



دائرة الصحة
DEPARTMENT OF HEALTH

**JAWDA Quarterly Waiting
Time Guidelines for
(Specialized and General
Hospitals)**

Issue: October 2019

Table of Contents

Executive Summary	3
About this Guidance	4
DoH Levels of Emergency Care.....	4
Waiting time Performance Indicators	5
Primary Care Appointment- Outpatient Setting	5
Referral of Suspected Cancer Cases.....	6
Hospital Wait at Point of Arrival.....	7
Consultant or specialist Hospital Appointment (excluding cancer)	8
Hospital Inpatient or day case (inpatient)	9
Door to Balloon (PCI) waiting time for patients suspected with Acute Myocardial Infarction (AMI).....	10
Stroke admission with CT scan timeframe	12
Seeing a doctor in emergency department or urgent care center (Door to Doctor Time)	13
Registration to leaving emergency department or urgent care center (Door to Door Time).....	14
24 hours -Re attendance rate to emergency department or urgent care center.....	15
APPENDIX A- for stroke ICD_10 Diagnosis Codes.....	19
Ischemic ICD-10 codes:	19
Hemorrhagic ICD-10 codes:.....	22

Executive Summary

The Department of Health– Abu Dhabi (DOH) is the regulatory body of the healthcare sector in the Emirate of Abu Dhabi and ensures excellence in healthcare for the community by monitoring the health status of its population.

The Emirate of Abu Dhabi is experiencing a substantial growth in the number of hospitals, centers and clinics. This is ranging from school clinics and mobile units to internationally renowned specialist and tertiary academic centers. Although, access and quality of care has improved dramatically over the last couple of decades, mirroring the economic upturn and population boom of the Abu Dhabi Emirate, however challenges remain in addressing further improvements.

The main challenges that are presented with increasingly dynamic population include an aging population with increased expectation for treatment, utilization of technology and diverse workforce leading to increased complexity of healthcare provision in Abu Dhabi. All of this results in an increased and inherent risk to quality and patient safety.

DOH has developed a dynamic and comprehensive quality framework in order to bring about improvements across the health sector. This guidance relates to the quality indicators that DOH is mandating the quarterly reporting against by the fully operating general and specialist hospitals in Abu Dhabi.

The guidance sets out the full definition and method of calculation for patient safety and clinical effectiveness indicators. For enquiries about this guidance, please contact jawda@doh.gov.ae

This document is subject for review and therefore it is advisable to utilize online versions available on the DOH website at all times.

Published: October 2019, version 4. Effective on January 2020

About this Guidance

The guidance sets out the definitions, reporting, and frequency of JAWDA waiting time (WT) performance indicators. Department of Health (DoH) with consultation of local and international emergency and accident (E &A) consultant expertise developed waiting time performance indicators that are aimed for assessing the degree to which a provider competently and safely delivers the appropriate clinical services to the patient within the optimal time period.

The waiting time performance indicators in this guidance include measures to monitor i.e., (time spent in emergency, wait time for cardiac procedures, wait time for diagnostic imaging, and primary care appointment). Healthcare providers are the most qualified professionals to develop and evaluate quality of care measures for emergency department. Therefore, it is crucial that clinicians retain a leadership position in defining emergency department quality of care.

Who is this guidance for?

All DoH licensed healthcare facilities providing emergency and outpatient care services (emergency, urgent care hospitals, and primary care providers) in the Emirate of Abu Dhabi.

How do I follow this guidance?

Each provider will nominate one member of staff to coordinate, collect, monitor and report waiting time quality performance indicators data as per communicated dates. The nominated healthcare facility lead must in the first instance e-mail their contact details (if different from previous submission) to jawda@doh.gov.ae and submit the required quarterly quality performance indicators through Jawda online portal.

What are the Regulation related to this guidance?

- Legislation establishing the Health Sector
- [DOH Standard for Primary Health Care in Emirate of Abu Dhabi](#)
- [DOH Standard for Emergency Department](#)
- As per [DoH Policy for Quality and Patient Safety](#) issued January 15th 2017, this guidance applies to all DOH Licensed Hospital Healthcare Facilities in the Emirate of Abu Dhabi in accordance with the requirements set out in this Standard.

