HOSPITAL KANOWIT
EMERGENCY AND TRAUMA UNIT
(UNIT OPERATIONAL POLICY)

REVISED OCTOBER 2023

UNIT

OPERATIONAL POLICY

Emergency And Trauma Unit

Hospital Kanowit

2023

Revised October 2023

OPERATIONAL POLICY **HK/ETU/PP/1-23**	TARIKH KUATKUASA	7/11/2023
	TARIKH SEMAKAN	7/11/2023
	DISEDIAKAN OLEH	Mahadir Bin Ros Pen. Peg. Perubatan U32 No. LPP : 11612 Hospital Kanowit PPP MAHADIR BIN ROS
	DILULUSKAN OLEH	DR BERNADETTE SYONNIA BT. JARU SAWAT PENGARAH HOSPITAL, HOSPITAL KANOWIT. MMC NO.61590 DR BERNADETTE SYONNIA BT JARU SAWAT HOSPITAL DIRECTOR
TAJUK / TITLE	Unit Operational Policy Emergency and Trauma Unit, Hospital Kanowit.	
TARGET / SKOP	To be used at the Emergency and Trauma Unit (ETU), Kanowit Hospital and it encompasses the management and care of emergency and trauma patients from the field and within the ETU. The scope includes: 1. Pre-hospital care services and ambulance services. 2. ETU management of medical and trauma cases. 3. Mass casualties' management. 4. Medical coverage for high-risk community events 5. Observational medical care 6. One Stop Crisis Centre (OSCC) services	
TUJUAN	To serve as guideline for the day-to-day operation of the Emergency and Trauma Unit, Kanowit Hospital.	

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1. INTRODUCTION

The ETU will operate 24 hours daily offering a multitude of emergency medical services for the community encompassing a wide range of emergent trauma and non-trauma conditions ranging from the critically ill or severely injured to those with minor ailments falling within the scope of emergency medicine.

1.1. Vision

To provide fast and efficient emergency treatment services

1.2. Mission

Appreciate the patient's life as a valuable asset in society in addition to taking positive steps to improve the quality of health to enjoy a better quality of life.

1.3. Objectives & Goals

1.3.1 General Objective

The objective of ETU is to provide a comprehensive, quality, efficient and effective service to the injured and acutely ill with the aim to save life, facilitate early recovery while maintaining a close and effective rapport with the public.

1.3.2 Specific Objective

I. Early detection, effective and efficient treatment to the injured and acutely ill.

II. Prevent and reduce disabilities from injury or illness.

III. Refer patients to the proper and appropriate discipline for further treatment.

IV. To establish a conducive and safe working environment for the staff,

1.3.3 Goal

1.3.3.1 Percentage of inappropriate triaging (Under-Triaging): Category Green patients who should have been triaged as Category Red. (Target : ≤ 0.5%)

1.3.3.2 Percentage of patients ventilated in Emergency and Trauma Department for more than 8 hours. (Target : ≤ 50%)

1.3.3.3 Ambulance dispatch time of less than 5 minutes. (Target : > 90%)

1.3.3.4 PEFR Implementation for Asthma Patients in Asthma Bay by AMO. (Target : 80%)

1.4. Scope of service

1.4.1 Emergency Care

1.4.1.1 To provide care that is comprehensive and appropriate for a community hospital which covers:

a. Resuscitation and stabilization
b. Diagnosis and intervention procedures
c. Definitive care

1.4.2 Pre-Hospital Care/Emergency ambulance service

1.4.2.1 The service will cover an area within the 25km radius. ETU will coordinate with other hospitals, health clinics and other agencies for calls received from a distance more than 25km away.

1.4.2.2 This includes provision of onsite resuscitation, stabilization and emergency transportation to base hospital or other appropriate medical facilities.

1.4.3 One Stop Crisis Center

1.4.3.1 To provide and coordinate with other department and agencies in the management of rape, sexual abuse, child abuse, sodomy, and domestic violence cases.

1.4.4 Inter Facility Transfer

1.4.4.1 To provide and coordinate inter facility transfer between government hospitals.

1.4.5 Disaster Management

1.4.5.1 To provide and coordinate the management of casualties in internal and external disasters.

1.4.6 Medical Coverage

1.4.6.1 To provide an appropriate medical coverage for high-risk community event and event attended by VVIP.

2.0 POLICY DOCUMENT STATEMENT.

2.1 This policy documents covers key areas of ETU such us organization, scope and service system, resources including components of human, physical, structural and hardware, and the human capital training and planning.

2.2 This policy document shall outline the quality standards of the various components of the organization including service, professional practice, structural and hardware.

2.3 The policy document shall be reviewed in part or in whole every 3 years.

3.0 ORGANIZATION AND MANAGEMENT

3.1 ORGANIZATION CHART

3.1.1 The staff organization for the emergency unit is shown in organization chart (Refer Appendix A).

3.1.2 The unit is headed by a Medical Officer. He will report directly to the Hospital Director and will assume responsibility for matters pertaining to the administration of the unit. He will be assisted by an Assistant Medical Officer U32.

3.1.3 A Senior Medical Officer in-charge will be responsible for matters pertaining to clinical management.

3.2 Role of the Head of Emergency and Trauma Unit

3.2.1 The Head of Department (HOU) is responsible for the day-to-day operation of the unit.

3.2.2 He shall be responsible for manpower planning and deployment, such that to ensure the most optimal use of department personnel and emergency department activities are delegated appropriately according to the level of staff education, skills, and abilities.

3.2.3 He shall establish a system where each emergency personnel be put on duty roster and on call. This shall also integrate a mechanism to summon any emergency personnel for deployment in the event of a disaster.

3.2.4 Planning and development of the department (physical and services)

3.2.5 Human resource planning and development (training, Continuous Medical Education CME etc).

3.2.6 Plan and implement the budget for the department.

3.2.7 Conduct periodic internal department meetings with heads of units. Special ad-hoc meetings will be carried out when necessary and creation of specific committees made.

3.2.8 Quality assurance and auditing

3.3 Relationship with other department / unit / agencies

3.3.1 The department shall interact or relate with other departments / units in the hospital concerning clinical areas, finance, procurement, and supply of consumable items.

3.3.2 ETU shall interact with other agencies in the following situation.

i.	Ambulance service	Other hospitals, health clinics, JPAM
ii.	Medical legal cases	Police
iii.	Disaster, Mass Casualty Incident	Police, Fire and Rescue Department, Local Authorities, Private Institutions etc.
iv.	Mercy Flights	MEDEVAC, TUDM
v.	Infectious diseases	Divisional Health Office, Local Council
vi.	Domestic violence	Police, Welfare Departments, NGOs
vii.	Social support	Social and Welfare Department

4.0 HUMAN RESOURCE

4.1 Staffing

4.1.1 The workforce of ETU shall be organized and managed in a manner that leads to an efficient and desirable work output based on the current available staff strength.

4.1.2 Middle level management list:

i. Medical Officer UD43/44/48

ii. Assistant Medical Officer U32

iii. Nursing Sister U32

4.2 Staff requirement

4.2.1 Due to the wide range of ETU scope of services, and the limited number of human resources, staff is deployed with multiple responsibilities to cover the various treatment areas and activities.

4.2.2 Head of Unit – Medical Officer

4.2.3 Medical Officers (1-2) per on call basis - cover Red Zone, Yellow Zone, Green Zone, Respi Zone

4.2.4 Assistant Medical Officers (AMO U29)-for every 7 hours shift 0700-1400(am); 1400-2100 (pm); 2100-0700 (10 hours) for night duty is as in the table below.

1 -2AMO	In-charge shift / Triage Counter / Green Zone
1-2 AMO	Respi Zone/Yellow Zone/Emergency Medical and Trauma Team (EMT)
1-2 AMO	Red Zone/Secondary Triage/Green Zone

4.2.5 Staff Nurse (SN)-for every 7 hours shift 0700-1400 (am); 1400-2100 (pm); 2100-0700 (10 hours) for night duty.

1 -2 SN	Red Zone/EMT/Respi Zone
1-2 SN	Yellow Zone/Observation Bay

4.2.6 Pembantu Perawatan Kesihatan (PPK) – 1-2 person for every 7 hours shift 0700-1400 (am); 1400- 2100 (pm); 2100-0700 (10 hours) for night duty.

4.2.7 Drivers - for every 7 hours shift 0700-1400 (am); 1400-2100 (pm) ; 2100-0700 (10 hours) for night duty.

4.2.8 The number of staff during the night shift is reduced but the coverage of treatment areas remains the same. The number of staff on duty might vary depending on the requirement and manpower available.

4.2.9 Each category of staff must have a “Desk File” which contains the job descriptions, responsibilities, and work processes.

4.3 Staff Discipline

4.3.1 All emergency personnel shall adhere strictly to official working hours and document attendances using face scan.

4.3.2 All leave applications must be approved before taking leave.

4.3.3 All staff shall follow accepted dress codes and standard identifications or name tags.

4.4 Orientation

4.4.1 All new personnel will undergo an introduction and department orientation program by the HOU of supervisors according to the orientation checklist provided.

4.4.2 Orientation should be conducted within 1 month of reporting duty to the department.

4.4.3 Orientation form must be kept in the department orientation file.

4.5 Training / CME Activities

4.5.1 CME activities shall be categorized into general and specific. General types shall be opened to all clinical categories (doctors, paramedic and nursing). Specific types shall be focused programs for different categories.

4.5.2 Doctors, Assistant Medical Officers, and nurses should attend the minimal required continuous professional development points annually as specified by the Ministry of Health. This information will be documented in the personal logbook for credentialing and assessment of the Annual Appraisal.

4.5.3 The staff shall be encouraged to use educational facilities available in the hospital.

4.5.4 Staff shall be notified of any workshop and seminar. Selection of staff to attend internal/hospital level CME activities is by their immediate supervisor (U32) or HOU.

4.5.5 For external workshops, seminars and conference, selection of appropriate personnel shall be done by the HOU, who will decide based on the availability of slots / seats, funds and approval by the Hospital Director.

5.0 FACILITIES AND EQUIPMENT

5.1 CLINICAL FACILITIES

The department shall provide facilities for patient's management as follows:

5.1.1 Critical zone / Red Zone

5.1.1.1 Critical Zone will have at least **1 resuscitation beds** with comprehensive patient resuscitation, diagnostic, therapeutic and monitoring capabilities.

5.1.2 Semi Critical Zone / Yellow Zone

5.1.2.1 Semi Critical Zone shall have at leas**t 3 beds** with monitoring capabilities for trauma and non-trauma patients.

5.1.2.1 It shall be equipped with resuscitative equipment, drugs and non-invasive monitoring devices for patients' care and shall always be ready to anticipate any emergencies.

5.1.3 Non-Critical Zone / Green Zone

5.1.3.1 Shall have sufficient rooms that allow patient interview, consultation, and examination to be conducted in complete privacy.

5.1.4 Respiratory Zone

5.1.4.1 The respiratory (respi) zone shall serve as

i. Isolation area for all contagious / air-borne diseases.
ii. Asthma Bay

5.1.4.2 It shall be equipped with at least:

i. 1 resuscitation bays with equipment comprehensive for patient resuscitation, diagnostic, therapeutic and monitoring.

5.1.4.3 Asthma Bay is equipped with adequate reclining patient seats and trolley. This bay shall be dedicated for the management of asthmatic patients of mild-moderate severity. Standard equipment for monitoring patients while under treatment will be available here.

5.1.5 Triage Area

5.1.5.1 The Primary Triage Area shall be defined by the virtual space at the immediate vicinity of the department entrance and triage counter. It is under the purview and responsibility of a triager.

5.1.5.2 This area consists of the Primary Triage Counter and Secondary Triage Room. The Secondary Triage Room will be equipped with a sphygmomanometer, temperature measurement instrument, pulse oximeter, electrocardiogram machine and blood sugar measuring device. Basic dressing, splint and anti-tetanus injection will also be available here.

5.1.8 Observation Bay

There shall be at least **2 observation beds** equipped with non-invasive monitoring equipment.

5.1.9 Decontamination Area

Adequate shower areas for soft decontamination shall be made available and isolated from the waiting area.

5.1.10 Call Taker Area

A Call Taker Area shall be located within the Primary Triage or an area that shall be manned 24 hours a day.

5.2 NON-CLINICAL AREAS

The following facilities shall be made available for clients of ETU.

5.2.1 General Waiting Area

It shall be furnished with adequate and comfortable waiting seats.

5.2.2 Registration Counter

This counter shall function for out-patient emergency registration.

5.2.3 Record

All medical records of patients seen and treated at ETU shall be sent to the record office. The record office shall manage the safekeeping of medical records of all cases managed in the ETU.

5.3 EQUIPMENT

5.3.1 Every Treatment Area shall be equipped with standard equipment for it to function.

5.3.2 Only specific zone has its own basic resuscitation equipment inclusive of:

i. Airway management & ventilators (Red Zone Only)
ii. Emergency trolleys with Resuscitation drugs (Red Zone Only)
iii. Monitors
iv. Defibrillators (Redzone Only)

5.3.3 All the above facilities and equipment will only be used by ETU personnel. A written request for utilization of the above facilities and equipment for external use must be forwarded to the HOU for consideration.

