Emergency Admissions:
A journey in the right direction?

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Emergency Admissions: A journey in the right direction?

- The trainees perspective
  - Emergency Medicine and Critical Care accredited doctor.
  - Limited knowledge relating to Emergency Assessment Units
- Asked myself 2 questions
  - What was my training like?
  - Is training resulting in poor outcomes?

What was my training like?

- Forward:
- “…when the hospitals were staffed by highly competent senior registrars. We took care of patients in the casualty department and we took care of them whether in the intensive care unit or operating theatre, day or night. And there was built into it an inevitable continuity of care, for the same doctors had done the clinics, ward rounds and operating yesterday and would do them again tomorrow. Well reminisce if you like….”
  - Professor T Treasure.
    - chairman

What was my training like?

- PRHO
  - 1 in 4 with no prospective cover
  - Weekends
    - 8am Saturday morning till 5pm Monday evening
    - No weekend phlabotomist / ECG / 1st dose antibiotics
    - Support of senior registrar
- SHO
  - August 1997 – August 2002
  - PRHO “protected time”
  - ADH changed to Banding
  - Support of senior staff but autonomy on decision making

What was my training like?

- SpR
  - Emergency Medicine and Critical Care Training
    - Registrar cover 24 hours/day
    - European Working time directive
      - Increasing shift pattern of work
- Consultant
  - UNKNOWN!!

What about this report?

- Overview of finds
  - “Patients admitted as an emergency are among the sickest that are cared for in the hospital. This aspect highlights the need for early decision making by doctors with the most appropriate skills and knowledge based on the clinical needs of the patients”

- Overview of finds
  - “Patients admitted as an emergency are among the sickest that are cared for in the hospital. This aspect highlights the need for early decision making by doctors with the most appropriate skills and knowledge based on the clinical needs of the patients”
  - Why do trainees delay decision making
    - Need to obtain results / imaging / notes
    - Unsure of the diagnosis
      - Infection/failure = “frusocillin”
    - Do they feel they need a senior to make the decision
      - What if they get it wrong?

Methodology

- Aims
  - Identify remediable factors in the organisation of care of adult patients who were admitted as emergencies.

Methodology

- Sample selection
  - Dies on or before midnight on day 7 (following admission)
  - Were transferred to adult critical care on or before midnight on day 7
  - Were discharged on or before midnight on day 7 and subsequently died in the community with 7 days of discharge.
- We see a lot more patients than this and get it right in them!

Methodology

- Questionnaires and casenotes
  - Admission questionnaires
    - sent to the admitting consultant.
      What about the emergency consultant?
  - Ongoing care questionnaire
    - The consultant under whose care the patient was on day 7 at midnight for all those who went to critical care?
    - Is that the speciality consultant or the critical care consultant?

Overview of data collected

- Age Range
  - Median age 77years
  - Modal age range 80-90 years
- 895/1469 death was the expected outcome.
- Do Not Attempt Resuscitation order is NOT the same as Do not treat.
- How aggressive should treatment be?
  - Dignity vs treatment
  - Competency based training/ previous experience

Results

- 3.1 Initial Assessment
  - “When a patient with an acute healthcare problem arrives in hospital he/she requires prompt clinical assessment, appropriate investigations and institution of a clear management plan.”
- Can we give prompt clinical assessment
  - Reliant on nursing triage
  - Work load of patients being admitted can exceed the level of work that the emergency department can offer.
  - Backlog of patients within the department causes a backlog of patients to be off-loaded from ambulance trolleys.
  - 4 Hour target – breached before they are seen

3.1 Initial Assessment

- Quality of the initial assessment
  - “The royal college of physicians recommends that a doctor with the appropriate skills in acute medicine should be present at all times in all units receiving acute medical emergencies. This would be an SpR or equivalent in medicine or in a speciality who should have the MRCP(UK) Diploma or equivalent AND two years recent experience in managing patients presenting as acute medical emergencies.”
- No Emergency consultant on-call over night = No SpR on nights.
- Staff grades/ trust grade doctors with less than the above recommendation

3.1 Initial Assessment

- Case Study 1
- “A very elderly patients was admitted in the early hours with of the morning with a fractured neck of femur following a fall at home. The patient had a past medical history of ischemic heart disease and chronic obstructive pulmonary disease and was taking anti-failure medication. An orthopaedic SHO performed an initial assessment of the patient; with a cardiovascular and respiratory assessment being described as normal……”

- Where is the Emergency department clerking?
- What does that clerking say?
- What is the recommended length of time a fractured neck of femur should be in an emergency department?
  - 1 hour / 2 hours / 4 hours
- Can you fully assess and investigate an elderly patient with a fall in an emergency department within 4 hours?

3.2 First Consultant Review

- Case 3 – peritonitis and septic shock
- Case 4 – Pnuemonia and sepsis
- Case 5 – Ischiorectal abscess and sepsis

- Recommendation
  - “Trainees need to have adequate training and experience to recognise critically ill patients and make decisions. This is not only about education but also a balance between a training and service role;”

- Training and Service role.
  - Are senior doctors used more for service provision at the expense of patient care?
  - Senior trainees used to “see and treat”
    - Quicker than juniors
    - Minors - 60-70% of Emergency department attendance
    - Keeping minors waiting time to a minimum aids 4 hour targets.
  - Junior medical staff with major patients and less senior support

3.3 Consultant commitments while on-take

- Emergency Medicine & Critical care
  - Privileged training very little experience of consultants having other commitments
- Are the consultants on the shop-floor?
  - Office but usually available
  - Consultant advice to the question
    - “what should I do with this patient”
    - “Refer it on..”

