Title: Medical and Surgical Emergency Admission Designation Policy	
Policy Owner: MOH committee on hospital clinical services and policies	**Policy Code**: A-Adm-003
Section location: Emergency Medicine and wards	**Effective Date**: 01-10-2022
Applies to: Internal Medicine, Surgery, Surgical Subspecialties, Orthopedic, Obstetrics and Gynecology and Emergency Medicine	**Revision Date:** 31-12-2024
Approvals	**Signature Date:** 18 SEP 2022
Approved by: MOH committee on hospital clinical services and polices	
Approved by: Director of technical affairs	
Approved by: Assistant undersecretary of technical affairs	
Notes	

1.0 Purpose

1.1 The medical, general surgical, surgical subspecialties, orthopedic, obstetrics and gynecology departments frequently overlap in the scope of practices and services they provide for certain clinical conditions and pathologies. It is important that the patients, for their best interest, be allocated to the service/department that can and will serve them best in the setting/ward that can provide them with the best care. Physicians should bear in mind that collaboration and patient ownership must be bilateral with patients admitted under the care of one service may well be transferred to the care of the other, if their medical or surgical condition necessitates that. The aim of this policy is to ultimately provide patients presenting to the emergency department and in need for evaluation and/or admission, the best and optimal care by being evaluated and/or admitted by the proper department that is specialized in dealing with such cases in a timely manner.

2.0 Responsibilities, Consults and Conflicts

2.1 It is mandatory that all the aforementioned services/departments respect and adhere to the outlined policy set forth in this document issued by the Ministry of Health (MOH) committee on health care services and policies.

2.2 Violations of the above (with or without resulting medical complications arising from such breach of code of conduct) may be reviewed in investigative committees and are subject to disciplinary actions.

2.3 It is mandatory that on call representatives of the aforementioned departments/services consulted for the cases respond in a timely fashion as per the rules and regulations of the Ministry of Health policies on consultation with undue delay to the set response times.

2.4 It is mandatory that on call representatives of the aforementioned departments/services consulted for the detailed cases adhere to the tenets of

consultation and ED admission policy rules set by the MOH (Emergency Department Admission Policy).

3.0 Deep Vein Thrombosis (DVT)

3.1 Patients presenting with history and clinical evidence of spontaneous DVT of the extremities (first incidence, or recurrent) with no past surgical history or trauma are to be admitted under the **medical team.**

3.2 Patients presenting with history and clinical evidence of DVT of the extremities occurring **within 30 days** of a general surgical procedure or trauma are to be admitted under the respective **surgical team.**

3.3 Patients presenting with history and clinical evidence of DVT of the extremities occurring **within 30 days** of an orthopedic surgical procedure are to be admitted under the **orthopedic team**.

3.3.1 If the hospital does not have an Orthopedic surgery service, the patient is to be admitted under the general Surgery team, managed by medical team and Orthopedic surgery consult to be sent for follow up and/or take over.

3.4 Patients presenting with DVT of the extremities **during pregnancy or 6-weeks post-delivery** are to be admitted under the **Obstetrics/Gynecology team.**

3.5 Management and follow-up of the anti-coagulation must be done by the Medical/Hematology team in the respective ward.

4.0 Pulmonary Embolism (PE)

4.1 Inpatients who are diagnosed with PE **during their admission**, are to **remain under** the care of the **admitting team**, with daily medical follow up and management.

4.2 Patients presenting to the emergency department with clinical and radiological evidence of PE

4.2.1 **If Stable** PE, with **no past surgical procedure or trauma within 30 days:** are to be admitted under the **medical team.**

4.2.2 **If stable**, occurring **within 30 days of a general surgical procedure**: are to be admitted under the **surgical team.**

4.2.3 **If stable**, occurring **within 30 days of an orthopedic surgical procedure** (fracture, metal prosthesis insertion, etc.): are to be admitted under the **orthopedic team.**

4.2.3.1 If the hospital does not have an Orthopedic surgery service, the patient is to be admitted under the Surgery team, managed by the medical team. An Orthopedic surgery consult to be sent for follow up and or take over.

