The Hong Kong Enterostomal Therapists Association (HKETA) is a professional nursing organization devoted to promote, enhance and share with other health care disciplines the expertise knowledge of Enterostomal Therapy in the provision of quality patient care.

We maintain that Enterostomal Therapists (ET) are qualified nurses who possess specialized Enterostomal Therapy qualification recognized locally and internationally.

- **Enterostomal Therapists** are experts in the provision of care to individuals with abdominal stomas, fistulas, draining wounds, incontinence, decubitus and vascular ulcers.

- **Enterostomal Therapists** are responsible to provide holistic care in order to expedite the physical, psychological, social and spiritual well-being of individuals with special needs, both in the hospital and community.

- **Enterostomal Therapists** are committed to promote Enterostomal Therapy nursing by participating in research, education, and setting and monitoring of the standards of care.

- **Enterostomal Therapists** are competent consultants in supporting who are interested and involved in the Enterostomal Therapy.

- **Enterostomal Therapists** are responsible to continuously enrich their personal and professional development in order to ever improve the care in Enterostomal Therapy.

- **Enterostomal Therapists** are dedicated to share experience and knowledge with other health care team members.
**CODE OF PRACTICE OF ENTEROSTOMAL THERAPISTS**

**Enterostomal Therapists** act to promote and safeguard the rights, interests and well-being of individuals.

- **Enterostomal Therapists** provide the Enterostomal Therapy service with respect for individual’s belief, values, customs and uniqueness; unconditioned by the individual’s race, colour, sex, age, social status and nature of the health problem.

- **Enterostomal Therapists** maintain confidentiality of the individual’s personal information and shares with others only that information relevant to his/her care.

- **Enterostomal Therapists** provide the individual with all relevant information about the choice of products available and its suitability to the individual’s need without prejudice. He/ She should bear in mind the needs and requirements of the individual in the choice of products.

- **Enterostomal Therapists**, when participating in 'trial' of a product, should not be under obligation to persuade the individual or himself/ herself to use the product. He/ She should avoid the use of professional qualifications in the promotion of commercial products.

- **Enterostomal Therapists** refuse to accept any gift, favour or hospitality that might influence the fulfilment of professional roles.

- **Enterostomal Therapists** keep accurate records on all individuals’ consultation in order to maintain an integral part of the service.

- **Enterostomal Therapists** are personally accountable for his/her professional practice and judgment and should recognize any limits of personal knowledge and skill. He/ She takes steps to solve any relevant deficits through the collaborative work among the health care team in order to meet the needs of the individual.

- **Enterostomal Therapists** must uphold and develop own knowledge, skill and competence by keeping in alignment with new developments, theory and practice of Enterostomal Therapy care. He/she must maintain high standard of care and professional conduct at all times.
OBJECTIVES OF ENTEROSTOMAL THERAPY NURSING
IN PRESSURE ULCER CARE

- To identify individuals at risk of developing pressure ulcers.
- To implement pressure ulcer prevention strategies.
- To provide treatment to individuals with pressure ulcers.
- To monitor individuals’ progress and ensure compliance to treatment protocol.
- To detect and manage complications resulting from pressure ulcers.
- To provide education to individuals and related caregivers.
- To provide professional support to policymakers and educators in relation to the development of best practice.
- To work towards quality care by participation in clinical researches and sharing of knowledge with other health care disciplines.
Enterostomal Therapists provide care to individuals with pressure ulcers of all age groups. Therefore Enterostomal Therapists have to demonstrate high standard of professionalism in planning care based on a balance of individual’s needs, best practice evidence and available resources throughout the nursing process. Promoting public awareness and recognition of the service is another crucial component in the specialty. The scope of Enterostomal Therapy nursing in pressure ulcer care covers a wide range of areas as follows:

- Conduct assessment on individuals at risk of developing pressure ulcer(s).
- Provide information to individuals and caregivers regarding skin care, mechanical loading, support surface and nutritional support.
- Attend to individual’s psychological needs and provide counseling as required.
- Perform care to individuals with pressure ulcer as indicated.
- Monitor individual’s progress and facilitate adaptation to treatment modalities.
- Prevent and detect complications of pressure ulcer.
- Perform specific examination and treatment to pressure ulcer complications.
- Implement measures to minimize the reoccurrence of pressure ulcer.
- Educate individuals and caregivers regarding to pressure ulcer care.
- Provide information to individuals concerning the choice of products available and its suitability to individual situation.
- Collaborate with other health care disciplines in delivering individualized and holistic care.
- Provide professional consultation to other health care team members in relation to pressure ulcer care.
- Liaise with health care administrators in relation to policy development.
- Participate in clinical audit and continuous quality improvement programmes to uphold the standard of pressure ulcer care.
- Conduct clinical research to enhance evidence-based nursing management of pressure ulcer.
- Enhance the advancement of pressure ulcer care through dissemination and translation of research findings into practice.
The aim of Enterostomal Therapy nursing in the domains of pressure ulcer care provision falls into 5 aspects:

- Empowering individuals and their caregivers regarding pressure ulcer prevention and management,
- Facilitating individuals’ rehabilitation and attainment of a high quality of life,
- Confining the incidence and prevalence of pressure ulcers,
- Ensuring effective allocation of resources and minimizing the negative effects of pressure ulcer on health care system,
- Fostering integration of research findings in clinical practice.