3.5 Availability of investigations and notes

- Case 7
- “An elderly patient with known chronic obstructive pulmonary disease was admitted with an acute exacerbation secondary to a possible infective cause. The patient was considered to be ‘coping’ by the pre-registration HO at the initial assessment. A chest x-ray was requested and oral antibiotics were commenced. Three hours after admission an arterial blood gas measurement revealed a pH 7.38, PaCO2 8.5kPa and PAO2 10KPa on 28% oxygen….. By this time [24 hours] the patients condition had deteriorated further and a review was conducted by an ICU outreach team which commenced non-invasive ventilation on the ward. Twelve hours later the patient was transferred to the ICU for close observation and still required non invasive ventilation on day 7 following admission.

- *The advisors considered the delay in obtaining and reporting on the chest x-ray was unacceptable. This delayed the decision to start intravenous antibiotics.*

- The delay in reporting is unacceptable BUT
- Is this a problem with not obtaining the x-ray?
- Problem lies with reviews and observations of the patient

- Why did it take 12 hours to transport the patient to the ICU?
- Who was managing the patient on the ward?

3.5 Availability of investigations and notes

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  - Recommendation
    - “Hospitals which admit patients as an emergency must have access to both conventional radiology and CT scanning 24 hours a day with immediate reporting”

3.5 Availability of investigations and notes

- Personal experience
  - 5th Year SpR Emergency Medicine
    - Out of hours patient
      - Headache, agitation
  - Immediate Management
    - Intubated, ventilated and sedated
  - Immediate Investigation needed
    - CT Head

3.5 Availability of investigations and notes

- Personal experience
  - On call radiologist contactable via switchboard
  - Switchboard refuses to connect the SpR to the consultant radiologist because:
    - “referrals are consultant to consultant only”
- Not only the availability but also the ease with which investigations and imaging can be obtained.
- Remember
  - Certain investigations are “time critical”
    - CT Heads
    - AAA imaging

3.7 Handovers

- Increase in handover due to shorter working hours of trainees.
- Accept this is the situation
  - but how can we improve it
    - Twice daily handovers with a consultant present
    - (Critical care – recognised method of handover)
  - Improves patient care
  - Opportunity for education

3.8 Reviews and observations

- Case 9
- “A young patient sustained a head injury following a fall. On arrival his Glasgow Coma Scale (GCS) was recorded as 10 and the patient was reported to be unco-operative. The patient was still in the department 6 hours later when the patient fell of the trolley and hit his head during the fall. A CT scan was performed 11 hours after arrival in the emergency department which showed a left temporal contusion with a small amount of subarachnoid blood and minor midline shift. The patient was intubated, ventilated and sedated and transferred to the neurointensive care unit……There was no repeat CT scan or cervical radiology investigations…”

- *“The advisors were of the view that the trainee medical staff provided good care in stabilising the patient but were concerned what there was inadequate senior review and decision making”*

3.8 Reviews and observations

- Case 9
  - Question 1
    - What level of experience did the doctor who saw the patient have?
    - Did he feel confident to manage the patient on there own?
  - Question 2
    - If assistance was requested what level of experience did they have?

3.8 Reviews and observations

- Case 9
  - Highlights other problems addressed in the NCEPOD document

Common Theme in the case studies

Case 1	Preoperative MI
Case 2	Gallbladder SEPSIS
Case 3	Tubo-ovarian SEPSIS
Case 4	Pneumonia SEPSIS
Case 5	Perianal Abscess SEPSIS
Case 6	Cellulitis
Case 7	Pneumonia
Case 8	Peritoneal SEPSIS
Case 9	Head Injury
Case 10	Ruptured AAA
Case 11	Alcohol related

Sepsis

- Are trainees able to recognise a septic patient?
- Can trainees recognised and treat septic shock adequately
- How far will trainees go with regards to invasive monitoring and intervention of a very elderly septic patient
  - Oxygen, fluids and antibiotics.
  - Central lines, SvO2 monitoring, inotropic support
- Can a full sepsis care bundle be implemented in the emergency department?
- Are patients going to get continuing observations on a ward?

Conclusion

- I do not believe that the finds of the management of patients that I have noticed in this report are any different to what any other final year SpR in Acute medicine, Emergency medicine or Critical care would identify if they read the report.
- Is training poor, or are trainees over stretched to be able to deal with amount of acute emergencies that they have to deal with on a day to day basis?
- How much of organisational factors are influencing training?

Can any of these recommendations be achieved?

- Combined Emergency medicine and acute medicine?
- Consultant presence 8am to 22:45 weekdays
- Designated clinical time with no other commitments
- 24 hours CT scanning and reporting
- Near patient testing – (where appropriate)
- Twice daily handovers

- Early warning scoring system

Would these recommendations make a difference?

- Do we need an ICNARC style data base system for acute emergency admissions?