

FEx Net 2022 Collated SAQs:

Administration Answers

1. Access Block
2. Access Block
3. Bullying
4. Complaint
5. Coroner
6. Cultural Safety
7. Discharge AMA
8. Did Not Wait
9. Did Not Wait
10. Frequent attender
11. Guideline
12. Health Intervention
13. KPI
14. M+M
15. Mass Casualty
16. Mass Casualty
17. Missed Fracture
18. Missed Malignancy
19. Overcrowding
20. Palliative Care
21. Protocol
22. Short Stay Unit
23. Simulation
24. Trainee Problem
25. Triage
26. Triage

Answers:

1. What is the definition of access block? (2 marks) 1/2

Answer:

An admitted patient who remains in the emergency department for > 8 hours because of a delay in accessing an inpatient bed

2. What is the difference between access block and ED overcrowding? (2 marks) 1/2

Answer:

ED overcrowding refers to the situation where ED function is impeded primarily because the number of patients waiting to be seen, undergoing assessment and treatment or waiting departure exceeds either the physical bed and or staffing capacity of the ED. Access block is the principal cause of ED overcrowding.

3. List 4 markers of ED overcrowding. (4 marks) 2/4

Answer:

- Inability to offload ambulance patients and a resultant loss of capacity in the local emergency response in the community
- Inability to place critically unwell patients in an appropriate treatment space when required
- Patients undergoing clinical management in a non-treatment area, where privacy and access to basic clinical resources is reduced or delayed
- Admitted patients receiving a lower standard of care than they would receive in their destination unit
- Obstruction to access and egress routes from the ED in contravention of OH&S requirements

4. List 4 adverse effects of ED overcrowding. (4 marks) 2/4

Answer:

1. Increased adverse events
2. Increased violent behavior
3. Increased errors
4. Delayed time to critical care
5. Increased morbidity
6. Excess deaths

Passmark: 6/12 Adjust to ../10 please

References:

1. www.acem.org.au S57 Statement on overcrowding
2. Cameron 4th Edition, page 89

Question 2

(essentially an access block question)

Q1

Hospital occupancy too high

Delayed radiology / pathology results

Delayed inpatient team reviews

Delayed senior MO review resulting in delayed decision making

Difficult bed booking process

High complexity case load

Staffing issues eg sick leave, understaffing nursing

(many others,, not accept “access block” as this is the problem)

Q2

More frequent senior medical ward rounds for early discharge

More admitting medical officers

More frequent use of direct admission by ED staff

Improved access to radiology / pathology

Early senior ED doctor review for early disposition decisions

Improve (decrease) hospital bed occupancy

Less elective surgery

Hospital avoidance programs eg HITH

Streamlined care plans for common problems

(will be a lot of acceptable answers)

Question 3

(i) 3 marks

- Ensure Chest Pain patient is safe *****MUST SAY comment in regards to 'safety'**
- Ensure Department is safe, handover to NUM/most senior doctors
- Ensure privacy (discussion in private setting)
- Take (secure) notes - *****MUST SAY**
- Aim for hot debrief - not appropriate to go into detail at this time
- Unlikely to be able to commit time to this straightaway - make a risk assessment of any risk / harm and if NO RISK - contract to have a further meeting and investigate

(ii) 3 marks

- Local Uni Dean and/or divisional heads in University
- Student's Mentor
- University Management
- Director of EM
- Contact with Hospital Executive
- Any patients that have affected by the interactions between the pair
- Potentially other students
- Other reasonable' stakeholders'

(iii) 4 marks

- Acknowledge complaint and its seriousness and provide support to the student (1)
- Inform the UNI that student may be traumatised by negative experiences (2)
- Gather information about behaviour from other staff ; 360 degree. Confidential (3)
- Approach the registrar and get their side of the story (4)
- Management plan for registrar: identify triggers and put in specific strategies addressing D and A/ stress/ burnout/ time frame for review/ advise behaviour is not acceptable (5)
- Minimise Bullying in the future AND education/orientation (Various strategies) (6)
 - Ensure all staff are aware of their obligations not to engage in Unacceptable workplace behaviour
 - Promote an anti-bullying workplace environment by their own conduct and Behaviour in the workplace
 - Ensure that information about what types of behaviours do, and do not, constitute unacceptable behaviour are communicated to all staff
 - Encourage and support staff in the self-resolution of conflict by providing training in conflict resolution
 - Provide a clear process for reporting unacceptable workplace behaviour
 - Ensure there is a process to rapidly respond to complaints related to unacceptable workplace behaviour
 - Ensure orientation of new staff informs them about the no bullying culture and about the department's anti bullying policy

Question 4

You have received a complaint from a patient who underwent procedural sedation in your emergency department. The patient had a pulseless, dislocated ankle.

The sedation was carried out by one of your competent senior registrars in the resuscitation room during a night shift.

During the sedation the patient aspirated and had a course of antibiotics during his hospital stay. The patient has complained that he “was not told about any risks of having sedation that night”.