These are achieved through the provision of comprehensive support to individuals suffering from pressure ulcers or at risk of developing pressure ulcers and their families. Enterostomal Therapists provide holistic care to this subgroup of the population in hospitals, clinics and the community. The provision of care can be categorized into 3 domains.

**Primary Care Domain**
Primary care aims at early identification of individuals at-risk of developing pressure ulcers and prevention of pressure ulcer formation with the use of evidence-based risk assessment tools and clinical practice guidelines. This involves the introduction of pressure ulcer prevention programmes in both clinical settings as well as in the community (e.g. homecare, nursing homes, rehabilitation centres) to arouse the awareness of individuals and their caregiver. Well-structured education sessions, discharge plans and establishment of professional and general public information databases are the key elements in this domain. The service is provided in collaboration with other disciplines and available community resources, such as community nursing services.

**Secondary Care Domain**
Secondary care focuses on the provision of specialized pressure ulcer management in the institutional settings. It includes reduction or elimination of tissue interface pressure, provision of support for optimum wound healing, selection of appropriate wound care products according to individual needs, evaluation of education on prevention of pressure ulcer complications and early detection of such condition.

**Tertiary Care Domain**
Tertiary care includes the nursing management of complicated pressure ulcers, such as the management of infection or pressure ulcers with prolonged healing time. It requires the provision of accurate assessment, intensive physical and psychosocial interventions and support from advanced technology. In this connection, contemporary pressure ulcer care mandates adoption of the best available scientific evidence. Therefore, Enterostomal Therapists are also committed to research activities on pressure ulcer which inform clinical facilitate decision makings.
HKETA STANDARDS IN PRESSURE ULCER PREVENTION

Risk Assessment

Standard Statement
Individual at risk of pressure ulcer development is identified.

Process Standard
1. Ensure privacy of individual.
2. Maintain an environment conducive to the procedure (warmth, good lighting).
3. Explain the reason and procedure to individual (and/ or caregiver).
4. Position individual to facilitate the procedure.
5. Conduct assessment on individual (and/ or caregiver) regarding the following aspects:
   5.1. Physical and psychosocial condition.
   5.2. Nutrition and hydration status.
   5.3. Skin condition (e.g. presence of diaphoresis/ incontinence) and skin care practice.
   5.4. Past pressure ulcer prevention strategy and care plan.
   5.5. Knowledge regarding pressure ulcer prevention.
   5.6. Financial status and availability of resource/ assistive personnel.
6. Assess individual with a valid pressure ulcer risk assessment tool.
7. Identify individual at risk of developing pressure ulcer.
8. Reassess individual at regular intervals and when individual’s condition changes.

Outcome Standard
1. Individual (and/ or caregiver) understands the significance of risk assessment.
2. Individual at risk of developing pressure ulcer(s) is identified.
3. Individual risk factors for pressure ulcer development are identified.
4. Risk assessment tool is utilized correctly.
5. Accurate records are maintained.

Equipment to be utilized for the procedure
1. Risk assessment tool.
2. Progress record.
Skin Care

Standard Statement
Individual’s skin integrity is maintained and optimized to prevent injury by excessive dryness, irritation or moisture due to incontinence and perspiration.

Process Standard
1. Ensure privacy of individual.
2. Maintain an environment conducive to the procedure (warmth, good lighting).
3. Explain the reason and procedure to individual (and/or caregiver).
4. Inspect the skin for the following abnormalities:
   4.1. Dryness.
   4.2. Cracking.
   4.3. Scaling.
   4.4. Erythema.
   4.5. Maceration.
   4.6. Fragility.
   4.7. Temperature change.
   4.8. Induration.
5. Conduct skin assessment on at-risk individual at regular intervals, at least once daily, with special attention to bony prominences.
6. Cleanse skin gently with non-irritant cleansing agent:
   6.1. At the time of soiling and at regular intervals.
   6.2. Avoid excessive rubbing or massage.
   6.3. Avoid water of extreme temperature.
7. Treat dry skin with moisturizers.
8. Minimize skin exposure to urine and/or faeces with the use of continence care products.
9. Implement bladder or bowel training programme as indicated.
10. Provide written instructions and care plan to individual (and/or caregiver).

Outcome Standard
1. Skin integrity of at-risk individual is maintained and optimized.
2. Individualized program of skin care is developed and implemented.
3. Abnormalities in skin condition are detected and treated.
4. Accurate records are maintained.

Equipment to be utilized for the procedure
1. Skin care products.
2. Continence care products.
3. Progress record.
HKETA STANDARDS IN PRESSURE ULCER PREVENTION

Mechanical Loading

Standard Statement
Individual at risk of pressure ulcer development is protected against the adverse effects of external mechanical forces.