4.2.4 **If stable**, occurring **during pregnancy or post-delivery (within 6 weeks)**: are to be admitted under the **Obstetrics/Gynecology team.**

4.3 **Massive PE:** hemodynamically unstable patients, with a suggestive echo finding(s) of massive PE, are to be admitted under the **Cardiology/Medical team** in a monitored setting (CCU/ICU).

4.4 Management and follow-up of the anti-coagulation must be done by the Medical/Hematology team in the respective ward.

5.0 For patients with Advanced Metastatic Cancers, for palliative care, and including those refusing intervention, the admission will be based on the origin of the cancer and the secondary clinical conditions

5.1 **Clinical conditions due to <u>direct complications of the primary cancer:</u>**

5.1.1 Patients with advanced, end-stage metastatic cancers originating from the **gastrointestinal, biliary systems and breast with clinical conditions due to <u>direct complications of the primary cancer</u>** (e.g., presenting with clinical and radiological evidence of **obstruction of the gastrointestinal system - foregut, midgut and hindgut - obstructive jaundice, malignant effusions)** are to be admitted under the **<u>surgical team.</u>**

5.1.2 Patients with advanced, end-stage metastatic cancers originating from the **hematological, lymphatic, neurological, hepatic and thoracic systems with clinical conditions due to <u>direct complications of the primary cancer</u>** are admitted under the **<u>medical team.</u>**

5.1.3 Patients with advanced, end-stage metastatic cancers originating from the **urological system with clinical conditions due to <u>direct complications of the primary cancer</u>** (e.g., presenting with clinical and radiological evidence of **obstructive uropathy, hematuria)** are admitted under the **<u>urology team.</u>**

5.1.4 Patients with advanced, end-stage metastatic cancers originating from the **female reproductive system with clinical conditions due to <u>direct complications of the primary cancer</u>** are admitted under the **<u>gynecology team.</u>**

5.1.5 Patients with advanced, end-stage metastatic cancers presenting with clinical and radiological evidence of **non-operable fracture** are admitted under the **<u>orthopedic team.</u>**

5.2 **Clinical conditions due to <u>indirect complications of primary cancer</u> are admitted according to the presenting illness and acute issue.**

5.2.1 Patients with advanced, end-stage metastatic cancers presenting with **clinical conditions due to <u>indirect complication of the primary cancer (e.g. seizures)</u> or** not specific or related to the primary cancer (e.g. clinical and radiological evidence of **pneumonia, urinary tract infection, and non-malignant pleural effusion)**, are admitted under the **<u>medical team</u>**

5.3 **Patients with end stage cancers deemed terminal for palliative end of life care**

5.3.1 Patients with advanced, end-stage metastatic cancers originating from the **gastrointestinal, biliary systems and breast deemed terminal for comfort measures and support** are to be admitted under the **<u>surgical team</u>**

5.3.2 Patients with advanced, end-stage metastatic cancers originating from the **hematological, lymphatic, neurological, hepatic and thoracic systems deemed terminal for comfort measures and support** are admitted under the **<u>medical team.</u>**

5.3.3 Patients with advanced, end-stage metastatic cancers originating from the **female reproductive system deemed terminal for comfort measures and support** are admitted under the **<u>gynecology team.</u>**

5.3.3.1 If presented with abdominal complications and/or malignant effusion to hospitals that don't have a gynecology department, patient is to be admitted under **surgical team** and a consult must

be sent to **the gynecology** team that is covering the respective hospital for transfer of care if deemed fit.

5.3.4 Patients with advanced, end-stage metastatic cancer originating from the **urological system deemed terminal for comfort measures and support** are admitted under the **urology team.**

5.4 Patients operated in the Kuwait Cancer Control Center (KCCC) and presenting to secondary hospitals with complications related to his/her cancer, are to be referred to and admitted in the KCCC accordingly.

5.5 Refer to the MOH Operational and Management Policy and Guide for Adults with Terminal Illness.

6.0 Gastrointestinal Bleeding

6.1 Patients presenting with history and evidence of **acute upper gastrointestinal bleeding,** will be managed as follows:

6.1.1 Hemodynamically **stable** patients, who are deemed in need of admission, are to be admitted and managed under the care of the **medical team.**

6.1.2 Hemodynamically **unstable** patients are to be admitted and managed in the **intensive care unit,** with gastroenterologist/surgical consultation to be issued. The Endoscopic procedure is to be done in the operation theatre or intensive care unit. Post-endoscopy, patients should be monitored in the intensive care unit. If bed is not available, the patient should be kept in the recovery room, under ICU care, until bed is available.

