful assessment of the situation, taking both patient's and GP's wishes into account. If you are inexperienced you must remember your limitations. When in doubt you should go through the case with a more senior Emergency Department doctor.If a GP phones to request admission, discuss the case with a consultant, or advise them to contact the AMAA if the problem is medical. Discharging the patient is your responsibility. You cannot avoid the issue by referring the patient to the in-patient team to let them decide for you- bad advice is bad advice regardless of who gives it.

More and more frequently patients in the pre-admission category are referred for "RULE OUT" investigations that can be only accessed urgently by Emergency Department staff rather than for

admission. The CLINICAL section contains information about our structured approach to this for many common presentations –you need to know this information, referring to the Handbook regularly.

If you decide that your patient requires admission, ask yourself 'why?' – Is this definitely the most appropriate option for them? Please discuss all admissions with a senior doctor in your first few months.

b) <u>The Modified Appropriateness Evaluation Protocol</u>

c)

The thought process described above is now to be formalised and each doctor's performance will audited continuously using the Modified AEP- a utilization management tool that is to be embedded in the Symphony admissions process. *Doctors who cannot learn to admit appropriately will loose the right to admit and may have restricted clinical allocations*. There are occasions when a patient should be admitted despite a lack of indications on AEP – this is a Consultant case (No 14 in box below)

At least ONE of the following

1. **Unstable angina OR ECG or cardiac marker evidence of acute ischaemia[1]**
2. **Will require monitoring of cardiac rhythm, blood pressure, pulse, temperature *or* respiration either continuously *or* two-hourly for more than 4 hours**
3. **Will require intravenous fluid or intravenous medication that cannot be administered in the community[2]**
4. **Will require any form of new artificial ventilation or supplemental oxygen[3]**
5. **Severe electrolyte/acid base abnormality[4]**
6. **Likely to require a procedure in theatre within 18 hours[5]**
7. **Acute loss of ability to move a limb or other body part within 48 hours of admission**
8. **Acute impairment or reduction of sight or hearing within 48 hours prior to admission**
9. **Recent acute internal bleeding(except haematuria unless requiring catheterisation)**
10. **Pulse rate <50 or > 140 per minute**
11. **Systolic BP <90 or>200, diastolic <60 or > 120 mmHg**
12. **Acute confusional state/ coma/ unresponsiveness[6]**
13. **Acute rupture of recent surgical wound**
14. **Consultant Protocol-override authorised by Dr_____**

Note

1. Unstable Angina is defined as either crescendo angina, new onset angina within 5 days *or* angina at rest within 5 days where "angina" is taken to mean *typical* cardiac pain)
2. Contraindication to community iv therapy may be medical or due to unavailability of community services
3. Unless patient already on supplemental oxygen and no adjustment of dose needed
4. Check with experienced A&E doctor if unsure
5. This includes interventions such a fracture reduction in A&E procedure room, urgent endoscopies etc
6. This excludes simple inebriation unless CNS obs or monitoring required(see criterion two above)

Admission arrangements for psychiatric patients, ENT patients and those requiring intensive care are different. You need to ask the relevant doctors to assess the patient for you, you cannot admit directly yourself.

d) Emergency Care in the Community

THERE ARE SOME EXCELLENT SERVICES IN THE COMMUNITY–PLEASE USE THEM AS MUCH AS POSSIBLE.
A team of community nurses, physiotherapists and occupational therapists are attached to our Emergency Department. Their job is to help co-ordinate discharge and follow-up for our Emergency Department patients within the community, avoiding hospital admission for those who require nursing / physio / OT rather than hospital-based care. They are able to care for patients in specially funded short term nursing home beds, carry out home visits including iv therapy (see below) or follow up on the telephone. They work closely with the social services team (see below). A nursing member of 'ACAHT' is available 9am-11pm seven days per week with full bank holiday cover *(mobile 07979693195).* Outside these hours fax a referral form to Dalriada Urgent Care (*fax to 08705329024*). A member of the Rapid Response Team (social services) providing short term non-nursing assistance to patients in their homes can be contacted daily between 9am and 9pm (*mobile 07960531626*). To date the physio/OT teams work during office hours only. An emergency social worker can be contacted out-of-hours via *94468833*. The local out-of-hours GP service is Dalriada Urgent Care on *08705329024*.

