



دائرة الصحة  
DEPARTMENT OF HEALTH

**JAWDA KPI Quarterly  
Guidelines for  
Haematopoietic Stem Cell  
Transplant (HSCT) Service  
Providers**

**January 2020**

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### 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](mailto: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.

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                  March 2023        Version 2

Effective: Q1 2023

### **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 [JAWDA@doh.gov.ae](mailto:JAWDA@doh.gov.ae) 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 [Policy for Quality and Patient Safety](#) 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

**Jawda HSCT Quality Performance Indicators**

Haematopoietic Stem Cell Transplantation Quality Performance Indicators

Type: Haematopoietic Stem Cell Transplantation

Number: HSCT001

<b>KPI Description (title):</b>	<b>Percentage of adult patients with successful engraftment</b>											
<b>Domain</b>	Patient Centered											
<b>Sub-Domain</b>	Clinical Outcome											
<b>Definition</b>	Percentage of adult patients with successful engraftment											
<b>Calculation</b>	<p><b><u>Numerator:</u></b> Number of adult patients (18 years and older) where engraftment was successful (successful defined as neutrophil count of (&gt; <math>0.5 * 10^9/L</math>) for three consecutive days by day plus 28)</p> <p><b>CPT CODE: 85048</b></p> <p><b><u>Denominator:</u></b> Total number of adult patients (18 years and older) transplanted in the first 6 months of the previous 7 month reporting period</p> <p><b>CPT CODES: 81267, 81268, 38206, 38232, 38241, 38205, 38230, 38240, 38242</b></p> <p>Example for denominator reporting 2022/2023</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td><b><u>Q1</u></b></td> <td><b><u>Q2</u></b></td> <td><b><u>Q3</u></b></td> <td><b><u>Q4</u></b></td> </tr> <tr> <td><b><u>Jan 22 - Jun 22</u></b></td> <td><b><u>Apr 22 - Sep 22</u></b></td> <td><b><u>Jul 22 - Dec 22</u></b></td> <td><b><u>Oct 22 - Mar 23</u></b></td> </tr> </table>				<b><u>Q1</u></b>	<b><u>Q2</u></b>	<b><u>Q3</u></b>	<b><u>Q4</u></b>	<b><u>Jan 22 - Jun 22</u></b>	<b><u>Apr 22 - Sep 22</u></b>	<b><u>Jul 22 - Dec 22</u></b>	<b><u>Oct 22 - Mar 23</u></b>
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<b><u>Jan 22 - Jun 22</u></b>	<b><u>Apr 22 - Sep 22</u></b>	<b><u>Jul 22 - Dec 22</u></b>	<b><u>Oct 22 - Mar 23</u></b>									
<b>Reporting Frequency</b>	Quarterly											
<b>Unit Measure</b>	Percentage											
<b>International comparison if available</b>	<a href="#">Specialized Services Quality Dashboards – Blood and Infection metric definitions for 2019/20</a>											
<b>Desired Direction</b>	Higher is better											
<b>Data Source</b>	<ul style="list-style-type: none"> <li>• Centrally collected claim data (KEH)</li> <li>• Patient medical record</li> </ul>											

**Jawda HSCT Quality Performance Indicators**

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Type: Haematopoietic Stem Cell Transplantation

Number: HSCT002

<b>KPI Description (title):</b>	<b>Percentage of pediatric patients with successful engraftment</b>										
<b>Domain</b>	Patient Centered										
<b>Sub-Domain</b>	Clinical Outcome										
<b>Definition</b>	Percentage of pediatric patients with successful engraftment										
<b>Calculation</b>	<p><b><u>Numerator:</u></b> Number of pediatric patients (below 18 years) where engraftment was successful (successful defined as neutrophil count of (<math>&gt; 0.5 * 10^9/L</math>) for three consecutive days by day plus 28)</p> <p><b>CPT CODE: 85048</b></p> <p><b><u>Denominator:</u></b> Total number of patients (below 18 years) transplanted in the first 6 months of the previous 7 month reporting period</p> <p><b>CPT CODES: 81267, 81268, 38206, 38232, 38241, 38205, 38230, 38240, 38242</b></p> <p>Example for denominator reporting 2022/2023</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td><b><u>Q1</u></b></td> <td><b><u>Q2</u></b></td> <td><b><u>Q3</u></b></td> <td><b><u>Q4</u></b></td> </tr> <tr> <td><b><u>Jan 22 - Jun 22</u></b></td> <td><b><u>Apr 22 - Sep 22</u></b></td> <td><b><u>Jul 22 - Dec 22</u></b></td> <td><b><u>Oct 22 - Mar 23</u></b></td> </tr> </table>			<b><u>Q1</u></b>	<b><u>Q2</u></b>	<b><u>Q3</u></b>	<b><u>Q4</u></b>	<b><u>Jan 22 - Jun 22</u></b>	<b><u>Apr 22 - Sep 22</u></b>	<b><u>Jul 22 - Dec 22</u></b>	<b><u>Oct 22 - Mar 23</u></b>
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<b><u>Jan 22 - Jun 22</u></b>	<b><u>Apr 22 - Sep 22</u></b>	<b><u>Jul 22 - Dec 22</u></b>	<b><u>Oct 22 - Mar 23</u></b>								
<b>Reporting Frequency</b>	Quarterly										
<b>Unit Measure</b>	Percentage										
<b>International comparison if available</b>	<a href="#">Specialized Services Quality Dashboards – Blood and Infection metric definitions for 2019/20</a>										
<b>Desired Direction</b>	Higher is better										
<b>Data Source</b>	<ul style="list-style-type: none"> <li>• Centrally collected claim data (KEH)</li> <li>• Patient medical record</li> </ul>										