6.2 Patients presenting with history and evidence of **acute lower gastrointestinal bleeding,** will be managed as follows:

6.2.1 Hemodynamically **stable** patients, who are deemed in need of admission, are to be admitted and managed under the care of the **surgical team.**

6.2.2 Hemodynamically **unstable** patients are to be admitted in **intensive care unit and managed by the surgical team.** The endoscopic procedure is to be done in the operation theatre or intensive care unit. Post-endoscopy, patients should be monitored in the intensive care unit. If bed is not available, the patient should be kept in the recovery room, under ICU care, until bed is available.

6.3 Patients presenting with history and evidence of acute **upper** (or lower gastrointestinal bleeding), **within 30 days post foregut surgery** (e.g., sleeve, esophagectomy etc.), and:

6.3.1 Hemodynamically **stable** patients, who are deemed in need of admission, are to be admitted and managed under the care of the **surgical team.**

6.3.2 Hemodynamically **unstable** patients are to be admitted in **intensive care unit and managed by the surgical team.**

7.0 Thoracic Pathologies.

7.1 The thoracic surgery department is a consult service with admission privileges for elective stable clinical pathologies (related to the chest wall, foregut, pleura and lung) in the chest disease hospital at the Al Sabah Health region. The thoracic surgery team provides its scope of services and professional support for all the ministry of health general hospitals (for both emergency and elective cases).

7.2 **Pneumothorax:**

7.2.1 Patients presenting with traumatic or spontaneous pneumothorax who are deemed in need for admission, should be admitted and managed under the care of the **surgical team.**

7.3 **Pleural effusions:**

7.3.1 Patients presenting with symptomatic pleural effusions secondary to ongoing medical comorbidities who are deemed in need of admission, should be admitted and managed under the care of the **medical team** of the hospitals they presented to.

7.3.2 The consultation of the general surgery team or the thoracic surgery on call team (for assessment and management plan) is left to the discretion of the treating/admitting team and the interdepartmental policies established by the thoracic surgery department at the chest disease hospital.

7.3.3 Drainage of the pleural effusions maybe referred by the consulted thoracic surgeon, to the hospitals' general surgeons and or interventional radiologist.

7.3.4 Patients presenting with symptomatic **pleural effusions** secondary to ongoing medical comorbidities, who are deemed in need of admission, and are **unstable** from the respiratory or cardiovascular point secondary to the effusion should be admitted and managed under the care of the **medical team** of the hospitals they presented to with urgent consultation of the in house general surgery team for drainage of the effusion.

*(cirrhosis, end stage renal failure, parapneumonic effusion, empyema, congestive heart failure, lymphoma etc.)

7.4 **Post thoracic surgery:**

7.4.1 Patients who have undergone elective surgical procedures in the chest disease hospital (CDH), by the thoracic surgeons, for thoracic or foregut pathologies, who in turn present to the emergency department with pleural or other complications from such surgeries who are deemed unstable and in need for admission, should be admitted and managed under the care of the **general surgery** team of the hospitals they presented to. After which the respective thoracic surgery team is to be consulted for plan, management and/or transfer of care.

7.4.2 Those cases that present with the aforementioned complications and deemed stable and fit for transfer to the respective thoracic surgeon treating physician, should be referred accordingly.

8.0 Septic Arthritis

8.1 Patients presenting to emergency department with history and (or suspected) evidence of septic arthritis, are to be admitted under the care of the **orthopedic team.**

8.2 Joint aspiration is to be performed by the orthopedic surgeon or rheumatologist (based on availability).

9.0 Osteomyelitis

9.1 Patients presenting to the emergency department with history and evidence of osteomyelitis, deemed in need of admission for IV antibiotics, are to be admitted and managed under the care of the **medical team.**

9.2 Patients presenting to the emergency department with history and evidence of osteomyelitis, deemed needing admission and orthopedic surgical intervention, are to be admitted and managed under the care of the **orthopedic team**

9.3 Patients presenting to the emergency department with history and evidence of osteomyelitis, occurring post-orthopedic surgery or prosthesis/plate insertion, are to be admitted and managed under the care of the **orthopedic team**.