- a. In dealing with the complaint describe the features of your immediate response (3 marks)

Early contact w complainant

Neutral, empathetic, non-judgmental

Express regret without liability

Treat the complaint seriously

Senior staff/consultant to handle

- b. Fill in the table below to demonstrate what phases you will need to go through to finalise the answer to the complaint (8 marks)

Step of complaints process	Example of elements included in that stage
Investigation	Look through documentation
	Consent form
	Interview staff involved
	Root cause analysis
Staff counselling	acknowledge feeling of guilt
	counsel regarding any identified errors
	+/- need for notification of defence organisation
	Write down recollections of events if not documented
Teaching and training	Staff teaching on procedural sedation
	Consent teaching
	Airway requirements for trainees performing sedation
Q & A	M and M
	Need for protocol/update protocol
	Consent compliance
Involving complaints department	Notification
	Provide documentation
	Organise meeting if required
Answer to complainant	Finalise reply in a timely fashion

	Written reply
	Refer to the complaints department

Question 5

You are the consultant on the morning shift and just before handover the night registrar asks you to whether he should complete a death certificate for a 78-year-old man who died in the emergency department overnight. He had advanced dementia and was suspected to have a ruptured abdominal aortic aneurysm which had been previously deemed unsuitable for surgical intervention by the vascular surgeons.

- a. List six situations where a death is notifiable to the coroner (6 marks)

Identity of the person is unknown
Violent or unnatural Death (accident/suicide/homicide/overdose/snakebite/anaphylaxis/drowning/electrocution/ work-place)
Death in suspicious circumstances (homicide suspected)
Healthcare-related death (healthcare caused/contributed to the death or failure to provide care)
Cause of death certificate has not been issued and is not likely to be issued (not able to ascertain cause of death)
Death in care
Death in custody
Death in the course of or as a result of a police operation

- b. State one important consideration that is required after notifiable death is reported to the coroner or the police (1 mark)

Consider need for scene /personal items and body preservation (all items entering the body plus devices attached to these must be preserved)

- c. List five actions required by a medical officer in the event of a non-notifiable death in the department (5 marks).

Pronounce the death in the medical record
Complete cause of Death certificate
Consider whether a hospital autopsy is desirable
Notify the family of the death
Complete discharge summary
Notify the GP
Begin the death review process
Consider tissue donation

Source: Management of the Deceased -Practice Manual 2012, State Coroner's Guidelines 2013

Question 6 (11 marks)

You are a newly appointed consultant working in a regional ED. You have had a patient interaction a few days ago which is concerning you.

You reviewed an elderly Aboriginal woman who presented with lethargy and shortness of breath. A work-up revealed severe renal impairment and a potassium of 7.2 mmol/L.

The patient spoke almost entirely in her first language with her 14-year-old granddaughter acting as an interpreter. You felt you gave a comprehensive explanation of the diagnosis, plan and need for admission. The patient appeared to understand, nodding occasionally and saying “yes”.

Unfortunately, 30 minutes later her nurse reported that both the patient and her granddaughter had walked out of the hospital shortly after you left the bedside.

- a. What are four (4) suggestions to help prevent a similar situation occurring in the future? (4 marks)
- **Always use an accredited/formal translator, and never a child**
 - Early involvement of Aboriginal Health Workers or Liaison Officers
 - These workers are *not* synonymous with translators
 - Touch base with patients frequently and explain the care plan
 - Address non-medical needs (e.g. blankets, food, family)

- Ensure important family members or community elders are involved
- Closed-loop communication; check patient's understanding

Pass = 3/4

In the context of a child interpreter in the stem, failing to recognise that a child cannot interpret for this patient is a critical error (i.e. 0/4).

- b. List four (4) department-wide strategies you could implement to ensure culturally safe medical care is available? (4 marks)

- Ensure a cultural history is taken from all patients/families
- Policy development considers the diverse health beliefs of the population
- Develop prompts so that management plans account for cultural obligations
- Ensure availability of cultural/religious consultants
- Professional interpreter services are available at all times for languages in the ED catchment
- Create strong links with healthcare providers of local minority populations
- Consumer feedback mechanisms allow culturally diverse input
- There is a system for non-judgmental reflection of cultural issues
- Cultural training workshops/education sessions
- Design of department with cultural sensitivity in mind
 - Some examples: outdoor space, segregated gynae rooms, meeting space

Pass = 2/4

- c. A culturally competent approach to health care requires specific skills, knowledge and attitudes. What are three (3) GENERAL principles of a culturally competent approach to health care that may help you to care for a similar patient? (3 marks)

- Knowledge of the patient's ethnicity and resulting health challenges
- An understanding of the beliefs and structures present in different cultures
- A non-judgemental/empathetic/respectful approach to other cultures
- Ability to integrate cultural concerns into management plans
- Self-awareness of one's own culture and its impact on practice.

Qualities essential to providing good healthcare that are not specific to culturally competent care should not score.

Pass = 2/3

Question 7

A 73 year old man is brought into the ED with left sided chest discomfort and is diagnosed with a NSTEMI on the basis of high lateral T wave inversion and a positive initial troponin T of 64 (reference range 0-14). The nurse notifies you that he wishes to self-discharge as his pain has resolved and he feels well.

