



دائرة الصحة
DEPARTMENT OF HEALTH

Long Term Care Jawda Guidance

Version 3

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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, clinics and other healthcare providers. 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 for quarterly reporting by the **operating Long-Term Providers in the Emirates of 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 utilise online versions available on the DOH website at all times.

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Introduction

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 the population. DOH is mandated:

- To achieve the highest standards in health curative, preventative and medical services and health insurance in the Emirate.
- To lay down the strategies, policies and plans, including future projects and extensions for the health sector in the Emirate, and to follow-up on their implementation
- To apply the laws, rules, regulations and policies that are issued as they are related to its purposes and responsibilities, in addition to what is issued by the respective international and regional organizations in line with the development of the health sector.
- To follow up and monitor the operation of the health sector, to achieve an exemplary standard in the provision of health, curative, preventive and medicinal services and health insurance.

DOH defines the strategy for the health system, monitors and analyses the health status of the population and performance of the system. In addition, DOH shapes the regulatory framework for the health system, inspects against regulations, enforce standards, and encourages adoption of world – class best practices and performance targets by all healthcare service providers in the Emirate of Abu Dhabi.

DOH also drives programs to increase awareness and adoption of healthy living standards among the residents of the Emirate of Abu Dhabi in addition to regulating scope of services, premiums and reimbursement rates of the health system in the Emirate of Abu Dhabi.

The Health System of the Emirate of Abu Dhabi is comprehensive, encompassing the full spectrum of health services and is accessible to all residents of Abu Dhabi. The system is driven towards excellence through continuous outcome improvement culture and monitoring achievement of specified indicators. Providers of health services are independent, predominately private and follow highest international quality standards. The system is financed through mandatory health insurance.

In doing so DOH will:

- Drive structure, process and outcome improvements across health sector
- Put people first and champion their rights
- Focus on quality and act swiftly to eliminate poor quality of care
- Work with stakeholders and apply fair processes.
- Gather information and utilize knowledge and expertise to improve care.
- Link the care to payment in a way that results in a continuous improvement and maximize the value of the care provided in Abu Dhabi.

Patient Safety and Clinical Effectiveness

Patient safety is 'the discipline in the health care sector that applies safety science methods toward the goal of achieving a trustworthy system of health care delivery'. Patient safety is also an attribute of health care systems; it minimizes the incidence and impact of and maximizes recovery from adverse events. Clinical effectiveness is "the application of the best knowledge, derived from research, clinical experience and patient preferences to achieve optimum processes and outcomes of care for patients. The process involves a framework of informing, changing and monitoring practice". Clinical effectiveness is about doing the right thing at the right time for the right patient and is concerned with demonstrating improvements in quality and performance.

- **The right thing** (evidence-based practice requires that decisions about health care are based on the best available, current, valid and reliable evidence)
- **In the right way** (developing a workforce that is skilled and competent to deliver the care required)
- **At the right time** (accessible services providing treatment when the patient needs them)
- **In the right place** (location of treatment/services).
- **With the right outcome** (clinical effectiveness/maximising health gain)

Patient safety, clinical effectiveness and patient experience are recognized as the main pillars of quality in healthcare. In Abu Dhabi, the measurement of patient safety, clinical effectiveness and patient experience data is intended to identify strengths and weaknesses of healthcare delivery, drive-quality improvement, inform regulation and promote patient choice. In addition to data on harm avoidance or success rates for treatments, providers will be assessed on aspects of care such as dignity and respect, compassion and involvement in care decisions through patient satisfaction surveys. The inclusion of patient safety, clinical

effectiveness and patient experience for quality performance is often justified on grounds of its intrinsic value. For example, clear information, empathic, two-way communication and respect for patients' beliefs and concerns could lead to patients being more informed and involved in decision-making and create an environment where patients are more willing to disclose information.

Planning for data collection and submission

In planning for data collection and submission, healthcare providers must adhere to reporting, definition and calculation requirements as set out in **section 7 (Long Term Indicators definition)**. Healthcare providers must also consider the following:

- Nominate responsible data collection and quality leads(s).
- Ensure data collection leads are adequately skilled and resourced.
- Understand and identify what data is required, how it will be collected (sources) and when it will be collected.
- Create a data collection plan.
- Ensure adequate data collection systems and tools are in place.
- Maintain accurate and reliable data collection methodology.
- Data collation, cleansing and analysis for reliability and accuracy.
- Back up and protect data integrity.
- Have in place a data checklist before submission.
- Submit data on time and ensure validity.
- Review and feedback data findings to the respective teams in order to promote performance improvement.
- When needed, documentation and tracks will be provided instantly to DOH or their representative to assure DOH that all due processes are being followed in collecting, analyzing, validating and submitting the performance.

- Failing to submit valid data will be in breach of the licensing condition and could result in fines being applied, penalties associated with performance or revocation of license.