10.0 Diabetic foot/Bedsore

10.1 Patients presenting to the emergency department with infected diabetic foot/bedsores that requires active inpatient wound management and follow up (e.g., serial debridement), are to be admitted under the care of the **surgical team**.

10.2 Diabetes management should be done by the medical team in the surgical ward.

10.3 Patients presenting to the emergency department with infected diabetic foot/bedsore with **ongoing active unstable medical** condition(s) (e.g., decompensated heart failure, decompensated liver failure, active COPD exacerbations, etc.), unrelated to the respective wound, are to be admitted under the **medical team** and followed up by the respective **surgical team.**

10.4 A multidisciplinary team, including orthopedic, plastic, vascular, and general surgery should be considered in managing diabetic/bedsore patients.

11.0 Pancreatitis

11.1 **Acute severe** (by score: e.g., Glasgow, BISAP or APACHE II >8), necrotizing and/or obstructive (e.g., cholelithiasis) proven by radiological evidence of dilated biliary tree, are to be admitted under the care of the **surgical team.**

11.2 All post biliary procedures acute pancreatitis presenting to ED, are to be admitted initially under the care of **surgical team**.

11.3 **Mild-moderate acute pancreatitis** proven to be **non-obstructive** in origin by imaging, but with cholelithiasis, are to be admitted under the care of **surgical team**.

11.4 **Mild-moderate acute pancreatitis**, proven to be **non-obstructive** in origin by imaging (e.g., no cholelithiasis) to be admitted under the care of the **medical team.**

11.5 Chronic pancreatitis that does not need surgical intervention to be admitted under **gastrointestinal team/medical team** and a consult to hepato-pancreato-biliary specialty to be sent.

12.0 Acute Acalcular cholecystitis

12.1 Patients presenting to the ED with clinical and radiological evidence of acute acalcular cholecystitis are to be admitted under the care of **the surgical team.**

13.0 Urinary Tract Infection

13.1 Patients presenting to the emergency department with history and evidence of urinary tract infection are to be admitted under the care of the **urology team,** if any of the following criteria are present:

13.1.1 Male patients below age 45 year
13.1.2 Obstructive uropathy
13.1.3 Suprapubic catheter associated or needed
13.1.4 Collection or emphysema proven by imaging

13.2 Patient presenting to the emergency department with history and evidence of urinary tract infection with none of the above criteria, are to be admitted under the care of the **medical team**.

14.0 Sepsis/Septic Shock

14.1 Patient presenting with history and clinical evidence of sepsis/septic shock, are to be admitted under the care of the specialty of the underlying cause of the sepsis/septic shock in a monitored setting (ICU).

14.2 The Sepsis bundle should be initiated by the emergency physician upon arrival of the patient to the emergency department. (Refer to appendix)

15.0 Cellulitis

15.1 Patients presenting to the emergency department with history and clinical evidence of acute cellulitis are to be admitted under the care of the **medical team**.

15.2 Patients presenting to the emergency department with history and evidence of acute cellulitis complicated by abscess (any size), clinically or proven by ultrasound imaging, are to be admitted under the care of the **surgical team**.

16.0 Abscess

16.1 Patients presenting with history and evidence of **brain abscess** are to be managed as follows:

16.1.1 **Post Neurosurgical procedure** are to be admitted and managed by the **neurosurgery team in Ibn Sina Hospital.**

16.1.2 If **small <2.5cm**, and **not** for Neurosurgical **intervention, are to remain under the care of the medical team with follow up by the Neurosurgeon***

16.1.3 If large, equal or >2.5cm, and /or requiring neurosurgical intervention, are to be admitted under the care of **neurosurgery team**.

16.1.4 Sinusitis related brain abscess are admitted under the care **of the ENT care (if service available)/neurosurgery care.**

16.1.5 Note: if no available bed in Ibn Sina, the patient should be managed in the index hospital by the neurosurgeon under the medical team care.

