



دائرة الصحة
DEPARTMENT OF HEALTH

**JAWDA Quarterly &
Yearly Guidelines for
Assisted Reproductive
Technology Treatment
(ART) Providers**

Issue: October 2019

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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 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 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 utilize online versions available on the DOH website at all times.

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About this Guidance

The guidance sets out the definitions and reporting frequency of JAWDA Assisted Reproductive Technology Treatment (ART) performance indicators. Department of Health (DoH) with consultation of local and international fertility treatment quality of care expertise developed (ART) 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 ART performance indicators in this guidance include measures to monitor clinical effectiveness, and outcomes among patients receiving ART treatment i.e., (complications resulting from fertility treatment procedure, clinical pregnancy, multiple pregnancy, and live birth rates from fresh or frozen embryo transfer). Healthcare providers are the most qualified professionals to develop and evaluate quality of care measures for assisted reproductive technology treatment. Therefore, it is crucial that clinicians retain a leadership position in defining ART quality of care.

Who is this guidance for?

All DoH licensed healthcare facilities providing ART fertility treatment 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 ART 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 Assisted Reproductive Technology Services and Treatment](#)
- 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.

Glossary:

ART	Assisted Reproductive Technology Treatment (ART) is any assisted conception treatment involving ovarian stimulation with gonadotropins injections leading to timed intercourse, intra uterine insemination (IUI) or IVF/ICSI.
ART Cycle	It is the start of an IUI/IVF cycle in which a woman begins taking drugs to stimulate egg production; ART cycles include any process in which : <ol style="list-style-type: none"> 1) a woman has undergone ovarian stimulation or monitoring with the intent of having an ART procedure, 2) IUI or an IVF/ICSI procedure is performed or 3) Frozen embryos have been thawed with the intent of Embryo transfer
Clinical Pregnancy	Intra-uterine pregnancy with fetal heart activity identified using ultrasound 4-5 weeks after embryo transfer
Multiple pregnancy	Pregnancy with ≥ 3 pulsating intrauterine fetal hearts identified using ultrasound 4-5 weeks after embryo transfer
Cryopreservation	The practice of freezing eggs, sperm or embryos from a patient cycle for potential future use in ART cycles.
Embryo transfer	Placement of embryos into a woman's uterus.
Fresh IVF cycle	An IVF cycle in which fresh embryos are transferred to the woman. The fresh embryos are created with fresh or frozen eggs, and fresh or frozen sperm
Frozen embryo cycle	An ART cycle in which frozen embryos are thawed and transferred to the woman.
PGD/PGS (preimplantation genetic diagnosis or screening)	Techniques performed on embryos prior to transfer. PGD is for detecting specific genetic conditions to reduce the risk of passing inherited diseases to offspring. PGS screens embryos for an abnormal number of chromosomes, which is of special value for women with selected clinical indication such as advanced maternal age, recurrent miscarriages, or recurrent implantation IVF failure.
Reporting period	The span of time that defines the Jawda reporting period. The period will include all ART cycles that "started" in that period.

Source:

CDC (2017), Assisted reproductive technology, 2015 Fertility Clinic Success Rates Report
 HFEA (2016), Fertility treatment 2014- trends and figures

