

Role of Nurse at the Emergency Department Observation Unit



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Modern Emergency Department



Emergency Department Observation Unit





Background

- 120 million visits to emergency departments each year, one for every three people in the United States, fifty percent of all hospital admissions (Christopher W , 2011)
- The 2015 ACEP Board of Directors reaffirmed that modern hospitals and EDs continue to face an array of challenges including overcrowding, inefficient use of resources, escalating health care costs, and concerns over avoidable admissions (ENA, 2017)
- EDOUs have been shown to be safe and effective, are considered best practice when managed appropriately, and offer an important service line for hospitals to help avoid financial penalties associated with patient readmissions

Observation Care



- ▶ a well-defined set of specific, clinically appropriate services
- ▶ include ongoing short term treatment, assessment, and reassessment before a decision can be made regarding whether patients will require further treatment as hospital inpatients or if they are able to be discharged from the hospital. Centers for Medicare and Medicaid Services (2015).

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Observation patients are those:

- ▶ with > 6 hour but < 24 hour length of stay in the ED, and
- ▶ requiring additional testing to determine if hospital admission is needed, and
- ▶ with a 70% probability of discharge with low co-morbidities (Ross, et al. 2012)



Characteristics

- ▶ < 24 hours
- ▶ Established clinical inclusion/exclusion criteria
- ▶ Established physician protocols
- ▶ Established nursing protocols
- ▶ Closed unit attached to ED vs. separate unit
- ▶ Staffed by ED physicians

Note: If > 20% of patients convert to inpatient, the inclusion/exclusion criteria should be reevaluated for appropriateness of admission (Bohan, 2015)



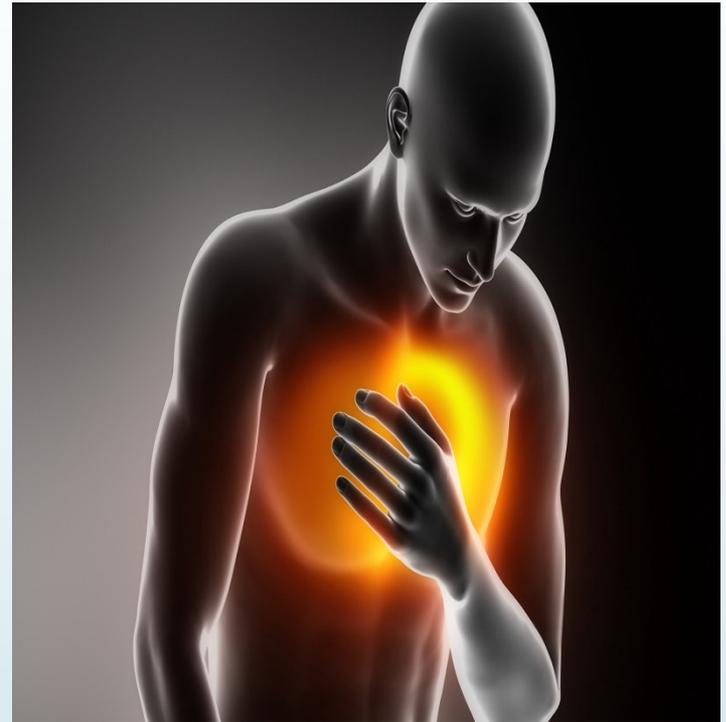
Common conditions managed and observed in an EDOU

- Chest pain
- Abdominal pain
- Asthma
- Minor Head injury
- Gastroenteritis
- Vertigo
- Syncope
- Transient neurological event/Transient ischemic attacks

(Komindr et al. International Journal of Emergency Medicine 2014)

Chest pain

The inclusion criterion for chest pain protocol is chest pain suggestive of angina or angina equivalent with an initial 12 lead ECG non-diagnostic for myocardial ischaemia and acute myocardial infarct



Observation intervention



- Record baseline parameters – temperature, heart rate, respiration, blood pressure and ST level.
- Check and record vitals (blood pressure, heart rate and respiration) 2 hourly.
- Record 12 lead ECG and check Troponin T blood test at these intervals:
 - 0 hour (time first 12 lead ECG and Troponin T was done in Critical Care Area)
 - 3 hours from time of emergency department registration (12-lead ECG only; Troponin T blood test is not done)
 - 6 hours from time of emergency department registration



Abdominal Pain

Indication for observation:

- Abdomen should be soft. There should be no guarding or rebound tenderness.
- Bowel sounds should be present.
- Hemodynamically stable (SBP >90)



Observation intervention

- ▶ All patients should be observed for a minimum of 3 hours and a maximum of 12 hours, with 3 hourly reviews
- ▶ FBC, U/E/Cr, seAmylase, urine dipstick, urine HCG, KUB, erect CXR, erect or lateral decubitus AXR may be performed if clinically indicated
- ▶ Vital signs should be monitored every 2 hourly. The I/O chart should be put up
- ▶ Severe diarrhoea or dehydration, iv hydration should be started. In fit and young adults, at least 2 litres of normal saline should be given over 4 to 6 hours