5.4 MAINTENANCE AND DISPOSAL

5.4.1 All medical, surgical and office equipment are recorded into the department inventory registration, in accordance with the government circular - *Pekeliling Perbendaharaan Bilangan 2 Tahun 1991, (1) Kew 312,312A, Inventory Kew 313, Kew 315 (Pergerakan Harta Modal)*

5.4.2 The care, maintenance or repair of the department infrastructures and assets shall follow the standard procedural guidelines already in place for any government facilities and assets.

5.4.3 Any physical expansion or additional asset procurement will be dictated by the needs of service and in compliance with established guidelines.

5.4.4 Each of the entire department workforces shall be responsible to safeguard and ensure that all assets are in excellent working order so as not to cause untoward effect on the delivery of medical care.

5.4.5 All equipment and facilities in the ETU shall be maintained and serviced by the concession company as scheduled and when required.

5.4.6 Maintenance and any changes of inventory must be updated and the HOU shall be informed.

5.4.7 Damaged assets shall be listed for disposal.

6.0 POLICIES AND PROCEDURES

6.1 Operating hours

Emergency and Trauma Unit Hospital Kanowit is opened 24 hours daily.

6.2 General

6.2.1 All registrations for treatment in ETU will be considered as outpatient treatment and the registration is carried out at the Registration Counter located in the department.

6.2.2 To ensure the correct treatment is being given to the correct patient, patient will be registered using their myKad/myKid/Passport No or any personal identification document. **(Appendix C)**

6.2.3 All patients seeking treatment will be registered into the Out-Patient Registration Book (Per PL 101).

6.2.4 Admission to other wards shall require in-patient registration at the hospital registration counter. Registration will be recorded in the admission registration book.

6.2.5 The treatment of ill-patient and OSCC cases takes priority to registration. ETU staff or family members shall subsequently assist in registering the patient.

6.3 Pre-hospital care, call taker and ambulance service

6.3.1 Ambulance Call (Appendix D)

6.3.1.1 The department shall respond to ambulance calls (within 5 minutes) for emergencies within the designated coverage area. For calls made for a distance more than 25km away, the department shall coordinate with the nearest hospital or health center to respond to the call.

6.3.1.2 The hospital will act as primary responder to any request for emergency ambulance. A proper communication and coordinating system will be used for dispatching ambulances.

6.3.1.3 (ETU shall also act as a secondary responder if another responder exists e.g., JPAM. The department also collaborates with other agencies to provide ambulance services).

6.3.1.4 Every request for the use of an ambulance shall go through the Call Centre.

6.3.1.5 Urgent request shall be treated as an emergency and the immediate available ambulance will transport the patient.

6.3.1.6 On confirming the call, an Emergency Ambulance Team shall be immediately dispatched to the site to provide on-site resuscitation, stabilization, and transport patients to base hospital.

6.3.1.7 The Emergency Ambulance Team shall comprise of an Assistant Medical Officer, a staff nurse and a driver from the ETU. Additional staff from other departments shall be called to assist when necessary.

6.3.2 Inter-Facility Transfer

(Refer Appendix Q: Referral of Patient)

The hospital shall provide ambulance services for inter-facility transfer in situation as follows:

6.3.2.1 Referral of patient to other hospitals or facilities due to limited or non-availability of the service/equipment expertise at the hospital.

6.3.2.2 All interfacility transfer to other hospital or facilities shall be attached with a copy of referral letter, which includes acceptance of the patient by the referred facility, name of the receiving person and designation.

6.3.2.3 All interfacility transfer to other hospitals or facilities must be approved by an emergency physician / HOU.

6.3.2.4 Fetching of patient who requires special transport equipment from other government hospitals.

6.3.3 Ambulance Service

6.3.3.1 Preferably, the hospital ambulance fleet should consist of an adequate number of Grade A and B ambulances.

6.3.3.2 All ambulances shall be equipped with adequate equipment for airways and circulatory managements, immobilization, and some resuscitation drugs.

6.4 Emergency Care

(Appendix E: General Flow of patient)

6.4.1 Triage

All patients attending ETU will undergo a triage process.

6.4.1.1 Primary Triage

- The primary triage shall serve to obtain critical visual assessment (and occasionally limited VERBAL information) of patient medical status.
- Primary triaging will follow the National Triage Category as reference.
- The outcomes of primary triage shall result in 3 types of patient categories:

  a. Critical

  When there is critical impairment to any of the A-B-C-D (airway-breathing-circulation disability) Systems which requires resuscitation.

  b. Semi-critical

  This category is of patients who are very ill requiring trolleys as part of their management but with stable vital signs.

  c. non-critical

  This category is designated for the seemingly stable individuals. The delayed category will be further subjected to a secondary triage process.

6.4.1.2 Secondary Triage

- At secondary triage, an accurate verbal appreciation (subjective) followed by a visual assessment (objective) of the patient's symptoms and physiological status will be obtained.
- Measurement of vital parameters will be performed here.
- Finally, the patient shall be accorded one of the three triage codes indicating their respective level of urgency. Focused therapeutic actions will be initiated here.

  The outcome of the secondary triage of a patient will result in 3 triage categories: **(Refer Appendix F)**

  a. Critical → Red
  b. Semi-critical → Yellow
  c. non-critical → Green
- A scheduled repeated assessment shall be performed for selected categories of stable patients. **(Refer Appendix G)**

6.4.2 Critical care

6.4.2.1 This zone in general will receive and manage critically ill patients with serious medical conditions or injuries. Such patients are also deemed as unstable hemodynamically. Vital signs monitoring at least 15 minutes interval for all critically ill patients.

6.4.2.2 The management of the patients here covers the aspects of:

6.4.2.2.1 Resuscitation and stabilization.

6.4.2.2.2 Diagnosis of life threatening or potentially life-threatening conditions.

6.4.2.2.3 Immediate therapeutic intervention.

6.4.2.2.4 Definitive management.

6.4.2.3 A team approach in provision of care for this category of patients will be emphasized. The philosophy of 'Golden Hour' of trauma care and damage control strategies shall be the foundation and scientific basis of care.

6.4.2.4 All diagnostic and therapeutic procedures will be maximized in this zone unless limited by facilities or not in the best interest of the patient.

6.4.2.5 When necessary, a referral shall be made to another discipline. If there is no response within a designated time frame, the specialist of the referred unit shall be notified**. (Appendix H)**

6.4.3 Semi Critical care

6.4.3.1 This zone receives patients that are in semi-critical condition.

6.4.3.2 Observation and monitoring shall be carried out at least every 4-hourly for all patients in semi- critical areas.

6.4.3.3 All patients on trolleys with hemodynamically stable conditions will be sent to this zone.

6.4.3.4 There shall be several immediate bays in ETU and each of these bays is able to serve as an active bay for incoming yellow zone patients and as lodger for patients if the need arises.

6.4.3.5 Patients from this zone who do not require admission to the ward but kept as lodgers in the observation bay.

6.4.3.6 Decision for admission from this zone shall be made within 1 hour by the doctors. **(Appendix I)**

6.4.4 Non- Critical care (Appendix J)

6.4.4.1 This zone receives patients with minor injury or mild trauma, or stable medical cases identified at the completion of primary triage process.

6.4.4.2 There shall be adequate consultations and examination area to serve the patients in this zone, assisted by an assistant medical officer, nurse or a health care assistant (PPK).

6.4.4.3 For radiology investigations and other treatment procedures required to be carried out in other areas of the department, the assistant shall usher the patients into this respective area.

6.4.4.4 All stable cases will be seen not more than the time stated in the Client's Charter.

6.4.4.5 Non-emergency cases should be seen at the nearest out-patient clinic.

6.4.5 Asthma management

6.4.5.1. This area is dedicated for asthmatic patients with acute exacerbation seeking emergency medical treatment at ETU.

6.4.5.2. Only mild to moderate cases are treated here.

6.4.5.3. The patients are identified following primary and secondary triage processes which include critical observations, vital signs, and peak expiratory flow measurements.

6.4.5.4. Severe asthmatic attacks are sent to resuscitation zones.

6.4.5.5. Treatment at this bay shall not exceed a maximum duration of more than 4 hours.

6.4.5.6. Consideration for admission must be made if complete relief is not achieved within this period or after therapy has been maximized here.

6.4.5.7. The patients are re-examined and reassessed, including PEFR measurement by the Assistant Medical Officer after the completion of each step of therapy.

6.4.5.8. Patients with satisfactory improvement at the end of the therapy will be discharged with appropriate medications.

6.4.5.9. The patients, where appropriate, shall be referred to the outpatient asthma clinic/specialist clinic for:

a) Sub-optimal asthmatic control in all age groups.
b) Newly diagnosed asthma.
c) Difficult asthmatic control with or no comorbidities.
d) Non-compliance to treatment.
e) Patient education is required.
f) Diagnostic challenge.

6.4.6 Behaviour Assessment (Psychiatric)

i. Patients with known cases of psychiatric illness accompanied by the police or family members shall be reviewed and managed accordingly at ETU.
ii. Patients who presented voluntarily to ETU with undiagnosed behaviour related problems or psychiatric illness will be reviewed and managed accordingly at ETU.

6.4.7 One Stop Crisis Centre (OSCC)

Refer to OSCC: Policy and Guidelines For Hospitals, Ministry of Health Malaysia. MOH/P/PAK/290.15(G4) (Refer Appendix L: Handling OSCC Level 1)

6.4.8 Communicable Disease

(Appendix K)

6.4.8.1 All patients with known/ suspected communicable diseases (e.g., active TB, Influenza, MERS-CoV, Covid-19) shall be triaged, treated and stabilized in Respi Zone.

6.4.8.2 Patients triaged to Respi Zone can be transferred out once infectious status is cleared after discussing with emergency physician on duty.

6.4.8.3 All staff attending to patients with known communicable disease should wear appropriate PPE as per the latest Ministry of Health guideline.

6.4.9 Observational Bay

6.4.9.1 Observation bay at ETU is for observing selected semi critical trauma and medical patients or non-critical patients having clinical and physiological conditions that may change and/or when admission is not seen as to be in the best interest of the patient or necessary. **(Appendix N)**

6.4.9.2 Admission to this ward will be under review by the medical officer oncall.

6.4.9.3 Admission shall not be more than 6 hours.

6.4.9.4 The respective emergency doctor is responsible for reviewing the patient's progress. (Appendix M)

6.4.9.5 For cases requiring referral to another unit, the response for a referred team is less than 30 minutes after the initiation of referral.

6.4.9.6 Visitors to the observation bay are allowed during hospital visiting hours but limited to immediate family members or 1 person at any one time. For other unscheduled visits, discretion shall be used by the personnel on duty.

6.4.9.7 Any unintentional stay in the observation unit of more than 12 hours shall be informed to the supervisor / medical officer in charge for further management and action, which include but not limited to referral to social welfare / immigration office/ police.

6.4.10 Disaster Management

(Refer to Hospital Disaster Plan)

6.4.10.1 ETU shall be equipped and prepared to provide disaster management services for disasters occurring externally or within the hospital facility.

6.4.10.2 ETU shall see to the deployment of a search and rescue team (s) during disaster response.

6.4.10.3 ETU will oversee the creation and setting up of disaster care areas or zones in the hospital.

6.4.10.4 The hospital shall also respond to any regional request for emergency medical assistance in the event of disasters or major incidence.

6.4.10.5 ETU shall assist to coordinate the preparation of disaster management policy for the hospital and conduct simulations or drills.

6.4.10.6 ETU shall assist with the transportation of patients during disaster situations. (Refer to Hospital Disaster Plan)

6.4.11 Medical Coverage

6.4.11.1 All requests for medical coverage shall require prior approval from the Hospital Director before any team can be dispatched.

6.4.11.2 The continuity of service in the department will also be considered prior to provision of medical coverage.

6.4.11.3 Risk assessment of events will be performed before any deployment of a medical coverage team.

6.4.11.4 A team trained in various aspects of medical coverage shall be deployed during such medical coverage activities.

6.4.11.5 Medical coverage offered will be according to guidelines as set by the Ministry of Health.

6.4.12 Patient management

6.4.12.1 Admission

6.4.12.1.1 All emergency admissions shall go through ETU if no prior consultation with the referred unit.

6.4.12.1.2 The emergency/on call medical officer reserve the final right to directly admit stable patients without any complicated conditions to any discipline when unnecessary delay is expected.

6.4.12.1.3 Only unstable, direct referred cases will be seen in ETU. A stable patient with prior consultation with the receiving unit will be directly admitted to the respective ward after quick assessment in ETU.

6.4.12.1.4 The identification of the primary team for patients with multiple injuries (poly-trauma) shall be made by the emergency/on call medical officer when unclear or when there is any conflicting situation.

6.4.12.1.5 The admission staff shall be responsible for informing the relevant ward for acknowledgement

6.4.12.1.6 Red Zone cases, once stabilized and ready for admission should be immediately sent to the respective ward.

6.4.12.1.7 All critical cases must be accompanied by a medical officer with an AMO or a nurse. A patient who is semi critical and stable is

to be accompanied by an AMO or a nurse. Green zone cases need not be accompanied by a trained staff.

6.4.12.1.8 For patients in Green Zone and Yellow Zone, the patients shall be ushered to their respective ward in less than 10 minutes after completion of registration process.

6.4.12.2 Transferring and Retrieval

Refer to Guidelines for Transferring Escort and Retrieval Team Kanowit Hospital.