Process Standard
1. Ensure privacy of individual.
2. Maintain an environment conducive to the procedure (warmth, good lighting).
3. Explain the reason and procedure to individual (and/or caregiver).
4. Reposition at-risk individual at regular intervals (2 hourly or according to protocol of individual institution).
5. Apply positioning devices and pressure relieving devices to reduce pressure on bony prominences according to the risk level of individual.
6. Ensure body parts and bony prominences are not in direct contact with one another during positioning.
7. Avoid direct side-lying on individual’s trochanter when repositioning.
8. Maintain the head of bed at a degree of elevation which minimize the effect of shearing.
9. Use lifting devices to move individual during transfer and position changes as required.
10. Implement mobilization/exercise programme for individual with limited mobility.
11. Position at-risk individual in proper postural alignment, distribution of weight, balance and stability when sitting out of bed.
13. Apply pressure reducing device for chair-bound individual.
14. Avoid appliance which increase pressure loading on bony prominence (e.g. rubber air-ring, donut).
15. Apply protective dressings to high-risk areas.
16. Provide written instructions and care plan to the individual (and/or caregiver).
17. Monitor effectiveness of interventions and functioning of devices at regular intervals and make adjustments accordingly.
18. Document and report individual’s response to the interventions.

Outcome Standard
1. The adverse effects of pressure, friction and shearing force will be eliminated or minimized.
2. Skin integrity of at-risk individual is maintained and optimized.
3. Appropriate interventions are carried out according to individual’s risk assessment results and protocol of the institution.
4. Care plan is drawn and reviewed at regular intervals.
5. Accurate records are maintained.

Equipment to be utilized for the procedure
1. Lifting and transfer devices (e.g. transfer board, lifting hoist).
2. Protective dressing materials.
3. Progress record.
HKETA STANDARDS IN PRESSURE ULCER PREVENTION

Support Surfaces

**Standard Statement**
Individual at risk of developing pressure ulcer is placed on pressure-reducing devices/pressure-relieving devices to avoid excessive pressure.

**Process Standard**
1. Ensure privacy of individual.
2. Maintain an environment conducive to the procedure (warmth/good lighting).
3. Explain the reason and usage of support surface to individual (and/or caregiver).
4. Select and apply appropriate pressure-reducing/pressure-relieving devices according to individual’s pressure ulcer risk assessment result and availability of device in the institution.
5. Monitor effectiveness of the interventions at regular intervals and adjust as indicated.
6. Reposition individual on support surface at regular interval if independent turning is jeopardized.
7. Document and report individual’s response to the interventions.
8. Collaborate with other disciplines in treatment plan as indicated.
9. Ensure proper cleansing and maintenance of the devices after use and at regular intervals.

**Outcome Standard**
1. Excessive pressure is reduced/relieved with appropriate devices.
2. Pressure-reducing/pressure-relieving devices are applied according to individual’s risk assessment results and availability in the institution.
3. Pressure-reducing/pressure-relieving devices are utilized correctly according to manufacturer’s instruction manual.
4. Skin integrity of at-risk individuals is maintained and optimized.
5. Accurate records are maintained.

**Equipment to be utilized for the procedure**
1. Pressure-reducing/pressure-relieving devices.
2. Progress record.
3. Pressure ulcer risk assessment record.
HKETA STANDARDS IN PRESSURE ULCER PREVENTION

Nutritional Intervention

**Standard Statement**
Individual’s nutrition and hydration status are optimised and maintained to reduce risk of pressure ulcer development.

**Process Standard**
1. Ensure privacy of individual.
2. Explain to individual (and/ or caregiver) the relationship between pressure ulcer formation and balanced nutrition and hydration.
3. Assess individual’s nutrition and hydration status, examples of which are:
   3.1. Clinical indicators (e.g. bowel sound, condition of skin and mucosal membrane, bowel elimination).
   3.2. Trend of body weight and/ or body mass index changes.
   3.3. Current intake and output balance.
   3.4. Laboratory results (e.g. serum albumin, protein, lymphocyte level).
   3.5. Protein and caloric intake.
   3.6. Need for supplementary diet/ nutrition.
4. Obtain and record individual’s history of food allergy.
5. Formulate a nutritional plan and implement measures to achieve adequate oral intake.
6. Provide written instructions and care plan to individual (and/ or caregiver).
7. Review individual’s response to nutritional intervention.
8. Consult dietitian for assessment and intervention if oral intake is inadequate.
9. Administer nutritional supplement as prescribed.
10. Administer enteral feeding or parenteral nutrition as prescribed.
11. Monitor for the effect and unwanted effects of enteral feeding or parenteral nutrition.

**Outcome Standard**
1. Targeted body weight will be achieved and maintained.
2. Individual's nutrition and hydration requirement will be met.
3. Individual will be free of complications from tube feeding/ parenteral nutrition.
4. Accurate records are maintained.

**Equipment to be utilized for the procedure**
2. Intake and output record.
3. Progress record/ laboratory results.
4. Information pamphlets.
5. Weighing scale.
Education for the Individual

Standard Statement
Individual (and/or caregiver) receives education on prevention of pressure ulcer.