ART Performance Indicators

Type: ART Quality Indicator

Number: ART001

KPI Description (title):	Rate of severe complications resulting from fertility treatment
Domain	Patient Safety
Sub-domain	Complication
Definition:	Percentage of fresh and frozen ART cycles with severe complications within two weeks from the start of fertility treatment, which requires hospitalization through emergencies, during the reporting period.
Calculation:	<p><u>Numerator:</u> Number of ART cycles with severe complications resulting from the fertility treatment, which requires unplanned hospitalization.</p> <p>Complications to be considered:</p> <p>(N98.1) Ovarian hyper-stimulation syndrome (OHSS) requiring hospital admission. Bleeding:</p> <ul style="list-style-type: none"> • N83.6 Haematosalpinx, N85.7 Hematomata, • N93.8 Other specified abnormal uterine and vaginal bleeding • N93.9 Abnormal uterine and vaginal bleeding, unspecified • K66.1 Haemoperitoneum, T81.0 Haemorrhage and hematoma complicating a procedure, not elsewhere classified)/ <p>Infections</p> <ul style="list-style-type: none"> • (N70) Salpingitis and oophoritis, (N71) Inflammatory disease of uterus, except cervix, (N73) other female pelvic inflammatory diseases, (N74.8) Female pelvic inflammatory disorders in other diseases classified elsewhere, (N98.0) Infection associated with artificial insemination, Pelvic infection /PID after egg collection). <p><u>Denominator:</u> Total number of all fresh and frozen ART cycles during the reporting time period</p>
Reporting Frequency:	Quarterly
Unit of Measure:	percentage
International comparison if available	<p>-Developed by DoH- Abu Dhabi</p> <p>-SA El Shawarby et al A review of complications following Transvaginal oocyte retrieval for in-vitro fertilisation , Human Fertility June 2004, 7(2), 127-133 (Document attached)</p> <p>-E.A.F. Dancet, T.M. D'Hooghe, C. Spiessens, W. Sermeus, D. De Neubourg, N. Karel, J.A.M. Kremer, W.L.D.M. Nelen; Quality indicators for all dimensions of infertility care quality: consensus between professionals and patients, Human Reproduction, Volume 28, Issue 6, 1 June 2013, Pages 1584–1597, https://doi.org/10.1093/humrep/det056</p>
Desired direction:	Lower is better
Notes for all facilities	
Data Source/ Report Name:	<ul style="list-style-type: none"> - Administrative and medical records. - Claims

Type: ART Quality Indicator

Number: ART002a

KPI Description (title):	Live births rate from fresh ART cycle for women of age below 35 years
Domain	Clinical outcome
Sub-domain	Effectiveness
Definition:	Percentage of live births (the complete expulsion or extraction of a product of fertilization that shows evidence of life) after a fresh ART cycle with embryo transfers relative to the total number of embryos transfer procedures for women below 35 years.
Calculation:	<p>Numerator: Total number of live births (the complete expulsion or extraction of a product of fertilization that shows evidence of life) after fresh ART cycle with embryo transfers for women below 35 years. A cycle resulting in live birth may include single or multiple infants born live.</p> <p>Inclusion: All live births including singleton and multiple irrespective of gestational age and birth weight.</p> <p>Exclusion: Women where all reasonable attempts have been made to follow up on status of live birth.</p> <p>Denominator: Total number of fresh Embryo transfer procedures performed in the reporting period for women below 35 years.</p> <p>Inclusion: Include all embryos that were transferred i.e. including those with and without PGD and PGS testing.</p>
Reporting Frequency:	Annually (<i>Live birth rate from all fresh Embryo transfer procedures in women below 35 years that started from January to December of a target year should be reported with the Q4 submissions of subsequent year.</i>)
Unit of Measure:	percentage
International comparison if available	Developed as per DoH- Abu Dhabi standard, HFEA, and CDC
Desired direction:	Higher is better
Notes for all facilities	
Data Source/ Report Name:	<ul style="list-style-type: none"> - Administrative and medical records. - Claims. - Medical Record Numbers (or unique patient identifier) list of all lost to follow up cases must be submitted to DOH at time of data submission

KPI Description (title):	Live births rate from fresh ART cycle for women of age 35 years and above
Domain	Clinical outcome
Sub-domain	Effectiveness
Definition:	Percentage of live births (the complete expulsion or extraction of a product of fertilization that shows evidence of life) after a fresh ART cycle with Embryo transfers relative to the total number of embryos transfer procedures for women of age 35 years and above.
Calculation:	<p>Numerator: Total number of live births (the complete expulsion or extraction of a product of fertilization that shows evidence of life) after fresh cycles with embryo transfer for women of age 35 years and above. A cycle resulting in live birth may include single or multiple infants born live.</p> <p>Inclusion: All live births including singleton and multiple irrespective of gestational age and birth weight.</p> <p>Exclusion: Women where all reasonable attempts have been made to follow up on status of live birth up.</p> <p>Denominator: Total number of fresh Embryo transfer procedures performed in the reporting period for women of age 35 years and above.</p> <p>Inclusion: Include all embryos that were transferred, i.e. including those with and without PGD and PGS testing.</p>
Reporting Frequency:	Annually (<i>Live birth rate from all fresh Embryo transfer procedures in women age 35 and above that started from January to December of a target year should be reported with the Q4 submissions of subsequent year</i>)
Unit of Measure:	percentage
International comparison if available	Developed as per DoH- Abu Dhabi standard, HFEA, and CDC
Desired direction:	Higher is better
Notes for all facilities	
Data Source/ Report Name:	<ul style="list-style-type: none"> - Administrative and medical records. - Claims - Medical Record Numbers (or unique patient identifier) list of all lost to follow up cases must be submitted to DOH at time of data submission