6.4.12.3 Discharge (Appendix O)

6.4.12.3.1 Emergency doctors shall be responsible to discharge all non-referred cases.

6.4.12.3.2 Prior to discharge of a patient, ETU staff should make sure that all patient's IV lines have been removed.

6.4.12.3.4 Patients who require follow-up shall be referred to the relevant clinic.

6.4.12.3.5 For patients that have absconded from the green zone, their registration card will be kept at ETU until the next working day before they are dispatched to the Medical Record office. (Appendix P)

6.4.12.3.6 For patients that absconded from the observation Bay/ETU, if they come back: (Appendix P)

i. Less than 24 hours -the patients will be accepted and reassessed in the Observation ward.

ii. More than 24 hours-the patients will be registered and treated as new cases.

6.4.12.4 Drug dispensing

6.4.12.4.1 A standard list and sufficient amount of outpatient drugs and medication will be made available at ETU for immediate use especially for patients admitted to the observation ward.

6.4.12.4.2 Patients discharged from ETU will be given a maximum three-day prescription except antibiotics which will be given a full regime. Patients can collect medication from the pharmacy (outpatient pharmacy) at the designated timing determined by the pharmacy department.

6.4.12.4.3 The patients will be advised to follow-up at the outpatient clinic the next working day.

6.4.12.4 Body management

(Refer to Guidelines Management of Mortuary Services, Kanowit Hospital HK/UPF/P&P/2/2023) (Appendix R)

6.4.12.4.1 For patients who passed away in ETU, ETU staff shall inform family members and perform the last rites

6.4.12.4.2 Bodies need to be kept at ETU not less than one(1) hour or while waiting mortuary staff arrival before sent to the mortuary.

6.4.12.4.3 For bodies brought in by police, shall go directly to mortuary.

6.4.12.4.4 Bodies brought in by family members shall be treated as Brought-In-Dead (BID) cases. The body shall be sent directly to mortuary.

6.4.12.4.5 ETU doctors shall be responsible to alert the Public Health Inspector f or bodies involving any notifiable diseases.

6.4.12.5 Postmortem

(Please Refer to Guidelines Management of Mortuary Services, Kanowit Hospital HK/UPF/P&P/2/2023)

6.4.13 Safety Procedures

6.4.13.1 Fire Safety

6.4.13.1 Heads of all categories shall be responsible in ensuring all safety measures are always followed.

6.4.13.2 Heads of all categories shall be responsible that all the fire equipment are complete, not expired and fully functioning. (Please refer to the Guideline on Fire Safety)

6.4.13.3 The fire-fighting equipment shall be well maintained by the Hospital Support Service and regularly checked by the Senior Assistant Medical Officer In-Charge of equipment and facilities.

6.4.13.2 Infection control

6.4.13.2.1 There will be total compliance with universal protection guide for control of infection including use of PPE, hand washing, care of biological products and by-products.

6.4.13.2.2 Strategies will be implemented for control of infection.

6.4.13.2.3 This includes:

i. Wash hands before and after-procedure, handling patients.
ii. Wearing protection garments and goggles during the procedure.
iii. Clinical waste management.
iv. ETU shall designate a link nurse to coordinate activities with the hospital central bodies.
v. ETU shall have its own infection control committee members to monitor staff compliance with infection control measures.
vi. ETU personnel shall also be responsible to alert the public health authorities in the event of a notifiable disease patient or incident.

6.4.13.3 Occupational Safety and Health

(Refer Occupational Safety and Health Policy Kanowit Hospital)

6.4.13.4 Security

6.4.13.4.1 Security officers shall be available 24 hours.

6.4.13.4.2 All exits from and entrances into ETU shall be closely guarded.

6.4.13.4.3 The emergency staff shall request assistance from the police and/or hospital security should the need arise.

6.4.14 Public Relation Services

6.4.14.1 ETU Senior Assistant Medical Officer will act as public relation officer during office hours.

6.4.14.2 ETU Assistant Medical Officer in-charge of the shift will act as public relation officer after office hours.

6.4.14.3 The public relation officer will be responsible for assisting in crowd management, patient's visitors and do contact tracing or paging.

6.4.14.4 In the event of disaster, a client information officer from the ETU shall be assigned to communicate with the public relation officer of the hospital.

7.0 QUALITY IMPROVEMENT

Quality improvement activities in ETU are guided by the service needs, aspiration and set standards.

These activities include:

- Critical data mining
- Quality indicators
- Health outcomes
- Health research and development
- Clients' satisfaction and complaint management
- Personnel satisfaction

7.1 Critical Data Mining

7.1.1 ETU critical and vital statistics are acquired and collected for internal and external usage, report submission and service planning.

7.1.2 The statistics include:

7.1.2.1 Workload.

7.1.2.2 Admission rates.

7.1.2.3 Pre-hospital/Ambulance service information.

7.2 Quality indicators

7.2.1 The department shall subscribe to quality assurance programs (QAP) and quality indicators deemed relevant to the service provided.

7.2.2 Quality Assurance Program shall be implemented to ensure emergency services provided are safe, efficient, effective and of high quality.

7.2.3 All emergency department personnel shall be familiar with the QA Program.

7.2.4 This includes:

7.2.4.1 Hospital Performance Indicators for Accountability (HPIA) / Key Performance Index for Clinical Services (KPI)

7.2.4.1.1 Inappropriate Triaging (Under-triaging): Percentage of Category Green Patients Who Should Have Been Triaged as Category Red.

7.2.4.1.2 Percentage of paramedics in acute care areas who have a CURRENT trained status in Basic Life Support (BLS) in the corresponding year.

7.2.4.1.3 Percentage of AMO in Emergency Services trained in Advanced Life Support (ALS)

7.2.4.1.4 Dispatch and Ambulance Preparedness of Primary Responses

7.2.4.1.5 Peak Flow Rate (PEFR) Implementation for Asthma Patients in Asthma Bay by AMO.

7.2.4.1.6 Percentage of Paramedics Completed Standard Emergency Medical and Trauma Services (EMTS) Credentialing and Privileging.

7.2.4.2 EMERGENCY SERVICE INDICATORS

7.2.4.2.1 Waiting time

7.2.4.2.2 Admission to observation ward

7.2.4.2.3 Preventable death

7.2.4.2.4 Inappropriate admission

7.2.4.2.5 Inappropriate triage

7.2.4.3 Mortality and Morbidity audits

7.2.4.4 Sentinel event monitoring

7.3 Health Research and Development

The department shall be an advocate for research and development activities. The department will provide a productive environment for her personnel to pursue such activities and integrate these elements into its day-to-day operations.

7.4 Clients' satisfaction

7.4.1 The department shall conduct audits of various facets of the client services with integrated feedback management.

7.4.1.1 Client satisfaction/feedback survey

- Random internal and external surveys shall be conducted to identify strong and weak points in this service.

7.4.1.2 Complaint management

- Complaints shall be categorized according to implication and seriousness. All complaints will be investigated, and a written report shall be forwarded to HOU and Hospital Director within 2 weeks.

7.4.2 Action will be taken accordingly. For high impact and serious complaints immediate investigation and action will be taken within 24 hours.

7.5 Personnel Satisfaction

7.5.1 ETU will regularly conduct personnel satisfaction survey and adopt an open policy for feedback which includes:

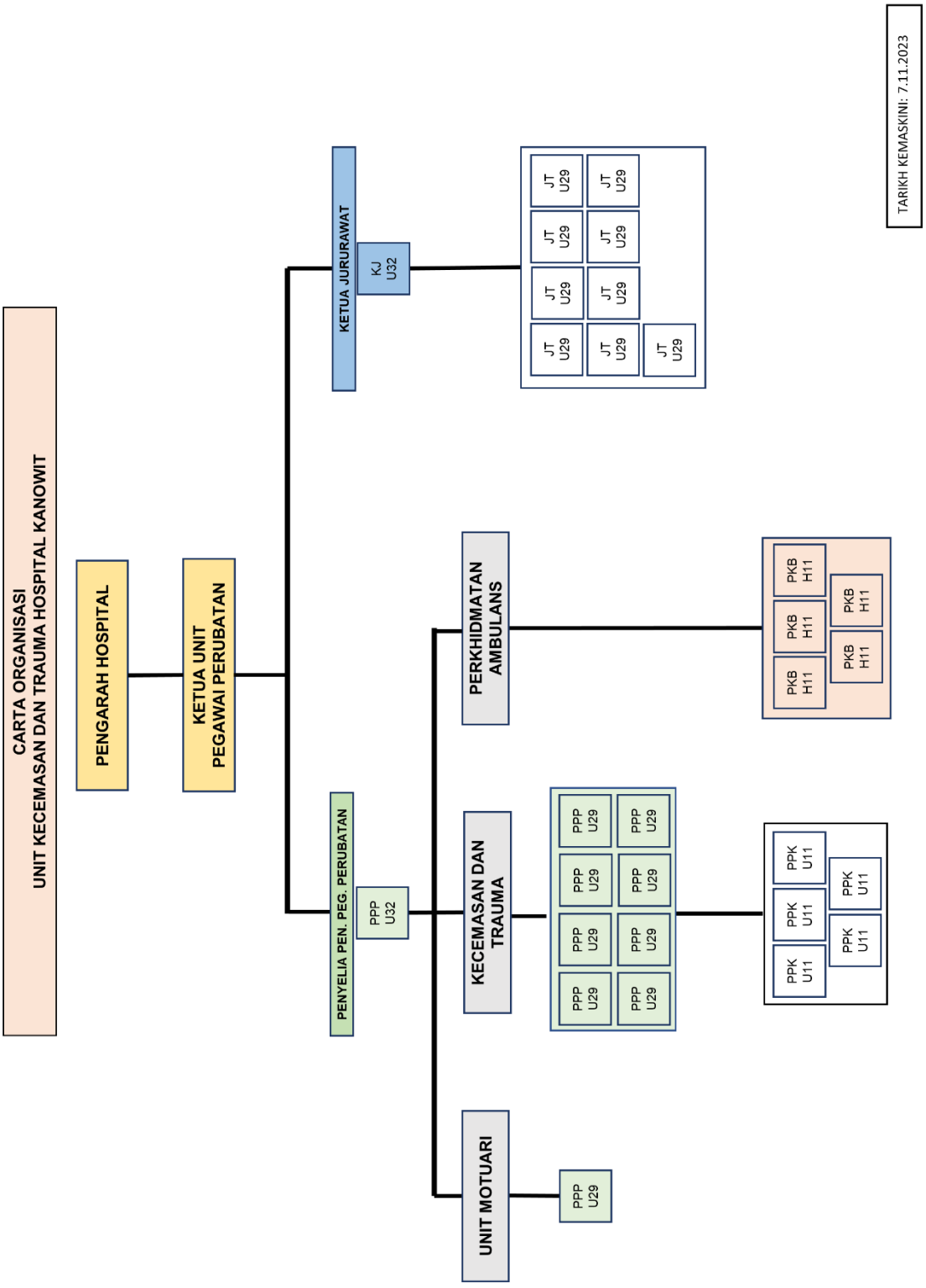
7.5.2 Career development

7.5.3 Core competency/skill training

7.5.4 Workplace satisfaction.

APPENDIX A

ORGANIZATION CHART



APPENDIX B

ULTILIZATION FOR FACILITIES

A. Critical Zone

a) Adequate resuscitation beds shall be utilized for the management of adult patients.
b) One resuscitation bed shall be utilized for paediatric patients.
c) Any patient, trauma, or non-trauma can be comprehensively managed on each bed. The procedures include resuscitation, stabilization and diagnostic or therapeutic procedures.
d) Emergency doctors can choose to directly transfer the patient using this bed to the definitive care area.
e) Alternatively, emergency doctors can direct the patient to be moved onto a transport trolley after considering the patient's comfort, condition, safety, and other technicalities like instrumentation/monitors/drips.

B. Semi Critical Zone

a) Adequate immediate care beds shall be utilized for the management of various categories of patients in this zone.
b) Examinations and simple therapeutic procedures can be performed on each bed.
c) For ward transfer, the emergency doctor can choose to directly transfer the patient using this bed to the definitive care area.
d) Alternatively, emergency doctors can direct the patient to be moved onto a transport trolley after first, considering the patient's comfort, condition and safety and other technicalities like instrumentation/monitors/drips.

C. Non-Critical Zone

a) There shall be a clerking area with tables and chairs provided for the doctors and patients.
b) There shall be an examination couch / trolley available with shield / curtain to provide privacy for the patients.
c) Basic blood taking trolley and basic medication trolley shall be available.

D. Respiratory Zone

a) 1 resuscitation bays with equipment comprehensive for patient resuscitation, diagnostic, therapeutic and monitoring.
b) Examination, and simple therapeutic management should be performed on the trolley provided.

E. Asthma Bay

a) There shall be adequate reclining chairs for asthma patients receiving nebulizer therapy and IV drug infusion.
b) Nebulizers shall be given metered dose inhaler (MDI), or oxygen driven method either from the wall mounted port or nebulizer machine.
c) If the patient deteriorates, the equipment and trolley at the semi-critical area and critical area shall be utilized for patient's treatment and management.