*Note: the above article 16.1 is due to lack of bed availability in IBN SINA hospital, and this might change in the future.

16.2 Patients presenting with history and evidence of **abscess in the Head/Neck** (deep to cervical fascia, infra/intramuscular abscesses and post ENT procedures infection excluding soft tissue skin infections (e.g., carbuncles and furuncles and infected cysts) are to be admitted under the care of the **ENT/Plastic surgery team**.

16.3 Patients presenting with history and evidence of **abscess in the anterior and posterior trunk** (Superficial) are to be admitted under the care of the **surgical team**.

16.4 Patients presenting with history and evidence of **intra-abdominal/pelvic abscesses** are to be admitted under the care of the **surgical team**.

16.5 Patients presenting with history and evidence of **ovarian/uterine abscess** are to be admitted under the care of the **gynecology team.**

16.6 Patients presenting with history and evidence of **abscess in the upper (arm/forearm) or lower limbs (thigh/leg)** that are proven to be **superficial** (perifascial, subcutaneous fat and above skin layers) are to be admitted under the care of the **surgical team**.

16.7 Patients presenting with history and evidence of **abscess in the upper (arm/forearm) or lower limbs (thigh/leg)** that are proven to be **deep** (subfascial, intramuscular, inframuscular) are admitted under the care of **orthopedic team**.

16.8 Patients presenting to emergency department with history and evidence of **abscess in the hand (deep and/or superficial),** are admitted under the care of **orthopedic team** (shift to Alrazi-hospital).

16.9 Patients who present with history and evidence of **abscess in the hand, while inpatient,** are managed and followed up by **Orthopedic team** in the index admitted ward. Take over within 48 hours if deemed fit from orthopedic surgery or necessary.

16.10 **Spinal abscess**

16.10.1 Radiologically diagnosed spinal abscess (vertebral column or spinal cord spaces) **post spinal procedures** performed by the **orthopedic spine surgery** team to be admitted under the **orthopedic spine surgery team.** Consultation to the neurosurgery is done accordingly thereafter if deemed necessary by the treating/admitting team.

16.10.2 Radiologically diagnosed spinal abscess (vertebral column or spinal cord spaces) **post spinal procedures** performed by **neurosurgery team** are to be admitted under the **neurosurgery team.** Consultation to the orthopedic spine surgery team is done accordingly thereafter if deemed necessary by the treating/admitting team.

16.10.3 Radiologically diagnosed **vertebral osteomyelitis/abscess** (not related to a procedure on the spine) with bone destruction, unstable fracture and/or neurodeficit are to be admitted under the **orthopedic spine surgery team.** Consultation to the neurosurgery is done accordingly thereafter if deemed necessary by the treating/admitting team.

16.10.4 Non recurrent hematogenous vertebral osteomyelitis with no bone destruction, paravertebral/intravertebral abscess or neurodeficit are to be admitted under **medical team.**

17.0 Iliopsoas Abscess

17.1 Patients presenting with radiological diagnosis of iliopsoas abscess, to the emergency department, are to be admitted under the care of the **surgical team**

17.2 Patients presenting with radiological diagnosis of iliopsoas abscess, post spine fixation or if there is bone involvement with/without neurological deficit, are to be admitted under the care of **the orthopedic team.**

18.0 Necrotizing Fasciitis

18.1 Patients presenting with history, clinical and radiological evidence of necrotizing fasciitis, are to be admitted under the care of **the surgical team.**

18.2 Other surgical subspecialty should be consulted based on the affected area.

19.0 Amputations

19.1 Any patient presenting to the emergency department with an **amputated digit**, are admitted and managed under the care of **orthopedic team**.

19.2 Any patient presenting to the emergency department with trauma related amputations, are to be admitted and managed under the care of the **orthopedic team**.

19.3 Any patient in need for amputation with disarticulation involvement (shoulder/hip) are managed under the care of **orthopedic team.**

19.4 Any patient with necrotizing soft tissue infection with joint involvement in need for amputation with disarticulation (shoulder/hip) is to be managed under the care of **orthopedic team with assistance of the general surgery/plastic surgery team.**

19.5 Any patient who presents with diabetic foot that is in need for amputation is admitted and managed under the care of the **surgical team** (with orthopedic consult).