Type: ART Quality Indicator

Indicator Number: ART003a

KPI Description (title):	Clinical Pregnancy rate from fresh IVF/ICSI cycle for women below 35 years
Domain	Clinical outcome
Sub-domain	Effectiveness
Definition:	Total number of women with positive fetal hearts as confirmed by ultrasound 2-4 weeks after positive pregnancy test following fresh IVF/ICSI cycle for women below 35 years.
Calculation:	<p>Numerator: Total number of women with positive fetal hearts as confirmed by ultrasound 2-4 weeks after positive pregnancy test following fresh IVF/ICSI cycle for women below 35 years.</p> <p>Inclusion: All pregnancies including singleton and multiple.</p> <p>Denominator: Total number of fresh Embryo transfer procedures performed in the reporting period for women below 35 years.</p> <p>Inclusion: Include all embryos that were transferred, i.e. including those with and without PGD and PGS testing.</p>
Reporting Frequency:	Quarterly
Unit of Measure:	percentage
International comparison if available	Developed as per DoH standard, HFEA, and CDC
Desired direction:	Higher is better
Notes for all facilities	
Data Source/ Report Name:	<ul style="list-style-type: none"> - Administrative and medical records. - Claims

KPI Description (title):	Clinical Pregnancy rate from fresh IVF/ICSI cycle for women of age 35 years and above
Domain	Clinical outcome
Sub-domain	Effectiveness
Definition:	Total number of women with positive fetal hearts as confirmed by ultrasound 2-4 weeks after positive pregnancy test following fresh IVF/ICSI cycle for women of age 35 years and above.
Calculation:	<p>Numerator: Total number of women with positive fetal hearts as-confirmed by ultrasound 2-4 weeks after positive pregnancy test following fresh IVF/ICSI cycle for women of age 35 years and above.</p> <p>Inclusion: All pregnancies including singleton and multiple.</p> <p>Denominator: Total number of fresh Embryo transfer procedures performed in the reporting period for women of age 35 years and above.</p> <p>Inclusion: Include all embryos that were transferred, i.e. including those with and without PGD and PGS testing.</p>
Reporting Frequency:	Quarterly
Unit of Measure:	percentage
International comparison if available	Developed as per DoH standard, HFEA, and CDC
Desired direction:	Higher is better
Notes for all facilities	
Data Source/ Report Name:	<ul style="list-style-type: none"> - Administrative and medical records. - Claims

KPI Description (title):	High order Clinical pregnancy rate from fresh ART cycles
Domain	Patient Safety
Sub-domain	Multiple pregnancies
Definition:	Percentage of high order pregnancies (3 or more) as a result of fresh ART cycle relative to the total number of fresh embryo transfer procedures during the reporting period
Calculation:	<p><i>Numerator:</i> Total number of women with high order pregnancies (3 or more fetal hearts) confirmed by ultrasound at 2-4 weeks after fresh embryo transfer procedures.</p> <p><i>Denominator:</i> Total number of fresh Embryo transfer procedures performed during the reporting period</p> <p><i>Inclusion:</i> Include all embryos that were transferred, i.e. including those with and without PGD and PGS testing.</p>
Reporting Frequency:	Quarterly
Unit of Measure:	percentage
International comparison if available	Developed as per DoH standard, CDC, and HFEA
Desired direction:	Lower is better
Notes for all facilities	
Data Source/ Report Name:	<ul style="list-style-type: none"> - Administrative and medical records. - Claims

Type: ART Quality Indicator

Indicator Number: ART005

KPI Description (title):	High order live birth rate from fresh ART cycles
Domain	Patient Safety
Sub-domain	Multiple birth
Definition:	Percentage of women with high order live birth (3 or more) as a result of fresh ART cycle relative to the total number of all fresh ART cycles during the reporting period
Calculation:	<p><i>Numerator:</i> Total women with high order live birth (3 or more) as a result of fresh ART cycle</p> <p><i>Inclusion:</i> All live births (3 or more) irrespective of gestational age and birth weight</p> <p><i>Exclusion:</i> Women where all reasonable attempts have been made to follow up on status of live birth.</p> <p><i>Denominator:</i> Total number of fresh Embryo transfer procedures performed during the reporting period</p> <p><i>Inclusion:</i> Include all embryos that were transferred, i.e. including those with and without PGD and PGS testing.</p>
Reporting Frequency:	Annually (<i>Live birth rate from all fresh Embryo transfer procedures that started from January to December of a target year should be reported with the Q4 submissions of subsequent year</i>)
Unit of Measure:	percentage
International comparison if available	Developed as per DoH standard, and HFEA
Desired direction:	Lower is better
Notes for all facilities	
Data Source/ Report Name:	<ul style="list-style-type: none"> - Administrative and medical records. - Claims - Medical Record Numbers (or unique patient identifier) list of all lost to follow up cases must be submitted to DOH at time of data submission