About this Guidance

This guidance sets out the Patient Safety and Clinical Effectiveness reporting requirements so as to ensure high quality and safety of healthcare services offered to patients in the Emirate of Abu Dhabi. The guidance sets out the definitions, parameters and frequency by which JAWDA Quality indicators will be measured and submitted to DOH and will ensure Healthcare Providers provide safe, effective and high quality services.

Q. Who is this guidance for?

All DOH Licensed Long-Term Healthcare Providers in the Emirate of Abu Dhabi

Q. How do I follow this guidance?

Each Hospital will nominate one member of staff to coordinate, collect, quality control, monitor and report relevant Inpatient 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 the online portal.

Q. What are the Regulation related to this guidance?

- Legislation establishing the Health Sector
- HAAD Standard for Provision of Long-Term Care in healthcare facilities in the Emirate of Abu Dhabi

Glossary:

LTCF: Long term care facility

Target period: The span of time that defines the Jawda reporting period (e.g. a calendar quarter).

Resident: Patient in a long-term care facility licensed by the Department of Health, Abu Dhabi.

Population: Unless specified for the indicator, all residents (children, adults, using or not using devices etc.) in the LTCF are considered to be included for indicator measurement.

Adult is defined as 18 years and older.

Applicability of the indicator:

The denominator criteria of an indicator determines the applicability of that indicator. Certain indicators are applicable to a patient population subgroup or patients with a particular health condition e.g. VAE will apply to adult patients who are using a ventilatory device.

Some indicators will be applicable to all patients / residents in the long term facility.

This implies that the denominator count can be different for different indicators.

Stay: The period of time between a resident's entry into a facility and either (a) a discharge, or (b) the end of the target period, whichever comes first.

A stay is also defined as a set of contiguous days in a facility. The start of a stay is either:

- An admission entry **or**
- A reentry

The end of a stay is the earliest of the following:

- Any discharge assessment **or**
- A death in facility record, **or**
- The end of the target period.

Patient days in facility: The total number of days within a stay during which the resident was in the facility. Any days outside of the facility (e.g., acute care hospital, home, etc.) would not count towards the total patient days. The following rules are used when computing patient days:

- The counting stops with
 - (a) The last record in the target period if that record is a discharge assessment
 - (b) The last record in the target period if that record is a death in facility**or**
 - (c) The end of the target period is reached, whichever is earlier.
- Include the day of entry but not the day of discharge unless the entry and discharge occurred on the same day in which case the number of days in the stay is equal to 1.

- While death in facility records end patient day counting, these records are not used as target records because they contain only tracking information and do not include clinical information necessary for JAWDA indicator calculation.

Facility Submission of Case-mix:

The resident days in the long-term care are to be classified by the level of care as given in the “HAAD Standard for the Provision of the Long-Term care in Healthcare Facilities in the Emirate of Abu Dhabi Appendix 1”.

<https://haad.ae/HAAD/LinkClick.aspx?fileticket=PdITAxcoXrU%3D&tabid=819>

So each LTCF will be submitting the total number of resident days within each service category for the target period (3 months for quarterly submission) as follows:

	Acuity Level (Care Level)	Service Code	Resident days for target period*
	Simple	17-13	
	Intermediate	17-14	
	Intensive	17-15	
	Severe	17-16	
	Self-pay	XXXX	
	Total resident days in the target period		

The coding assignments for the period would be those that are approved by Daman.

**Some of the patients may have an assignment of more than one care level in the target period based on improvement or worsening of the care level (or possibly conversion from self-pay to insured patient or vice versa). Please consider the changes of service level during the reporting period e.g. if a patient was care level 17-16 till the 10th of the month and then that patient was weaned from ventilator by 11th and the care level changed to 17-14; the patient days will be accordingly assigned.*

Long Term Indicators

Type: Long Term Care Indicator

Indicator Number: LTC001

KPI Description (title):	Rate of emergency attendance
Domain	Process
Sub-Domain	Clinical effectiveness
Definition	Rate of emergency department visits or urgent care visits by long term care residents without being admitted to the hospital within the measurement quarter.
Population	All residents who are being cared for in the long term facility.
Calculation	<p>Numerator: Number of all unplanned visits to the Emergency Department (ED) or urgent care visits by long term residents within the measurement quarter. (Count the attendance rather than the number of residents).</p> <p><i>For definition of unplanned care and medical emergency, please refer to DOH (HAAD) Standard for Emergency Departments.</i></p> <p>Denominator: A count of the total number of long term resident days during the measurement quarter.</p> <p><i>Rate is calculated by the number of ED visits during the measurement quarter, divided by the total number of resident days during the same period and multiplying by 1000.</i></p> <p>Calculation: [numerator / denominator] x 1000</p>
Reporting Frequency	Quarterly
Unit Measure	Rate per 1000 long term resident days
International comparison if available	https://www.cdc.gov/nchs/fastats/emergency-department.htm Developed locally by modifying similar indicators used by AHRQ, OECD and CQC
Desired Direction	Lower is better
Data Source	Patient Medical Records Claims