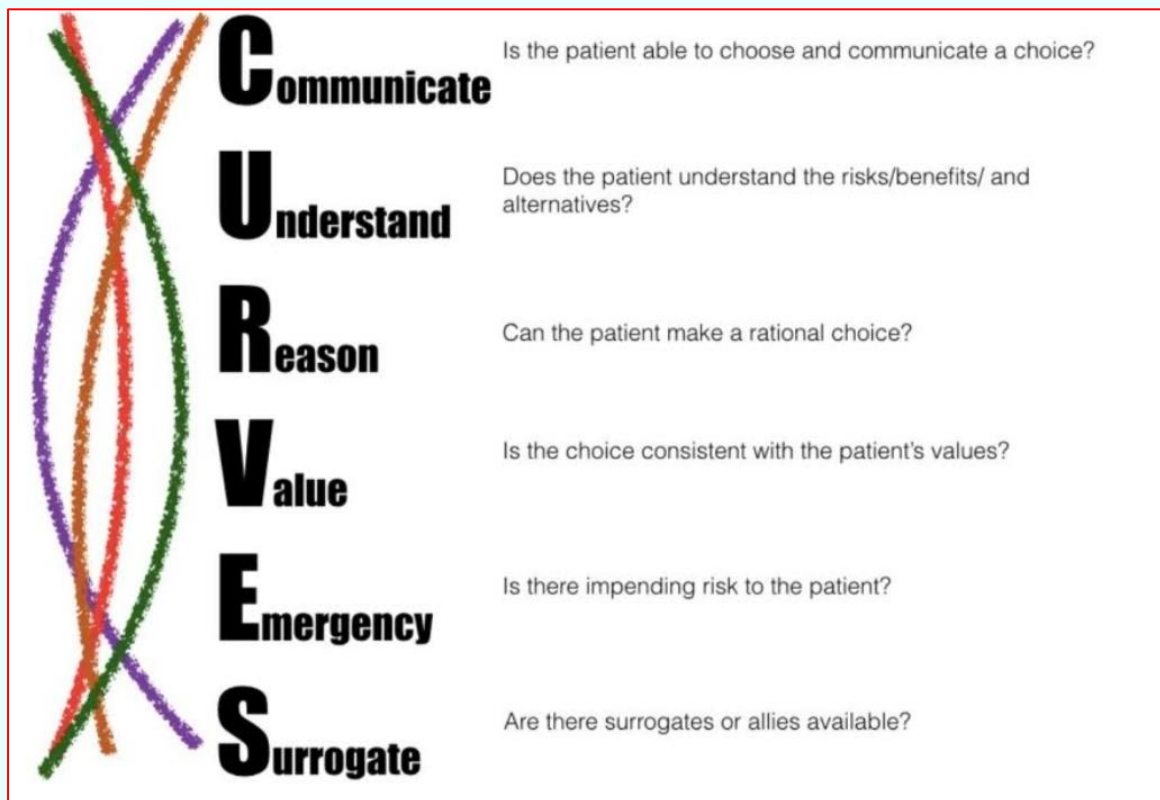
Outline some important medical risks of self-discharge in this scenario (3 marks)

Progression to STEMI

VT / VF – sudden cardiac death

CCF

Name 5 considerations when assessing a person's capacity to make a decision (5 marks)



Question 8

You are a new consultant working in an urban emergency department. The director approaches you and asks you to investigate the high proportion of 'did not wait' presentations. She is concerned these DNW figures represent

What is the (generally accepted) maximum accepted percentage of patients who DNW? (1 mark)

<5%

Name two patient groups who are often over-represented within DNW statistics (2 marks)

Children

Mental health patients

Name 4 reasons for high DNW numbers and propose 4 solutions (4 marks)

High DNW is mainly caused by long-wait times which is generally due to ED overcrowding and access block. Any reasonable reasons/solutions are ok. Examples below.

Reason	Solution
WR not suitable for patients awaiting care	Access to food / water / entertainment / nurse in WR
Long wait to fast-track / paed cases	FT/paed stream / separate staff allocation
Inadequate medical staffing	Hire more staff
Poor access to ED beds due to admissions	Hospital-wide approach to access block – early discharge, senior review etc

Question 9

1. List (5) key aspects of the protocol you will develop for the risk management of “Did Not Wait” patients in your ED. (5 marks)

Early notification of senior medical staff on shift if patient tries to leave before being seen by a doctor.

Daily audit of DNW patients by senior doctor

Identification of high risk patients or presentations

Attempts to contact patient or NOK to ensure appropriate care has been sought

Notification of referring doctor if patient DNW

Documentation of alternate care options provided to patient

2. List (4) strategies that may be implemented within the ED to minimize the number of “Did Not Wait” patients? (4 marks)

Reduce waiting times

Ongoing communication with waiting patients by ED staff

Managing expectations of waiting patients

Relatives able to wait with patients

Information provided about alternate ways to seek care

Physical layout of waiting room so that high risk patients can be seen by triage nurse

Comfort of waiting area

Internal waiting areas for high risk patient groups.

3. List (5) groups of patients who are at high risk for an adverse outcome if they leave without being seen in an Emergency Department? (5 marks)

Mental health patients

Drug and/or Alcohol intoxication (impaired judgement)

Children

High risk presentations (eg chest pain, head injury, headache, fever)

High triage categories

GP concern

Question 10

Name 4 goals of an individualised care plan for a 'frequent presenter' (4 marks)

- not to miss serious illness
- help patient in the long term
- improve patient care
- minimise ED stay
- improve engagement with community supports/services
- reduce disruption to staff

Who are the likely key stakeholders in this instance (5 marks)

Patient

GP

Emergency physicians + medical staff

Cardiology department

Emergency nursing staff

Emergency Department Management Team – Directors / Managers etc

Maybe psychologist

Question 11

Questions:

1. List 3 parties that need to be involved in this process, outside of the ED staff:
(3 Marks)
 - a. Radiology Department – regarding testing
 - b. Respiratory/Department of Medicine – regarding testing and follow upPossible:
 - c. Haematology –regarding specific testing
2. List 8 components that will form part of your ED guideline:
(8 Marks)
 - a. Title and Setting
 - b. Background
 - c. Aims
 - d. Inclusion criteria
 - e. Exclusion Criteria
 - f. Guideline – flow with supporting data/references
 - g. References
 - h. Date for audit/review
 - i. Sign off
3. List the sources you would use for writing the clinical component of the guideline:
(4 Marks)
 - Local guidelines (prior version, other departments within the same hospital)
 - Guidelines from similar hospitals
 - Published national standards (ie NHMRC, NICE)
 - Systematic Reviews (ie Cochrane) addressing the topic
 - Any recent journal articles that have practice changing implications
 - Canvassed opinion from stakeholders

Question 12

Many opportunities to provide preventative health interventions exist in the Emergency Department.

- i. Briefly define “primary prevention” and “secondary prevention” (2 marks)

Primary prevention:

Secondary prevention:

- Primary prevention – *aims to prevent disease or injury before it occurs* by preventing exposure to hazards, altering unhealthy behaviours and increasing resistance to disease. Examples – seat-belt legislation
- Secondary prevention aims to reduce the impact of a disease already evident by *early detection/treatment*. Examples – breast cancer screening, daily aspirin in CAD

- ii. List the 4 components of the CAGE questionnaire (4 marks)

- C – have you ever felt you should CUT down on your drinking?
- A – have people ANNOYED you by criticising your drinking?
- G – have you ever felt bad or GUILTY about your drinking?
- E – have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (EYE opener)

- iii. For each category below, list 3 indicators that a woman may be a victim of Domestic Violence (6 marks)

Physical Indicators

Behavioural indicators

Physical – Non-accidental Injury

- Unexplained bruising and other injuries
- Bruises of various ages
- Head, neck and facial injuries
- Injuries on parts of the body hidden from view (including breasts, abdomen and/or genitals), especially if pregnant
- 'Accidents' occurring during pregnancy
- Miscarriages and other pregnancy complications
- Injuries to bone or soft tissues
- Injuries sustained do not fit the history given
- Bite marks, unusual burns

Behavioural

- Multiple presentations often after hours
- Partner does most of the talking and insists on remaining with the patient
- Seeming anxious in the presence of the partner
- Evasive or ashamed about injuries
- Reluctance to follow advice

- iv. In what circumstances should a report of Domestic Violence be made to Police irrespective of the victim's wishes (3 marks)

Where Domestic Violence poses a significant risk to an individual or the public, reports to Police must be made, even where this is against the wishes of the victim. Examples:

- Serious injuries have been inflicted e.g broken bones, stab/gunshot wounds
- The perpetrator has access to a weapon and has threatened any person or caused a reasonable person to fear for their personal safety
- An immediate risk to any individual/s or the public exists
- An offence has occurred on Health Service premises
- Health staff have been threatened

- v. Other than alcohol and Domestic Violence screening, list 5 public health interventions currently carried out in Emergency Departments – provide an explanation or example for each (5 marks)

Public Health intervention type	Explanation/Example

- Secondary prevention – early detection of disease
- Injury surveillance – as part of research/Public Health Unit programs
- Disease outbreak surveillance – e.g. clusters of respiratory illnesses/flu detected
- Provision of immunisations – routine tetanus, rabies post-exposure
- Provision of preventative medications – “morning after pill”, HIV & hepatitis PEP,
- Screening for tobacco and other drug use – “SBIRT”
- Promoting cigarette cessation
- Screening for elder/child violence
- Referral to support services – D&A, housing assistance, family violence support

Question 13

1

Triage issues – incorrect score / lack of awareness

Medical staff knowledge deficits of importance of timely decision making

Lack of protocol for liaising with stroke unit

Poor access to imaging / CT

Poor access to radiologist for urgent report

- Anything else sensible

2

Education triage staff about signs of stroke and necessity of cat 2

Education medical staff about stroke thrombolysis

Liaise with stroke unit to create pathway for referral / discussion

Liaise with radiology department to improve access to CT and to ensure immediate reporting

ED consultant to prioritise order of CT scans performed

- Plenty of other stuff OK

Question 14

1.

ISSUE	POSSIBLE CONTRIBUTOR	STRATEGIES
SYSTEM LEVEL	Inadequate staffing at senior level Inadequate rostering within department areas	Review adequacy of staff mix to ensure adequate senior supervision
		Ensure senior staff rostered to/responsible for ambulatory care area
PROCESS LEVEL	Xray reporting delays No notification of abnormal imaging to clinical staff Lack of senior review of patient/imaging prior to discharge	Ask radiology to look at reporting times Single point contact (ED Consultant) for abnormal imaging
		Mandate all imaging/patients of junior staff discussed and reviewed prior to discharge at reg/consultant level.
INDIVIDUAL LEVEL	Lack of understanding/skill in xray interpretation Poor patient communication skills	Look at resident education program – common missed injuries
		Observed practice encounters with juniors; consider workshops on communication skills

2. Apologise and acknowledge inadequacy of initial care

Expedite rapid return and assessment – advise patient to return to ED; arrange senior review on arrival

Provide necessary clinical care – re-image/reduce/immobilise and analgesia

Pledge to investigate and feedback

Document all interactions

Question 15

i) 3 marks

Stay safe, Call for help (000), Assist others

Don't enter dangerous environment

Call walking patients to gather together in a safe location

Plan METHANE call

NO MARKS - call local hospital, provide treatment to patients etc.