F. Procedure Room

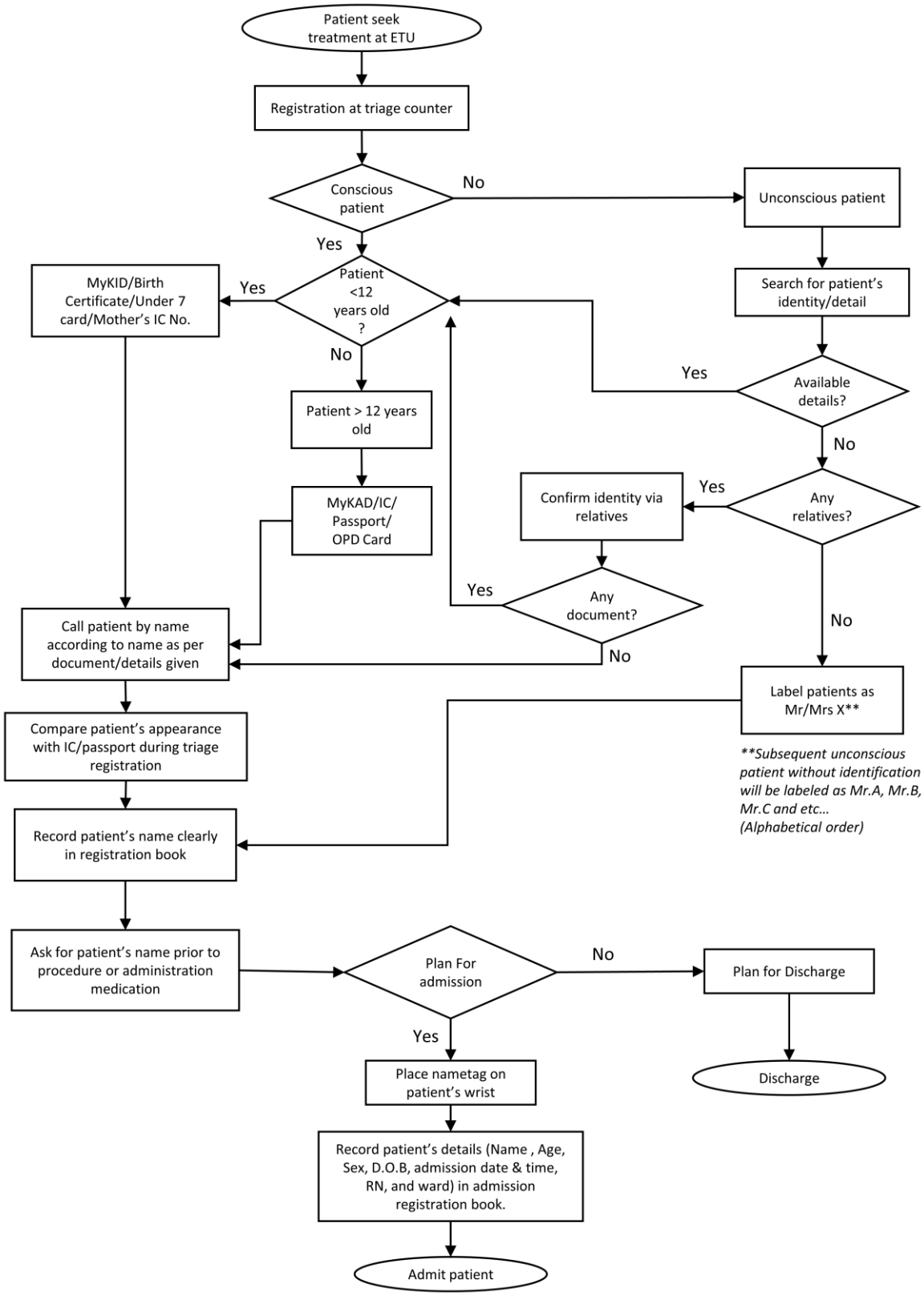
a) This area is for doctors and AMOs to perform minor surgical procedures and simple general procedures on non-critical patients like toilet and suture, wound debridement, dressing, application of plaster splints, slabs or casts or remove POP when needed for ETU patients.

H. Observation Bay

a) This bay has 2 beds, and shall be utilized for observation of patients fulfilling admission criteria. Outcome from the observation period shall be either admission or discharge.

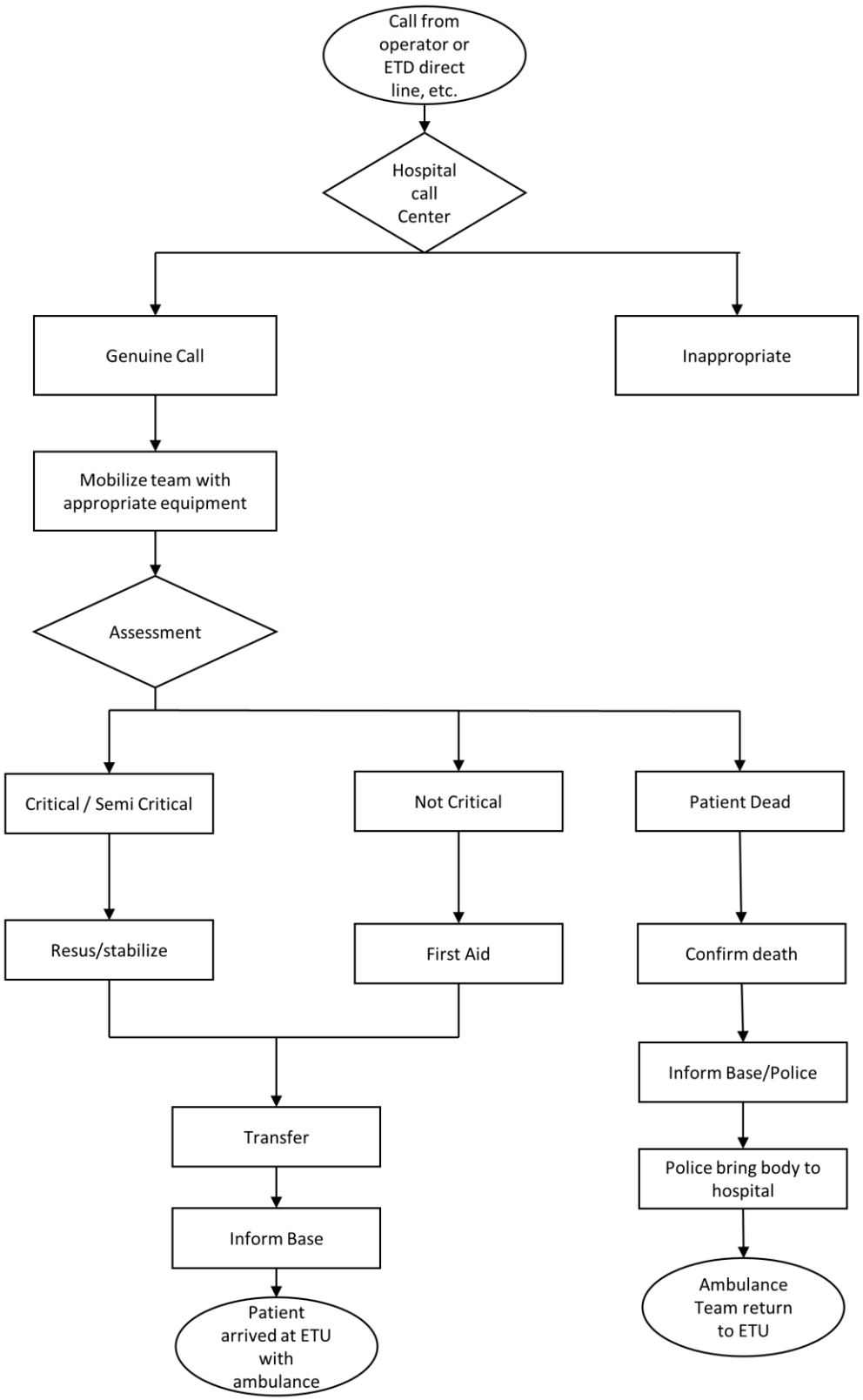
APPENDIX C

Guidelines Flow Chart For Patient Identification at Emergency and Trauma Hospital Kanowit.



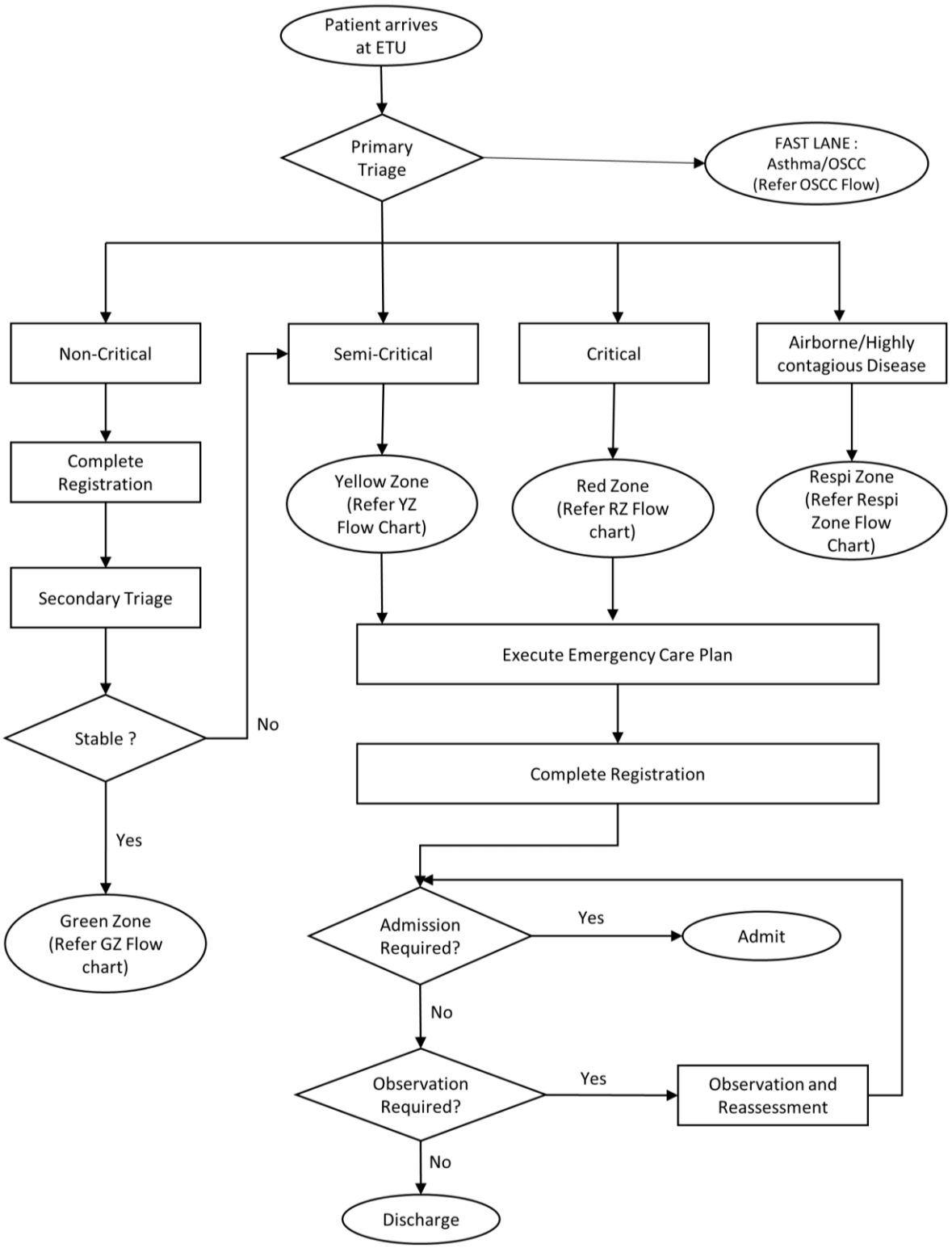
APPENDIX D

AMBULANCE CALL FLOW CHART



APPENDIX E

PATIENT'S GENERAL FLOW IN EMERGENCY DEPARTMENT



APPENDIX F

Triage Categories

Triage			Usual Presentation
Color Code	Categories	Sub-Categories	
Red	Critical	N/A	● Code /Arrest ● Major trauma ● Life threatening conditions ● Shock states ● Airways compromise ● Severe respiratory distress. Tachypnoea with rate >40 per min and/or dyspnoea with saturation <95% ● Severe Asthma or COAD ● Seizing patient ● Coma ● Head injury with GCS of 13 and below ● Exsanguinating limb injuries ● Severe crush injuries to limbs ● Burns to more than 25% BSA regardless of depth and/or more than 20% 3rd degree burns ● Alleged near-drowning ● Gun-shot wounds to head, neck, trunk, or abdomen or trajectory undetermined ● Arrhythmias: heart rate >150 or < 60/ min ● Hypertensive emergencies: elevated BP systolic > 220 mmHg or diastolic > 120mmHg with systemic symptoms or neurological deficit ● Chest pain- visceral, non-traumatic associated with parasympathetic or sympathetic symptoms ● Acute myocardial infarction/Unstable angina diagnosed by referral ● Acute abdomen, hemodynamically unstable ● Elevated blood sugars with neurological or systemic impairment ● Pregnant patient with APH and in labour