## Jawda HSCT Quality Performance Indicators

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Type: Haematopoietic Stem Cell Transplantation

Number: HSCT003

<b>KPI Description (title):</b>	<b>Percentage of adult patients dying within 100 days of autologous transplant</b>
<b>Domain</b>	Patient Centered
<b>Sub-Domain</b>	Clinical Outcome
<b>Definition</b>	Percentage of adult patients dying within 100 days of <i>autologous</i> transplant
<b>Calculation</b>	<p><b>Numerator:</b> Number of adult patients (18 years and older) in denominator who died within 100 days of <i>autologous</i> transplant</p> <p><b>Denominator:</b> 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</p> <p><b>CPT CODES: 38206, 38232, 38241</b></p>
<b>Reporting Frequency</b>	Quarterly
<b>Unit Measure</b>	Percentage of BMT died within 100 days of <i>autologous</i> transplant
<b>International comparison if available</b>	<a href="#">Specialized Services Quality Dashboards – Blood and Infection metric definitions for 2019/20</a>
<b>Desired Direction</b>	Lower is better
<b>Data Source</b>	<ul style="list-style-type: none"> <li>• Centrally collected claim data (KEH)</li> <li>• Patient medical record</li> </ul>

## Jawda HSCT Quality Performance Indicators

Type: Haematopoietic Stem Cell Transplantation

Number: HSCT004

<b>KPI Description (title):</b>	<b>Percentage of pediatric patients dying within 100 days of autologous transplant</b>
<b>Domain</b>	Patient Centered
<b>Sub-Domain</b>	Clinical Outcome
<b>Definition</b>	Percentage of pediatric patients dying within 100 days of <i>autologous</i> transplant
<b>Calculation</b>	<p><b>Numerator:</b> Number of pediatric patients (below 18 years) in denominator who died within 100 days of <i>autologous</i> transplant</p> <p><b>Denominator:</b> Total number of <i>autologous</i> transplants for pediatric patients (below 18 years) in the first 365 days of the previous 465 day reporting period</p> <p><b>CPT CODES: 38206, 38232, 38241</b></p>
<b>Reporting Frequency</b>	Quarterly
<b>Unit Measure</b>	Percentage of BMT died within 100 days of <i>autologous</i> transplant
<b>International comparison if available</b>	<a href="#">Specialized Services Quality Dashboards – Blood and Infection metric definitions for 2019/20</a>
<b>Desired Direction</b>	Lower is better
<b>Data Source</b>	<ul style="list-style-type: none"> <li>• Centrally collected claim data (KEH)</li> <li>• Patient medical record</li> </ul>



## Jawda HSCT Quality Performance Indicators

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Type: Haematopoietic Stem Cell Transplantation

Number: HSCT005

<b>KPI Description (title):</b>	<b>Percentage of adult patients alive at 1 year post autologous transplant</b>
<b>Domain</b>	Patient Centered
<b>Sub-Domain</b>	Clinical Outcome
<b>Definition</b>	Percentage of adult patients alive at 1 year post <i>autologous</i> transplant
<b>Calculation</b>	<p><b>Numerator:</b> Number of adult patients (18 years and older) in denominator alive 1 year after <i>autologous transplant</i></p> <p><b>Denominator:</b> 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.</p> <p><b>CPT CODES: 38206, 38232, 38241</b></p>
<b>Reporting Frequency</b>	Annual
<b>Unit Measure</b>	Percentage of survival at 1 year after <i>autologous transplant</i>
<b>International comparison if available</b>	<a href="#">Specialized Services Quality Dashboards – Blood and Infection metric definitions for 2019/20</a>
<b>Desired Direction</b>	Higher is better
<b>Data Source</b>	<ul style="list-style-type: none"> <li>• Centrally collected claim data (KEH)</li> <li>• Patient medical record</li> </ul>