Process Standard
1. Ensure privacy of individual.
2. Assess individual (and/or caregiver) regarding the following perspectives:
   2.1. Coping mechanism.
   2.2. Motivation and concerns.
   2.3. Learning needs and ability.
   2.4. Knowledge and practice on skin care and pressure ulcer prevention.
   2.5. Understanding and ability to comply with the care plan.
   2.6. Availability of resource and support.
3. Implement education program according to individual’s ability and needs.
4. Provide written information, demonstration and care plan to individual (and/or caregiver) as required.
5. Ensure individual (and/or caregiver) knows and understands the following aspects:
   5.1. Risk factors which lead to pressure ulcer development.
   5.2. Common pressure points of human body.
   5.3. Positioning and weight-shifting technique.
   5.4. Selection and use of appropriate pressure-reducing/pressure-relieving devices.
   5.5. Measures to monitor and enhance nutrition and hydration status.
   5.6. Access to consult Enterostomal Therapist for professional advices and care.
   5.7. Access to available resource/financial support as indicated
6. Evaluate individual’s (and/or caregiver’s) understanding and response to the education program.

Outcome Standard
1. Individual (and/or caregiver) verbalizes understanding of risk factors for pressure ulcer development.
2. Individual (and/or caregiver) is able to demonstrate correct techniques in turning and repositioning to prevent pressure ulcer development.
3. Individual (and/or caregiver) demonstrates the use of pressure-reducing devices/pressure-relieving devices correctly.
4. Individual (and/or caregiver) verbalizes understanding of significance of balanced nutrition and adequate hydration.
5. Individual (and/or caregiver) is satisfied with the education program.

Equipment to be utilized for the procedure
1. Teaching aids.
2. Information pamphlets.
3. Product suppliers information leaflet.
4. Progress record.
HKETA STANDARDS IN PRESSURE ULCER PREVENTION

Health Care Team Education

Standard Statement
Education on prevention of pressure ulcer is provided to members of the health care team.

Process Standard
1. Assess the existing knowledge of health care team members responsible for pressure ulcer prevention.
2. Formulate a teaching program. Topics are dictated by member’s needs, role in the team and knowledge background. Examples of area include:
   2.1. Risk factors which lead to pressure ulcer development.
   2.2. Pathophysiology of pressure ulcer formation.
   2.3. Risk assessment tools/ protocols.
   2.4. Skin care protocols.
   2.5. Positioning and weight-shifting technique.
   2.6. Selection and use of appropriate pressure-reducing/ pressure-relieving devices.
   2.7. Measures to monitor and enhance nutrition and hydration status.
   2.8. Access to consult Enterostomal Therapist for professional advice.
3. Implement the teaching program with appropriate teaching strategy (e.g. practical demonstration sessions, workshops, seminars, group discussion).
4. Provide written instructions as required.
5. Conduct evaluation on the teaching program with health care team members.
6. Reinforce information in the education program as required.
7. Review and update information in the education program at regular intervals.

Outcome Standard
1. Members of the health care team demonstrate adequate knowledge in pressure ulcer risk assessment.
2. Members of the health care team demonstrate adequate knowledge in caring of patients at risk of developing pressure ulcers.
3. Members of the health care team are satisfied with the education program.

Equipment to be utilized for the procedure
1. Teaching aids.
2. Written instruction and guidelines on pressure ulcer prevention.
3. Information sheet and/ or user manuals on pressure-reducing devices/ pressure-relieving devices.
HKETA STANDARDS IN PRESSURE ULCER MANAGEMENT

Pressure Ulcer Assessment

Standard Statement
Adequate information is obtained to plan care of pressure ulcer in conjunction with the individual (and/or caregiver).

Process Standard
1. Ensure privacy of individual.
2. Maintain an environment conducive to the procedure (warmth, good lighting).
3. Explain the reason and procedure to individual (and/or caregiver).
4. Conduct assessment on individual (and/or caregiver) regarding the following aspects:
   4.1. Age.
   4.2. Presence of concurrent diseases and medications in use.
   4.3. Activity and mobility level.
   4.4. Sensory function.
   4.5. Systemic and local tissue perfusion.
   4.7. Skin condition (e.g. presence of diaphoresis/incontinence) and skin care practice.
   4.8. Psychosocial status (e.g. mental state/coping mechanism).
   4.9. Understanding and compliance with pressure ulcer prevention and/or treatment plan.
   4.10. Financial status and availability of resource/assistive personnel.
5. Position individual to facilitate assessment of pressure ulcer.
6. Conduct assessment on pressure ulcer regarding the following aspects:
   6.1. Anatomical location and involvement of anatomical structures.
   6.2. Shape.
   6.3. Size (length, width, depth and surface area).
   6.4. Staging with reference to 4-stage system.
   6.5. Exudates (type, amount, consistency, odour).
   6.6. Granulation tissue (characteristic, amount, location).
   6.7. Sign of epithelialization.
   6.8. Condition of surrounding skin area.
   6.9. Necrotic tissue (type, amount, location).
   6.10. Undermining/sinus tract.
   6.11. Signs and symptoms of local and/or systemic infection.
7. Reassess at regular intervals and when individual or pressure ulcer deteriorates.

