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Training and assessment information

Welcome
Welcome to your course and Premium Health. The aim of this resource is to provide the essential knowledge and skills you require to effectively assist clients with daily management of a stoma and provide an overall awareness of the individual’s condition relating to the stoma.

Helping you to succeed in your course
We believe learning should be an enjoyable and challenging process and we understand that each learner is different. A variety of methods such as class participation, group discussion, scenarios, workbook exercises and opportunities for practice will help you to achieve competency.

We select our Premium Health trainers and assessors carefully. All are nurses or paramedics with appropriate qualifications, technical expertise and experience in both education and emergency first aid and in the disability or health care sector. This enables them to provide you with quality training which is grounded in experience and knowledge of the field.

Learning outcomes
On completion of this course you will be able to:

- Recognise the different components of the digestive system
- Recognise the different ostomy and stomal positions
- Identify specific management requirements for clients with an ostomy (drainage, dietary requirements etc.)
- Demonstrate how to safely change an ostomy bag, including observing infection control precautions
- Demonstrate a safe cleaning regime of the stoma
- Discuss and explain how to successfully trouble shoot common problems that occur in clients with an ostomy
- Identify standard precaution procedures required for managing bodily fluids

Statement of Participation
A Statement of Participation will be issued upon successful achievement of the assessment tasks in this non-accredited course.

Evaluation of the course
A student feedback form is provided at the back of the workbook. Your feedback is important to us as we use this as part of our continuous improvement cycle. Please complete the form at the end of your course.

Premium Health’s customer service
We offer you an on-going service in relation to course information and invite you to call our office on 1300 72 12 92 or email us on info@premiumhealth.com.au.

For more information about Premium Health specialised health and first aid courses, products, services and policies, access our website www.premiumhealth.com.au
The digestive system (gut) is a tube that goes from the mouth through the chest and abdomen to the anus. It is divided into several sections, each of which has a specialised function. Two other organs are closely involved in digestion, the liver and pancreas. They are attached to the gut by small tubes. These tubes carry the bile and enzymes made by the liver and pancreas to mix with food and break it into particles that can be absorbed.

The digestive system breaks down food and delivers nutrients to every cell in the body via the bloodstream. Food, fluid and waste products are pushed along the gut by muscular contractions in the wall which are called ‘peristalsis’. The time taken for food to go from the mouth to the anus varies from 12 to 48 hours, depending on the type of food eaten.

Mouth
This is the beginning of the digestive process, where food is chewed and broken down into pieces that can be swallowed.

Oesophagus
The oesophagus is the tube that connects the mouth to the stomach. Muscle contractions in the oesophagus push food gently down into the stomach. There is a valve between the oesophagus and the stomach which prevents reflux (backwards movement) of acid and food back up into the oesophagus.

Stomach
The stomach has several functions. It produces acid which can kill bacteria which can be swallowed in the food or saliva. The thick muscular walls of the stomach contract to break up solid food and mix solids, liquids, stomach acid and saliva in order to aid digestion.

Duodenum
The duodenum is the first part of the small intestine. It receives bile from the liver and enzymes from the pancreas through small ducts or tubes.

Pancreas
This organ makes enzymes that break food down into digestible particles. It also makes the hormone insulin, which controls blood sugar.

Liver and Gall bladder
The liver produces bile, a fluid that helps to digest fats. Bile is first stored in the gall bladder until it is needed after meals. It is then released into a tube called the ‘bile duct’ and travels down into the duodenum.

Small intestine
The small bowel is five metres in length in an adult and half that length for a baby. It is made up of many folds; if all the folds were flattened out, the surface area would equal that of a doubles tennis court. This creates a large surface area to allow large amounts of nutrients to pass across the lining of the small intestine into the bloodstream, which then distributes them throughout the body.