ii) 3 marks

Electrical Wires (could be live), other trains, Cliff faces, Heavy objects loose in wreckage (cars), train itself, slope, fuel, chemicals in cars, difficult access for EMS

iii) 7 marks

M	MAJOR INCIDENT	Has a major incident or standby been declared? (Yes / No - if no, then complete ETHANE message)	<i>Include the date and time of any declaration.</i>
E	EXACT LOCATION	What is the exact location or geographical area of the incident?	<i>Be as precise as possible, using a system that will be understood by all responders.</i>
T	TYPE OF INCIDENT	What kind of incident is it?	<i>For example, flooding, fire, utility failure or disease outbreak.</i>
H	HAZARDS	What hazards or potential hazards can be identified?	<i>Consider the likelihood of a hazard and the potential severity of any impact.</i>
A	ACCESS	What are the best routes for access and egress?	<i>Include information on inaccessible routes and rendezvous points (RVPs). Remember that services need to be able to leave the scene as well as access it.</i>
N	NUMBER OF CASUALTIES	How many casualties are there, and what condition are they in?	<i>Use an agreed classification system such as 'P1', 'P2', 'P3' and 'dead'.</i>
E	EMERGENCY SERVICES	Which, and how many, emergency responder assets and personnel are required or are already on-scene?	<i>Consider whether the assets of wider emergency responders, such as local authorities or the voluntary sector, may be required.</i>

Question 16 (16 marks)

You are the senior doctor in charge of a tertiary ED at 3pm when Ambulance Control state that there has been an explosion nearby.

i. What 5 pieces of information are important to obtain from Ambulance Control (5 marks)
(METHANE acronym)

- Confirm that a Major Incident has been declared
- Exact location
- Type of incident
- Hazards
- (Access/egress)
- Number of casualties (total and likely coming to your facility)
- (Emergency services present/required)

ii. List 7 steps that you should perform after receiving this phone call (7 marks)

- Declare a Major Incident as per Major Incident Protocol in your hospital → should cascade to executive/senior management to co-ordinate roles outside ED
- Find/follow major incident role-description cards
- Take role of Medical Co-ordinator or Senior Emergency Physician until/unless another more appropriate person can
- Consider need for decontamination of all patients prior to entering ED
- Close all other entry points to ED except one triage route
- Liaise with senior nursing and senior management to form key roles: triage officer, resuscitation teams, acute patients treating staff, green walking patients treating staff
- Assess current ED staffing and potential staffing (who can be called in)
- Identify areas to see Resus (red), Acute (yellow) and Walking (green) patients.
- Clear the emergency department of as many patients as possible

iii. Patients start arriving rapidly on foot and by ambulance. Using a triage sieve, classify (red, yellow, green) the following patients (4 marks)

- Female 40s, lying on ambulance stretcher, GCS 14, RR 33, BP 105/80, P 110 - Red
- Male 30s, limping up to triage unassisted, GCS 15, RR 26, BP 95/50, P 105 Green
- Female 20s, sitting in a wheelchair, obvious compound tibial fracture, GCS 15, RR 28, P 120 Red
- Male 50s, lying on stretcher, GCS 13, RR 25, BP 105/60, P 110. Yellow

Question 17

1. List 3 steps to approach this situation?

(3 marks)

Answer:

- Need to urgently contact patient and inform patient of missed diagnosis and need for further imaging of c-spine (with immobilisation).
- Inform patient he should not drive due to his seizure, and will need formal clearance to drive
- Notify director and consider formal report for M&M review or similar- need to explore why C-spine imaging was not initially undertaken (how was treating doctor able to clear c-spine clinically in setting of intoxication?)

2. You contact the patient, and advise him of the result. He informs you he lives 100km from the nearest town with a CT scanner.

What are the 3 main considerations for this patient?

(3 marks)

Answer:

- Patient should have c-spine immobilised until further imaging can confirm stable fracture and absence of other injury
- Patient will need transport to facility- ambulance is only practical option but depending on location this may be difficult to arrange
- Will need to liaise with local clinician who can continue to co-ordinate care, arrange imaging, transport and then referral as require- this may be local GP or hospital doctor

3. The patient is reluctant to undergo further imaging as he is the local school bus driver and does not want to leave the bus route uncovered.

What 2 significant medico-legal issues does this case raise?

(4 marks)

Answer:

- Missed diagnosis of potentially serious injury- need for open disclosure, incident reporting and review of processes to avoid future similar missed injury
- Patient privacy and confidentiality- usually this is paramount however in this situation the risk to the public (potential further seizure whilst driving school bus) outweighs the need to uphold confidentiality. Australian and New Zealand fitness to drive guidelines require patients to notify Driving License Authorities of seizure disorder, and will require a seizure-free period before resumption of driving, and will exclude commercial licenses. A notification will need to be made to the relevant authority if the patient insists on driving, including potentially liaising with local police.

