

# Haematopoietic Stem Cell Transplant (HSCT) Jawda Guidance

Version 3

## **Table of Contents**

Executive Summary	3
About this Guidance	4
Haematopoietic Stem Cell Transplantation Quality Performance Indicators	5
Percentage of adult patients with successful engraftment	5
Percentage of pediatric patients with successful engraftment	6
Percentage of adult patients dying within 100 days of autologous transplant	7
Percentage of pediatric patients dying within 100 days of autologous transplant	8
Percentage of adult patients alive at 1 year post autologous transplant	9
Percentage of pediatric patients alive at 1 year post autologous transplant	10
Percentage of adult patients dying within 100 days of allogeneic transplant	11
Percentage of pediatric patients dying within 100 days of allogeneic transplant	12
Percentage of adult patients alive at 1 year post allogeneic transplant	13
Percentage of pediatric patients alive at 1 year post allogeneic transplant	14
Percentage of adult patients with successful platelet engraftment	15
Percentage of pediatric patients with successful platelet engraftment	16
Summary of Changes 2024	16

#### **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 ranges 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 Emirate of Abu Dhabi, 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 of care 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 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 always utilize online versions available on the DOH website.

Published:	January 2020	Version 1
	March 2023	Version 2
	April 2024	Version 3

Effective: Q1 2024

## About this Guidance

The guidance sets out the definitions and reporting frequency of JAWDA Haematopoietic Stem Cell Transplantation (HSCT) Facilities performance indicators. The Department of Health (DOH), with consultation from local and international expertise of Haematopoietic Stem Cell Transplantation (HSCT), has developed Haematopoietic Stem Cell Transplantation 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 period of time.

The Jawda KPI for Haematopoietic Stem Cell Transplantation patients in this guidance include measures to monitor morbidity and mortality in patients undergoing Haematopoietic Stem Cell Transplantation. Healthcare providers are the most qualified professionals to develop and evaluate quality of care for HSCT patients; therefore, it is crucial that clinicians retain a leadership position in defining performance among Haematopoietic Stem Cell Transplantation s healthcare providers.

#### Who is this guidance for?

All DOH licensed healthcare facilities providing Haematopoietic Stem Cell Transplantation services 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 Haematopoietic Stem Cell Transplantation services quality 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 <u>JAWDA@doh.gov.ae</u> and submit the required quarterly quality performance indicators through Jawda online portal.

#### What are the Regulations related to this guidance?

- Legislation establishing the Health Sector
- As per DOH <u>Policy for Quality and Patient Safety</u> issued January 15<sup>th</sup> 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 Standard on Stem Cell Therapies and Products & Regenerative Medicine

## Haematopoietic Stem Cell Transplantation Quality Performance Indicators

#### Type: Haematopoietic Stem Cell Transplantation

KPI Description (title):	Percentage of adult patients with successful engraftment
Domain	Patient Centered
Sub-Domain	Clinical Outcome
Definition	Percentage of adult patients with successful engraftment
Calculation	<ul> <li>Numerator: Number of adult patients (18 years and older) where engraftment was successful (successful defined as neutrophil count of (&gt; 0.5 * 10^9L) for three consecutive days by day plus 28)</li> <li>CPT CODE: 85048</li> <li><u>Denominator:</u> Total number of adult patients (18 years and older) transplanted in the first 6 months of the previous 7 month reporting period</li> <li>CPT CODES: 38240, 38241, 38242</li> </ul>
Reporting Frequency	Quarterly
Unit Measure	Percentage
International comparison if available	NHS commissioning » Specialised services quality dashboards submission dates 2024/25 (england.nhs.uk) https://www.england.nhs.uk/publication/specialised-services-quality-dashboards- metrics-metadata/
Desired Direction	Higher is better
Data Source	<ul><li>Centrally collected claim data (KEH)</li><li>Patient medical record</li></ul>