Large intestine or Colon
The colon is like a waste treatment works. It contains numerous bacteria which help in this process. After all the nutrients are absorbed in the small intestine, the leftover liquid waste passes from the small intestine into the large intestine. The large intestine then processes this liquid waste into solid bowel motions. This is done by absorption of fluid through the large intestine surface into the blood stream. Peristalsis pushes the motion down into the rectum where it is stored until it is time to empty the bowels.
Anus
The rectum is the final section of the large intestine, terminating at the anus. The anus is the opening at the end of the digestive tract. It is made up of muscular bands (called a sphincter) which close off the rectum. When it is time for a person to empty their bowels the sphincter muscle relaxes and allows the motion to pass through.

Ostomy or Stoma
The term ‘ostomy’ and ‘stoma’ have slightly different meanings but are commonly used interchangeably to describe a surgically created opening, usually on the abdominal wall, through which a small end section of the bowel is brought to allow waste evacuation when a personal has lost normal bowel or bladder function as a result of disease, injury, birth defect or other causes.

Ostomy
An ostomy is a surgical procedure that creates an artificial opening (stoma) for the elimination of bodily wastes, such as a colostomy, ileostomy or gastrostomy. There are certain conditions that may require a person to have an ostomy. Some of these include cancer, abdominal trauma or abdominal infection, intractable incontinence, colon polyps or inflammatory bowel disease (e.g. Crohn’s disease or ulcerative colitis).

An ostomy or opening from the ileum which is the small bowel (or small intestine) is called an ileostomy. An ostomy from the colon or large bowel is called a colostomy. The names of the ostomies relates to the different sections of the bowel.
The position of the ostomy in relation to the bowel will dictate the consistency of the waste matter. Consequently, waste matter from the ileum or small bowel will be more liquid or watery in consistency. With one of the functions of the large bowel being to absorb moisture, waste matter from the large bowel will be more formed in texture due to this fluid being absorbed into the bowel.

Stoma

A stoma is an opening, either natural or surgically created, which connects a portion of the body cavity to the outside environment. In this course the stoma’s we will be focusing on are those that are surgically created along the digestive system. One well-known form of an artificial stoma is a colostomy, which is a surgically created opening in the large intestine that allows the removal of faeces out of the body, bypassing the rectum, to drain into a pouch or other collection device.

They are roughly the size of a 20 cent coin, located on the front of the abdomen, half way between the belly button and the hip bone. It is soft, moist and red (similar to the lining of your mouth) and round or oval in appearance. Some may have two openings. There are no nerve endings in the stoma and therefore the stoma does not have any sensation or feeling but the skin around it has feeling. They may be at skin level or raised a little with the skin around the stoma being the same colour as the abdominal skin. A stoma may be permanent or temporary.

When the bowel acts, wind and bowel motions come out through the stoma so a small, disposable, flat plastic bag - commonly called a colostomy bag - is worn over the stoma to catch the waste. The back of the bag sticks firmly to the skin around the stoma and provides a leak-proof, odour-proof system. When a bag has been used, it is disposed of and a new one is fitted.
Colostomy

A colostomy is a surgical procedure in which a stoma is formed by drawing the healthy end of the large intestine or colon through an incision in the abdominal wall and suturing it into place. This opening, in conjunction with the attached stoma appliance, provides an alternative channel for faeces to leave the body. It may be reversible or irreversible depending on the circumstances. The most common condition needing colostomy formation is colon or rectal cancer.

There is no muscle control of the stoma action so a pouch is worn to collect faecal waste. An easily managed, closed pouch is worn and replaced as required.

Managing a colostomy:
- In most cases a pouch (also called an appliance) is worn over the stoma to collect bodily waste
- The pouch can be drainable or non-drainable
- Self-irrigation or natural elimination can be used to manage a colostomy, depending on the medical condition
- Diet and deodorants can control wind and odour.

Ileostomy

An ileostomy is a surgical opening constructed by bringing the end or loop of small intestine (the ileum) out onto the surface of the skin. Intestinal waste passes out of the ileostomy and is collected in an external pouching system which is adhered to the skin. Ileostomies are usually sited above the groin on the right hand side of the abdomen.