Pass mark: 6/10

Question 18

Questions:

1- List 4 possible reasons that may have led to this lesion being missed on the initial presentation to ED. (4 marks)

Lack of education/experience of junior medical staff in interpreting CXR

Lack of review of radiology by senior staff

Poor documentation

Incorrect films reviewed on initial presentation

2- Outline your approach to this situation as the Senior Emergency Physician on shift. (6 marks)

1. Ensure appropriate follow-up of current lesion with referral to Respiratory team for further urgent diagnostic work-up
2. Documentation of findings of missed diagnosis in the notes
3. Have a discussion with the patient and family regarding the delay in diagnosis (open disclosure principles) & document discussions with patient and family
4. Notify ED director
5. Notify Radiology director
6. Notify hospital medico-legal department.
7. Refer this case for review through hospital quality assurance program such as M&M or patient safety committees.
8. Advise previous treating doctors of missed diagnosis & possible medico-legal implications

3- List 5 strategies that could be implemented at a departmental level to prevent future missed radiological diagnoses? (5 marks)

Timely reporting of radiology

Notifications of medical staff of abnormal radiology reports

Follow-up up of all pending results by GP after patient discharge

Follow-up process for radiology reports arriving after patient discharge

Copies of all radiology reports automatically forwarded to GP

Audit of results review processes to ensure they are functioning effectively

Reference: ACEM policy on the follow-up of results of investigations ordered by the Emergency Department P54 July 2014

Question 19

- i. Define “ED overcrowding”

ED overcrowding refers to the situation where ED function is impeded primarily because the number of patients waiting to be seen, undergoing assessment and treatment, or waiting for departure exceeds either the physical bed and/or staffing capacity of the ED.

- ii. Regarding the causes of ED overcrowding, for each category list two (2) examples (6 marks)

Category	Examples
Input	
Throughput	
Output	

Input

Presentations with more urgent and complex care needs [20, 29–31, 108]
 Increase in presentations by the elderly [20, 31, 114, 115]
 High volume of low-acuity presentations [29, 117]
 Access to primary care [29, 109, 117]
 Limited access to diagnostic services in community [31]

Throughput

ED nursing staff shortages [30, 31]
 Presence of junior medical staff in ED [113]
 Delays in receiving test results and delayed disposition decisions [20]

Output

Access block [20, 29–31, 110–112]
 ICU and cardiac telemetry census [116]

ICU = Intensive Care Unit

<https://doi.org/10.1371/journal.pone.0203316.t005>

- iii. Regarding the adverse consequences of ED overcrowding, for each category list two (2) examples (4 marks)

Category	Examples
Patient Effects	
Staff Effects	

Patient Effects

Poor patient outcomes e.g. for patients with chest pain [29, 30, 75, 92, 107]
 Increased mortality [3, 80, 85, 96, 99–101]
 Delayed assessment and care [29, 30, 76–79, 81, 83, 84, 87, 89–91, 93, 94, 98, 103, 104], including surgery [97]
 Increased IPLOS [82, 88, 95, 99, 101]
 Risk of readmission [3, 74]
 Reduced patient satisfaction [102]
 Exposure to error [17, 18]

Staff Effects

Non-adherence to best practice guidelines [18, 75–79, 90, 91, 93, 94, 98, 103, 104]
 Increased staff stress [29]
 Increased violence towards staff [29, 86]

System Effects

Increased IPLOS [82, 88, 95, 99, 101]
 Increased EDLOS [29, 84, 105, 106]

IPLOS = inpatient length of stay EDLOS = emergency department length of stay

<https://doi.org/10.1371/journal.pone.0203316.t004>

- iv. Regarding potential solutions to ED overcrowding, for each category list two (2) examples (6 marks)

Category	Examples
Input	
Throughput	
Output	

Input

GP-led walk-in centres / Co-located GP [32, 33, 64]
 Extended GP opening hours [37, 43, 58, 72]
 Choice of ED [64]
 Social interventions including: education campaigns, financial disincentives, redirection [32]

Throughput

Split ESI 3 on presentation [34]
 Earlier physician assessment [21, 23, 38, 50, 63, 65, 67, 71], including physician-led/supported triage [25, 40, 45, 47, 56, 60]
 Fast-track / flexible care area [42, 55, 56]
 Shorter turnaround-times for laboratory tests [26, 27, 52, 53, 66]
 ED nurse flow coordinator [35, 44, 69]
 Bedside registration [56, 68]
 Nurse initiated protocols [28]
 Earlier inpatient consultation [49]
 Increased ED bed numbers [57, 69]
 Increased ED staff [69]

Output

Active bed management [20, 36, 39, 46]
 Leadership program/Support [39, 61, 67]
 Implementation of nationally mandated, timed patient disposition targets [48, 54, 59, 62, 67, 69]
 ED staff direct admit rights [63, 67]
 Admitting team prioritise ED admissions [67]
 Alternative admission policies [22, 41, 69, 70, 73]
 Increased inpatient beds and staff [69]

GP = general practitioner ESI = Emergency Severity Index

<https://doi.org/10.1371/journal.pone.0203316.t006>

Question 20 (15 marks)

You have received a prehospital “batcall” about an 86 year-old female nursing home resident with acute respiratory distress who has just had return of spontaneous circulation (ROSC) after arresting in the ambulance en route. She is intubated and has GCS 3.

- i. What is the definition of palliative care? (3 marks)

- life limiting illness includes cancer and chronic disease
- focus on quality of life
- treatment that is not aimed at a cure
- prevent and treat suffering
- holistic approach addressing physical, emotional, mental, social and spiritual needs.