[DoH Levels of Emergency Care](#)

- Emergency Department (Major Trauma)
- Emergency Department (Trauma)
- Urgent Care Centre

Department of Health (DOH): JAWDA Waiting Time Indicators

Waiting time Performance Indicators

Type: Waiting Time Indicator
WT 001

Indicator Number:

KPI Description (title):	Primary Care Appointment- Outpatient Setting
Domain	Access and Timeliness
Sub-Domain	Waiting time
Definition:	Time to see a Department of Health (DoH) licensed Family Physician or member of their team General Practitioner (GP) in the primary care service.
Calculation:	<p>Numerator: Number of patients that were seen within 48 hours of requests.</p> <p>Denominator: Total number of all appointment request.</p> <p>Exclusions:</p> <ol style="list-style-type: none"> 1) Non Physician Led Appointment Types 2) Follow Up Appointment Types (Follow-up does not relate to billing aspects) 3) Dentist and anesthesia 4) Emergency Patients 5) Patient choice of not having the appointment within 48 hours when offered 6) Walk in Patients
Reporting Frequency:	Quarterly
Unit of Measure:	% for performance (hours for mean, median and min. & max)
Reported Information	Numerator, Denominator, Indicator Performance (also, mean waiting time, median waiting time, min. & max. waiting time)
Target	90% within 48 hours
Notes for all facilities	
Data sources / Report Name:	<ul style="list-style-type: none"> - Local business intelligence report or any other internally designed system - Applicable to licensed operational general and specialist hospitals for provision of primary care and/or specialist/consultant outpatient facilities

Department of Health (DOH): JAWDA Waiting Time Indicators

Type: Waiting Time Indicator
WT 002

Indicator Number:

KPI Description (title):	Referral of Suspected Cancer Cases
Domain	Access and Timeliness
Sub-Domain	Waiting time
Definition:	Time for a Department of Health (DOH) licensed relevant specialist/consultant to see a patient with suspected cancer from time of receiving the referral.
Calculation:	<p>Numerator: Number of patients with suspected cancer that was seen by the relevant (DOH) licensed specialist/consultant within 2 weeks (or 14 calendar days) from receiving the referral (or self-requested appointment).</p> <p>Denominator: Total number of all referral (including self-referral patients with suspected cancer).</p> <p>Populations: All suspected cancer referral cases</p> <p>Exclusions: -Non Physician Led Appointment Types -Follow Up Appointment Types (Follow-up does not relate to billing aspects) -Patient choice of not having the appointment within 14 days when offered</p>
Reporting Frequency:	Quarterly
Unit of Measure:	% for performance (<i>days</i> for mean, median and min. & max)
Reported Information	Numerator, Denominator, Indicator Performance (also, mean waiting time, median waiting time, min. & max. waiting time)
Target	90% within 14 days
Notes for all facilities	
Data sources / Report Name:	<ul style="list-style-type: none"> - Local business intelligence report or any other internally designed system - Applicable to licensed operational general and specialist hospitals for provision of primary care and/or specialist/consultant outpatient facilities - Referral forms or database

Department of Health (DOH): JAWDA Waiting Time Indicators

Type: Waiting Time Indicator
WT 003

Indicator Number:

KPI Description (title):	Hospital Wait at Point of Arrival
Domain	Access and Timeliness
Sub-Domain	Waiting time
Definition:	Time in minutes from registration to seeing any Department of Health (DOH) licensed (specialist, family medicine, general practitioner, or consultant).
Calculation:	<p>Numerator: Number of patients that were seen within 60 minutes from registration in attendance.</p> <p>Denominator: Total number of all patients registering by any DOH licensed specialist, family medicine, general practitioner, or consultant physician.</p> <p>Exclusions:</p> <ul style="list-style-type: none"> ▪ Non-Physician Led Appointment Types ▪ Patients that required investigation done prior to seeing the doctor, as part of efficient process e.g.; hearing test, treadmill test, ECG, blood glucose, etc.
Reporting Frequency:	Quarterly
Unit of Measure:	% for performance (<i>minutes</i> for mean, median and min. & max)
Reported Information	Numerator, Denominator, Indicator Performance (also, mean waiting time, median waiting time, min. & max. waiting time)
Target	90% within 60 minutes
Notes for all facilities	
Data sources / Report Name:	<ul style="list-style-type: none"> - Local business intelligence report or any other internally designed system - Applicable to licensed operational general and specialist hospitals for provision of primary care and/or specialist/consultant outpatient facilities

