Guidelines for Reporting Emergency Unit/Department Services Key Performance Indicators

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Health Policies and Standards Department

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Health Regulation Sector

Dubai Health Authority

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INTRODUCTION

The Health Regulation Sector (HRS) plays a key role in regulating the health sector. HRS is mandated by the Dubai Health Authority (DHA) Law No. (6) of the year (2018) with its amendments pertaining to DHA, to undertake several functions including but not limited to:

- Developing regulation, policy, standards, guidelines to improve quality and patient safety and promote the growth and development of the health sector;

- Licensure and inspection of health facilities as well as healthcare professionals and ensuring compliance to best practice;

- Managing patient complaints and assuring patient and physician rights are upheld;

- Governing the use of narcotics, controlled and semi-controlled medications;

- Strengthening health tourism and assuring ongoing growth; and

- Assuring management of health informatics, e-health and promoting innovation.

The Guidelines for Reporting for Reporting Emergency Unit/Department (ED)Services Emergency Key Performance Indicators aims to fulfil the following overarching Dubai Health Sector Strategy 2026:

- Pioneering Human-centred health system to promote trust, safety, quality and care for patients and their families.

- Make Dubai a lighthouse for healthcare governance, integration and regulation.

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EXECUTIVE SUMMARY

Emergency Unit/ Department (ED) Services play a vital role in the healthcare system as they can be the entry point to the system for many patients and therefore the monitoring of their performance is equally important. The Guidelines for reporting Emergency Unit/Department (ED) Services Key Performance Indicators (KPIs), is developed to establish of system-level measures to monitor the provision of Emergency Unit/ Department Services in the Emirate of Dubai and to assure the optimization of the delivery of patient care and improving health outcomes.

Dubai Health Authority issued Standards for Emergency Unit/ Department Services that focus on:

- The health care professional requirements and permitted services for Emergency Units/Department.

- The health facility design requirements for Emergency Unit/Department Services aligned with the DHA Health facility guidelines.

- The policies, procedures, protocols and clinical governance that should be in place for the provision of Emergency Unit/Department. Services.

- The general requirements for patient triage, assessment, stabilisation, admission, referral and management.

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This document provides a guidance to healthcare facilities providing Emergency Unit/ Department. Services on reporting a set of 4 Key Performance Indicators (KPIs). These KPIs are categorized into Two domains as follows:

1. **Time**

   - Emergency Unit/Department Waiting Time to Triage.

   - Door to Balloon (PPCI)

   - Time from Emergency Unit /Department to in-patient ward

2. **Effectiveness**

   - Revisit Rate to The Emergency Unit/ Department After 72 Hours of Initial Discharge

All DHA licensed health facilities providing Emergency Unit/ Department Services should collect the data Biannually and report them to DHA using the KPI data tools.

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DEFINITIONS:

Discharge: the formal release of a patient from a hospital after a procedure or course of treatment.

Door To Balloon: the time taken from arrival to the ED to balloon deployment in the catheterization lab

Emergency Unit/ Department.: Health facilities that are open 24 hours, 7 days a week. An emergency unit/Department is consultant-led (onsite emergency trained physician), with a multidisciplinary team and nursing support, and possess diagnostic, surgical and pharmacy capabilities to manage an emergency or life-threatening patient

Patient arrival: refers to the moment when a patient presents themselves to the Emergency Unit/ Department for urgent medical care. Regardless of any methods.

Primary Percutaneous Coronary Intervention (PPCI) is an emergency procedure used to treat acute coronary artery disease

Revisit Rate: Percentage of patients who return to the emergency department after dischared within a specified period

ST-elevation myocardial infarction (STEMI): is an event in which transmural myocardial ischemia results in myocardial injury or necrosis

Triage: process which categorizes patients based on urgency of needs.

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ABBREVIATIONS

AHA: American Heart Association

DHA: Dubai Health Authority.

DOH: Department of Health.

ED: Emergency Department

HRS: Health Regulation Sector.

KPIs: Key Performance Indicators.

LAMA: leave hospital against medical advice

PPCI: Primary Percutaneous Coronary Intervention.

STEMI: ST-elevation myocardial infarction.