Outcome Standard
1. Adequate information on individual’s condition and pressure ulcer is recorded.
2. Pressure ulcer is staged according to 4-stage system.
3. Individual factor for pressure ulcer development will be identified.
4. Abnormalities are reported for medical/surgical interventions as indicated.
5. Individualized care plan is drawn.

Equipment to be utilized for the procedure
1. Ruler/measuring guide.
2. Progress record.
HKETA STANDARDS IN PRESSURE ULCER MANAGEMENT

Pressure Ulcer Care

Standard Statement
Optimal care is provided to individual with pressure ulcer(s).

Process Standard
1. Ensure privacy of individual.
2. Maintain an environment conducive to the procedure (warmth, good lighting).
3. Explain the reason and procedure to individual (and/ or caregiver).
4. Obtain and record individual’s history of allergy.
5. Position individual to facilitate the procedure.
6. Administer analgesic as prescribed.
7. Conduct assessment on pressure ulcer status.
8. Manage open pressure ulcer wound with special consideration in the following aspects:
   8.1. Wound cleansing process.
   8.2. Necessity/ suitability of debridement.
   8.3. Prevention/ management of infection.
   8.4. Selection and application of topical agent and dressing.
9. Institute measures which support healing of pressure ulcer:
   9.1. Avoid positioning on pressure ulcer.
   9.3. Reduce excessive moisture due to incontinence or sweating.
   9.4. Eliminate/ minimize effect of shear and friction.
   9.5. Apply pressure-reducing/ pressure-relieving devices (if not already utilized) according to result of pressure ulcer assessment and availability of device in individual institution.
   9.6. Review position change schedule to meet individual need.
   9.7. Optimize individual’s nutrition and hydration status.
10. Protect pressure ulcer from external source of contamination.
11. Evaluate effectiveness of interventions at regular interval and when individual’s condition changes. Modify care plan as indicated.
12. Collaborate with other discipline (e.g. doctor, occupational therapist, physiotherapist, dietitian) in the treatment plan as indicated.

Outcome Standard
1. Factors which promote pressure ulcer healing are optimized.
2. Pressure ulcer progress compatible with individual’s underlying medical condition is observed.
3. Individual (and/ or caregiver) verbalizes understanding of the etiologic factors and process of pressure ulcer development.
4. Individual (and/ or caregiver) verbalizes understanding and complies to care plan.
5. Accurate records are maintained.

Equipment to be utilized for the procedure
1. Dressing equipment.
2. Dressing materials.
3. Analgesic.
4. Progress record.
HKETA STANDARDS IN PRESSURE ULCER MANAGEMENT

Debridement

Standard Statement
Loose necrotic tissue in the pressure ulcer is removed by debridement to promote healing and prevent infection.

Process Standard
1. Ensure privacy of individual.
2. Maintain an environment conducive to the procedure (warmth, good lighting).
3. Explain the reason and procedure to individual (and/ or caregiver).
4. Obtain informed consent from individual (and/ or individual’s guardian) for debridement with sharps.
5. Obtain and record individual’s history of allergy.
6. Position individual to facilitate the procedure.
7. Administer analgesic as required.
8. Assess the pressure ulcer and select the method of debridement most consistent with individual’s condition and treatment objective.
9. Apply appropriate topical agent/ dressing to pressure ulcer after the procedure.
10. Evaluate the effectiveness of debridement at regular intervals and modify care plan as indicated.
11. Repeat debridement at each dressing change until the wound is free of necrotic tissue.
12. Monitor for and provide treatment to complications of debridement (e.g. bleeding).
13. Implement measures which support healing of pressure ulcer after debridement:
   13.1. Avoid positioning on pressure ulcer.
   13.3. Eliminate or minimize effect of shear and friction.
   13.4. Apply pressure-reducing/ pressure-relieving devices (if not already utilized) according to result of pressure ulcer assessment and availability in the institution.
   13.5. Optimize individual’s nutrition and hydration status.
14. Protect pressure ulcer from external source of contamination.
15. Collaborate with other discipline (e.g. doctor, occupational therapist, physiotherapist, dietitian) for further interventions as indicated.

Outcome Standard
1. Debridement is carried out in a safe and effective manner.
2. Pressure ulcer healing is optimized with removal of loose necrotic tissue.
3. Individual is free from complications associated with debridement.
4. Accurate records are maintained.

Equipment to be utilized for the procedure
1. Dressing equipment.
2. Dressing materials.
3. Debridement agent (if applicable).
4. Analgesic.
5. Progress record.
HKETA STANDARDS IN PRESSURE ULCER MANAGEMENT