KPI Description (title):	Percentage of pediatric patients with successful engraftment
Domain	Patient Centered
Sub-Domain	Clinical Outcome
Definition	Percentage of pediatric patients with successful engraftment
Calculation	Numerator:Number of pediatric patients (below 18 years) where engraftment was successful (successful defined as neutrophil count of (> 0.5 * 10^9L) for three consecutive days by day plus 28)CPT CODE:85048Denominator:Total number of patients (below 18 years) transplanted in the first 6 months of the previous 7 month reporting periodCPT CODES:38240, 38241, 38242
Reporting Frequency	Quarterly
Unit Measure	Percentage
International comparison if available	NHS commissioning » Specialised services quality dashboards submission         dates 2024/25 (england.nhs.uk)         https://www.england.nhs.uk/publication/specialised-services-quality-dashboards-metrics-metadata/
Desired Direction	Higher is better
Data Source	<ul><li>Centrally collected claim data (KEH)</li><li>Patient medical record</li></ul>

KPI Description (title):	Percentage of adult patients dying within 100 days of autologous transplant
Domain	Patient Centered
Sub-Domain	Clinical Outcome
Definition	Percentage of adult patients dying within 100 days of <i>autologous</i> transplant
Calculation	<ul> <li>Numerator: Number of adult patients (18 years and older) in denominator who died within 100 days of <i>autologous</i> transplant</li> <li>Denominator: Total number of <i>autologous</i> transplants for adult patients (18 years and older) in the first 365 days of the previous 465 day reporting period</li> <li>CPT CODES: 38241</li> </ul>
Reporting Frequency	Quarterly
Unit Measure	Percentage of BMT died within 100 days of <i>autologous</i> transplant
International comparison if available	NHS commissioning » Specialised services quality dashboards submission dates 2024/25 (england.nhs.uk) https://www.england.nhs.uk/publication/specialised-services-quality-dashboards-metrics- metadata/
Desired Direction	Lower is better
Data Source	<ul><li>Centrally collected claim data (KEH)</li><li>Patient medical record</li></ul>

KPI Description (title):	Percentage of pediatric patients dying within 100 days of
	autologous transplant
Domain	Patient Centered
Sub-Domain	Clinical Outcome
Definition	Percentage of pediatric patients dying within 100 days of <i>autologous</i> transplant
Calculation	<b>Numerator</b> : Number of pediatric patients (below 18 years) in denominator who died within 100 days of <i>autologous</i> transplant
	<ul> <li>Denominator: Total number of <i>autologou</i>s transplants for pediatric patients (below 18 years) in the first 365 days of the previous 465-day reporting period</li> <li>CPT CODES: 38241</li> </ul>
Reporting Frequency	Quarterly
Unit Measure	Percentage of BMT died within 100 days of <i>autologous</i> transplant
International comparison if available	NHS commissioning » Specialised services quality dashboards submission dates         2024/25 (england.nhs.uk)         https://www.england.nhs.uk/publication/specialised-services-quality-dashboards-metrics-metadata/
Desired Direction	Lower is better
Data Source	<ul><li>Centrally collected claim data (KEH)</li><li>Patient medical record</li></ul>

KPI Description (title):	Percentage of adult patients alive at 1 year post autologous
	transplant
Domain	Patient Centered
Sub-Domain	Clinical Outcome
Definition	Percentage of adult patients alive at 1 year post <i>autologous</i> transplant
Calculation	<b>Numerator:</b> Number of adult patients (18 years and older) in denominator alive 1 year after <i>autologous</i> transplant
	<ul> <li>Denominator: Total number of <i>autologous transplants</i> for adult patients (18 years and older) <i>in</i> the first 12 months of the previous 24-month reporting period.</li> <li>CPT CODES: 38241</li> </ul>
Reporting Frequency	Annual
Unit Measure	Percentage of survival at 1 year after <i>autologous</i> transplant
International comparison if available	NHS commissioning » Specialised services quality dashboards submission dates         2024/25 (england.nhs.uk)         https://www.england.nhs.uk/publication/specialised-services-quality-dashboards-metrics-metadata/
Desired Direction	Higher is better
Data Source	<ul><li>Centrally collected claim data (KEH)</li><li>Patient medical record</li></ul>