20.0 Compartment Syndrome

20.1 Patients presenting with clinical evidence of compartment syndrome involving extremities, are to be admitted under the care of the **orthopedic team**.

20.2 Patients presenting with clinical evidence of intra-abdominal compartment syndrome, are to be admitted under the care of the **surgical team**.

20.3 Patients presenting with clinical evidence of post-vascular repair compartment syndrome, are to be admitted under the care of the **Vascular surgery team**.

20.4 Patients presenting with clinical evidence of burn-related compartment syndrome (extremity or torso) are to be admitted under the care of the **plastic surgery team**.

20.5 Refer to compartment syndrome policy A-Adm-006 for further details.

21.0 Patients with multiple traumatic injuries secondary to motor vehicle collisions (MVC), fall from height (FFH) etc.

21.1 Some victims of trauma may present with multiple traumatic injuries of multiple organs or anatomical regions which necessitate a multidisciplinary approach in management but under the care of the admitting general surgery/trauma surgery team (e.g., a patient with traumatic brain injury, an open femoral fracture, and a grade 3 liver injury).

21.2 Many other patients present with mild multiple injuries but a major single organ/region injury which requires more specialized care by specialized services (e.g., patient with lumber spine fracture and bilateral femoral shaft fractures with normal CT scan of the brain, abdomen, and pelvis). The following has been set as a guide to when is a patient fit and appropriate to be admitted under the care of the specialized services to be provided the best care in a timely manner.

21.3 Patients presenting to the emergency department with multiple traumatic injuries after FFH/MVC, are to be admitted under the care of the **surgical/trauma team for at least 24 hours** prior to transfer of care to the subspecialty unit planning surgical intervention or follow up for its specified respective injury (e.g., spine/orthopedic surgery team, OMF etc.) **if the two criteria are present**:

21.3.1 **Criteria 1:** Sustained multiple injuries **with** associated **specific organ injury** (e.g., spinal injuries and/or orthopedic injuries, OMF, ophthalmology, plastic, etc.) **that is planned for surgical intervention, or management plan** by that respective **subspecialty** (within 48-96 hours or beyond).

21.3.2 **Criteria 2**: Patients sustaining multiple injuries & presenting to emergency department with any of the following criteria:

1. GCS<15 and >11 (even if the CT brain normal or abnormal from musculoskeletal point, but non-operative)
2. Any physiological derangements (SO2<92%, HR>100/min, SBP<100mmHg, respiratory rate>25/min, or abnormal ABG, lactic acidosis or high base deficit>2.5)
3. Radiological evidence of injuries other than musculoskeletal (e.g., confirmed, or suspected solid or hollow organ injuries, lung contusion, pneumo/hemothorax, multiple rib fractures, flail chest, OMF injuries needing intervention, burns, blunt cardiac injuries, sternal fracture, blunt thoracic aortic injuries)

21.4 Patients presenting to the emergency department sustaining **specific organ/region injury** after FFH/MVC (e.g., spinal injuries and/or orthopedic injuries, OMF, ophthalmology, plastic, etc.), are to be transferred to/**admitted under** the care of that respective **specialized unit** (e.g., OMF, Ortho, ophthalmology, etc.) **within 24 hours of the injury, if the 4 criteria present**:

21.4.1 **Criteria 1**: the patient is clinically stable **within** 24 hours of the initial injury, with assessment & documented clearance (by ER and/or general surgery/trauma surgery team) for transfer by a senior registrar and above rank.

21.4.2 **Criteria 2:** the patient is cleared clinically and radiologically from other injuries (with a validated report of the trauma-related necessary imaging for the particular mechanism e.g., a whole-body CT scan with I.V. contrast for a high risk polytrauma)

21.4.3 **Criteria 3**: the patient is planned for surgical intervention, follow up or care by the respective **specialized unit** (e.g., OMF, Ortho, ophthalmology, etc.) over the next 48-96 hours (or beyond).

21.4.4 **Criteria 4:** absence of any point in articles 21.3.1 and 21.3.2

22.0 Rib Fracture

22.1 Patients presenting with history, clinical and radiological evidence of rib fracture are to be admitted under the care of the **surgery team**.