Triage			Usual Presentation
Color code	Category	Sub-Category	
Yellow	Semi-critical	N/A	● Unable to walk but airway is secure, hemodynamically stable and on trolleys: ● Altered conscious level but not comatose ● Head injured: GCS <14 GCS full but pupils unequal ● Fractures of long bones of lower limbs/pelvis ● Open fractures of upper limbs ● Spine injuries ● Eye injuries with loss or impaired vision ● Dislocations of major joints ● Limb amputation: total or near-total ● Burns 15-25% of BSA regardless of depth and/or 10- 20% 3rddegree burns with no compromise to airway and circulation ● Vascular injuries but hemodynamically stable ● Uncontrollable major bleeding but hemodynamically stable ● Patients with acute abdomen but hemodynamically stable ● Chemical exposure involving eye(s) ● Alleged poisoning or drug overdose with impairment of conscious level ● Severe pain: ▪ Trauma :Pain score : 8-10/10 ▪ Non-Trauma: Pain score : 4-7/10 ● Post-ictal states with neurological deficit ● Alleged reaction-moderate ● Asthma: moderate and mild ● Mild or moderate dyspnea with saturation > 95% and/or rate <40 min ● Hyperventilation and unstable to maintain posture. ● Chest pain – visceral and not associated with other symptoms ● Arrhythmias: heart rate > 60/ min to < 150/ min ● Hypertensive urgencies: elevated BP systolic < 220mmHg or diastolic < 120 mmHg with minimal systemic symptoms but no neurological deficit ● Other medical urgencies requiring intravenous and intermittent monitoring only: o Dehydration, diarrhea with vomiting o Pyrexia >40°C, signs of infection o Acute psychotic episode o Chemotherapy or immunocompromise

Triage			Usual Presentation
Color code	***Category***	***Sub-Category***	
Green	*Non-critical*	*G1* *Fast lane*	*Airway secure, hemodynamically stable patients not in any distress and ambulance:* *● Children <2 year* *● Senior citizen > 65 years* *● Acute pain: Pain scale < 4* *● Chest pain-non-visceral, musculoskeletal, and not associated with other symptoms:* *Has previous heart disease?* *● Acute Abdominal pain* *● Abuse/Neglect/Assault* *● Psychosis with suicidal ideation* *● Post seizure- alert on arrival* *● POP complications* *● Elevated blood sugar without any major symptoms* *● Mild asthma* *● Acute urinary retention* *● Closed fracture of upper limbs or ankle with major angulations* *● Dislocations of small joints* *o foreign body*
		G1 require initial management or 1st aid before seen by doctor	● Chest pain-non-visceral, musculoskeletal, and not associated with other symptoms: No previous heart disease ● Psychiatric complaints ● Minor allergic reaction
Green	Non-critical	G2 Patients who can wait	● Diarrhea alone (no dehydration) ● Vomiting (normal mental status with no dehydration) ● Burns <15% of BSA regardless of depth and/or <10% 3rd degree burns ● Minor trauma – not necessarily acute ● Head injury – alert, no vomiting ● Bumps and bruises ● Closed fracture of upper limbs ● Simple laceration, cuts ● Controllable bleeding ● Closed fracture of upper limbs or ankle without major angulations. ● Menses related complaints ● General medical conditions or minor illnesses not requiring monitoring ● Nail prick ● Acute infective eye conditions ● Abnormal pain: chronic ● Sore throat – no respiratory symptoms ● Earache ● Chronic Trauma injuries >1 month ● Acute pyrexia <38°C for adult < 65 years of ages or children between 2 to 12 years of age ● Simple skin disease – chronic

APPENDIX G

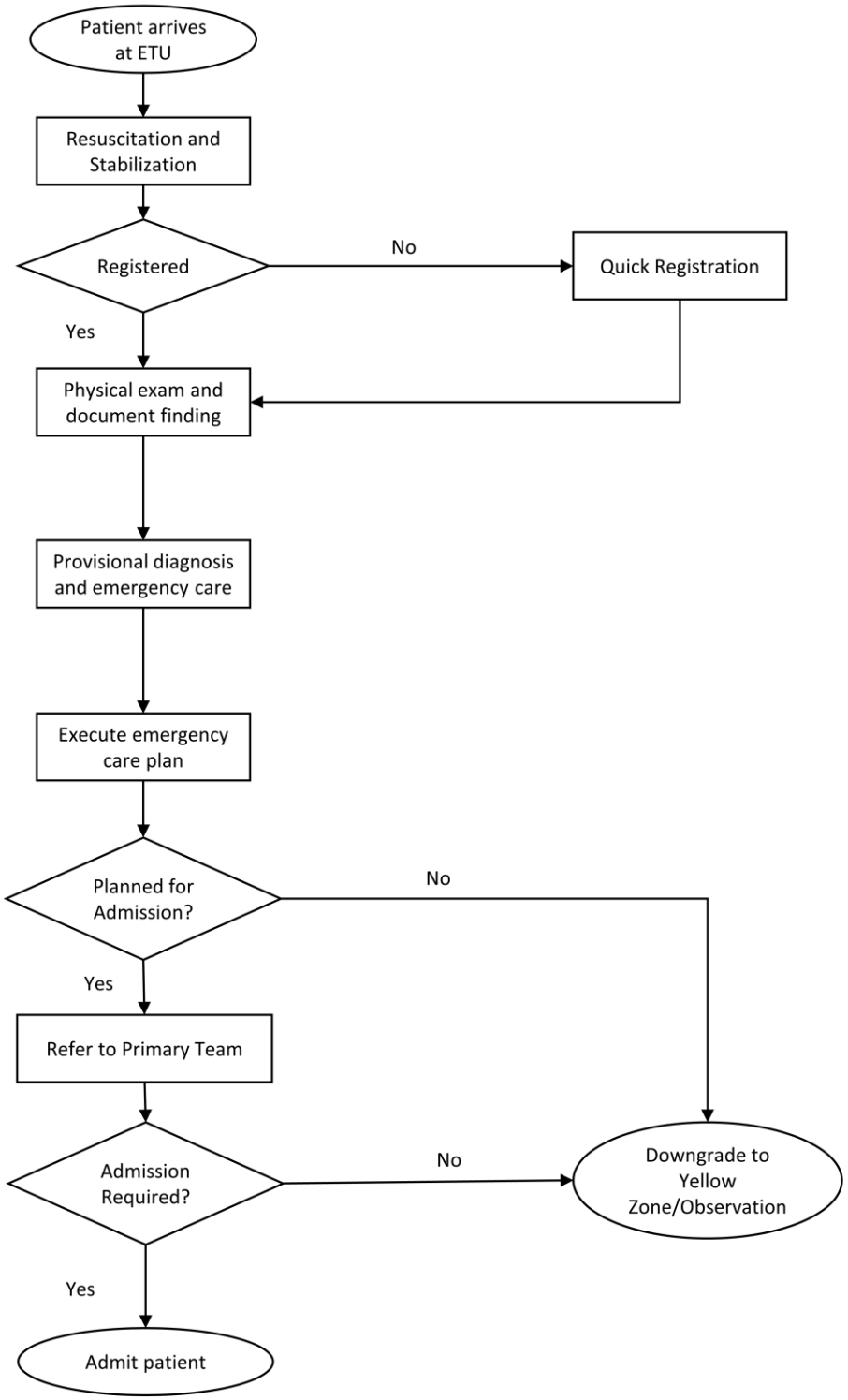
REASSESSMENT TIME

Scheduled Repeat Assessment At Triage For Non-Critical Patients		
Non-Trauma		
Symptoms Category		Reassessment Time*
1	Chest pain in any high-risk category	30 min
2	Abdominal pain in adult female (childbearing age)	30 min
3	Abdominal pain in geriatric	30 min
4	Abdominal pain in paediatric	30 min
5	Nausea and vomiting in paediatric	30 min
6	Shortness of breath	30 min
7	Focal or generalized body/limb weakness	30 min
8	PV Bleeding	30 min
9	Severe – moderate pain (unrelieved by preliminary measures)	30 min
10	Any low normal or high normal vital parameters in an otherwise well patient	30 min
Trauma		
Symptoms Category		Reassessment Time*
1	High risk mechanism	30 min
2	High risk co-morbidities	30 min
3	High risk age categories	30 min
4	Chest pain	30 min
5	Abdominal pain	30 min
6	Mild-Moderate blood loss (controlled)	40 min
7	Severe- moderate pain (not relieved by preliminary measures)	30 min

- This is an operational time only but does not necessarily dictate standard of patient's care.
- When consultation time is expected to exceed the reassessment time.
- Reassessment implies the repeat performance of subjective assessments following initial assessment by medical officers.