Type: Long Term Care Indicator

Indicator Number: LTC002

KPI Description (title):	Rate of Unplanned Hospital Admission
Domain	Outcome
Sub-Domain	Clinical effectiveness
Definition	Rate of emergency admissions in an inpatient setting of an acute care hospital or transfer to a higher acuity unit such as ICU within the same facility within the measurement quarter by long term care residents.
Population	All residents who are being cared for in the long term facility.
Calculation	<p>Numerator: Number of all unplanned admissions to any acute care hospital or transfer to a higher acuity unit such as ICU within the same facility by long term residents during the measurement quarter (count the admissions rather than the residents).</p> <p><i>For definition of unplanned care and medical emergency, please refer to DOH (HAAD) Standard for Emergency Departments.</i></p> <p>Denominator: A count of the total number of long term resident days during the measurement quarter.</p> <p><i>Rate is calculated by the number of unplanned admissions during the measurement quarter divided by the total number of resident days during the same period and multiplying by 1000.</i></p> <p>Calculation: $[\text{numerator} / \text{denominator}] \times 1000$</p>
Reporting Frequency	Quarterly
Unit Measure	Rate per 1000 long term resident days
International comparison if available	<p>http://pmj.bmj.com/content/77/903/40</p> <p>Developed locally by modifying similar indicators used by AHRQ, OECD and CQC</p>
Desired Direction	Lower is better
Data Source	<p>Patient Medical Records</p> <p>Claims</p>

Type: Long Term Care Indicator

Indicator Number: LTC003

KPI Description (title):	Rate of Deep Vein Thrombosis
Domain	Patient Safety
Sub-Domain	Complication
Definition	Rate of deep vein thrombosis (primary or secondary diagnosis) for long term residents aged 18 years and above within the measurement quarter.
Population	All adult residents who are being cared for in the long term facility.
Calculation	<p>Numerator: Number of residents aged 18 years or older newly diagnosed with a primary or secondary deep vein thrombosis (ICD-10-CM) within the measurement quarter.</p> <p>Codes: Secondary or primary ICD-10-CM Diagnosis Codes for Deep Vein Thrombosis: I82.401, I82.402, I82.403, I82.409, I82.411, I82.412, I82.413, I82.419, I82.421, I82.422, I82.423, I82.429, I82.431, I82.432, I82.433, I82.439, I82.441, I82.442, I82.443, I82.449, I82.491, I82.492, I82.493, I82.499, I82.4Y1, I82.4Y2, I82.4Y3, I82.4Y9, I82.4Z1, I82.4Z2, I82.4Z3, I82.4Z9, I82.601, I82.602, I82.603, I82.609, I82.621, I82.622, I82.623, I82.629, T82.897A, T82.897D, T82.897S, T81.72XA, T81.72XD, T81.72XS, T80.1XXA, T80.1XXD, T80.1XXS, I80.00, I80.01, I80.02, I80.03, I80.10, I80.11, I80.12, I80.13, I80.201, I80.202, I80.203, I80.209, I80.211, I80.212, I80.213, I80.219, I80.221, I80.222, I80.223, I80.229, I80.231, I80.232, I80.233, I80.239, I80.291, I80.292, I80.293, I80.299, I80.3, I80.8, I80.9</p> <p>Denominator: A count of the total number of long term adult resident days during the measurement quarter.</p> <p>Exclusion: Residents who have had their diagnosis of an Inherited or Acquired hypercoagulable condition reviewed and confirmed upon admission to a long term care facility and every 6 months thereafter by a Haematologist.</p> <p>Rate is calculated by the number of newly diagnosed adult residents with deep vein thrombosis during the measurement quarter divided by the total number of adult resident days during the same period and multiplying by 1000.</p> <p>Calculation: [numerator / denominator] x 1000</p>
Reporting Frequency	Quarterly
Unit Measure	Rate per 1000 long term resident days
International comparison if available	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3124858/ - AHRQ QI™ Version 4.5, Patient Safety Indicators #12, Deep Vein Thrombosis Rate - OECD, CQC of UK with modification following discussion with local experts and considering local culture.
Desired Direction	Lower is better
Data Source	Patient Medical Records Claims