In addition there are a variety of Specialist Nurses who look after patients with long-term illness and help them avoid unnecessary hospital admission eg Diabetic Specialist Nurses, Respiratory Nurse specialists, Cardiac Function Nurses, Dementia Nurses etc. Your patient or their carer will often be able to give you the name and number of their Nurse Specialist – try to involve them as early as possible as their help is invaluable.

e) Emergency (Non-Nursing) Care in the Community (Social Worker: Extension 4642)

An emergency CARE PACKAGE may be required because of intercurrent illness or injury or a change in social circumstances - anything which removes an elderly or dependant person's ability to care for him/herself. The package may include home helps, meals, emergency hostel accommodation or residential care. Contact our social worker or, after hours contact the social worker on 94468833. There are two important considerations - Firstly, make sure that there is nothing "medically" wrong eg. x-ray hips and pelvis, check ECG, check u&e / WCC. Request an ACAHT assessment of mobility and nursing needs before making the referral or carry out one yourself if this is not available (see CLINICAL SECTION on Falls). Secondly, remember that the patient may be means-tested and may have to pay for part of their care (the Social Worker will explain this to the patient but you should be aware of it).

f) Home IV Therapy – Hospital Diversion

ACAHT can be asked to give IV antibiotics at home for selected patients requiring IV therapy who are not ill enough to require hospitalisation. The ACAHT nurse should be contacted by phone before

the patient leaves Emergency Department so that a firm arrangement can be made in advance of their discharge. The patient needs a drug kardex properly filled out, prescription written with drug and diluent (i.e. water or saline), ACAHT referral form (on symphony) and a copy of the patient's notes – the ACAHT nurse will explain this to you if you are unsure. These patients remain under the care of Emergency Department and in practice almost all are on antibiotics for severe or non-responding cellulitis. A time should be arranged for re-assessment at the Emergency Department if you have particular concerns but often you can give the patient a supply of oral antibiotics to use after their iv's are completed (usually on Day Four) and ask the ACAHT nurse to monitor progress.

g) Mental Health Liaison Service

Strictly speaking, these services should not be included in this section as they provide emergency assessment and care for mental health problems rather than for conditions requiring admission to a general hospital. In practice however, Emergency Department patients with mental health problems have often been stranded in Antrim hospital because of delays in accessing psychiatry services and ED doctors have acted incorrectly in the past by admitting patients who are medically fit for discharge on the advice of mental health team personnel. There is more information about this in the CLINICAL SECTION.

h) "Running out of beds"

- ***"this Emergency Department does not close* !"**

At times hospitals temporarily run out of beds but the Emergency Department can never close! The ambulance service will be asked not to bring patients requiring admission to us but this is only a request, ambulances are still entitled to come if necessary –never argue with ambulance personnel. Never discharge a patient needing admission because of bed shortages and never transfer patients who are unfit. The Emergency Department consultants can help you in the event of difficulties.

i) Patients who require admission to the wards

Complete the Final Placement column on the flimsy and the Symphony Screen, advise patients *and their relatives* of your decision to admit and brief the admitting relevant doctor about the patient's diagnosis and condition. Take special care to ensure that diabetic patients receive meals or sliding scale insulin/glucose infusion as appropriate and that regular medication is not "accidentally" omitted.

The following general guidelines apply for care pending admission.

- **Cardiac patients: bed rest, continuous ECG, SaO2 monitoring, controlled O2 therapy (default =100% NRRM), iv cannula, minimum two-hourly obs, relevant blood tests, CXR and regular medication (see clinical section)**
- **Surgical Patients: bed rest, fasting, iv fluids, daily fluid chart, parenteral analgesia as required, relevant x-rays and blood tests, minimum two-hourly obs, medical reassessment every six hours**
- **Medical patients: controlled O2 therapy (default = 28%), iv cannula, SaO2 monitoring, relevant blood tests, x-rays, regular medication, daily fluid chart, minimum two-hourly obs, supervision for patients at risk of self harm**
- **Patients awaiting any inpatient care who also have diabetes (ie non-coma).: U&E, FBP, ECG, Minimum 2-hourly BM, IF fasting, sliding scale insulin and glucose infusion.**

j) Transferring to another hospital

Some patients require transfer to other hospitals because they need specialist care not available on this site (e.g. head trauma, fractures). Rarely, patients will require transfer to another hospital because of lack of beds here.

k) Call and Send

Trauma patients – Clinical information section

Never transfer ill patients, for example those with unresolved chest pain, severe asthma or impaired consciousness unless a properly trained and equipped doctor accompanies them. If there is no one available to transfer such patients - speak to one of the Emergency Department consultants or StR. You cannot leave the Emergency Department. An anaesthetist should transfer patients who may require airway management or ventilator support. Ill children should be generally be transferred by paediatricians or paediatric anaesthetists. NICATS (the RVH ICU-based anaesthetic transfer service usually collects stabilised patients *from ICU* who are going to RICU and is rarely appropriate for ED transfers). *ALL PAEDIATRIC TRANSFERS MUST BE EXAMINED BY / DISCUSSED WITH THE ED CONSULTANT/ SpR and PAEDIATRIC REGISTRAR. The bed to be arranged by the PAEDIATRIC REGISTRAR.*