## Jawda HSCT Quality Performance Indicators

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Type: Haematopoietic Stem Cell Transplantation

Number: HSCT006

<b>KPI Description (title):</b>	<b>Percentage of pediatric patients alive at 1 year post autologous transplant</b>
<b>Domain</b>	Patient Centered
<b>Sub-Domain</b>	Clinical Outcome
<b>Definition</b>	Percentage of pediatric patients alive at 1 year post <i>autologous</i> transplant
<b>Calculation</b>	<p><b>Numerator:</b> Number of pediatric patients (below 18 years) in denominator alive 1 year after <i>autologous transplant</i></p> <p><b>Denominator:</b> 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.</p> <p><b>CPT CODES: 38206, 38232, 38241</b></p>
<b>Reporting Frequency</b>	Annual
<b>Unit Measure</b>	Percentage of survival at 1 year after <i>autologous transplant</i>
<b>International comparison if available</b>	<a href="#">Specialized Services Quality Dashboards – Blood and Infection metric definitions for 2019/20</a>
<b>Desired Direction</b>	Higher is better
<b>Data Source</b>	<ul style="list-style-type: none"> <li>• Centrally collected claim data (KEH)</li> <li>• Patient medical record</li> </ul>

## Jawda HSCT Quality Performance Indicators

Type: Haematopoietic Stem Cell Transplantation

Number: HSCT007

<b>KPI Description (title):</b>	<b>Percentage of adult patients dying within 100 days of allogeneic transplant</b>
<b>Domain</b>	Patient Centered
<b>Sub-Domain</b>	Clinical outcome
<b>Definition</b>	Percentage of adult patients dying within 100 days of <i>allogeneic</i> transplant
<b>Calculation</b>	<p><b>Numerator:</b> Number of adult patients (18 years and older) in denominator who died within 100 days of <i>allogeneic</i> transplant</p> <p><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</p> <p><b>CPT CODES: 38205, 38230, 38240, 38242</b></p>
<b>Reporting Frequency</b>	Quarterly
<b>Unit Measure</b>	Percentage of BMT died within 100 days of <i>allogeneic</i> transplant
<b>International comparison if available</b>	<a href="#">Specialized Services Quality Dashboards – Blood and Infection metric definitions for 2019/20</a>
<b>Desired Direction</b>	Lower is better
<b>Data Source</b>	<ul style="list-style-type: none"> <li>• Centrally collected claim data (KEH)</li> <li>• Patient medical record</li> </ul>

## Jawda HSCT Quality Performance Indicators

Type: Haematopoietic Stem Cell Transplantation

Number: HSCT008

<b>KPI Description (title):</b>	<b>Percentage of pediatric patients dying within 100 days of allogeneic transplant</b>
<b>Domain</b>	Patient Centered
<b>Sub-Domain</b>	Clinical outcome
<b>Definition</b>	Percentage of pediatric patients dying within 100 days of <i>allogeneic</i> transplant
<b>Calculation</b>	<p><b>Numerator:</b> Number of pediatric patients (below 18 years) in denominator who died within 100 days of <i>allogeneic</i> transplant</p> <p><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</p> <p><b>CPT CODES: 38205, 38230, 38240, 38242</b></p>
<b>Reporting Frequency</b>	Quarterly
<b>Unit Measure</b>	Percentage of BMT died within 100 days of <i>allogenic</i> transplant
<b>International comparison if available</b>	<a href="#">Specialized Services Quality Dashboards – Blood and Infection metric definitions for 2019/20</a>
<b>Desired Direction</b>	Lower is better
<b>Data Source</b>	<ul style="list-style-type: none"> <li>• Centrally collected claim data (KEH)</li> <li>• Patient medical record</li> </ul>

**Jawda HSCT Quality Performance Indicators**

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Type: Haematopoietic Stem Cell Transplantation

Number: HSCT009

<b>KPI Description (title):</b>	<b>Percentage of adult patients alive at 1 year post allogeneic transplant</b>
<b>Domain</b>	Patient Centered
<b>Sub-Domain</b>	Clinical Outcome
<b>Definition</b>	Percentage of adult patients alive at 1 year post <i>allogeneic</i> transplant
<b>Calculation</b>	<p><b>Numerator:</b> Number of adult patients (18 years and older) in denominator alive 1 year after <i>allogeneic</i> transplant</p> <p><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</p> <p><b>CPT CODES: 38205, 38230, 38240, 38242</b></p>
<b>Reporting Frequency</b>	Annual
<b>Unit Measure</b>	Overall survival at 1 year
<b>Exclusions:</b>	Percentage of survival at 1 year after <i>allogeneic</i> transplant
<b>International comparison if available</b>	<a href="#">Specialized Services Quality Dashboards – Blood and Infection metric definitions for 2019/20</a>
<b>Desired Direction</b>	Higher is better
<b>Data Source</b>	<ul style="list-style-type: none"> <li>• Centrally collected claim data (KEH)</li> <li>• Patient medical record chart</li> </ul>