Type: Long Term Care Indicator

Indicator Number: LTC004

KPI Description (title):	Rate of newly acquired or worsening pressure injury (Stage II and above)
Domain	Patient Safety
Sub-Domain	Adverse Events (AE) and Sentinel events
Definition	Rate of newly acquired or worsening pressure injury (Stage II and above) among long term care residents
Population	All residents (adult, pediatric and neonatal) who are being cared for in the long term facility.
Calculation	<p>Numerator: Number of long term residents with newly (long term facility) acquired pressure injury or with worsening pressure injury Stage II, III, IV, Unstageable or Deep Tissue Injury (DTI) within the measurement quarter. Long term care facility associated or worsening pressure injury (Stage II and above) ICD- 10 CM Codes:</p> <p><i>L89.000,L89.002,L89.003,L89.004,L89.010,L89.012,L89.013,L89.014,L89.020,L89.022,L89.023,L89.024,L89.100,L89.102,L89.103,L89.104,L89.110,L89.112,L89.113,L89.114,L89.120,L89.122,L89.123,L89.124,L89.130,L89.132,L89.133,L89.134,L89.140,L89.142,L89.143,L89.144,L89.150,L89.152,L89.153,L89.154,L89.200,L89.202,L89.203,L89.204,L89.210,L89.212,L89.213,L89.214,L89.220,L89.222,L89.223,L89.224,L89.300,L89.302,L89.303,L89.304,L89.310,L89.312,L89.313,L89.314,L89.320,L89.322,L89.323,L89.324,L89.42,L89.43,L89.44,L89.45,L89.500,L89.502,L89.503,L89.504,L89.510,L89.512,L89.513,L89.514,L89.520,L89.522,L89.523,L89.524,L89.600,L89.602,L89.603,L89.604,L89.610,L89.612,L89.613,L89.614,L89.620,L89.622,L89.623,L89.624,L89.810,L89.812,L89.813,L89.814,L89.890,L89.892,L89.893,L89.894,L89.92,L89.93,L89.94,L89.95</i></p> <p>Guide on stage is defined below;</p> <p>Category/Stage II: Partial thickness Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled or sero-sanguinous filled blister. Presents as a shiny or dry shallow ulcer without slough or bruising*. This Category/Stage should not be used to describe skin tears, tape burns, incontinence associated with dermatitis, maceration or excoriation. *Bruising indicates deep tissue injury.</p> <p>Category/Stage III: Full thickness skin loss Full thickness skin loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling. The depth of a Category/Stage III pressure ulcer varies by anatomical location. The bridge of</p>

	<p>the nose, ear, occiput and malleolus do not have (adipose) subcutaneous tissue and Category/Stage III injury can be shallow. In contrast, areas of significant adiposity can develop extremely deep Category/Stage III pressure injury. Bone/tendon is not visible or directly palpable.</p> <p>Category/Stage IV: Full thickness tissue loss</p> <p>Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present. Often included undermining and tunneling. The depth of a Category/Stage IV pressure injury varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have (adipose) subcutaneous tissue and these injuries can be shallow. Category/Stage IV Injury can extend into muscle and/or supporting structures (e.g., fascia, tendon or joint capsule) making osteomyelitis or osteitis likely to occur. Exposed bone/muscle is visible or directly palpable.</p> <p>Exclusions:</p> <ul style="list-style-type: none"> Patients with pressure injury present on admission, that stayed the same stage or improved following the start of the long term care. Long term associated pressure injury Stage I (ICD- 10 CM Codes: L89.001, L89.011,L89.021,L89.101,L89.111, L89.121,L89.131,L89.141,L89.151, L89.201,L89.211,L89.221,L89.301,L89.311,L89.321, L89.41, L89.501,L89.511,L89.521,L89.601,L89.611, L89.621,L89.811,L89.891,L89.91). <p>Denominator: A count of the total number of long term resident days during the measurement quarter.</p> <p>Rate is calculated by the number of long term residents with newly acquired or worsening pressure injury (Stage II and above) during the measurement quarter divided by the total number of resident days during the same period and multiplying by 1000. Calculation: [numerator / denominator] x 1000</p>
Reporting Frequency	Quarterly
Unit Measure	Rate per 1000 long term resident days
International comparison if available	CQC of UK with modification following discussion with local experts https://www.npuap.org/wp-content/uploads/2014/08/Quick-Reference-Guide-DIGITAL-NPUAP-EPUAP-PPPIA-Jan2016.pdf
Desired Direction	Lower is better
Data Source	Patient Medical Records -Skin and Wound Assessment Chart Internal adverse event system