Management of Infected Pressure Ulcer

**Standard Statement**
Infection in pressure ulcer is detected and eradicated.

**Process Standard**
1. Ensure privacy of individual.
2. Maintain an environment conducive to the procedure (warmth, good lighting).
3. Explain the reason and procedure to individual (and/or caregiver).
4. Employ standard precaution measures according to infection control policy.
5. Assess pressure ulcer for the presence of local signs and symptoms of infection (e.g. advancing cellulitis, induration, purulent discharge, offensive odour).
6. Assess individual for the presence of systemic signs and symptoms of infection (e.g. hyperthermia, tachycardia, leukocytosis, confusion/altered mental state).
7. Obtain specimen for culture and sensitivity test as indicated.
8. Perform cleansing of pressure ulcer with special consideration in the following areas:
   8.1. Selection of wound cleansing lotion.
   8.2. Wound cleansing process.
   8.3. Debridement of infected necrotic tissue.
   8.4. Selection and application of dressing.
9. Refrain from the use of occlusive dressing.
10. Protect pressure ulcer from external source of contamination.
11. Optimize individual’s nutrition and hydration status.
12. Evaluate effectiveness of interventions at regular intervals and when client’s condition changes.
13. Monitor for complications developed from infected pressure ulcer (e.g. osteomyelitis).
14. Administer topical and/or systemic antimicrobial(s) as prescribed.
15. Consult doctor for surgical interventions as indicated.
16. Dispose soiled dressings according to infection control guideline.

**Outcome Standard**
1. Infection in pressure ulcer is controlled or eradicated with interventions.
2. Infection control policy is strictly adhered.
3. Individual (and/or caregiver) verbalizes understanding of the disease process.
4. Individual (and/or caregiver) demonstrates compliance to the care plan.

**Equipment to be utilized for the procedure**
1. Dressing equipment.
2. Dressing materials.
3. Progress record.
HKETA STANDARDS IN PRESSURE ULCER MANAGEMENT

Pain Management

Standard Statement
Individual experiences diminished pain associated with pressure ulcer(s).

Process Standard
1. Ensure privacy of individual.
2. Assess individual’s verbal and non-verbal signs of pain (e.g. reluctance to move, wrinkled brow, guarding of affecting body part, tachycardia).
3. Measure individual’s severity of wound pain with a valid pain assessment tool according to guideline of individual institution.
4. Assess for factors which aggravate or alleviate wound pain.
5. Obtain and record individual’s history of allergy.
6. Implement measures to reduce pain generated from pressure ulcer(s):
   6.1. Provide reassurance to individual (and/ or caregiver).
   6.2. Provide emotional support during wound dressing change.
   6.3. Moisten wound dressing before removal.
   6.4. Position individual to avoid direct pressure on the pressure ulcer.
   6.5. Gather adequate assistance when turning and transferring individual.
   6.6. Provide non-pharmacological measures for pain relief (e.g. restful environment, diversional therapy).
7. Consult physiotherapist and occupational therapist for measures to reduce muscle spasms and contractures which increase pain.
10. Evaluate individual’s response to interventions at regular interval.
11. Encourage participation from individual (and/ or caregiver) in care plan.

Outcome Standard
1. Pain associated with pressure ulcer(s) is under control.
2. Individual (and/ or caregiver) verbalizes understanding and satisfaction with pain control interventions.
3. Non-therapeutic effects of the analgesic are detected early with appropriate actions taken.

Equipment to be utilized for the procedure
1. Pain Assessment Tool.
2. Analgesic.
3. Progress record.
HKETA STANDARDS IN PRESSURE ULCER MANAGEMENT

Education for the Individual

Standard Statement
Individual (and/or caregiver) receives education on care of pressure ulcer.

Process Standard
1. Ensure privacy of individual.
2. Assess individual (and/or caregiver) regarding the following perspectives:
   2.1. Coping mechanism.
   2.2. Motivation and concerns.
   2.3. Learning needs and ability.
   2.4. Knowledge in care of pressure ulcer.
   2.5. Understanding and ability to comply with treatment plan.
   2.6. Availability of resource and support.
3. Implement education program according to individual needs.
4. Ensure individual (and/or caregiver) knows and understands the following aspects:
   4.1. Common pressure points of human body.
   4.2. Etiologic factors which lead to pressure ulcer development.
   4.3. Measures to facilitate healing of pressure ulcer(s).
   4.4. Clinical indicators of pressure ulcer healing.
   4.5. Abnormalities of pressure ulcer(s) to report.
   4.6. Positioning and weight-shifting technique.
   4.7. Selection and use of appropriate pressure-reducing/ pressure-relieving devices.
   4.8. Measures to monitor and enhance nutrition and hydration status.
   4.9. Access to consult enterostomal therapist for professional advice and care.
   4.10. Access to apply for resource/ financial support as indicated.
5. Evaluate individuals (and/or caregiver’s) understanding and response to the education program.
6. Provide written information and care plan to individual (and/or caregiver).

Outcome Standard
1. Individual (and/or caregiver) verbalizes understanding of etiologic factors for pressure ulcer development.
2. Individual (and/or caregiver) verbalizes understanding of abnormalities to report.
3. Individual (and/or caregiver) is able to demonstrate correct techniques in turning and repositioning to enhance pressure ulcer healing.
4. Individual (and/or caregiver) demonstrates the use of pressure-reducing devices/ pressure-relieving devices correctly.
5. Individual (and/or caregiver) verbalizes understanding of balanced nutrition and adequate hydration.
6. Individual (and/or caregiver) is satisfied with the education program.

Equipment to be utilized for the procedure
1. Teaching aids.
2. Information sheets/ pamphlets.
3. Product suppliers information leaflet.
4. Progress record.
HKETA STANDARDS IN PRESSURE ULCER MANAGEMENT

Health Care Team Education

Standard Statement
Education on pressure ulcer management is provided to members of the health care team.