KPI Description (title):	Live births rate from frozen ART cycle for women below 35 years
Domain	Clinical outcome
Sub-domain	Effectiveness
Definition:	Percentage of live births (the complete expulsion or extraction of a product of fertilization that shows evidence of life) after a frozen ART cycle with Embryo transfers relative to the total number of embryos transfer procedures for women below 35 years.
Calculation:	<p><u>Numerator:</u> Total number of live births (the complete expulsion or extraction of a product of fertilization that shows evidence of life) after frozen ART cycle with Embryo transfers for women below 35 years. A cycle resulting in live birth may include single or multiple infants born live.</p> <p>Inclusion: All live births including singleton and multiple irrespective of gestational age and birth weight.</p> <p>Exclusion: Women where all reasonable attempts have been made to follow up on status of live birth.</p> <p><u>Denominator:</u> Total number of frozen Embryo transfer procedures performed in the reporting period for women below 35 years.</p> <p>Inclusion: Include all embryos that were transferred, i.e. including those with and without PGD and PGS testing.</p>
Reporting Frequency:	Annually: <i>(Live birth rate from all frozen Embryo transfer procedures for women below 35 years that started from January to December of a target year should be reported with the Q4 submissions of subsequent year)</i>
Unit of Measure:	percentage
International comparison if available	Developed as per DoH- Abu Dhabi standard, HFEA, and CDC
Desired direction:	Higher is better
Notes for all facilities	
Data Source/ Report Name:	<ul style="list-style-type: none"> - Administrative and medical records. - Claims - Medical Record Numbers (or unique patient identifier) list of all lost to follow up cases must be submitted to DOH at time of data submission

KPI Description (title):	Live births rate from frozen ART cycle for women of age 35 years and above
Domain	Clinical outcome
Sub-domain	Effectiveness
Definition:	Percentage of live births (the complete expulsion or extraction of a product of fertilization that shows evidence of life) after a frozen ART cycle with Embryo transfers relative to the total number of embryos transfer procedures for women of age 35 years and above.
Calculation:	<p><u>Numerator:</u> Total number of live births (the complete expulsion or extraction of a product of fertilization that shows evidence of life) after frozen ART cycle with Embryo transfers for women of age 35 years and above. A cycle resulting in live birth may include single or multiple infants born live.</p> <p>Inclusion: All live births including singleton and multiple irrespective of gestational age and birth weight.</p> <p>Exclusion: Women where all reasonable attempts have been made to follow up on status of live birth.</p> <p><u>Denominator:</u> Total number of frozen Embryo transfer procedures performed in the reporting period for women of age 35 years and above.</p> <p>Inclusion: Include all embryos that were transferred, i.e. including those with and without PGD and PGS testing.</p>
Reporting Frequency:	Annually: <i>(Live birth rate from all frozen Embryo transfer procedures in women aged 35 years and above, that started from January to December of a target year should be reported with the Q4 submissions of subsequent year)</i>
Unit of Measure:	percentage
International comparison if available	Developed as per DoH- Abu Dhabi standard, HFEA, and CDC
Desired direction:	Higher is better
Notes for all facilities	
Data Source/ Report Name:	<ul style="list-style-type: none"> - Administrative and medical records. - Claims - Medical Record Numbers (or unique patient identifier) list of all lost to follow up cases must be submitted to DOH at time of data submission