Type: Long Term Care Indicator

Indicator Number: LTC005

KPI Description (title):	VAE (Ventilator associated event)
Domain	Patient Safety
Sub-Domain	Complication
Definition	<p>VAEs are identified by using a combination of objective criteria:</p> <ul style="list-style-type: none"> • Deterioration in respiratory status after a period of stability or improvement on the ventilator, • Evidence of infection or inflammation, and • Laboratory evidence of respiratory infection. <p>The VAE rate per 1000 ventilator days is calculated by dividing the number of VAEs by the number of ventilator days and multiplying the result by 1000 (ventilator days).</p> <p><i>NOTE: Residents must be mechanically ventilated for at least 4 calendar days to fulfill VAE criteria (where the day of intubation and initiation of mechanical ventilation is day 1). The earliest date of event for VAE (the date of onset of worsening oxygenation) is day 3 of mechanical ventilation.</i></p>
Population	All adult residents 18 years and above who are being cared for in the long term facility and are using a ventilatory device.
Calculation	<p>Numerator: Following are the definitions for VAE including VAC Ventilator-Associated Condition, IVAC Infection related Ventilator-Associated Complication and PVAP Possible Ventilator Associated Pneumonia.</p> <p>*Specify Criteria Used:</p> <p style="text-align: center;">STEP 1: VAC (≥1 REQUIRED)</p> <p><u>At least one:</u></p> <p><input type="checkbox"/> Daily min fraction of inspired oxygen (FiO₂) increases ≥ 0.20 (20 points) for ≥ 2 continuous days† OR</p> <p><input type="checkbox"/> Daily min positive end-expiratory pressure (PEEP) increases ≥ 3 cm H₂O for ≥ 2 continuous days†</p> <p>†after 2+ days of stable or decreasing daily minimum values.</p> <p style="text-align: center;">STEP 2: IVAC</p> <p><u>Both criteria:</u></p> <p><input type="checkbox"/> Temperature > 38°C or < 36° OR <input type="checkbox"/> White blood cell count ≥ 12,000 or ≤ 4,000 cells/mm³ AND</p> <p><input type="checkbox"/> A new antimicrobial agent(s) is started, and is continued for ≥ 4 days</p> <p style="text-align: center;">STEP 3: PVAP</p> <p>One of the following criteria is met:</p> <p><input type="checkbox"/> Criterion #1: Positive culture of one of the following specimens, meeting quantitative or semi-quantitative thresholds,‡ without requirement for purulent respiratory secretions:</p> <p style="margin-left: 40px;"><input type="checkbox"/> Endotracheal aspirate <input type="checkbox"/> Lung tissue</p> <p style="margin-left: 40px;"><input type="checkbox"/> Bronchoalveolar lavage <input type="checkbox"/> Protected specimen brush</p> <p>OR</p> <p><input type="checkbox"/> Criterion #2: Purulent respiratory secretions‡ (defined as secretions from the lungs, bronchi, or trachea that contain >25 neutrophils and <10 squamous</p>

	<p>epithelial cells per low power field [lpf, x100]) plus organism(s) identified from one of the following specimens (to include qualitative culture, or quantitative/semi-quantitative culture without sufficient growth to meet criterion #1):‡</p> <ul style="list-style-type: none"> □ Sputum □ Endotracheal aspirate □ Lung tissue □ Bronchoalveolar lavage □ Protected specimen brush <p>OR</p> <p>□ Criterion #3: One of the following positive tests (as outlined in the protocol): ‡</p> <ul style="list-style-type: none"> □ Organism(s) identified from pleural fluid □ Lung histopathology □ Diagnostic test for Legionella species □ Diagnostic test for selected viral pathogens <p>‡collected after 2 days of mechanical ventilation and within +/- 2 days of onset of increase in FiO2 or PEEP.</p> <p>Exclusion:</p> <ul style="list-style-type: none"> • If the date of the VAE (i.e., day 1 of the ≥ 2-day period of worsening oxygenation) occurs on the day of transfer/discharge or the next day, indicate the transferring /discharging facility, not the current facility of the resident in the comments box. This resident will be excluded from the numerator count of the long term care facility. <p>For further information please see surveillance algorithm on page 18 of the VAE module: https://www.cdc.gov/nhsn/PDFs/pscManual/10-VAE_FINAL.pdf</p> <ul style="list-style-type: none"> • Repeated infection for the same type during 14 days from Date of Event <p>Denominator: Ventilator days: Number of residents managed with ventilatory devices, are collected daily, at the same time each day. These daily counts are summed and only the total for the measurement quarter is used.</p> <p>Inclusion:</p> <ul style="list-style-type: none"> • All ventilator days are counted, including ventilator days for residents on mechanical ventilation for < 3 days. • Patients undergoing weaning from mechanical ventilation are included in ventilator day counts as long as the patient is receiving support from a mechanical ventilator and is eligible for VAE surveillance
Reporting Frequency	Quarterly
Unit Measure	Rate per 1000 ventilator days
International comparison if available	https://www.cdc.gov/nhsn/PDFs/pscManual/10-VAE_FINAL.pdf https://www.cdc.gov/nhsn/inpatient-rehab/vae/index.html https://www.cdc.gov/nhsn/forms/57.112_VAE_BLANK.pdf
Desired Direction	Lower is better

JAWDA Quarterly Guidelines for (Long Term Care Providers)