23.0 Ingrown Toenail

23.1 Ingrown Toenails are to be managed by the emergency department physician (depending on competency) / surgery team.

24.0 Degloving Injuries

24.1 Patients presenting to the emergency department with clinical evidence of degloving injuries involving the Torso/face are to be admitted under the **general surgery team** with combined care of the **plastic surgery team.**

24.2 Patients presenting to the emergency department with clinical evidence of degloving injuries involving the extremities or fracture associated with degloving injuries, are to be admitted under **orthopedic surgery team** with combined care of **plastic surgery team**.

25.0 Cut Wounds, and Closure of the Wound

25.1 Patients presenting to the emergency department with cut wounds are to be managed by the **emergency department doctors**

25.2 Patients presenting to the emergency department with complex cut wounds, are managed by the **surgery team.**

25.2.1 Definition of complex cut wound depends on size, amount of tissue lost and need of competency with tissue handling, closure techniques and wound care including competency of the consulting ERP.

25.3 Patients presenting to the emergency department with cut wound and suspected tendon involvement of upper limbs, lower limbs, or hands, are to be managed by the **orthopedic team (with wound closure even if no tendon involvement**).

25.4 Patients presenting to the emergency department with cut wound of the face are managed by **ERP /Surgery/Plastic surgery team (**depending on complexity of injury and competency).

26.0 Foreign body

26.1 Patients presenting to the emergency department with history and evidence of subcutaneous foreign body, **without** neurological deficit, are to be managed by the **surgery team**.

26.2 Patients presenting to the emergency department with history and evidence of intramuscular or intra-articular foreign body associated with decreased range of motion or neurological deficit, are managed by the **orthopedic team**.

26.3 Patients presenting to the emergency department with history and evidence of subcutaneous/deep foreign body in the hand/foot, are to be managed by the **orthopedic team**.

27.0 Vascular injury

27.1 Patients presenting to the emergency department with history and clinical evidence of vascular injury, **without** associated fracture, are to be admitted and managed by the **general surgery/trauma surgery/vascular surgery team**.

27.2 Patients presenting to the emergency department with history and clinical evidence of **fracture associated vascular injury**, are to be admitted and managed by the **orthopedic/vascular surgery team**.

28.0 Radiological Imaging

28.1 Some radiological procedures necessary for the diagnosis of the above relevant pathologies will need to be done in the ED setting prior to consultation of the respective specialties in order to achieve proper disposition of the patient to the most appropriate specialty for that diagnosed pathology that will provide the necessary management. Examples:

28.1.1 Skin and soft tissue infection requiring US or CT-Scan to rule out deep seated abscess.

28.1.2 CT chest to rule out emphysematous bullae instead of pneumothorax.

28.2 Refer to the Emergency Radiology Policy A-Adm 004 for more details.

29.0 Pregnancy Related Cases

29.1 Pregnant patients with medical conditions exacerbated by the pregnancy are to be admitted and managed by the obstetrics and gynecology department. Consultation of the respective medical specialties (obstetric medicine where available) must be issued if assessment, management, or co-management is deemed necessary.

29.2 Examples of the medical conditions exacerbated by the pregnancy:

- 29.2.1 Urinary tract infection.
- 29.2.2 Bronchial asthma.
- 29.2.3 Pneumonia **(**exception: suspected TB or severe pneumonia requiring ICU admission. Such patients are best served to be admitted under the medical team with an Obstetrics team following up the pregnancy**).**
- 29.2.4 Venous thromboembolism (up to 6 weeks post-delivery).
- 29.2.5 Gestational Diabetes.
- 29.2.6 Known case of Epilepsy,
- 29.2.7 Pregnancy induced hypertension.
- 29.2.8 Renal impairment.

29.3 Pregnant patients with mild to moderate DKA are to be admitted by the obstetrics and gynecology department and co-managed with the medical/diabetology department (to define the severity of DKA, based on the attached table in the appendix).

29.4 Pregnant patients with severe DKA are to be admitted to ICU.

29.5 Where obstetric medicine service is available, it is the responsibility of the obstetric medicine team to follow and manage pregnant women admitted with medical conditions in obstetric wards.