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1. BACKGROUND

Emergency services that are well established and connected are considered the backbones of strong functioning health systems. Dubai Health Authority (DHA) has issued its Standards for Emergency Unit/ Department Services and upon the execution of Emergency Transfer Services Assessment project the importance of establishing system level measures emerged. Given the critical role emergency care plays in healthcare provision, and importance of assuring the highest levels of quality and patient safety are upheld, it is important to establish system-level measures to monitor the provision of Emergency Unit/ Department services in the Emirate of Dubai.

This Guideline aims to assist providers of emergency services in understanding DHA's Emergency Services KPIs and their reporting method. Each of the KPIs covered in the guideline have a KPI card elaborating on the calculation and relevant details.

2. SCOPE

2.1. Measurement and reporting of KPIs by DHA licensed Healthcare providers

3. PURPOSE

3.1. Improve Emergency Transfer providers' understanding of the Key Performance Indicators.

3.2. Initiate data collection for Emergency Transfer Services KPIs.

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3.3. Ensure monitoring and quality assurance among Emergency Transfer Services providers.

3.4. Improve Emergency services provided in Dubai.

4. APPLICABILITY

4.1. All DHA licensed Hospitals providing Emergency Services.

5. GENERAL PROCEDURES

5.1. All DHA licensed facilities providing Emergency Unit/ Department. services are required to report the indicators specific to the scope of Emergency services.

5.2. Each facility providing emergency services Shall assign a Quality Representative who will be responsible for reviewing the data from departments and reporting the Key Performance Indicators (KPIs) to DHA Biannually.

5.3. If the KPI is not applicable to the range of services provided by the facility, quality leads should mark the field with "NA".

5.4. Quality Representative of Emergency Unit/ Department services must assure staff awareness of the new KPIs.

5.5. Quality Representative must consider the following in data collection:

5.5.1. Decide which KPI is applicable to the facility based on the scope of services.

5.5.2. Assure data collection lead(s) are adequately skilled and resourced.

5.5.3. Create a data collection plan based on methodology and available resources.

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5.5.4.   Assure adequate data collection systems and tools are in place.

5.5.5.   Back up the data and assure protection of data integrity.

5.6. Data Analysis and Submission:

5.6.6.   Quality Representative must ensure data is clean and analysed for reliability and

accuracy before submission.

5.6.7.   Data collection should be on a Biannually basis.

5.6.8.   Submission deadline is the second week of reported quarter as follows:

- Q1 and Q2 date of reporting- 5-14 Jan.

- Q3 and Q4 date of reporting- 5-14 July.

5.6.9.   Submission should be using the link provided by DHA as below:

- https://msurvey.government.ae/survey/Dubai%20Health%20Authority%20/k00

- Or to scan the bar code

5.6.10. Data submission and related queries can be communicated with the Monitoring

and Evaluation Section (MonitoringKPIs@dha.gov.ae).

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6. KEY PERFORMANCE INDICATORS:

6.1. Time:

6.1.1 Emergency Unit/Department Waiting Time to Triage.

Emergency Unit/Department Waiting time to Triage	
Main Domain:	Time
Subdomain:	Patient Waiting Time
Indicator Definition:	The percentage of arrival time at Emergency Unit/Department until patient is triaged by health care professional
Calculation:	Numerator: Total number of patients triaged within 15 minutes from arrival to Emergency Unit/Department Denominator: Total number of patients in ED Exclusions: • Patient who leave without being seen • Patient who are immediately triage upon arrival (patient with life threatening conditions) • Patient transferred directly to other facility or department upon arrival
Target:	80% at 15 or less minutes
Methodology:	Numerator/ denominator x100.
Measuring Unit:	% of timely triage
Reporting Frequency:	Biannually
Desired Direction:	Higher is better
Rationale:	Metric of process efficiency and patient care
KPI Source:	DHA.

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6.1.2 Door to Balloon (PPCI).

Door to Balloon (PPCI)	
Main Domain:	Time
Subdomain:	Timely Intervention
Indicator Definition:	The percentage of waiting time for patients suspected with Acute Myocardial Infarction (AMI) from the patient's arrival at the Emergency Unit/Department to first inflation of the balloon catheter during percutaneous coronary intervention
Calculation:	Numerator: Total number of patients who received PPCI within 90 minutes or less Denominator: Total number of STEMI patients who are indicated to receive PPCI Inclusion: • Hospitals with Cath Lab Services Exclusions: • In-Patients • Patients who refuse/ ineligible for PPCI. • Patients who were treated with Tenecteplase (TNK) or Coronary artery bypass surgery (CABG).
Target:	80% of patients receiving PPCI within 90 mins or less
Methodology:	Numerator/ denominator x100.
Measuring Unit:	% of timely intervention
Reporting Frequency:	Biannually
Desired Direction:	Higher is better
Rationale:	Metric of effectiveness and quality
KPI Source:	DHA, AHA, DOH

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6.1.3 Time from Emergency Unit / Department to in-patient ward.