Data Source	Patient medical record Laboratory data Infection control records
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Type: Long Term Care Indicator

Indicator Number: LTC006

KPI Description (title):	Rate of falls resulting in any injury per 1000 resident days
Domain	Patient Safety
Sub-Domain	Adverse Events (AE) and Sentinel Events
Definition	Rate of falls resulting in any injury per 1000 long term care resident days.
Population	All residents who are being cared for in the long term facility.
Calculation	<p>Numerator: Total number of long term resident falls resulting in injury (minor, moderate, major, or death) to the patient in the measurement quarter.</p> <p><u>Inclusions:</u> Resident falls with injury: minor, moderate, major, or death.</p> <p>A fall is an unplanned descent to the floor. Include falls when a patient / resident lands on a surface where you wouldn't expect to find a patient. All unassisted and assisted falls are to be included whether they result from physiological reasons (fainting) or environmental reasons (slippery floor). Also report patients / residents that roll off a low bed onto a mat as a fall.</p> <p>The National Database of Nursing Quality Indicators NDNQI definitions for injury:</p> <ul style="list-style-type: none"> •None—patient had no injuries (no signs or symptoms) resulting from the fall, if an x-ray, CT scan or other post fall evaluation results in a finding of no injury. •Minor—resulted in application of a dressing, ice, cleaning of a wound, limb elevation, topical medication, bruise or abrasion. •Moderate—resulted in suturing, application of steri-strips/skin glue, splinting or muscle/joint strain. •Major—resulted in surgery, casting, traction, required consultation for neurological (basilar skull fracture, small subdural hematoma) or internal injury (rib fracture, small liver laceration) or patients with coagulopathy who receive blood products as a result of the fall. •Death—the patient died as a result of injuries sustained from the fall (not from physiologic events causing the fall)." <p><u>Exclusions:</u> Resident falls, but no harm was evident</p> <p>Denominator: Total number of all long term resident days in the measurement quarter. Calculation: [numerator / denominator] x 1000</p>
Reporting Frequency	Quarterly
Unit Measure	Rate per 1000 long term resident days
International comparison if available	https://www.ahrq.gov/professionals/systems/hospital/fallpxtoolkit/fallpxtk5.html
Desired Direction	Lower is better
Data Source	Patient Medical Records Incident Reports

Type: Long Term Care Indicator

Indicator Number: LTC007

KPI Description (title):	Catheter-associated Symptomatic Urinary Tract Infection (CA-SUTI) per 1000 patient days
Domain	Patient safety
Sub-Domain	Complication
Definition	<p>The measure reports the long term care residents with an indwelling catheter who have a urinary tract infection in the measurement quarter.</p> <p><i><u>Date of Event:</u> The date when the first clinical evidence (signs/symptoms) of the UTI appeared or the date the specimen used to meet the infection criteria was collected, whichever comes first.</i></p> <p><i><u>Indwelling urinary catheter:</u> A drainage tube that is inserted into the urinary bladder through the urethra, is left in place, and is connected to a drainage bag/collection system (including leg bags); also called a Foley catheter. Indwelling urinary catheters do not include straight in-and-out catheters or suprapubic catheters.</i></p> <p><i>Indwelling urinary catheters which have been in place for >14 days should be changed prior to specimen collection, but failure to change catheter does not exclude a UTI for surveillance purposes.</i></p> <p><i>If a resident is transferred to the facility with an indwelling urinary catheter in place, and the facility replaces the catheter with a new one while the resident is in the care of the facility, then the date of insertion of the device corresponds to the date the new catheter was placed in the LTCF.</i></p>
Population	All long term residents with an indwelling catheter who are being cared for in the long term facility
Calculation	<p>Numerator:</p> <p>All residents that develop signs and symptoms of a UTI in the measurement quarter while having an indwelling urinary catheter in place or removed within the 2 calendar days prior to the date of event, where day of catheter removal is equal to day 1 (urinary catheter is in place on the day of event or the day before the event).</p> <p>Resident must meet both criteria 1 AND 2:</p> <p>CRITERION 1: One or more of the following (Signs and Symptoms and Laboratory and Diagnostic Testing):</p> <ol style="list-style-type: none"> 1. Fever+[Single temperature $\geq 37.8^{\circ}\text{C}$ ($>100^{\circ}\text{F}$), or $>37.2^{\circ}\text{C}$ ($>99^{\circ}\text{F}$) on repeated occasions, or an increase of $>1.1^{\circ}\text{C}$ ($>2^{\circ}\text{F}$) over baseline] 2. Rigors 3. New onset hypotension, with no alternate non-infectious cause 4. New onset confusion/functional decline with no alternate diagnosis AND leukocytosis ($>14,000$ cells/mm³ or Left shift [$>6\%$ or 1,500 bands/mm³]) 5. New or marked increase in suprapubic tenderness 6. New or marked increase in costovertebral angle pain or tenderness 7. Acute pain, swelling, or tenderness of the testes, epididymis, or prostate 8. Purulent discharge from around the catheter insertion site