30.0 Monitoring procedure

30.1 MOH committee on hospital clinical services and polices will monitor the above policy.

30.2 A Senior doctor of the related team can email the above-mentioned committee, in case of any incidence.

30.3 The email address will be: policy.moh.kw@gmail.com

APPENDIX

Attachment # 1

Typical laboratory characteristics of DKA and HHS

Typical laboratory characteristics of DKA and HHS*

Typical laboratory characteristics of DKA and HHS*

	DKA			HHS
	Mild	Moderate	Severe	
Plasma glucose (mg/dL)	>250	>250	>250	>600
Plasma glucose (mmol/L)	>13.9	>13.9	>13.9	>33.3
Arterial pH	7.25 to 7.30	7.00 to 7.24	<7.00	>7.30
Serum bicarbonate (mEq/L)	15 to 18	10 to <15	<10	>18
Urine ketones ¶	Positive	Positive	Positive	Small
Serum ketones - Nitroprusside reaction	Positive	Positive	Positive	≤ Small
Serum ketones - Enzymatic assay of beta hydroxybutyrate (normal range <0.6 mmol/L) Δ	3 to 4 mmol/L	4 to 8 mmol/L	>8 mmol/L	<0.6 mmol/L
Effective serum osmolality (mOsm/kg) ◇	Variable	Variable	Variable	>320
Anion gap §	>10	>12	>12	Variable
Alteration in sensoria or mental obtundation	Alert	Alert/drowsy	Stupor/coma	Stupor/coma

DKA: diabetic ketoacidosis; HHS: hyperosmolar hyperglycemic state.
* There may be considerable diagnostic overlap between DKA and HHS.
¶ Nitroprusside reaction method.
Δ Many assays for beta hydroxybutyrate can only report markedly elevated values as >6.0 mmol/L.
◇ Calculation: 2[measured Na (mEq/L)] + glucose (mg/dL)/18.
§ Calculation: (Na+) – (Cl– + HCO3–) (mEq/L).

Graphic 72111 Version 8.0

Attachment # 2

Sepsis Screening and Assessment Tool

Date:
Time:

Patient's Name:
Age/ D.O.B:
Civil I.D Number:
File Number:

Is the history suggestive of infection?

☐Yes, source unclear
☐Pneumonia
☐Urinary tract infection
☐Intra abdominal infection
☐Joint or skin infection
☐Device-related infection
☐Meningitis
☐Other (specify) .....

qSOFA Criteria

☐Respiratory rate ≥ 22/min
☐Altered mental status (i.e. GCS ≤ 15)
☐Systolic BP ≤ 100 mm Hg

Sepsis six aim to complete **within 1 hour**

Take

☐**1. Blood cultures** before giving antibiotics
Do not delay antibiotic administration >1 hour if blood cultures are difficult to obtain. Send samples from potentially infected sites eg.sputum, urine, wounds, IVC/CVC. Consider source control.
☐**2. Lactate and CBC**
☐**3. Urine output measurement**

Give

☐**4. O2** (94-98% SpO2 or 88-92% in COPD patients)
☐**5. IV fluid resuscitation**
(500ml bolus - give up to 30ml/kg) & reassess
(target systolic BP>90/MAP>65)
Monitor response to IV fluids and titrate to effect
☐**6. IV antibiotics** .....
Please write antibiotic name & regimen

For diagnostic purposes

Look for **signs of organ dysfunction**:
☐Systolic BP < 90 or Mean Arterial Pressure < 65
☐New need for oxygen to achieve saturation > 90%
☐Lactate > 2 mmol/L
☐Urine output < 0.5ml/kg
☐Acutely altered mental status
☐Glucose > 7.7 mmol/L
☐Creatinine > 177 micromol/L
☐Bilirubin > 34 micromol/L
☐PTR > 1.5 or aPTT > 60s
☐Platelets < 100 x 109/L
Any organ dysfunction: THIS IS **SEPSIS**

Look for **signs of septic shock**
(following administration of fluid bolus)
☐Lactate > 4 mmol/L
☐Hypotensive (Systolic BP < 90 or MAP < 65)
If either present: THIS IS **SEPTIC SHOCK**
Critical care consult required

Doctor's Name:	
Doctor's signature:	
Date:	Time