Time from Emergency Unit/ Department to in-patient ward	
Main Domain:	Time
Subdomain:	Conveyance
Indicator Definition:	The percentage of patients' arrival at the Emergency unit/ Department to their admission to an in-patient ward
Calculation:	Numerator: Total number of patients waiting times in minutes (less than 180 minutes) for transfer patient from Emergency unit/ Department to in-patient ward Denominator: Total number of Patients transferred from Emergency unit/ Department to in-patient ward Exclusions: • Patients who leave against medical advice (LAMA). • Patients who were transferred to another hospital.
Target:	TBA
Methodology:	Numerator/ denominator
Measuring Unit:	Percentage
Reporting Frequency:	Biannually
Desired Direction:	Higher is better
Rationale:	Metric of efficiency and quality
KPI Source:	DHA.

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6.2. Effectiveness

6.2.1. Revisit Rate to The Emergency Department After 72 Hours of Initial Discharge.

Revisit Rate to The Emergency Unit/ Department After 72 Hours of Initial Discharge	
Main Domain:	Revisit Rates
Subdomain:	Effectiveness
Indicator Definition:	The percentage of patient revisit Emergency Unit/Department less than 72 hours of initial discharge for the same chief complaint
Calculation:	Numerator: Number of revisits to the Emergency Unit/Department within or less than 72 hours Denominator: Number of all discharged patients from Emergency Unit/Department Exclusions: • Scheduled referral visit • Patient left without being seen • Patient left against medical advice • Admitted patients through ED. • Wound care • Dressing • Infusion • Unrelated Diagnosis
Target:	NA
Methodology:	Numerator/ denominator x100.
Measuring Unit:	percentage
Reporting Frequency:	Biannually
Desired Direction:	Lower is better
Rationale:	Metric of effectiveness and quality
KPI Source:	DHA

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REFERENCES

1. Al Ali , M. et al., 2023. ED Revisits Within 72 Hours to a Tertiary Health Care Facility in Dubai: A Descriptive Study. 15(3),. Cureus,. https://doi.org/10.7759/cureus.36807

2. Champasri, K. et al., 2023. Door-to-device time and mortality in patients with ST-elevation myocardial infarction treated with primary percutaneous coronary intervention: insight from real world data of Thai PCI Registry. Cardiovascular Diagnosis And Therapy, pp. 843-854. https://cdt.amegroups.org/article/view/117982/html

3. DHA Standards for Emergency Unit Services

4. DOH(2021)JAWDA Quarterly Waiting Time Guidelines for (Specialized and General Hospitals) available at : Muashir - JAWDA Indicators Submission Guidelines | Department of Health Abu Dhabi

5. Jacobson, N. et al., 2023. Mortality in the Emergency Department and the Effectiveness of Conventional Safety Event Reporting. Cureus, 15(9). Mortality in the Emergency Department and the Effectiveness of Conventional Safety Event Reporting - PMC (nih.gov)

6. Krishnan S, V., Ravi, M., Abraham, S. V., Palatty, B. U., & Balakrishnan, J. M. (2021). Door to balloon time in patients presenting with acute ST elevation myocardial infarction and time factors influencing it; an observational study from a tertiary care teaching hospital in India. *Indian heart journal*, *73*(3), 359–361. https://doi.org/10.1016/j.ihj.2021.02.008

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7. Nathan, A. S., Raman, S., Yang, N., Painter, I., Khatana, S. a. M., Dayoub, E. J., Herrmann, H. C., Yeh, R. W., Groeneveld, P. W., Doll, J. A., McCabe, J. M., Hira, R. S., Giri, J., & Fanaroff, A. C. (2020). Association between 90-Minute Door-to-Balloon time, selective exclusion of myocardial infarction cases, and access site choice. Circulation Cardiovascular Interventions, 13(9). https://doi.org/10.1161/circinterventions.120.009179

8. The Royal College of Emergency Medicine, 2017. Initial Assesment of Emergency Department Patients [Online] Available at SDDC_Intial_Assessment_Feb2017.pdf (rcem.ac.uk)

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