KPI Description (title):	Percentage of pediatric patients alive at 1 year post autologous transplant
Domain	Patient Centered
Sub-Domain	Clinical Outcome
Definition	Percentage of pediatric patients alive at 1 year post <i>autologous</i> transplant
Calculation	<b>Numerator:</b> Number of pediatric patients (below 18 years) in denominator alive 1 year after <i>autologous</i> transplant
	<ul> <li>Denominator: Total number of <i>autologous transplants</i> for pediatric patients (below 18 years) <i>in</i> the first 12 months of the previous 24-month reporting period.</li> <li>CPT CODES: 38241</li> </ul>
Reporting Frequency	Annual
Unit Measure	Percentage of survival at 1 year after <i>autologous transplant</i>
International comparison if available	NHS commissioning » Specialised services quality dashboards submission dates         2024/25 (england.nhs.uk)         https://www.england.nhs.uk/publication/specialised-services-quality-dashboards-metrics-metadata/
Desired Direction	Higher is better
Data Source	<ul><li>Centrally collected claim data (KEH)</li><li>Patient medical record</li></ul>

KPI Description (title):	Percentage of adult patients dying within 100 days of allogeneic
	transplant
Domain	Patient Centered
Sub-Domain	Clinical outcome
Definition	Percentage of adult patients dying within 100 days of <i>allogeneic</i> transplant
Calculation	<b>Numerator:</b> Number of adult patients (18 years and older) in denominator who died within 100 days of <i>allogenei</i> c transplant
	<b>Denominator:</b> Total number of <i>allogeneic</i> transplants for adult patients (18 years and older) in the first 365 days of the previous 465 days reporting period
	CPT CODES: 38240, 38242
Reporting Frequency	Quarterly
Unit Measure	Percentage of BMT died within 100 days of <i>allogeneic</i> transplant
International comparison if available	NHS commissioning » Specialised services quality dashboards submission dates2024/25 (england.nhs.uk)https://www.england.nhs.uk/publication/specialised-services-quality-dashboards-metrics- metadata/
Desired Direction	Lower is better
Data Source	<ul><li>Centrally collected claim data (KEH)</li><li>Patient medical record</li></ul>

KPI Description (title):	Percentage of pediatric patients dying within 100 days of allogeneic transplant
Domain	Patient Centered
Sub-Domain	Clinical outcome
Definition	Percentage of pediatric patients dying within 100 days of <i>allogeneic</i> transplant
Calculation	<b>Numerator:</b> Number of pediatric patients (below 18 years) in denominator who died within 100 days of <i>allogenei</i> c transplant
	<b>Denominator:</b> Total number of <i>allogeneic</i> transplants for pediatric patients (below 18 years) in the first 365 days of the previous 465 day reporting period
	CPT CODES: 38240, 38242
Reporting Frequency	Quarterly
Unit Measure	Percentage of BMT died within 100 days of <i>allogenic</i> transplant
International comparison	NHS commissioning » Specialised services quality dashboards submission
if available	dates 2024/25 (england.nhs.uk)
	https://www.england.nhs.uk/publication/specialised-services-quality-dashboards- metrics-metadata/
Desired Direction	Lower is better
Data Source	<ul><li>Centrally collected claim data (KEH)</li><li>Patient medical record</li></ul>

KPI Description (title):	Percentage of adult patients alive at 1 year post allogeneic
	transplant
Domain	Patient Centered
Sub-Domain	Clinical Outcome
Definition	Percentage of adult patients alive at 1 year post <i>allogeneic</i> transplant
Calculation	<b>Numerator:</b> Number of adult patients (18 years and older) in denominator alive 1 year after <i>allogeneic</i> transplant
	<b>Denominator:</b> Total number of <i>allogeneic</i> transplants for adult patients (18 years and older) in the first 12 months of the previous 24 month reporting period
	CPT CODES: 38240, 38242
Reporting Frequency	Annual
Unit Measure	Overall survival at 1 year
Exclusions:	Percentage of survival at 1 year after <i>allogeneic</i> transplant
International comparison if available	NHS commissioning » Specialised services quality dashboards submission dates 2024/25 (england.nhs.uk)
	https://www.england.nhs.uk/publication/specialised-services-quality-dashboards-metrics- metadata/
Desired Direction	Higher is better
Data Source	<ul> <li>Centrally collected claim data (KEH)</li> <li>Patient medical record chart</li> </ul>