Department of Health (DOH): JAWDA Waiting Time Indicators

Type: Waiting Time Indicator
WT 004

Indicator Number:

KPI Description (title):	Consultant or specialist Hospital Appointment (excluding cancer)
Domain	Access and Timeliness
Sub-Domain	Waiting time
Definition:	Time for a Department of Health (DOH)-licensed specialist or consultant to see a non-suspected cancer case.
Calculation:	<p>Numerator: Number of patients that got seen by the relevant (DOH licensed specialist/consultant within 2 weeks (or 14 calendar days) from receiving the referral (or self-requested appointment).</p> <p>Denominator: Total number of all referral including self-referral -patients.</p> <p>Exclusions:</p> <ul style="list-style-type: none"> ▪ Exclude appointments in primary care services ▪ Exclude visits to dental and anesthesia providers ▪ From Oncology Clinics ▪ Non Physician Led Appointment Types ▪ Follow Up Appointment Types (Follow-up does not relate to billing aspects) ▪ Patient choice of not having the appointment within 14 days when offered
Reporting Frequency:	Quarterly
Unit of Measure:	% for performance (<i>days</i> for mean, median and min. & max)
Reported Information	Numerator, Denominator, Indicator Performance (also, mean waiting time, median waiting time, min. & max. waiting time)
Target	90% within 14 calendar days
Notes for all facilities	
Data sources / Report Name:	<ul style="list-style-type: none"> - Local business intelligence report or any other internally designed system - Applicable to licensed operational general and specialist hospitals for provision of primary care and/or specialist/consultant outpatient facilities

Department of Health (DOH): JAWDA Waiting Time Indicators

Type: Waiting Time Indicator
WT 005

Indicator Number:

KPI Description (title):	Hospital Inpatient or day case (inpatient)
Domain	Access and Timeliness
Sub-Domain	Waiting time
Definition:	Number of days it takes to admit a non- emergency patient from DTA (decision to admit) made by a Department of Health (DOH) licensed specialist or consultant.
Calculation:	<p>Numerator: Number of patients being admitted within 28 days from date of DTA (Decision to Admit).</p> <p>Population: All elective admissions with DTA</p> <p>Exclusions:</p> <ul style="list-style-type: none"> ▪ Patients who are unable to have their treatment for social, work or personal reasons ▪ Patients who choose to wait longer than 4-weeks for their treatment ▪ Patients for whom it is not clinically appropriate to start treatment within 4 weeks ▪ Delay in admission due to insurance approval being refused or delayed >= 14 days ▪ Emergency admissions
Reporting Frequency:	Quarterly
Unit of Measure:	% for performance (<i>days</i> for mean, median and min. & max)
Reported Information	Numerator, Denominator, Indicator Performance (also, mean waiting time, median waiting time, min. & max. waiting time)
Target	90% within 28 calendar days
Notes for all facilities	
Data sources / Report Name:	<ul style="list-style-type: none"> - Local business intelligence report or any other internally designed system - Applicable to facilities licensed to provide inpatient services

Department of Health (DOH): JAWDA Waiting Time Indicators

Type: Waiting Time Indicator
WT 006

Indicator Number:

KPI Description (title):	Door to Balloon (PCI) waiting time for patients suspected with Acute Myocardial Infarction (AMI)
Domain	Access and Timeliness
Sub-Domain	Waiting time
Definition:	Number of minutes it takes to start angioplasty for emergency patients with Acute Myocardial Infarction (AMI). Acute myocardial infarction (AMI) patients with ST-segment elevation or LBBB on the ECG closest to arrival time receiving primary PCI during the hospital stay with a time from hospital arrival to PCI of 90 minutes or less.
Calculation:	<p>Numerator: Number of patient who had primary angioplasty within 90 min of attending as an emergency With AMI.</p> <p>Denominator: AMI patients with ST-elevation or LBBB on ECG who are indicated to receive primary PCI.</p> <p>Denominator Inclusions:</p> <ul style="list-style-type: none"> • Discharged patients with Acute myocardial infarction diagnosis: <ul style="list-style-type: none"> ○ An ICD-10-CM Principal Diagnosis Code for AMI: <ul style="list-style-type: none"> I21.01 ST elevation (STEMI) myocardial infarction involving left main coronary artery I21.02 ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery I21.09 ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall I21.11 ST elevation (STEMI) myocardial infarction involving right coronary artery I21.19 ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall I21.29 ST elevation (STEMI) myocardial infarction involving other sites I21.3 ST elevation (STEMI) myocardial infarction of unspecified site AND ○ CPT Principal and Other Procedure Codes for Percutaneous Coronary Intervention (PCI): <ul style="list-style-type: none"> 92982 Percutaneous transluminal coronary balloon angioplasty; single vessel 92984 Percutaneous transluminal coronary balloon angioplasty; each additional vessel (List separately in addition to code for primary procedure) 92995 Percutaneous transluminal coronary atherectomy, by mechanical or other method, with or without balloon angioplasty; single vessel

Department of Health (DOH): JAWDA Waiting Time Indicators

	<p>92996 Percutaneous transluminal coronary atherectomy, by mechanical or other method, with or without balloon angioplasty; each additional vessel (List separately in addition to code for primary procedure)</p> <p>AND/ OR</p> <ul style="list-style-type: none"> ○ ST-segment elevation or LBBB on the ECG performed closest to hospital arrival <p>AND</p> <ul style="list-style-type: none"> ○ PCI performed within 24 hours after hospital arrival <p>Denominator Exclusions:</p> <ul style="list-style-type: none"> ▪ Patients less than 18 years of age ▪ In-Patients ▪ Patients enrolled in clinical trials ▪ Patients administered fibrinolytic agent or any counter indication agent prior to PCI in another facility if indicated ▪ PCI described as non-primary by a physician/advanced practice nurse/physician assistant (physician/APN/PA) ▪ PCI is clinically contraindicated
Reporting Frequency:	Quarterly
Unit of Measure:	% for performance (<i>minutes</i> for mean, median and min. & max)
Reported Information	Numerator, Denominator, Indicator Performance (also, mean waiting time, median waiting time, min. & max. waiting time)
Target	90% within 90 minutes
Notes for all facilities	
Data sources / Report Name:	<ul style="list-style-type: none"> - Local business intelligence report or any other internally designed system - Applicable to facilities licensed to provide inpatient services

Type: Waiting Time Indicator
WT 007

Indicator Number:

Department of Health (DOH): JAWDA Waiting Time Indicators

KPI Description (title):	Stroke admission with CT scan timeframe
Domain	Access and Timeliness
Sub-Domain	Waiting time
Definition:	Number of minutes it takes to interpret head CT scan for emergency patients presenting with stroke signs and symptoms.
Calculation:	<p>Numerator: Number of stroke patients who had a CT-Scan of the head which was interpreted within 45 minutes of arrival to emergency department or (ED)</p> <p>Denominator: All adult Patients (>=18 years old) visiting emergency department who were suspected of having suspected stroke signs and symptoms. (See Appendix- A for stroke ICD_10 Diagnosis Codes)</p> <p>Exclusion:</p> <ul style="list-style-type: none"> ▪ Patients below 18 years of age. ▪ Stroke symptoms more than 6 hours before presentation ▪ Stroke symptoms of undetermined duration
Reporting Frequency:	Quarterly
Unit of Measure:	% for performance (<i>minutes</i> for mean, median and min. & max)
Reported Information	Numerator, Denominator, Indicator Performance (also, mean waiting time, median waiting time, min. & max. waiting time)
Target	90% within 45 minutes
Notes for all facilities	
Data sources / Report Name:	<ul style="list-style-type: none"> - Local business intelligence report or any other internally designed system - Applicable to facilities licensed to provide inpatient services

Department of Health (DOH): JAWDA Waiting Time Indicators

Type: Waiting Time Indicator
WT 008

Indicator Number:

KPI Description (title):	Seeing a doctor in emergency department or urgent care center (Door to Doctor Time)
Domain	Access and Timeliness
Sub-Domain	Waiting time
Definition:	Number of minutes it takes from point of registration to seeing a doctor.
Calculation:	<p>Numerator: Number of patients seen by an emergency department or urgent care doctor within target time (60 minutes).</p> <p>Population: All emergency or urgent care encounters (irrespective of triage category).</p> <p>Exclusion:</p> <ul style="list-style-type: none"> ▪ Deceased on Arrival (DOA) ▪ Patient Left Without Being Seen (LWBS)
Reporting Frequency:	Quarterly
Unit of Measure:	% for performance (<i>minutes</i> for mean, median and min. & max)
Reported Information	Numerator, Denominator, Indicator Performance (also, mean waiting time, median waiting time, min. & max. waiting time)
Target	90% within 60 minutes
Notes for all facilities	
Data sources / Report Name:	<ul style="list-style-type: none"> - Local business intelligence report or any other internally designed system - Applicable to facilities licensed to provide emergency and inpatient services

Department of Health (DOH): JAWDA Waiting Time Indicators

Type: Waiting Time Indicator
WT 009

Indicator Number:

KPI Description (title):	Registration to leaving emergency department or urgent care center (Door to Door Time)
Domain	Access and Timeliness
Sub-Domain	Waiting time
Definition:	Number of minutes from registration to patient leaving the emergency department or urgent care center (admitted or discharged).
Calculation:	<p>Numerator: Number of patients finished their emergency or urgent care visit within target time (180 minutes).</p> <p>Denominator: All emergency/urgent care encounters (irrespective of triage category).</p> <p>Exclusion:</p> <ol style="list-style-type: none"> 1) Deceased on Arrival (DOA) 2) Patient Left Without Being Seen (LWBS) 3) Patient Left Against Medical Advise (LAMA) 4) Triage-out to Outpatient Services or to other hospitals 5) Visits with both unknown/invalid registration and triage date/time
Reporting Frequency:	Quarterly
Unit of Measure:	% for performance (<i>minutes</i> for mean, median and min. & max)
Reported Information	Numerator, Denominator, Indicator Performance (also, mean waiting time, median waiting time, min. & max. waiting time)
Target	90% within 180 minutes
Notes for all facilities	
Data sources / Report Name:	<ul style="list-style-type: none"> - Local business intelligence report or any other internally designed system - Applicable to facilities licensed to provide emergency and inpatient services

Department of Health (DOH): JAWDA Waiting Time Indicators

Type: Waiting Time Indicator
WT 010

Indicator Number:

KPI Description (title):	24 hours -Re attendance rate to emergency department or urgent care center
Domain	Access and Timeliness
Sub-Domain	Waiting time
Definition:	Number of patient who return to the emergency department or urgent care center within 24 hours of being discharge for the same chief complaint (s).
Calculation:	<p>Numerator: Number of patient who return the emergency department or urgent care center within 24 hours of being discharge with the same chief complaint (s).</p> <p>Denominator: Total number of all emergency/urgent care encounters (irrespective of triage category)</p> <p>Exclusion:</p> <ul style="list-style-type: none"> ▪ Deceased on Arrival (DOA) ▪ Patient Left without being seen (LWBS) ▪ Patient Left against Medical advice (LAMA)
Reporting Frequency:	Quarterly
Unit of Measure:	% Re-attendance rate
Reported Information	Numerator, Denominator, Indicator Performance
Target	Lower is better
Notes for all facilities	
Data sources / Report Name:	<ul style="list-style-type: none"> - Local business intelligence report or any other internally designed system - Applicable to facilities licensed to provide emergency and inpatient services

Department of Health (DOH): JAWDA Waiting Time Indicators

Type: Waiting Time Indicator
WT 011

Indicator Number:

KPI Description (title):	Left Without Being Seen (LWBS) by an emergency department or urgent care doctor
Domain	Access and Timeliness
Sub-Domain	Waiting time
Definition:	Percentage of patients, who had an initial assessment by a nurse in the triage area, but for unknown reasons, chose to leave the emergency department or urgent care before an assessment by a doctor and treatment could occur.
Calculation:	<p>Numerator: Number of patients who left the emergency department or urgent care without being seen by an emergency or urgent care doctor.</p> <p>Denominator: All emergency or urgent encounters (irrespective of triage category).</p>
Reporting Frequency:	Quarterly
Unit of Measure:	% Left without being seen (LWBS)
Reported Information	Numerator, Denominator, Indicator Performance
Target	Lower is better (3% or less)
Notes for all facilities	
Data sources / Report Name:	<ul style="list-style-type: none"> - Local business intelligence report or any other internally designed system - Applicable to facilities licensed to provide emergency and inpatient services