Process Standard
1. Assess the existing knowledge of health care team members responsible for pressure ulcer management.
2. Formulate a teaching program. Topics are dictated by member’s needs, role in the team and knowledge background. Examples of area include:
   2.1. Etiologic factors which lead to pressure ulcer development.
   2.2. Management of pressure ulcer(s).
   2.3. Abnormalities of pressure ulcer(s) to report.
   2.4. Positioning and weight-shifting technique.
   2.5. Selection and use of appropriate pressure reducing/ pressure relieving devices.
   2.6. Measures to monitor and enhance nutrition and hydration status.
   2.7. Access to consult Enterostomal Therapist for professional advice and care.
3. Implement the teaching program with appropriate teaching strategy (e.g. practical demonstration sessions, workshops, seminars, group discussion).
4. Provide written instructions as required.
5. Conduct evaluation on the teaching program with health care team members.
6. Reinforce information in the education program as necessary.
7. Review and update information in the education program at regular intervals.

Outcome Standard
1. Members of the health care team demonstrate adequate knowledge related to the caring of patients with pressure ulcer(s).
2. Members of the health care team are satisfied with the education program.

Equipment to be utilized for the procedure
1. Teaching aids.
2. Written instruction/ guidelines on pressure ulcer management.
3. Information sheet and/ or user manuals on pressure reducing devices/ pressure relieving devices.
GLOSSARY

• **Blanchable Erythema**
  Blanchable erythema is described as an area of redness which turns white or pallor when pressure is applied. It indicates the compensatory mechanism of tissue to the external pressure which creates an ischaemic insult. The response is usually transient and does not lead to tissue loss.

• **Cellulitis**
  A diffuse inflammatory process of tissue commonly presenting redness, swelling and tenderness. It may occur around a lesion and indicates a spreading infection.

• **Debridement**
  Debridement is defined as the removal of non-viable tissue from a wound. It is an essential component of wound bed preparation and can be classified into 4 types:
  1. Sharp/ Surgical debridement – Accomplished with the use of scalpel or scissors. Provides rapid removal of non-viable tissue and can be used in conjunction with other topical therapy to enhance effect. Conservative sharp debridement can be performed by Enterostomal Therapists at bedside according to individual institution’s policy while extensive surgical debridement is performed by surgeons in operation theatre.
  2. Enzymatic debridement – Using topical enzymatic agents (e.g. collagenase, proteinase) to break down necrotic tissue chemically. It is a slow process and is unsuitable for infected wound. Viable tissue is spared.
  3. Mechanical debridement – Non-selective debriding technique which remove both necrotic tissue and healthy tissue. May associate with pain. Common methods include wet-to-dry dressings, hydrotherapy and wound irrigation.
  Enterostomal Therapists bear the responsibility to perform or recommend the most appropriate type of debridement consistent with the wound condition and treatment goal.

• **Enterostomal Therapist**
  Enterostomal Therapist (ET) is a registered nurse who has received recognized specialty training in the care of individuals with problems associated with stomas, wounds or incontinence. Such trainings include those overseas and local Enterostomal Therapy Nursing Education Programmes (ETNEP) held by various institutes and educational bodies. In-service Enterostomal Therapists are also commonly called “Stoma Care Nurses” and they are responsible for care provision from primary to tertiary domain of pressure ulcer care as appointed by individual institutions.

• **Epithelialization**
  Regeneration of the epithelium across a denuded surface as the wound heals.

• **Erythema**
  Redness of the skin surface which is usually associated with capillary congestion or vasodilatation. Pressure-induced erythema may be further classified as blanchable and non-blanchable.
• **Exudate**  
Any wound fluid resulted from a physiological process or a disease condition. It may contain serum, cellular debris, bacteria and leukocytes.

• **Friction**  
The mechanical force exerted on the skin when moving or rubbing against another surface. Friction causes superficial skin damage and is commonly seen in restless patients or when patients are being dragged in beds.

• **Granulation Tissue**  
Tissue resulted from the formation or growth of small blood vessels and connective tissue which fills an open full-thickness wound. Granulation tissue is usually red and moist with an uneven granular appearance.

• **Induration**  
Abnormal hardening of tissue with a definite margin as a result of pathological change in its texture.

• **Leukocytosis**  
Increase in the number of white blood cells in blood. An increase exceeding 10,000/mm$^3$ usually indicates a pathological condition.

• **Mechanical Loading**  
The contribution of mechanical forces – i.e. pressure, friction and shear – to the development of pressure ulcers. (AHCPR, 1992)

• **Necrotic Tissue**  
Devitalized tissue which is commonly brown or black in colour. It slows wound healing and promotes bacterial growth.

• **Non-blanchable Erythema**  
Reddened area that remains red when pressure is applied. It indicates a stage I pressure ulcer.

• **Occlusive Dressing**  
Dressings which consistently retain moisture within the wound by altering the natural process of moisture vapour evaporation. Occlusive dressings are contraindicated for use in infected wounds.