	<p><u>AND</u></p> <p>CRITERION 2: Any of the following: If urinary catheter removed within last 2 calendar days:</p> <ol style="list-style-type: none"> 1. Specimen collected from clean catch voided urine and positive culture with no more than 2 species of microorganisms, at least one of which is a bacterium of $\geq 10^5$ colony-forming units (CFU) / ml 2. Specimen collected from in/out straight catheter and positive culture with any number of microorganisms, at least one of which is bacterium of $\geq 10^2$ colony-forming units (CFU)/ml. <p>If urinary catheter in place:</p> <ol style="list-style-type: none"> 3. Specimen collected from indwelling catheter and positive with any number of microorganisms, at least one of which is a bacterium of $\geq 10^5$ colony-forming units (CFU)/ml. <p><i>+ Fever can be used to meet CA-SUTI criteria even if the resident has another possible cause for the fever (e.g., pneumonia).</i></p> <p><u>Inclusion:</u></p> <ul style="list-style-type: none"> • To be considered a CA-UTI, the indwelling catheter must be in place for >2 calendar days on the date of event, with day of device placement being Day 1. • Only UTI events presenting > 2 calendar days after admission (where date of admission is equal to day 1) are considered long term care facility onset events. <p><u>Exclusion:</u></p> <ul style="list-style-type: none"> • If a resident is transferred from an acute care facility and develops signs/symptoms of a UTI within the first 2 calendar days of admission to the LTCF, it would be considered present at the time of transfer to the LTCF. This case would not be included in the numerator for the LTCF. • Repeated infection for the same type during 14 days from Date of Event <p><u>Denominator:</u> Catheter-days: Number of residents with an indwelling urinary (Foley) catheter collected daily for all residents in the facility. These daily counts are summed and only the total for the measurement quarter is entered.</p> <p><u>Exclusion:</u> None of the following urinary management devices should be included when counting indwelling catheter-days: suprapubic catheters, straight in-and-out catheters, or condom (male only) catheters.</p> <p><u>Rate calculation:</u> CA-SUTI incidence rate/1,000 catheter-days = Number of residents with CA-SUTI / Catheter-days x 1,000</p>
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Reporting Frequency	Quarterly
Unit Measure	Rate per 1000 urinary catheter days (long term)
International comparison if available	https://www.cdc.gov/nhsn/ltc/uti/index.html https://www.cdc.gov/nhsn/PDFs/LTC/LTCF-UTI-protocol-current.pdf Updated January 2018 http://www.hpsc.ie/a-z/microbiologyantimicrobialresistance/infectioncontrolandhai/surveillance/hcaiinlongtermcarefacilities/haltreports/2016report/File.16218.en.pdf
Desired Direction	Lower is better
Data Source	Patient medical record Laboratory data

Type: Long Term Care Indicator

Indicator Number: LTC008

KPI Description (title):	[Non-catheter associated] Symptomatic Urinary Tract Infection (SUTI) per 1000 resident days
Domain	Patient safety
Sub-Domain	Complication
Definition	<p>The measure reports the long term care residents without an indwelling catheter who have a urinary tract infection in the measurement quarter.</p> <p><i>Date of Event: The date when the first clinical evidence (signs/symptoms) of the UTI appeared or the date the specimen used to meet the infection criteria was collected, whichever comes first.</i></p>
Population	All long term residents without an indwelling urinary catheter who are being cared for in the long term facility.
Calculation	<p>Numerator:</p> <p>All residents that develop signs and symptoms of a UTI in the measurement quarter while not having an indwelling catheter in place or removed >2 calendar days prior to the date of event, where day of catheter removal is equal to day 1.</p> <p>Resident must meet criteria (1 OR 2 OR 3) AND criteria 4:</p> <p>CRITERION 1: Either of the following (Signs & Symptoms):</p> <ol style="list-style-type: none"> 1. Acute dysuria 2. Acute pain, swelling, or tenderness of the testes, epididymis, or prostate. <p>CRITERION 2: Either of the following:</p> <ol style="list-style-type: none"> 1. Fever+ [Single temperature $\geq 37.8^{\circ}\text{C}$ ($>100^{\circ}\text{F}$), or $>37.2^{\circ}\text{C}$ ($>99^{\circ}\text{F}$) on repeated occasions, or an increase of $>1.1^{\circ}\text{C}$ ($>2^{\circ}\text{F}$) over baseline] 2. Leukocytosis ($>14,000$ cells/mm³ or Left shift [$>6\%$ or 1,500 bands/mm³]) <p>AND</p> <p>One or more of the following (New and/or marked increase):</p> <ol style="list-style-type: none"> 1. Costovertebral angle pain or tenderness 2. New or marked increase in suprapubic tenderness 3. Gross hematuria 4. New or marked increase in incontinence 5. New or marked increase urgency 6. New or marked increase frequency <p>CRITERION 3: Two or more of the following (New and/or marked increase):</p> <ol style="list-style-type: none"> 1. Costovertebral angle pain or tenderness 2. New or marked increase in suprapubic tenderness 3. Gross hematuria 4. New or marked increase in incontinence 5. New or marked increase in urgency