Asthma



Indication for observation:

- ▶ Acceptable vital signs (SBP > 90 mmHg, RR < 25 breaths/minute and SaO₂ >95% on room air after initial treatment)
- ▶ Alert and orientated
- ▶ PEF >50%
- ▶ PCO₂ < 45 mmHg, PO₂ > 70 mmHg in ABG result (if it is done)
- ▶ Absence of pneumonia
- ▶ No past history of ICU admission



Observation Intervention

- ▶ Nebulization (2 doses) and steroid prior to transfer to Observation Ward
- ▶ Check vital signs and PEFr hourly twice and 2 hourly thereafter
- ▶ Check SaO₂ hourly twice and 2 hourly thereafter
- ▶ Staff Nurse in-charge of Observation Ward will inform attending MO review patients every 3 hourly.
- ▶ Administer bronchodilator nebulisation if indicated.
- ▶ Discharged after 3 hours if their vital signs are acceptable, there is resolution of breathlessness
- ▶ At the end of 6 hours, patients whose PEFr < 75%, RR > 25, or SaO₂ < 95% on room air should be admitted.



Minor Head Injury

Indication for observation:

- ▶ Hemodynamically stable (SBP >90, SaO₂ >92)
- ▶ Normal GCS (unless intoxicated)
- ▶ Headache, dizziness, vomiting, confusion, loss of consciousness, amnesia associated with HI is acceptable
- ▶ Alcohol or drug intoxication associated with HI
- ▶ Unreliable or inadequate history
- ▶ Patients with bleeding tendencies eg. Anticoagulation, thrombocytopenia
- ▶ Scalp hematoma, laceration, contusion, abrasion, soft tissue facial injury

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Observation intervention

- **All patients should be observed for a minimum of 6 hours and a maximum of 12 hours.**
- Consciousness level (GCS, pupil size, limb movement) and vital signs hourly for 2 hours, then 2 hourly thereafter
- Review by doctor 3 hourly

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Syncope

The evaluation usually involves :

- Cardiac monitoring,
- Serial cardiac enzymes, and
- An evaluation for structural heart disease most commonly with transthoracic echocardiogram.
- It may also include stress testing



Overall, observation services are designed to provide diagnostic and treatment capabilities managed by appropriate physician and registered nurse staffing in an efficient, safe, and comfortable environment.



Role of Emergency Nurse

- ▶ **Participate in the development** of written policies, diagnostic protocols, and standardized pathways that define criteria for patient selection, care, transfer, and discharge, and the oversight of observation units
- ▶ **Deliver quality nursing care** to observation patients, employing standardized pathways and evidence-based protocols, and practice according to regulatory and jurisdictional guidelines.



Role of Emergency Nurse

- ▶ **Support the rights of patients** to be informed regarding services provided, financial implications, cost-sharing, and insurance limitations of observation care
- ▶ Provide purposeful rounding and comfort measures to patients awaiting evaluation and disposition, providing progress updates and educating patients and their families
- ▶ **Participate in collaborative research** to refine and improve clinical and operational outcomes provided in EDOU



PRINCIPAL DUTIES AND RESPONSIBILITIES

- **Consults with physicians** regarding the patient's condition, diagnosis and treatment plan, medication orders and need for alternate dispositions if necessary.
- **Keeps attending physician** advised of status as necessary.
- **Initiates referrals** to appropriate resources and services, promoting a collaborative approach to patient care.



PRINCIPAL DUTIES AND RESPONSIBILITIES

- ▶ **Initiates order sets** and clinical protocols according to patient diagnosis as indicated
- ▶ **Writes orders** and **documents** in the medical record as indicated
- ▶ Initiates requests for **laboratory data** and **radiologic studies** as needed and interprets results as related to the treatment plan



PRINCIPAL DUTIES AND RESPONSIBILITIES

- **Informs, counsels** and **instructs** individuals and families on their specific health problems and test results.
- Prepares and maintains **complete and accurate medical records** and **other documents**.
- Attends, participates in discharge planning and multi-disciplinary case discussions and/or family meetings to promote high quality of care as necessary.
- **Analyzes documentation** and feedback to facilitate problem resolution.
- Participates in multi-disciplinary protocol development.
- Oversees the utilization of healthcare resources to facilitate the care of the patient within length of stay targets.



Summary



- ▶ Observation services offer **safe, efficient, and quality care** to ED patients with common complaints, decreasing unnecessary inpatient admissions and **improving fiscal performance** for hospitals.
- ▶ Role of Emergency Nurse in the EDOU include **development of policy and protocols, Deliver quality nursing care, Support the rights of patients and Participate in collaborative research**

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