Department of Health (DOH): JAWDA Waiting Time Indicators

Type: Waiting Time Indicator
WT 012

Indicator Number:

KPI Description (title):	Doctor to Decision to Admit Time
Domain	Access and Timeliness
Sub-Domain	Waiting time
Definition:	Number of patients admitted from the emergency department or urgent care center with whom admit decision time to time of departure from the emergency department or urgent care is within 60 minutes; Admission order and/or time of bed request may be used as a proxy.
Calculation:	<p>Numerator: Number of patients admitted to an inpatient unit from the emergency department or urgent care center, with whom admit decision time to time of departure from the emergency department or urgent care center is within 60 minutes.</p> <p>Denominator: All patients admitted to the facility from the emergency department or urgent care.</p> <p>Exclusion:</p> <ul style="list-style-type: none"> ▪ Observation and mental health patient ▪ Deceased on Arrival (DOA) ▪ Left without been seen ▪ Discharged
Reporting Frequency:	Quarterly
Unit of Measure:	% for performance (<i>minutes</i> for mean, median and min. & max)
Reported Information	Numerator, Denominator, Indicator Performance (also, mean waiting time, median waiting time, min. & max. waiting time)
Target	90% within 60 minutes
Notes for all facilities	
Data sources / Report Name:	<ul style="list-style-type: none"> - National Quality form (NFQ) Emergency Department Throughput Measures Stratification - Local business intelligence report or any other internally designed system - Applicable to facilities licensed to provide emergency and inpatient services

Department of Health (DOH): JAWDA Waiting Time Indicators

Type: Waiting Time Indicator
WT 013

Indicator Number:

KPI Description (title):	Percentage of emergency department or urgent care patient admitted to hospital
Domain	Effectiveness
Sub-Domain	Inpatient admission
Definition:	Percentage of emergency department or urgent care patient admitted to hospital
Calculation:	<p>Numerator: Number of patients that doctor made a decision to admit into hospitals.</p> <p>Denominator: All emergency or urgent encounters (irrespective of triage category).</p> <p>Exclusion:</p> <ul style="list-style-type: none"> ▪ Deceased on Arrival (DOA) ▪ Left without been seen (LWBS)
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
Target	<20%
Notes for all facilities	
Data sources / Report Name:	<ul style="list-style-type: none"> - Local business intelligence report or any other internally designed system - Applicable to facilities licensed to provide emergency and inpatient services

APPENDIX A- for stroke ICD_10 Diagnosis Codes

Ischemic ICD-10 codes:

I63.00	Cerebral infarction due to thrombosis of unspecified precerebral artery
I63.011	Cerebral infarction due to thrombosis of right vertebral artery
I63.012	Cerebral infarction due to thrombosis of left vertebral artery
I63.013	Cerebral infarction due to thrombosis of bilateral vertebral arteries
I63.019	Cerebral infarction due to thrombosis of unspecified vertebral artery
I63.02	Cerebral infarction due to thrombosis of basilar artery
I63.031	Cerebral infarction due to thrombosis of right carotid artery
I63.032	Cerebral infarction due to thrombosis of left carotid artery
I63.033	Cerebral infarction due to thrombosis of bilateral carotid arteries
I63.039	Cerebral infarction due to thrombosis of unspecified carotid artery
I63.09	Cerebral infarction due to thrombosis of other precerebral artery
I63.10	Cerebral infarction due to embolism of unspecified precerebral artery
I63.111	Cerebral infarction due to embolism of right vertebral artery
I63.112	Cerebral infarction due to embolism of left vertebral artery
I63.113	Cerebral infarction due to embolism of bilateral vertebral arteries
I63.119	Cerebral infarction due to embolism of unspecified vertebral artery
I63.12	Cerebral infarction due to embolism of basilar artery
I63.131	Cerebral infarction due to embolism of right carotid artery
I63.132	Cerebral infarction due to embolism of left carotid artery
I63.133	Cerebral infarction due to embolism of bilateral carotid arteries
I63.139	Cerebral infarction due to embolism of unspecified carotid artery
I63.19	Cerebral infarction due to embolism of other precerebral artery
I63.20	Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries
I63.211	Cerebral infarction due to unspecified occlusion or stenosis of right vertebral arteries
I63.212	Cerebral infarction due to unspecified occlusion or stenosis of left vertebral arteries
I63.213	Cerebral infarction due to unspecified occlusion or stenosis of bilateral vertebral arteries
I63.219	Cerebral infarction due to unspecified occlusion or stenosis of unspecified vertebral arteries
I63.22	Cerebral infarction due to unspecified occlusion or stenosis of basilar arteries
I63.231	Cerebral infarction due to unspecified occlusion or stenosis of right carotid arteries
I63.232	Cerebral infarction due to unspecified occlusion or stenosis of left carotid arteries
I63.233	Cerebral infarction due to unspecified occlusion or stenosis of bilateral carotid arteries
I63.239	Cerebral infarction due to unspecified occlusion or stenosis of unspecified carotid arteries