- ii. Prescribe one appropriate medication regime or management strategy for each symptom in the palliative semiconscious patient: (4 marks)

SYMPTOM	DRUG	DOSE	ROUTE	FREQ
PAIN	Morphine	2.5-5mg	SC	Q4H
	Fentanyl	25mcg	SC	Q4H
	Hydromorphone	0.5-1mg	SC	
AGITATION	Midazolam	2.5mg	SC	Q1H
	Haloperidol	0.5-1mg	SC	Q4H
	Clonazepam	0.2-0.5 mg	SL/SC	Q2H
NAUSEA	Metoclopramide	10mg	SC	Q8H
	Ondansetron	4-8mg	SL/SC	Q8H
	Haloperidol	0.5-1mg	SC	Q4H
SECRETIONS	Hyoscine butylbromide	10-20mg	SC	Q4H
	Hyoscine hydrobromide	0.4mg	SC	Q4H
	Glycopyrrolate	0.1-0.2mg	SC	Q4H
	*Or non-pharmo options			

* Current evidence does not support use of anti-muscarinic agents as not superior to placebo. They may cause adverse effects including delirium and dry mouth. Recommend

non-pharmacological approaches including positioning, and reassurance of family and carers, including staff.

The patient's daughter appears in the ED distressed. She tells you that her mother would never have wanted this. She has an ACD (Advanced Care Directive) stating not for CPR or ventilation or ICU care. She did not want to be transferred to hospital.

iii. What information should be in an ACD? (4 marks)

The patient's preferences in relation to:

- treatment goals: active versus comfort care/palliation
- levels of active treatment : ICU care/CPR/ventilation vs ward based care
- transfer to hospital in the event of deterioration
- place of death (eg home, residential aged care facility, hospital)
- after-death care (eg funeral director, preference for cremation or burial, cultural practices)
- requests for organ, tissue or body donation
- names and contact details of substitute decision-maker(s)
- other issues that are important to the patient (eg religious, care of pet).

After confirming the ACD details and further family discussion, a decision is made to extubate her in ED

iv. What preparation is needed? (4 marks)

-document family discussion and rationale for withdrawing life-saving treatment ie extubation

-explain plan and likely outcome, specifically estimating timing of death, usually hours

-discontinue unnecessary lines and medications. Turn off monitoring

-continue palliative medications charted above

-private room if possible with family present

-involve social worker and chaplain as appropriate

-reduce FiO₂ and PEEP prior to extubation

-wait until paralysis wears off, or reverse with Achase inhibitors eg neostigmine and use nerve stimulator Train Of Four to assess adequacy .

Question 21

1.

Gather information (2 marks)

- Current processes
- Guidelines College
- Other hospitals

Liaise stakeholders (2 marks)

- ED consultants / nurses
- Cardiologists

Write protocol

Audit performance (1 mark)

Re-evaluate (1 mark)

2.

Prolonged or repetitive pain

Raised biomarkers

ECG changes – ST depression >0.5mm / TWI >2mm

transient ST elevation

VT

Shock

Syncope

DM

Renal failure

PCI 6/12 or CABG ever

EF <40%

Question 22 (11 marks)

There have been a number of incidents in your emergency department Short Stay Unit where patients have unexpectedly deteriorated during their stay.

i. Define the role of a Short Stay Unit (2 marks)

- To manage Emergency Medicine patients who would benefit from extended treatment and observation but have an expected length of stay of less than 24 hours.
- Taken from Cameron Textbook of Adult Emergency Medicine 3rd Edition Section 27.2
- 1 mark for providing extended care for Emergency Medicine patients
- 1 mark for acknowledging an expected length of stay of 24 hour or less

ii. How would you develop a solution to this problem (4 marks)

- Gather information
- Develop solution plan
- Implement plan
- Audit / Re-collect data
- Note exact wording not essential but plan must include aspects of each of these domains to score maximum marks

- iii. You are tasked to develop exclusion criteria for your Short Stay Unit. List 5 criteria (5 marks)

- Patients who should be admitted to in-patient wards - complex medical or surgical problems
- Multiple problems
- Elderly patient
- Paediatric patients
- Patients without clear management plan / diagnosis
- Patients with intensive nursing requirements
- Risk to staff patients - psychotic, violent, forensic history

Taken from Cameron Textbook of Adult Emergency Medicine 3rd Edition Section 26.6

Question 23 (14 marks)

FEx Net 2022 Collated SAQs

You are interested in establishing an in-situ simulation program in your tertiary Emergency Department.

- i. List 3 components of your pre-brief (i.e. before participants enter the scenario) that create a “safe learning environment” for participants in in-situ simulation. (3 marks)

1. Formative rather than summative
 - Identify areas for learning and improvement; not an assessment of individual performance
2. Orientation to the environment, equipment, drugs, manikin, etc
3. Expectations of participants

-Express that the scenario is based on a clinical case, not designed to “trip-up” participants. Participants are expected to perform in their usual role and at their usual level of practice.