• **Pain Assessment tool**  
Validated instrument which is utilized to assess and measure the presence and/or severity of pain. Examples are numeric rating scale or facial expression scale.

• **Pressure Point**  
Pressure points are areas overlying bony prominences in a human body and are common sites of pressure ulcer development.

• **Pressure-Reducing Device**  
Pressure-reducing devices are support surfaces which lower interface pressure as compared to standard hospital mattress or chair surface but do not consistently reduce pressure below capillary closing pressure. Examples of pressure reducing
devices are gel-filled overlay, static overlay, dynamic overlay and replacement mattress.

- **Pressure-Relieving Device**
  Pressure-relieving devices are support surfaces which are able to consistently reduce interface pressure below capillary closing pressure. They are recommended for use on individuals who are unable to turn independently or who have skin breakdown on multiple surfaces. Examples of pressure relieving device are air-fluidized bed and low-air-loss bed.

- **Pressure Ulcer**
  Any lesion caused by unrelieved pressure, shear, friction and/or a combination of these. The result is localized tissue ischaemia and subsequent damage of the skin and underlying tissue. Pressure ulcer is also commonly referred to as pressure sore or bedsore in clinical settings.

- **Pressure Ulcer Risk Assessment**
  Assessment conducted to identify individuals at risk of developing pressure ulcer(s). To offers a more accurate and systematic assessment, it should be carried out with a validated pressure ulcer risk assessment tool.

- **Pressure Ulcer Risk Assessment Tools**
  Instruments which facilitate conduction of pressure ulcer risk assessment. They also provide information on the extent of specific risk factors. These tools vary in the ease of use, reliability and predictive validity. Therefore, they should not replace clinical judgement. Examples of pressure ulcer risk assessment tools include Braden Scale, Waterlow Scale, Gosnell Scale and Norton Scale.

- **Protective Dressing**
  Dressing applied to high-risk areas for the purpose of reduction of surface friction and shear against the skin. Examples of protective dressing are transparent films and hydrocolloid dressings.

- **Shear**
  Shear is resulted from the combination of gravity and friction. It causes disruption or angulation of vasculature when tissue layers slide against one another. Damage at the deeper fascial level of the tissue may occur.

- **Staging**
  Classification of pressure ulcer according to the degree of tissue damage observed. A frequently cited staging system, the 4-stage system, derived by the National Pressure Ulcer Advisory Panel (NPUAP), classifies pressure ulcers as follows:
  1. **Stage I** – An observable pressure related alteration of intact skin whose indicators as compared to the adjacent or opposite area on the body may include changes in one or more of the following: skin temperature (warmth or coolness), tissue consistency (firm or boggy feel) and/or sensation (pain, itching). The ulcer may appear as a defined area of persistent redness in lightly pigmented skin, whereas in darker skin tones, the ulcer may appear with persistent red, blue, or purple hues.
  2. **Stage II** – Partial thickness skin loss involving epidermis, dermis, or both. The ulcer is superficial and presents clinically as an abrasion, blister or shallow crater.
3. Stage III – Full thickness skin loss involving damage to, or necrosis of, subcutaneous tissue which may extend down to, but not through, underlying fascia. The ulcer presents clinically as a deep crater with or without undermining of adjacent tissue.

4. Stage IV – Full thickness skin loss with extensive destruction, tissue necrosis or damage to muscle, bone or supporting structure (e.g. tendon, joint capsule). Undermining and sinus tracts may also be associated with Stage IV pressure ulcers.

Staging is not possible in pressure ulcer covered with eschar or necrotic tissue and healing pressure ulcer should not be reversely staged.

- **Support Surface**
  Support surfaces refer to special beds, mattresses, mattress overlays, or seat cushions that reduce or relieve pressure while sitting or lying. (AHCPR, 1992)

- **Topical Agent**
  Topical agent refers to wound care product which can be placed in a wound and left in-situ for a given period of time to achieve its designated therapeutic effect(s).

- **Undermining**
  Tissue destruction to the margin of pressure ulcer underlying intact skin. It is usually caused by shearing force.

- **Wound Cleansing Lotion**
  Wound cleansing lotions are solutions which can be utilized for wound cleansing purpose. They include antiseptic agents (e.g. chlorhexidine gluconate 0.05%, povidone iodine 1%, hydrogen peroxide) and solutions without antimicrobial effect (e.g. normal saline). Choice of wound cleansing lotion is predominantly determined by wound type and bacterial loading in the wound. Normal saline is appropriate for cleansing of most pressure ulcers. Commercial wound cleansers may also be used in selected circumstances. Tap water in Hong Kong is inappropriate for wound cleansing as its quality varies in different settings.

- **Wound Cleansing Process**
  Wound cleansing is an essential part in wound management. It aids in preparing the wound bed for the healing process by removing debris, metabolic wastes and bacteria in the wound. It should be carried out after initial assessment and at each dressing change. Gentle cleansing with minimal mechanical force should be applied if gauze or sponges are utilized for such purpose. Pressurized irrigation (with irrigation pressure between 4 to 15 psi) is preferred for preservation of newly granulating tissue and better removal of wound debris and bacteria.
REFERENCES