Department of Health (DOH): JAWDA Waiting Time Indicators

I63.29	Cerebral infarction due to unspecified occlusion or stenosis of other precerebral arteries
I63.30	Cerebral infarction due to thrombosis of unspecified cerebral artery
I63.311	Cerebral infarction due to thrombosis of right middle cerebral artery
I63.312	Cerebral infarction due to thrombosis of left middle cerebral artery
I63.313	Cerebral infarction due to thrombosis of bilateral middle cerebral arteries
I63.319	Cerebral infarction due to thrombosis of unspecified middle cerebral artery
I63.321	Cerebral infarction due to thrombosis of right anterior cerebral artery
I63.322	Cerebral infarction due to thrombosis of left anterior cerebral artery
I63.323	Cerebral infarction due to thrombosis of bilateral anterior arteries
I63.329	Cerebral infarction due to thrombosis of unspecified anterior cerebral artery
I63.331	Cerebral infarction due to thrombosis of right posterior cerebral artery
I63.332	Cerebral infarction due to thrombosis of left posterior cerebral artery
I63.333	Cerebral infarction due to thrombosis of bilateral posterior arteries
I63.339	Cerebral infarction due to thrombosis of unspecified posterior cerebral artery
I63.341	Cerebral infarction due to thrombosis of right cerebellar artery
I63.342	Cerebral infarction due to thrombosis of left cerebellar artery
I63.343	Cerebral infarction due to thrombosis of bilateral cerebellar arteries
I63.349	Cerebral infarction due to thrombosis of unspecified cerebellar artery
I63.39	Cerebral infarction due to thrombosis of other cerebral artery
I63.40	Cerebral infarction due to embolism of unspecified cerebral artery
I63.411	Cerebral infarction due to embolism of right middle cerebral artery
I63.412	Cerebral infarction due to embolism of left middle cerebral artery
I63.413	Cerebral infarction due to embolism of bilateral middle cerebral arteries
I63.419	Cerebral infarction due to embolism of unspecified middle cerebral artery
I63.421	Cerebral infarction due to embolism of right anterior cerebral artery
I63.422	Cerebral infarction due to embolism of left anterior cerebral artery
I63.423	Cerebral infarction due to embolism of bilateral anterior cerebral arteries
I63.429	Cerebral infarction due to embolism of unspecified anterior cerebral artery
I63.431	Cerebral infarction due to embolism of right posterior cerebral artery
I63.432	Cerebral infarction due to embolism of left posterior cerebral artery
I63.433	Cerebral infarction due to embolism of bilateral posterior cerebral arteries
I63.439	Cerebral infarction due to embolism of unspecified posterior cerebral artery
I63.441	Cerebral infarction due to embolism of right cerebellar artery
I63.442	Cerebral infarction due to embolism of left cerebellar artery
I63.443	Cerebral infarction due to embolism of bilateral cerebellar arteries
I63.449	Cerebral infarction due to embolism of unspecified cerebellar artery
I63.49	Cerebral infarction due to embolism of other cerebral artery
I63.50	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebral artery
I63.511	Cerebral infarction due to unspecified occlusion or stenosis of right middle cerebral artery