KPI Description (title):	Percentage of pediatric patients alive at 1 year post allogeneic
	transplant
Domain	Patient Centered
Sub-Domain	Clinical Outcome
Definition	Percentage of pediatric patients alive at 1 year post <i>allogeneic</i> transplant
Calculation	<b>Numerator:</b> Number of pediatric patients (below 18 years) in denominator alive 1 year after <i>allogeneic</i> transplant
	<b>Denominator:</b> Total number of <i>allogeneic</i> transplants for pediatric patients (below 18 years) in the first 12 months of the previous 24 month reporting period
	CPT CODES: 38240, 38242
Reporting Frequency	Annual
Unit Measure	Overall survival at 1 year
Exclusions:	Percentage of survival at 1 year after <i>allogenic</i> transplant
International comparison if available	NHS commissioning » Specialised services quality dashboards submission dates         2024/25 (england.nhs.uk)         https://www.england.nhs.uk/publication/specialised-services-quality-dashboards-metrics-metadata/
Desired Direction	Higher is better
Data Source	<ul> <li>Centrally collected claim data (KEH)</li> <li>Patient medical record chart</li> </ul>

KPI Description (title):	Percentage of adult patients with successful platelet engraftment
Domain	Effectiveness
Sub-Domain	Process
Definition:	Percentage of adult patients (18 and older) where engraftment was successful (successful defined as count $\geq 20,000/\mu$ L without transfusion support for 7 consecutive days) by day plus 28.
Calculation:	<ul> <li><u>Numerator</u>: Number of adult patients (18 and older) where engraftment was successful (defined as count ≥20,000/µL without transfusion support for 7 consecutive days)</li> <li>CPT CODE: 85049</li> <li><u>Denominator</u>: Total number of adult patients (18 and older) transplanted in the first 6 months of the previous 7 month reporting period</li> <li>CPT CODES: 38240, 38241, 38242</li> </ul>
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	NHS commissioning » Specialised services quality dashboards submission dates 2024/25 (england.nhs.uk) https://www.england.nhs.uk/publication/specialised-services-quality-dashboards-metrics- metadata/
Desired direction:	Higher is better
Data sources and guidance:	-Patient medical record -Hospital administrative data

Number: HSCT012

KPI Description (title):	Percentage of pediatric patients with successful platelet engraftment
Domain	Effectiveness
Sub-Domain	Process
Definition:	Percentage of pediatric patients (below 18 years) where engraftment was successful (successful defined as count $\geq 20,000/\mu$ L without transfusion support for 7 consecutive days) by day plus 28
Calculation:	Numerator:       Number of pediatric patients (below 18 years) where engraftment was successful (defined as count ≥20,000/µL without transfusion support for 7 consecutive days)         CPT CODE:       85049         Denominator:       Total number of pediatric patients (below 18 years) transplanted in the first 6 months of the previous 7 month reporting period.         CPT CODES:       38240, 38241, 38242
Reporting Frequency:	Quarterly
Unit of Measure:	Percentage
International comparison if available	NHS commissioning » Specialised services quality dashboards submission dates 2024/25 (england.nhs.uk) https://www.england.nhs.uk/publication/specialised-services-quality-dashboards-metrics- metadata/
Desired direction:	Higher is better
Data sources and guidance:	-Patient medical record -Hospital administrative data

# Summary of Changes 2024

KPI #	Changes	
HSCT001-	Revised CPT codes in denominators	
HSCT012	Removed sample timelines	
	Updated NHS reference link	
HSCT011-	• Rephrased numerator: (defined as count $\geq 20,000/\mu$ L without transfusion support for	
HSCT012	7 consecutive days	