4. Confidentiality

-their individual performance will not be discussed outside of the session

ii. Outline 3 key components of your framework for debriefing a simulation scenario (3 marks)

1. Reactions phase

-important that trainees first discuss reactions generated (emotions/feelings) from being in the scenario. If this is not addressed, they will not be able to engage in reflective learning

2. Identify components performed well and those that were challenging

-Learning needs identified by participants themselves; reflective learning
-Learner/participant centred approach

3. Analysis

-understanding of participants framework/models for decisions made
-use of advocacy inquiry, delta-plus principles
-address technical (Clinical Knowledge) and non-technical (Communication and Human Factors)

4. Summarise/“Take-home points”

-important to wrap-up session with clear statements on specific learning objectives that were identified

iii. Identify 4 potential barriers or risks to running in-situ simulation and a mitigating solution for each barrier (8 marks)

Potential Barrier/Risk	Solution
Simulation equipment/drugs used on “real patients” (ie decommissioned equipment or out-of-date drugs)	- Clearly labelled simulation equipment - Simulation equipment stored or locked away
Reluctance of participation	- Trainees are aware when it’s happening (set time/date) - Encouraged/supported by consultant

	group/DEMT
Reluctance to perform session when department busy	- Sessions to be conducted at times of lower patient volume/acuity (eg mornings) - Sessions contacted during periods of maximal staffing (cross-over between shifts) - Agreed upon criteria for cancelling session (eg patient waiting numbers, resus patients TBS)
Disturbance of patients/relatives in nearby clinical areas	Make patients/relatives nearby aware (communicate or signs) that mock training is occurring
Available space in clinical area	Have a dedicated/protected area within the department for simulation
Lack of equipment/funding	- Perform low fidelity simulations with specific learning outcomes - Keep decommissioned or out-of-date equipment for sim use

Question 24

You have been approached by a senior clinical nurse in your ED informing you of a problem with a trainee. She is concerned that the trainee has an alcohol problem. On multiple occasions, the trainee has posted about his alcohol use on social media. She is concerned that there may also be other recreational drug use. Several other nurses have reported that he is abrupt, rude and does not communicate his plans. This registrar is an early phase advanced trainee who recently completed his primary examinations.

I. List 4 examples of conduct that would fulfil Mandatory Reporting requirements to the Medical Board. (4 marks)

- Practising while intoxicated on alcohol or drugs
- Sexual misconduct in the practice of the profession
- Placing the public at substantial harm because of an impairment / health issue
- Placing the public at risk because of a significant departure from accepted professional standards

II. You have organised to meet with this trainee to further discuss this issue. List 5 main points you would cover in this meeting. (5 marks)

- Investigate and ensure no need for mandatory reporting
- Identify work stressors
- Identify personal stressors
- Identify lifestyle factors - drug or alcohol use
- Identify and offer ongoing support - Family/Friends/Mentor/DEMTs
- Offer alcohol/drug liaison service referral
- Offer time off / roster changes to accommodate for trainee burnout

III. Following this meeting, you have identified that your department does not have a guideline on mandatory reporting.

List 6 important aspects required when developing a guideline. (3 marks)

- Gather information
 - Benchmarking
 - Evidenced based guidelines
 - Guidelines from other hospitals
- Identify and involve all relevant stakeholders
- Set objective and time frame
- Develop draft guideline and circulate for comment
- Implementation
 - Regular education and guideline promotion until targets achieved
- Post-implementation evaluation and adjustment
 - Regular guideline review

Question 25

You are a new consultant and asked to attend a meeting with hospital management regarding emergency department key performance indicators. Prior to attending you ensure you adequately understand some of the relevant areas:

Regarding triage, please complete the table (5 marks)

- ATS 1 immediate 100% of patients
- ATS 2 10min 80% of patients
- ATS 3 30min 75% of patients
- ATS 4 60min 70% of patients
- ATS 5 120min 70% of patients

Explain ETP including the relevant target figure (3 marks)

ETP – emergency treatment performance

81% of patients presenting to public ED will leave the ED within 4hrs*, via:

- Discharge
- Admission
- Transfer

All patients are included

Based on data that prolonged length of ED stay / overcrowding / access block increase hospital mortality

*First point of contact in ED: Admin or Triage

Note: accepted that some patients should be in ED longer than 4 hours (for safety) and thus ETP should not override clinical judgement

What is 'Transfer of care? What is the target?' (2 marks)

Transfer of care = time to ambulance handover and patient moved to bed or waiting room
100% within 30min, if >60min = incident report

(Not required: 85% within 15min, 95% within 20min)

Question 9 (10 marks)

She has a venous blood gas which is attached. Please outline your interpretation of her acid-base status (4 marks)

Metabolic acidosis + metabolic alkalosis

- Anion gap: $132 - (17 + 86) = 29$, thus HAGMA
- DR: $29 - 12 / 24 - 17 > 2$, thus HAGMA + metabolic alkalosis

Expected respiratory compensation

- Exp CO₂ = $8 + 1.5 \times 17 = \sim 32$

Electrolytes: Hypokalaemia / Hypochloraemia

Lactate / Cr normal (relevant to DDx)

Question 26

1. List 5 strategies that your department could implement to improve the above data. (5 marks)

Immediate notification strategies for Category 1 & 2 patients (Resus buzzers)
Rapid transfer of Category 1 & 2 patients from triage to clinical areas
Increase staffing of Resuscitation area (Cat 1 & 2 patients)
Redistribution of staff from low acuity areas of the department to high acuity areas.
Streaming of patients to clinical areas (Resus, Acute & Fast Track areas)
Implementation of a Rapid Assessment Team (RAT) model of care
Education of staff of the ATS triage categories & recommended maximum waiting times.
Ensure accurate data collection is occurring regarding time the patients are actually seen.

2. List 5 effects of long waiting times in the ED. (5 marks)

ED Overcrowding
Patient dissatisfaction & complaints
Increase in DNW patients
Violence and aggression against staff
Delays to critical treatments (eg time to antibiotics in sepsis)
Increase risk of adverse outcomes and higher mortality