	<p>6. New or marked increase in frequency</p> <p>CRITERION 4: Either of the following (Laboratory and Diagnostic Testing): 1. Specimen collected from clean catch voided urine and positive culture with no more than 2 species of microorganisms, at least one of which is a bacterium of $\geq 10^5$ colony-forming units (CFU)/ml 2. Specimen collected from in/out straight catheter and positive culture with any number of microorganism, at least one of which is a bacterium of $\geq 10^2$ colony-forming units (CFU)/ml</p> <p><i>+ Fever can be used to meet SUTI criteria even if the resident has another possible cause for the fever (e.g., pneumonia).</i></p> <p><u>Inclusion:</u></p> <ul style="list-style-type: none"> • Only UTI events presenting > 2 calendar days after admission (where date of admission is equal to day 1) are considered facility onset events. • These events can occur in residents without urinary devices or those managed with urinary devices other than indwelling urinary catheters, such as suprapubic catheters, straight in-and-out catheters and condom catheters. <p><u>Exclusion:</u></p> <ul style="list-style-type: none"> • If a resident is transferred from an acute care facility and develops signs/symptoms of a UTI within the first 2 calendar days of admission to the LTCF, it would be considered present at the time of transfer to the LTCF. This case would not be included in the numerator for the LTCF. • Repeated infection for the same type during 14 days from Date of Event <p>Denominator: Non-catheter associated resident-days are calculated by subtracting the catheter days from the total resident days. Total resident days are counted using the daily census of residents in the facility each day of the month and then summing up the daily census for the measurement quarter.</p> <p>Rate calculation: $\text{SUTI incidence rate/1,000 resident-days} = \frac{\text{Number of residents with SUTI}}{[\text{Total resident days} - \text{catheter-days}] \times 1,000}$</p>
Reporting Frequency	Quarterly
Unit Measure	Rate per 1000 long term resident days
International comparison if available	https://www.cdc.gov/nhsn/ltc/uti/index.html https://www.cdc.gov/nhsn/PDFs/LTC/LTCF-UTI-protocol-current.pdf Updated January 2018
Desired Direction	Lower is better
Data Source	Patient medical record

	Laboratory data
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Type: Long Term Care Indicator

Indicator Number: LTC009

KPI Description (title):	Gastroenteritis cases per 1000 resident days
Domain	Outcome
Sub-Domain	Effectiveness/Environment
Definition	Gastroenteritis cases per 1000 long term care resident days.
Population	All long term residents who are being cared for in the long term facility.
Calculation	<p>Numerator: Total number of residents who develop gastroenteritis in the measurement quarter.</p> <p>One of the following criteria must be met: CRITERION 1: Three or more liquid or watery stools above what is normal for the resident within a 24-hour period OR CRITERION 2: Two or more episodes of vomiting in a 24-hour period OR CRITERION 3: Both of the following: a) a stool culture positive for a pathogen (e.g., Salmonella, Shigella, E. coli O157:H7, Campylobacter spp., rotavirus) AND b) at least one of the following symptoms: i) nausea ii) vomiting iii) abdominal pain or tenderness iv) diarrhea</p> <p><u>Inclusion</u></p> <ul style="list-style-type: none"> Only gastroenteritis presenting > 1 calendar days after admission (where date of admission is equal to day 1) is considered facility onset. <p><u>Exclusion:</u></p> <ul style="list-style-type: none"> If a resident is transferred from an acute care facility and develops signs/symptoms of gastroenteritis within the first day of admission or readmission to the LTCF, it would be considered present at the time of transfer to the LTCF. This case would not be included in the numerator for the LTCF. Care must be taken to rule out non-infectious causes of symptoms. For instance, new medication may cause both diarrhea and vomiting; nausea and vomiting may be associated with gallbladder disease; initiation of new enteral feeding may be associated with diarrhea

	<p>Denominator: Total long term resident days in the measurement quarter.</p> <p>Rate Calculation: [numerator / denominator] x 1000</p>
Reporting Frequency	Quarterly
Unit Measure	Rate per 1000 long term resident days
International comparison if available	http://www.publichealthontario.ca/en/eRepository/Surveillance_3-3_ENGLISH_2011-10-28%20FINAL.pdf
Desired Direction	Lower is better
Data Source	Patient Medical Records Laboratory data