Type: ART Quality Indicator

Indicator Number: ART007a

KPI Description (title):	Clinical Pregnancy rate from frozen ART cycle for women below 35 years
Domain	Clinical outcome
Sub-domain	Effectiveness
Definition:	Percentage of women with positive fetal hearts resulting from frozen embryo transfer relative to the total number of frozen embryo transfer procedures performed during the reporting period for women below 35 years.
Calculation:	<p><u>Numerator:</u> Total number of women with positive fetal hearts as confirmed by ultrasound 2-4 weeks after positive pregnancy test following frozen embryo transfer procedure for women below 35 years.</p> <p><u>Inclusion:</u> All pregnancies including singleton and multiple.</p> <p><u>Denominator:</u> Total number of frozen Embryo transfer procedures performed in the reporting period for women below 35 years.</p> <p><u>Inclusion:</u> Include all embryos that were transferred, i.e. including those with and without PGD and PGS testing.</p>
Reporting Frequency:	Quarterly
Unit of Measure:	percentage
International comparison if available	Developed as per DoH standard, HFEA, and CDC
Desired direction:	Higher is better
Notes for all facilities	
Data Source/ Report Name:	<ul style="list-style-type: none"> - Administrative and medical records. - Claims

Type: ART Quality Indicator

Number: ART007b

KPI Description (title):	Clinical Pregnancy rate from frozen ART cycle for women of age 35 years and above
Domain	Clinical outcome
Sub-domain	Effectiveness
Definition:	Percentage of women with positive fetal hearts resulting from frozen embryo transfer relative to the total number of frozen embryo transfer procedures performed during the reporting period for women of age 35 years and above.
Calculation:	<p><u>Numerator:</u> Total number of women with positive fetal hearts as confirmed by ultrasound 2-4 weeks after positive pregnancy test following frozen embryo transfer procedure for women of age 35 years and above.</p> <p><u>Inclusion:</u> All pregnancies including singleton and multiple.</p> <p><u>Denominator:</u> Total number of frozen Embryo transfer procedures performed in the reporting period for women of age 35 years and above.</p> <p><u>Inclusion:</u> Include all embryos that were transferred, i.e. including those with and without PGD and PGS testing.</p>
Reporting Frequency:	Quarterly
Unit of Measure:	percentage
International comparison if available	Developed as per DoH standard, HFEA, and CDC
Desired direction:	Higher is better
Notes for all facilities	
Data Source/ Report Name:	<ul style="list-style-type: none"> - Administrative and medical records. - Claims

KPI Description (title):	High order clinical pregnancy rate from frozen ART cycles
Domain	Patient Safety
Sub-domain	Multiple pregnancies
Definition:	Percentage of women with high order pregnancies (3 or more) resulting from frozen embryo transfers relative to the total number of frozen ART cycles during the reporting period
Calculation:	<p><u>Numerator:</u> Total number of women with positive fetal hearts (3 or more) as confirmed by ultrasound 2-4 weeks after positive pregnancy test following frozen embryo transfer procedure</p> <p><u>Denominator:</u> Total number of frozen embryo transfer procedures performed in the reporting period</p> <p><u>Inclusion:</u> Include all embryos that were transferred, i.e. including those with and without PGD and PGS testing.</p>
Reporting Frequency:	Quarterly
Unit of Measure:	percentage
International comparison if available	Developed as per DoH standard, CDC, and HFEA
Desired direction:	Lower is better
Notes for all facilities	
Data Source/ Report Name:	<ul style="list-style-type: none"> - Administrative and medical records. - Claims

KPI Description (title):	High order live birth rate from frozen ART cycles
Domain	Patient Safety
Sub-domain	Multiple birth
Definition:	Percentage of women with high order live birth (3 or more) resulting from frozen embryo transfer relative to the total number of frozen ART cycles during the reporting period
Calculation:	<p><u>Numerator:</u> Total number of women with high order live births (3 or more) following frozen embryo transfer procedure</p> <p><u>Inclusion:</u> All live births including (3 or more) irrespective of gestational age and birth weight</p> <p><u>Exclusion:</u> Women where all reasonable attempts have been made to follow up on status of live birth.</p> <p><u>Denominator:</u> Total number of frozen embryo transfer procedures performed in the reporting period</p> <p><u>Inclusion:</u> Include all embryos that were transferred, i.e. including those with and without PGD and PGS testing.</p>
Reporting Frequency:	Annually: <i>(Live birth rate from all frozen Embryo transfer procedures that started from January to December of a target year should be reported with the Q4 submissions of subsequent year)</i>
Unit of Measure:	percentage
International comparison if available	Developed as per DoH standard, and HFEA
Desired direction:	Lower is better
Notes for all facilities	
Data Source/ Report Name:	<ul style="list-style-type: none"> - Administrative and medical records. - Claims - Medical Record Numbers (or unique patient identifier) list of all lost to follow up cases must be submitted to DOH at time of data submission