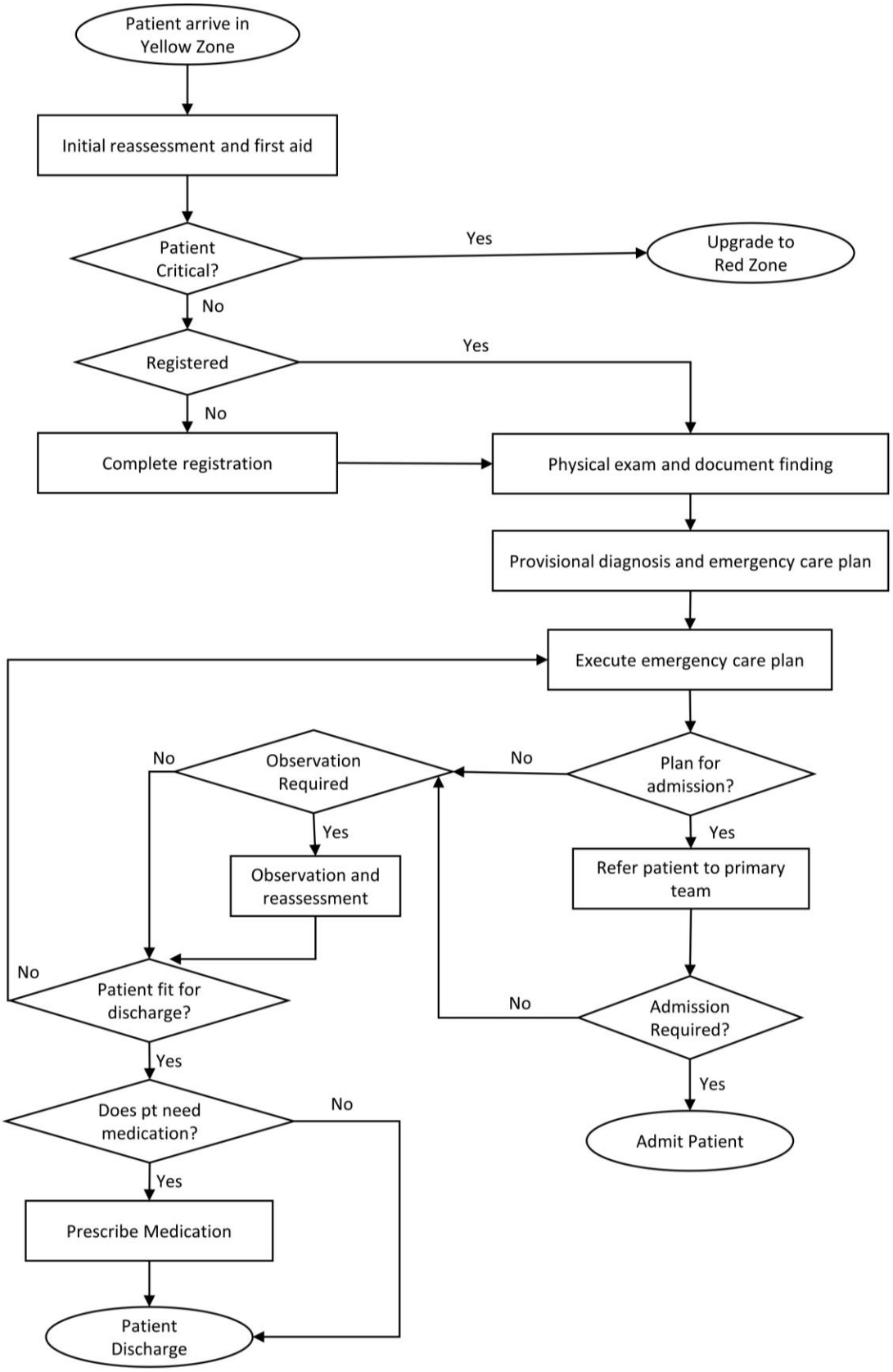
APPENDIX H

PATIENT FLOW IN THE RED ZONE



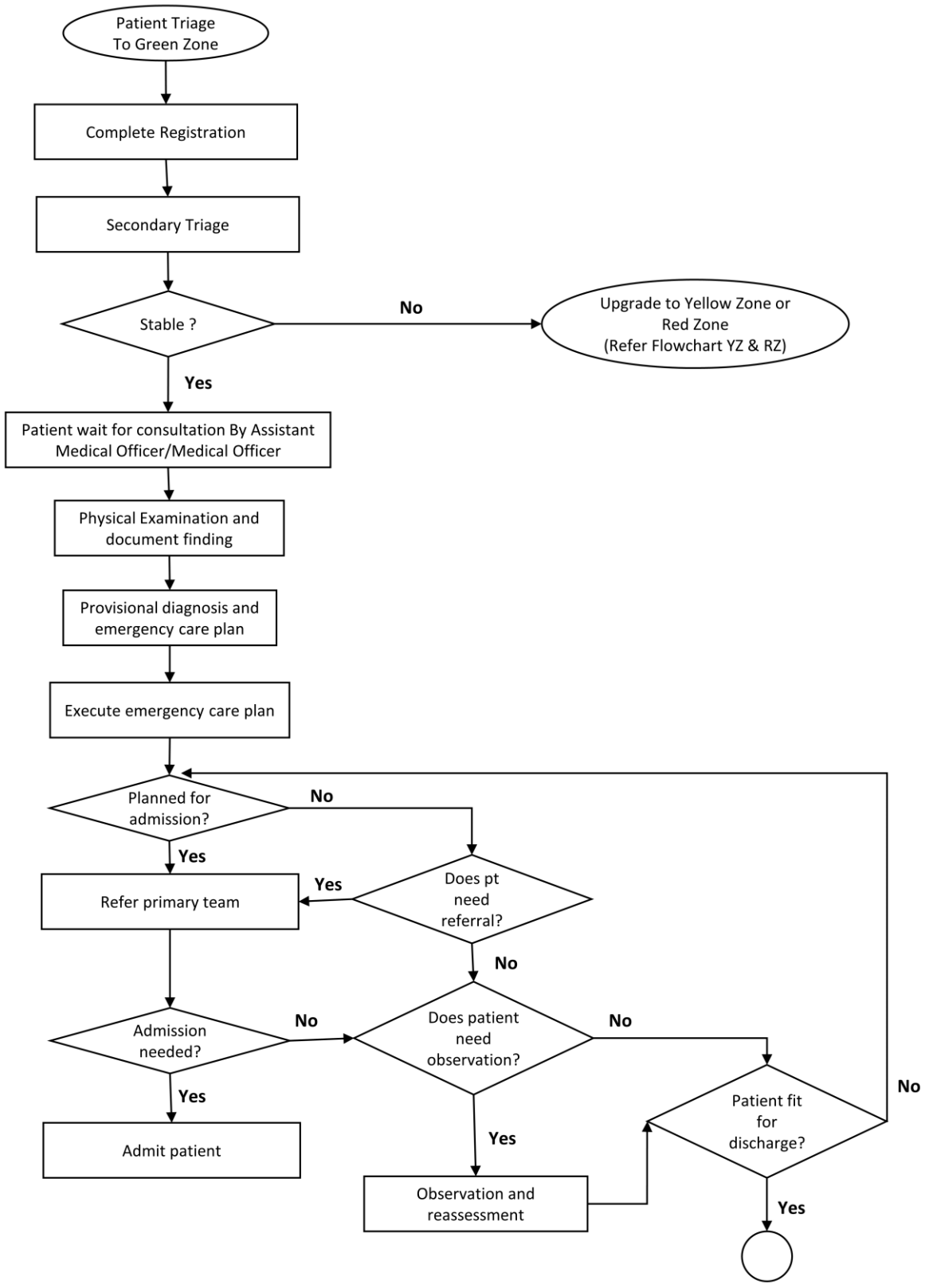
APPENDIX I

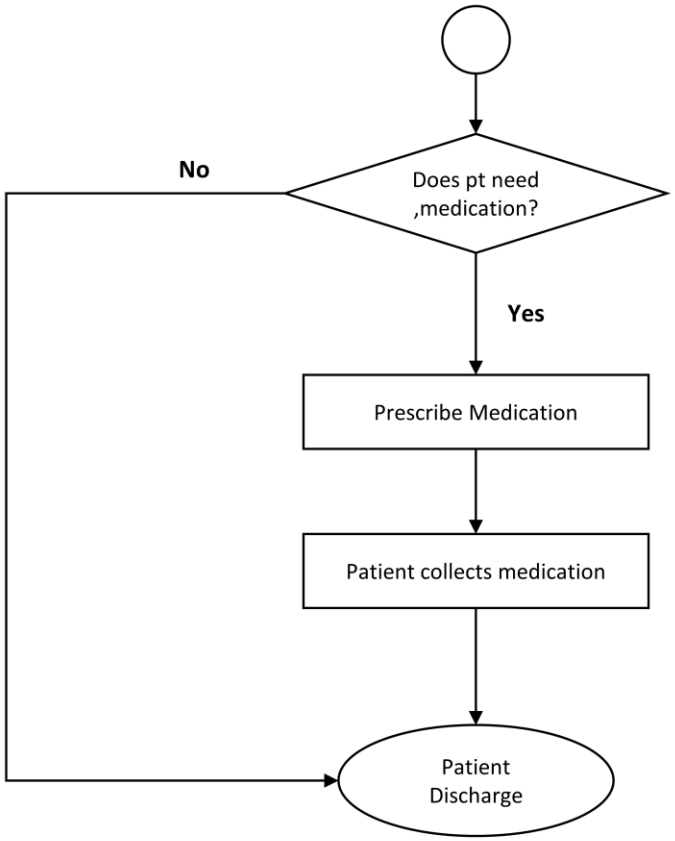
PATIENT'S FLOW CHART IN YELLOW ZONE



APPENDIX J

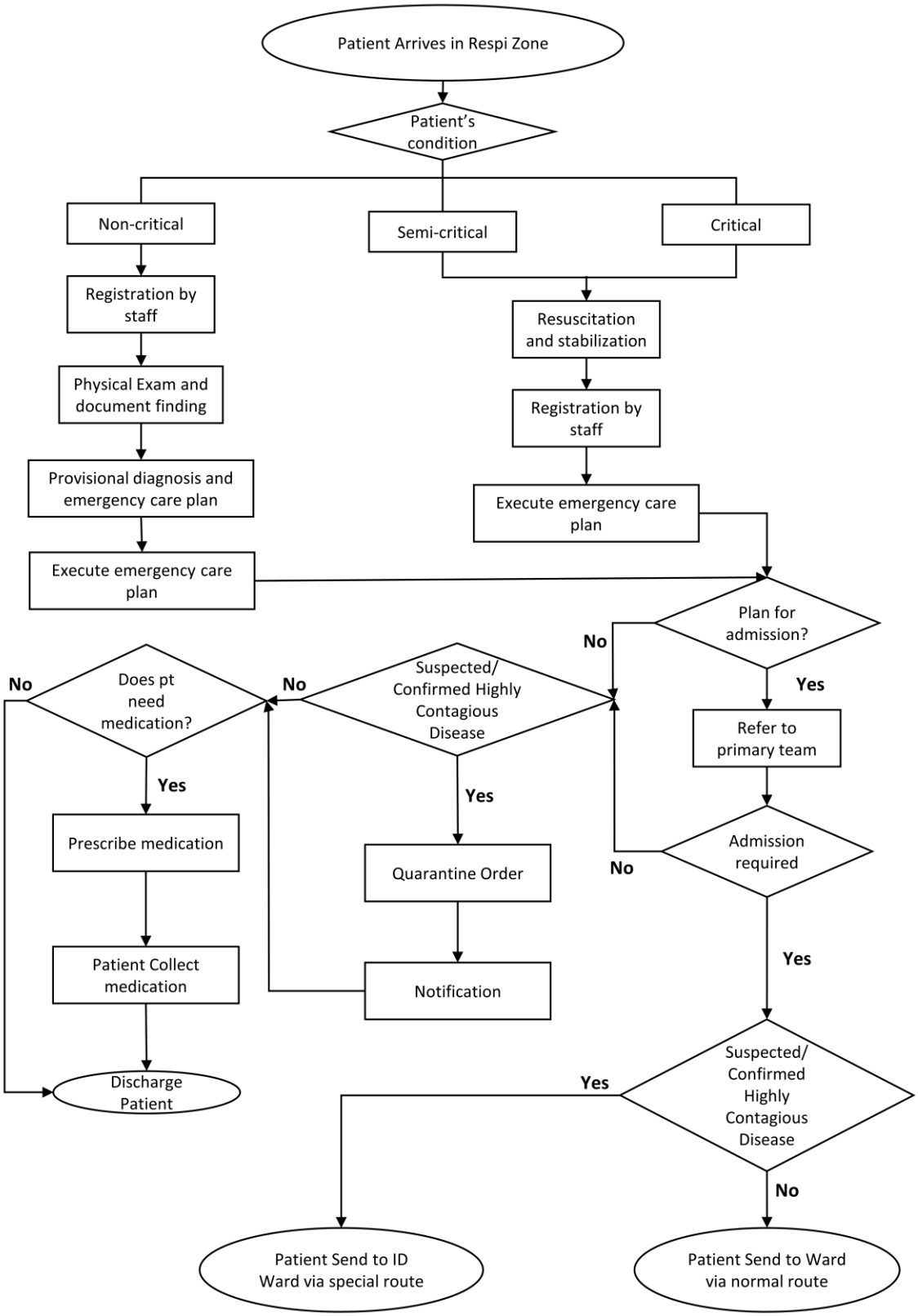
PATIENT'S FLOW IN GREEN ZONE




No
Does pt need ,medication?
Yes
Prescribe Medication
Patient collects medication
Patient Discharge