Department of Health (DOH): JAWDA Waiting Time Indicators

I63.512	Cerebral infarction due to unspecified occlusion or stenosis of left middle cerebral artery
I63.513	Cerebral infarction due to unspecified occlusion or stenosis of bilateral middle arteries
I63.519	Cerebral infarction due to unspecified occlusion or stenosis of unspecified middle cerebral artery
I63.521	Cerebral infarction due to unspecified occlusion or stenosis of right anterior cerebral artery
I63.522	Cerebral infarction due to unspecified occlusion or stenosis of left anterior cerebral artery
I63.523	Cerebral infarction due to unspecified occlusion or stenosis of bilateral anterior arteries
I63.529	Cerebral infarction due to unspecified occlusion or stenosis of unspecified anterior cerebral artery
I63.531	Cerebral infarction due to unspecified occlusion or stenosis of right posterior cerebral artery
I63.532	Cerebral infarction due to unspecified occlusion or stenosis of left posterior cerebral artery
I63.533	Cerebral infarction due to unspecified occlusion or stenosis of bilateral posterior arteries
I63.539	Cerebral infarction due to unspecified occlusion or stenosis of unspecified posterior cerebral artery
I63.541	Cerebral infarction due to unspecified occlusion or stenosis of right cerebellar artery
I63.542	Cerebral infarction due to unspecified occlusion or stenosis of left cerebellar artery
I63.543	Cerebral infarction due to unspecified occlusion or stenosis of bilateral cerebellar arteries
I63.549	Cerebral infarction due to unspecified occlusion or stenosis of unspecified cerebellar artery
I63.59	Cerebral infarction due to unspecified occlusion or stenosis of other cerebral artery
I63.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic
I63.8	Other cerebral infarction
I63.9	Cerebral infarction, unspecified

Department of Health (DOH): JAWDA Waiting Time Indicators

Hemorrhagic ICD-10 codes:

I60.00	Nontraumatic subarachnoid hemorrhage from unspecified carotid siphon and bifurcation
I60.01	Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation
I60.02	Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation
I60.10	Nontraumatic subarachnoid hemorrhage from unspecified middle cerebral artery
I60.11	Nontraumatic subarachnoid hemorrhage from right middle cerebral artery
I60.12	Nontraumatic subarachnoid hemorrhage from left middle cerebral artery
I60.2	Nontraumatic subarachnoid hemorrhage from anterior communicating artery
I60.30	Nontraumatic subarachnoid hemorrhage from unspecified posterior communicating artery
I60.31	Nontraumatic subarachnoid hemorrhage from right posterior communicating artery
I60.32	Nontraumatic subarachnoid hemorrhage from left posterior communicating artery
I60.4	Nontraumatic subarachnoid hemorrhage from basilar artery
I60.50	Nontraumatic subarachnoid hemorrhage from unspecified vertebral artery
I60.51	Nontraumatic subarachnoid hemorrhage from right vertebral artery
I60.52	Nontraumatic subarachnoid hemorrhage from left vertebral artery
I60.6	Nontraumatic subarachnoid hemorrhage from other intracranial arteries
I60.7	Nontraumatic subarachnoid hemorrhage from unspecified intracranial artery
I60.8	Other nontraumatic subarachnoid hemorrhage
I60.9	Nontraumatic subarachnoid hemorrhage, unspecified
I61.0	Nontraumatic intracerebral hemorrhage in hemisphere, subcortical
I61.1	Nontraumatic intracerebral hemorrhage in hemisphere, cortical
I61.2	Nontraumatic intracerebral hemorrhage in hemisphere, unspecified
I61.3	Nontraumatic intracerebral hemorrhage in brain stem
I61.4	Nontraumatic intracerebral hemorrhage in cerebellum
I61.5	Nontraumatic intracerebral hemorrhage, intraventricular
I61.6	Nontraumatic intracerebral hemorrhage, multiple localized
I61.8	Other nontraumatic intracerebral hemorrhage
I61.9	Non traumatic intracerebral hemorrhage, unspecified