**Jawda HSCT Quality Performance Indicators**

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Type: Haematopoietic Stem Cell Transplantation

Number: HSCT010

<b>KPI Description (title):</b>	<b>Percentage of pediatric patients alive at 1 year post allogeneic transplant</b>
<b>Domain</b>	Patient Centered
<b>Sub-Domain</b>	Clinical Outcome
<b>Definition</b>	Percentage of pediatric patients alive at 1 year post <i>allogeneic</i> transplant
<b>Calculation</b>	<p><b>Numerator:</b> Number of pediatric patients (below 18 years) in denominator alive 1 year after <i>allogeneic</i> transplant</p> <p><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</p> <p><b>CPT CODES: 38205, 38230, 38240, 38242</b></p>
<b>Reporting Frequency</b>	Annual
<b>Unit Measure</b>	Overall survival at 1 year
<b>Exclusions:</b>	Percentage of survival at 1 year after <i>allogenic</i> transplant
<b>International comparison if available</b>	<a href="#">Specialized Services Quality Dashboards – Blood and Infection metric definitions for 2019/20</a>
<b>Desired Direction</b>	Higher is better
<b>Data Source</b>	<ul style="list-style-type: none"> <li>• Centrally collected claim data (KEH)</li> <li>• Patient medical record chart</li> </ul>

## Jawda HSCT Quality Performance Indicators

Type: Haematopoetic Stem Cell Transplantation

Number: HSCT011

<b>KPI Description (title):</b>	<b>Percentage of adult patients with successful platelet engraftment</b>
<b>Domain</b>	Effectiveness
<b>Sub-Domain</b>	Process
<b>Definition:</b>	Percentage of adult patients (18 and older) where engraftment was successful (successful defined as platelets > or = 20,000 maintained for 7 consecutive days without transfusion) by day plus 28.
<b>Calculation:</b>	<p><b><u>Numerator:</u></b> Number of adult patients (18 and older) where engraftment was successful (successful defined as platelets &gt; or = 20,000 maintained for 7 days without transfusion)</p> <p><b>CPT CODE: 85049</b></p> <p><b><u>Denominator:</u></b> Total number of adult patients (18 and older) transplanted in the first 6 months of the previous 7 month reporting period</p> <p><b>CPT CODES: 81267, 81268, 38206, 38232, 38241, 38205, 38230, 38240, 38242</b></p>
<b>Reporting Frequency:</b>	Quarterly
<b>Unit of Measure:</b>	Percentage
<b>International comparison if available</b>	<a href="https://www.cibmtr.org/manuals/fim/1/en/topic/q12-14-initial-platelet-recovery">https://www.cibmtr.org/manuals/fim/1/en/topic/q12-14-initial-platelet-recovery</a>
<b>Desired direction:</b>	Higher is better
<b>Data sources and guidance:</b>	-Patient medical record -Hospital administrative data

## Jawda HSCT Quality Performance Indicators

Type: Haematopoetic Stem Cell Transplantation

Number: HSCT012

<b>KPI Description (title):</b>	<b>Percentage of pediatric patients with successful platelet engraftment</b>
<b>Domain</b>	Effectiveness
<b>Sub-Domain</b>	Process
<b>Definition:</b>	Percentage of pediatric patients (below 18 years) where engraftment was successful (successful defined as platelets > or = 20,000 maintained for 7 consecutive days without transfusion) by day plus 28
<b>Calculation:</b>	<p><b><u>Numerator:</u></b> Number of pediatric patients (below 18 years) where engraftment was successful (successful defined as platelets &gt; or = 20,000 maintained for 7 days without transfusion)</p> <p><b>CPT CODE: 85049</b></p> <p><b><u>Denominator:</u></b> Total number of pediatric patients (below 18 years) transplanted in the first 6 months of the previous 7 month reporting period.</p> <p><b>CPT CODES: 81267, 81268, 38206, 38232, 38241, 38205, 38230, 38240, 38242</b></p>
<b>Reporting Frequency:</b>	Quarterly
<b>Unit of Measure:</b>	Percentage
<b>International comparison if available</b>	<a href="https://www.cibmtr.org/manuals/fim/1/en/topic/q12-14-initial-platelet-recovery">https://www.cibmtr.org/manuals/fim/1/en/topic/q12-14-initial-platelet-recovery</a>
<b>Desired direction:</b>	Higher is better
<b>Data sources and guidance:</b>	-Patient medical record -Hospital administrative data