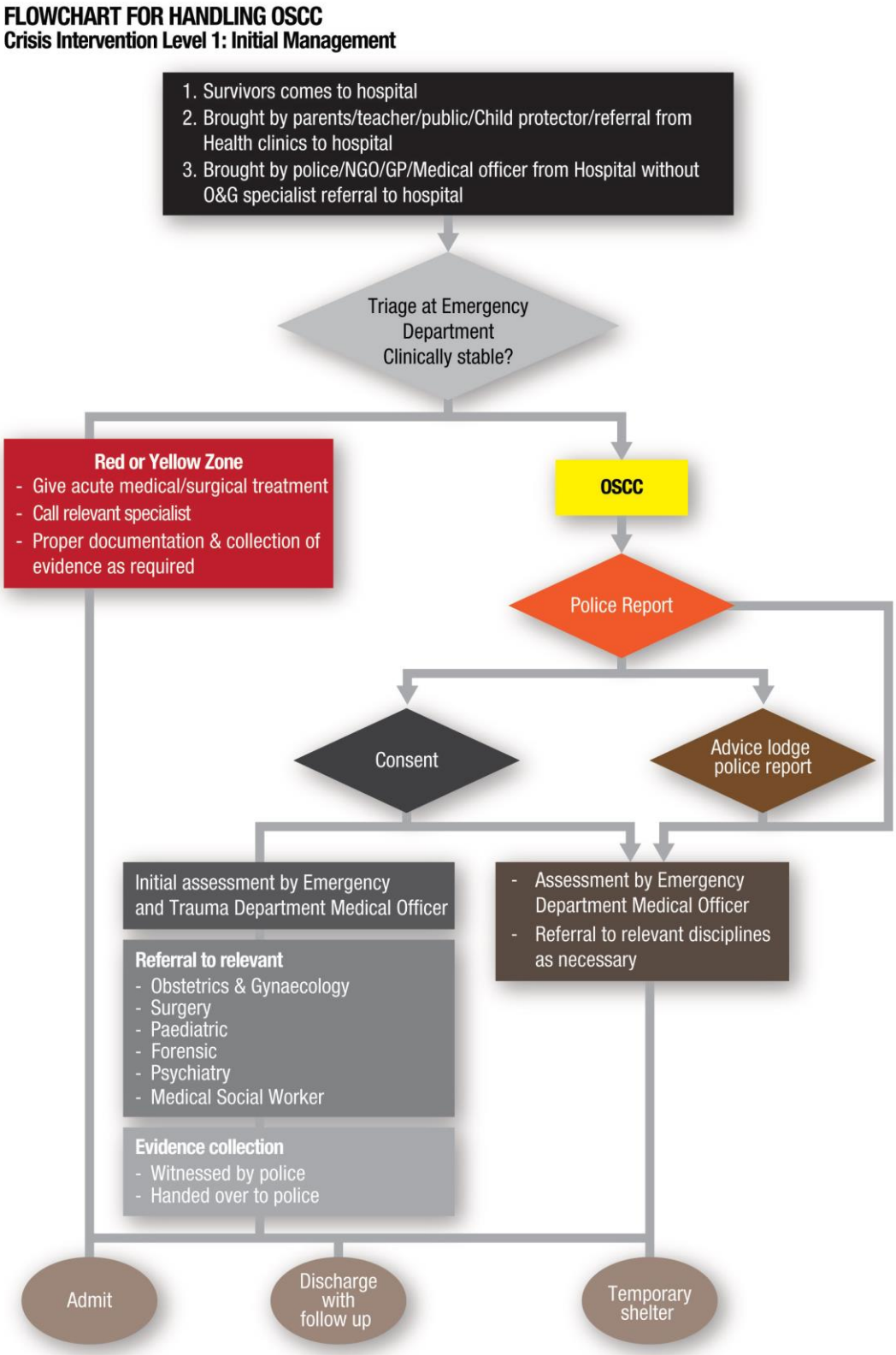
APPENDIX K

PATIENT'S FLOW IN RESPI ZONE



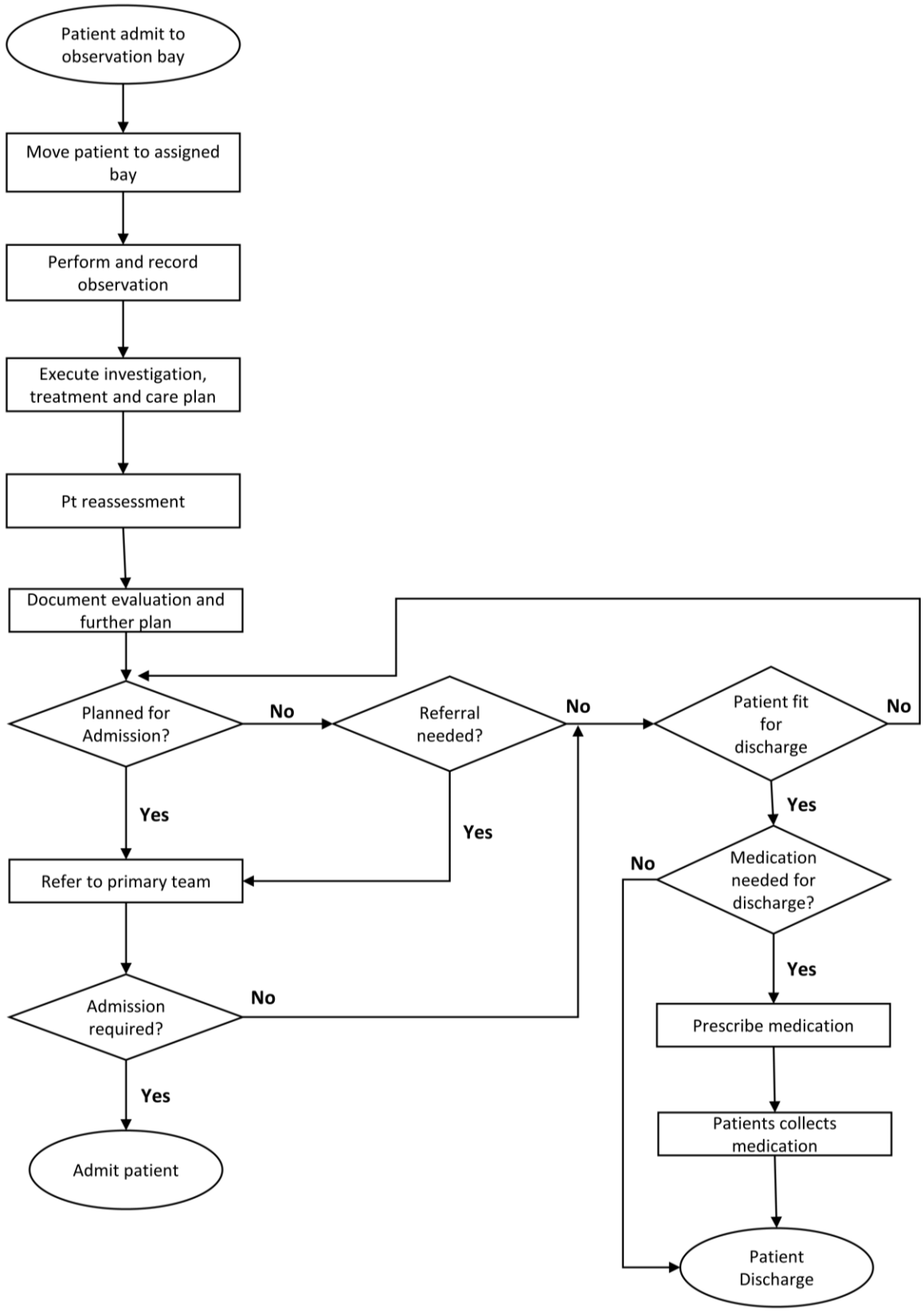
APPENDIX L

HANDLING OSCC LEVEL 1



APPENDIX M

OBSERVATION FLOW CHART



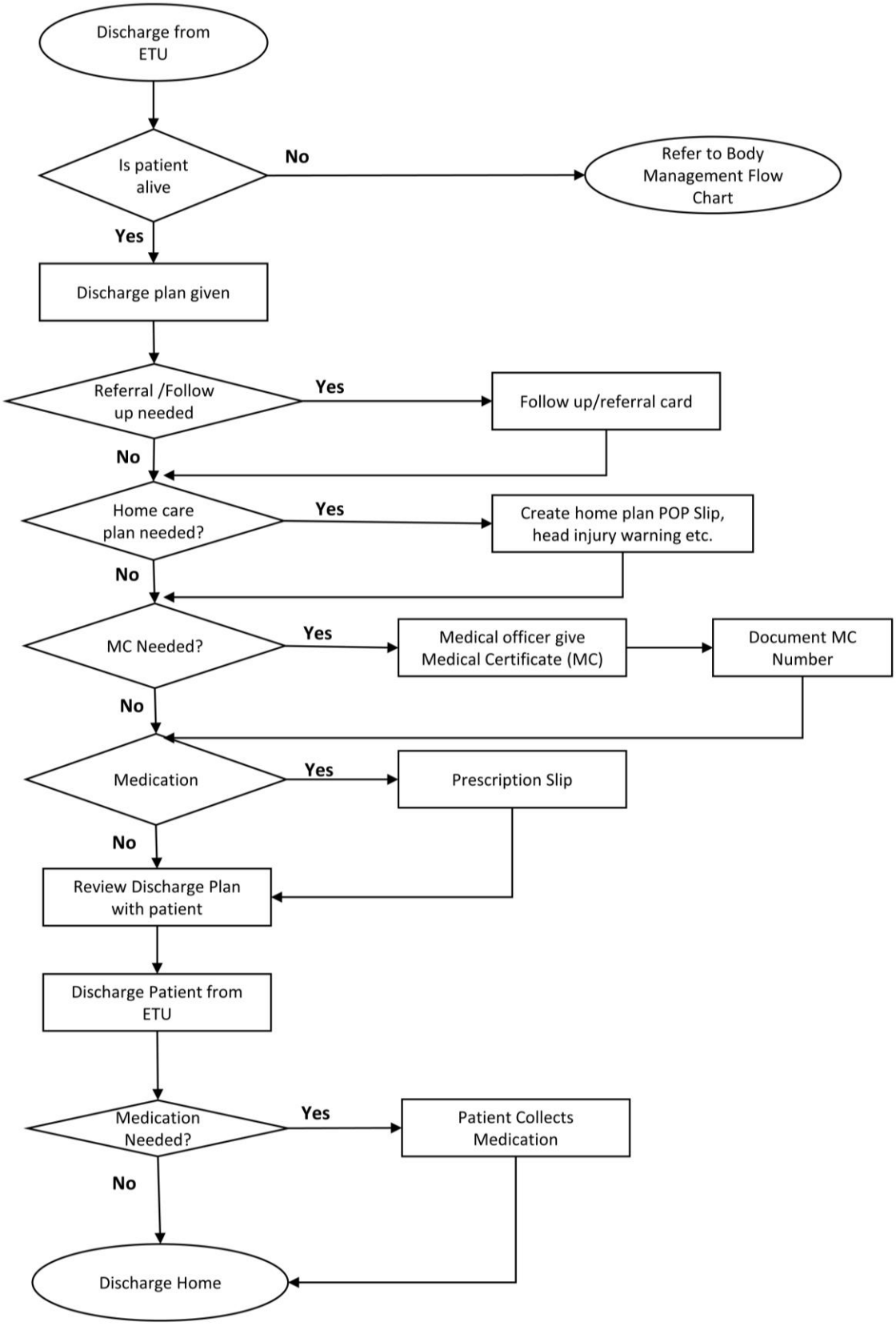
APPENDIX N

Patient categories for Observation Bay Admission

Trauma		
Condition		Purpose of admission
1	Mild head injury – concussion	To identify acute progression or development of symptoms or signs indicating increased ICP for low-risk categories
2	Abdominal pain	To identify acute progression or development of symptoms or signs; can be safely ruled out in no longer than 6 hours
3	Chest injury / pain	To identify acute progression or development of high-risk symptoms or signs
4	Wounds / Lacerations	To allow care of wounds (toilet and suturing) by specialist units that can be performed under LA and requiring only a clean environment and can be completed no longer than 6 hours
5	Soft-tissue injury	To identify progression or development of early symptoms or signs of compartment syndrome and requiring more than 6 hours
Non-Trauma		
Condition		Purpose of admission
1	Chest pain-low risk	To identify progression or development of new / recurrent symptoms or signs; to complete cardiac investigation
2	Mild dehydration	To allow completion of short IV fluids therapy; identify the development of high-risk symptoms
3	Small spontaneous pneumothorax	To identify progression or development of high-risk symptoms or signs; specific therapy not required; observation not longer than 6 hours
Other		
Condition		Purpose of admission
1	Delayed recovery from procedural sedation	To allow complete spontaneous recovery from effect of sedation
2	Pain	To allow adequate pain relief management to be instituted
3	OSCC – adult	A safe shelter cannot be offered elsewhere; alternatives are available but short delay expected; stay only no longer than 12 hours

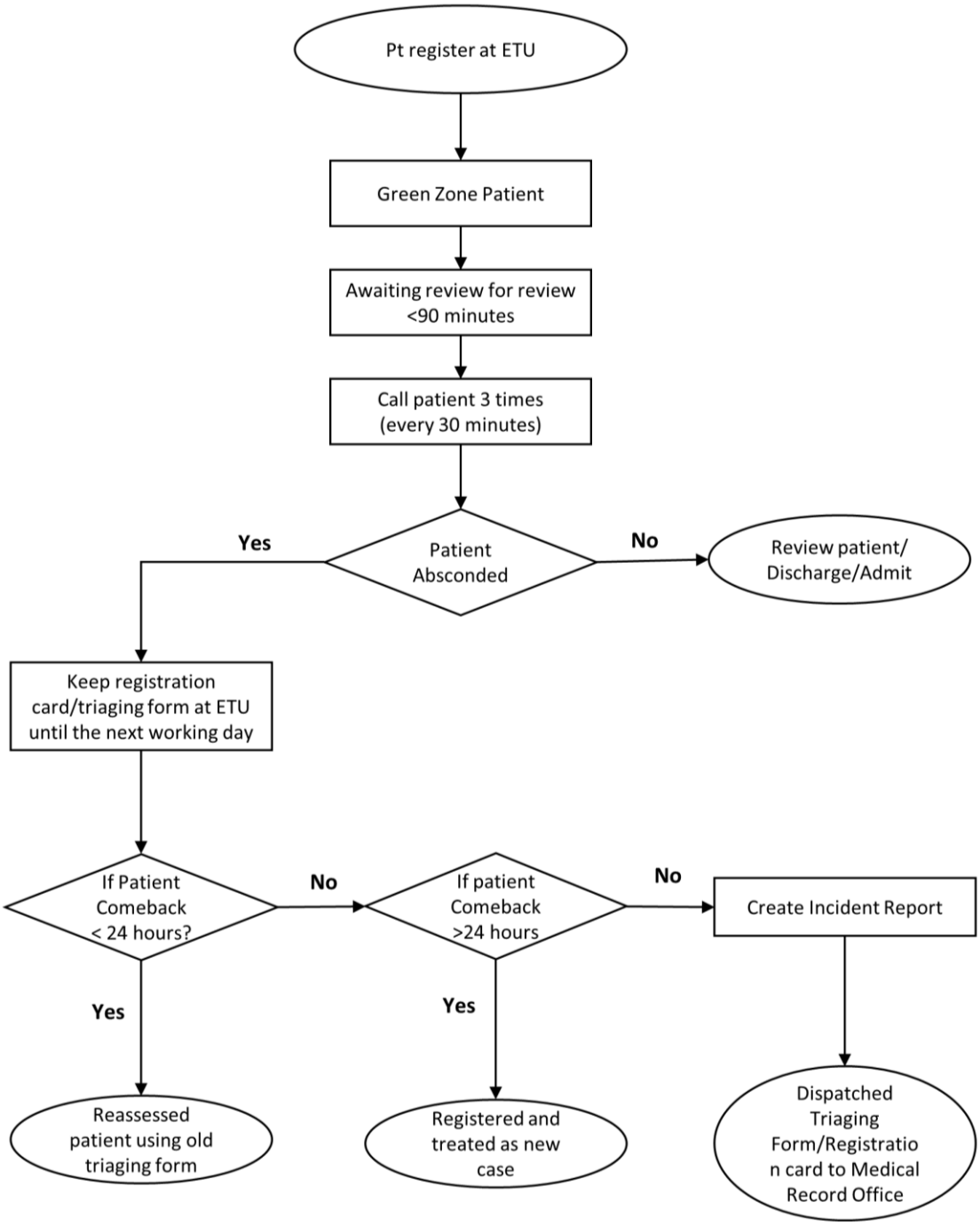
APPENDIX O

DISCHARGE FLOW CHART

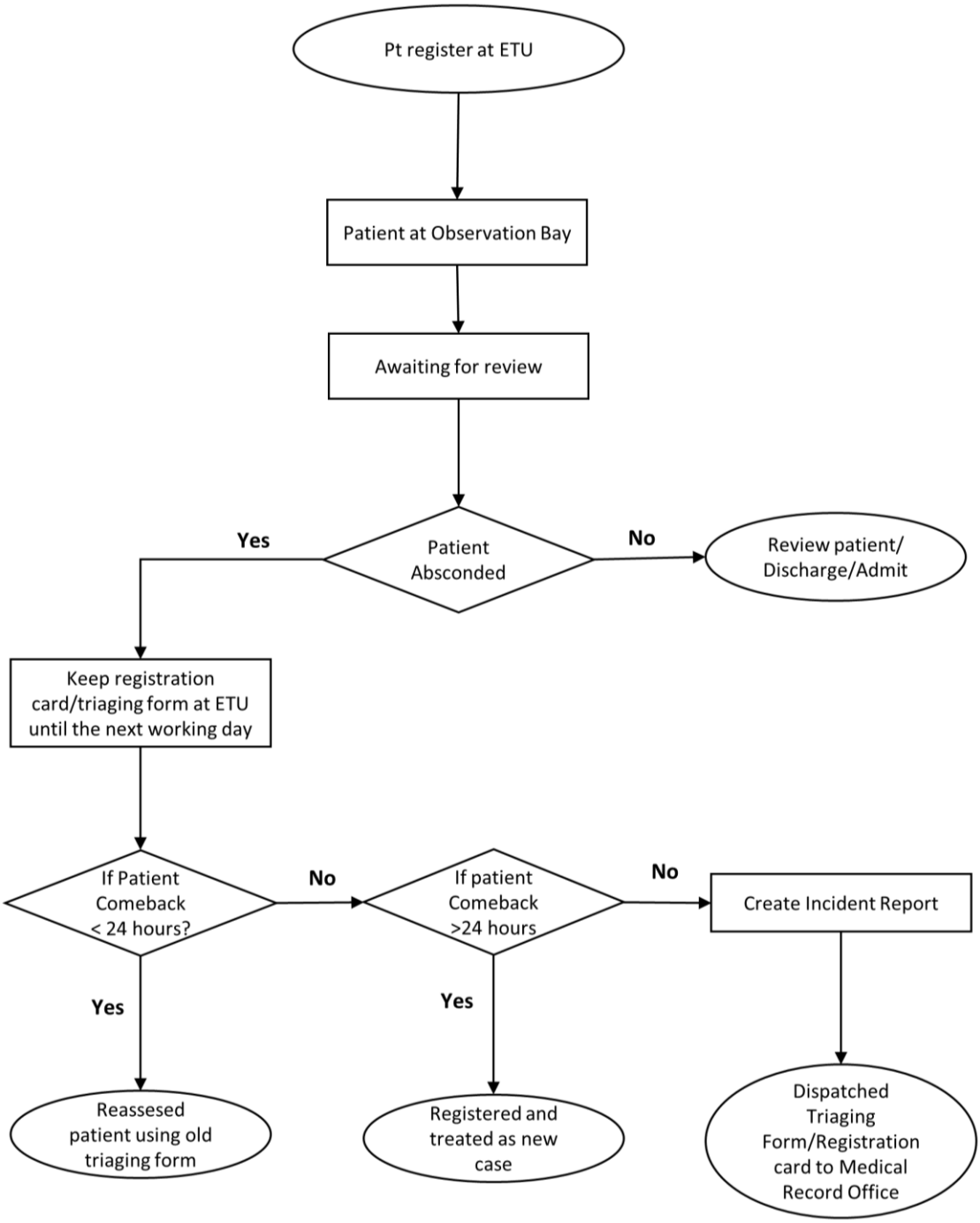


APPENDIX P

Absconded patients from Green Zone

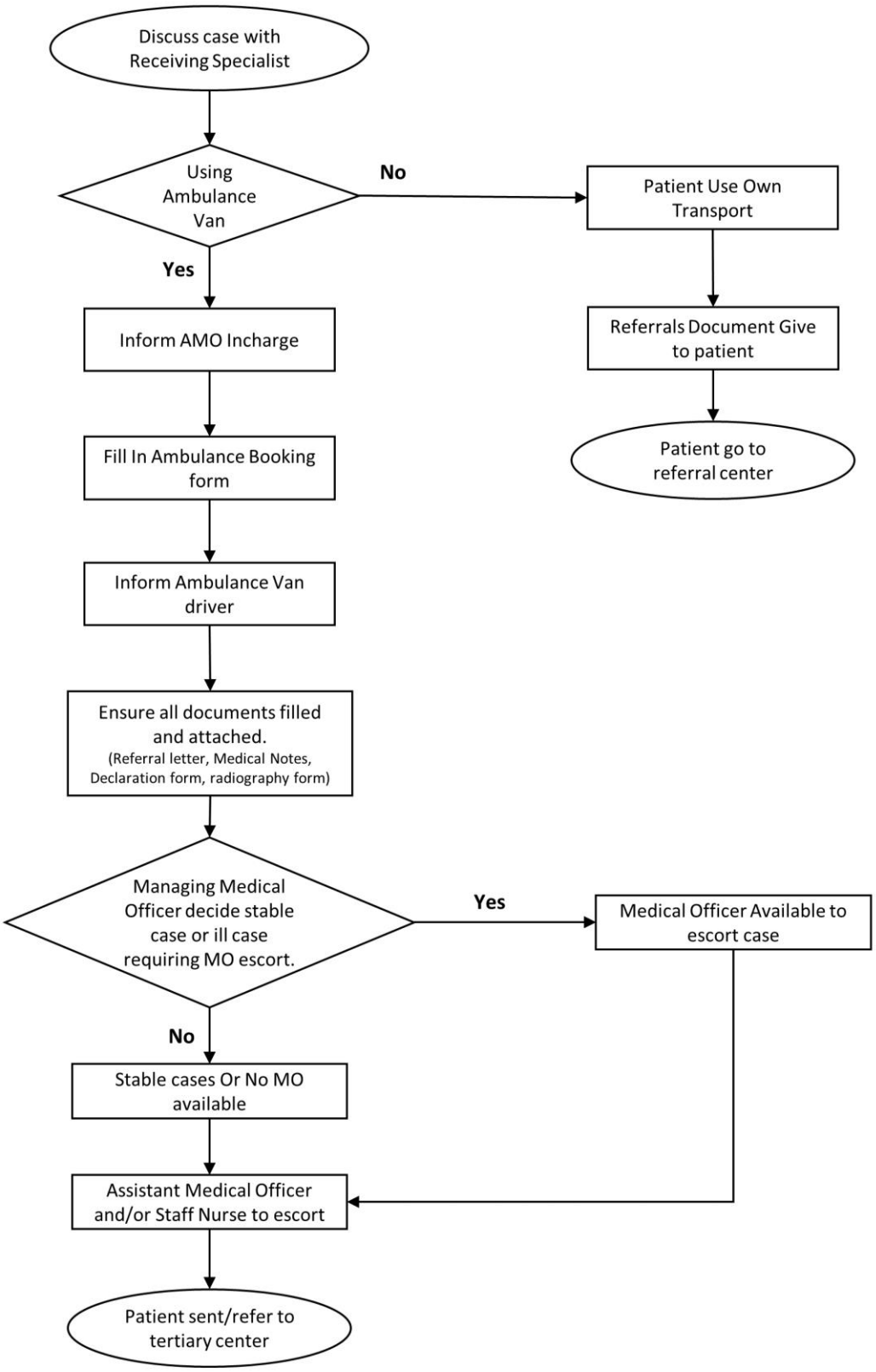


Absconded patients from Observation Bay.



APPENDIX Q

Guidelines Chart for Referral Patient



APPENDIX R

BODY MANAGEMENT

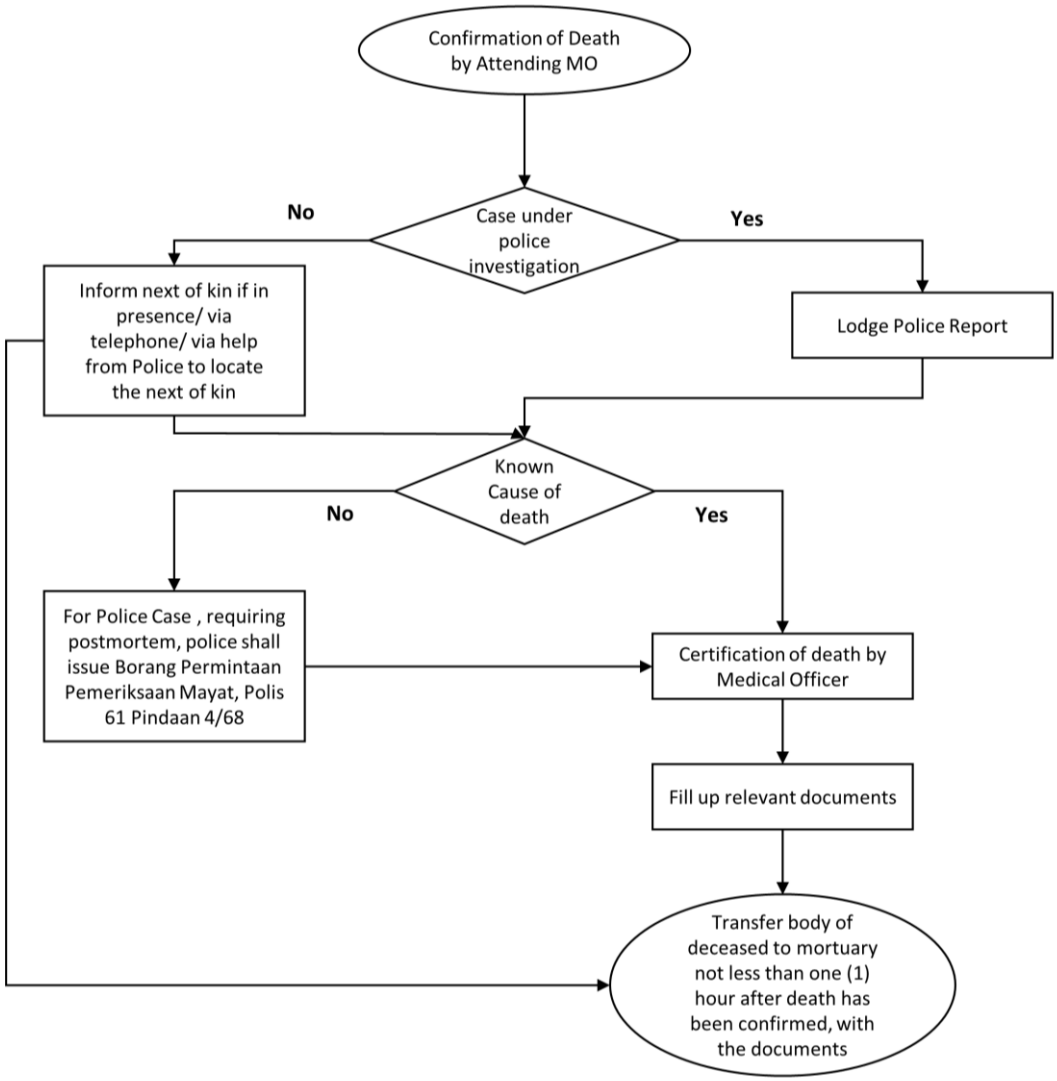
A. General Policy for Death

a) The body shall be kept at an area (Holding Bay) at Emergency and Trauma Unit after the last office while awaiting Mortuary staff to take the body.

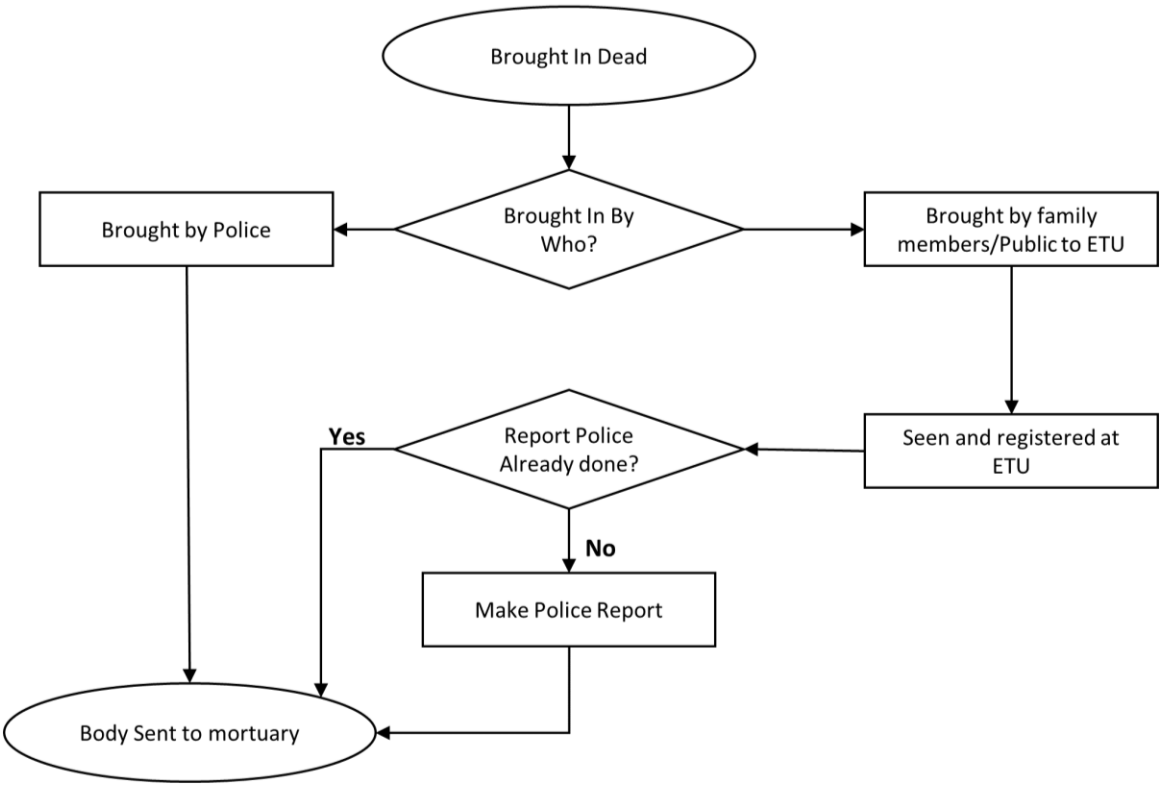
b) The “Holding Bay” shall serve as a ‘Grieving Area’ for the deceased family while awaiting the body to be transported to mortuary.

c) All body shall be transported to mortuary together with Triage Form, Confirmation of Death Document, and Medical Certificate of Death if the cause of death can be determined.

B. Flow Chart Death in Emergency and Trauma Department.



C. Flow Chart Brought in Dead



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