The discharge will be a liquid at first. Over time the small intestine adapts and the stoma output should thicken (up to a porridge-like consistency) and reduce to around 400-800ml (4-5 bag changes per day).

The most common conditions needing ileostomy formation are Ulcerative colitis, Crohn’s disease, polyps in the colon or rectum, cancer in the colon or rectum or other rarer causes.

Managing an ileostomy:
- For standard ileostomies an external drainable pouch is used
- For continent ileostomies, waste is stored in a surgically created pouch inside the body. A tube (catheter) is used to empty the pouch.
- Special care must be given to protecting the skin
- It is important to take regular meals and drink lots of fluids to keep electrolytes in balance. Diet will significantly affect the quantity and character of output.
- Be aware that high-fibre foods can stimulate the gut and cause diarrhoea or may cause a blockage. These foods include: cabbage, pineapple, bean sprouts, tomato skins, nuts, coconuts, bamboo shoots, orange pith, lettuce, celery, popcorn, mushrooms and dried fruit
- Chew all high-fibre foods well to aid digestion and avoid colic. It is advised to peel all fruit.
- Eat regularly as this helps to regulate stoma function
- Aim for at least 2 litres of fluid each day to avoid dehydration
- Avoid or restrict alcohol as this is dehydrating.
Ileostomies are slowly being replaced by the now preferred alternative *ileo-anal pouch, J-Pouch, or Barnett continent intestinal reservoir*. This surgery turns part of the small intestine into an internal reservoir, thus eliminating the need for an external appliance.

### Ostomy bags

There are 2 main types of ostomy bags:

1. **One piece ostomy bag** – adheres directly around the stoma. An all in one drainage bag.
2. **Two piece ostomy bag** - a base plate or wafer adheres around the stoma and a drainage pouch is positioned into the base plate or wafer.

**Please note:** the stoma can get wet and the client can have a shower with or without the drainage bag in place.

**Draining an ostomy bag**

Some bags can be drained of their contents and do not require replacing every time the bag becomes full. These bags will need to be emptied 4-6 times per day or as required.

For bags that allow for drainage, the steps are:

1. Open the clamp
2. Drain and empty the contents into the toilet, place toilet paper in the bowl to avoid splash back
3. Rinse the pouch
Changing a one piece ostomy bag

It is important to be prepared and have all the equipment at hand before starting to change the pouch. Gather the equipment needed:

- Gloves
- Waste bag
- Dry wipes for washing and drying
- Adhesive removal wipes (if needed)
- Warm water for washing
- New pouch
- Scissors for cutting the flange (if required)

Procedure:

- Tighten the skin around the abdomen
- Carefully remove adhesive – sometimes adhesive remover wipes or damp wipes will help
- Have toilet paper on hand to wipe away excess faecal matter
- Gently cleanse around the stoma with warm water but avoid excessive or harsh rubbing. A small amount of bleeding is normal
- Dry completely
- Assess the area for any redness, irritation, swelling or abnormalities
- If the stoma is uneven or oval shaped, you may need to cut the flange to fit
- Remove adhesive backing
- Begin putting on the new pouch by folding in half positioning the adhesive on the skin immediately below the stoma
- Press adhesive from the centre to the edges
- Ensure drainage clamp is closed (if has one)
- Dispose of all waste into the rubbish
- Drainable bags are changed every 1-3 days
- If bag does not allow for drainage, the bag should be changed as needed throughout the day

Warning: Do not flush pouch down the toilet.

Changing a two piece ostomy bag

Gather the equipment needed:

- Gloves
- Waste bag
- Dry wipes for washing and drying
- Adhesive removal wipes (if needed)
- Warm water for washing
- New pouch
- New wafer/base plate, cut to size
- Scissors for cutting the wafer/base plate to size (if needed)
Procedure:
- Empty bag if possible
- Gently remove adhesive wafer/base plate from skin – use warm water or adhesive remover wipes – pulling downwards from the stoma is the easiest
- Have toilet paper on hand to wipe away excess faecal matter
- Cleanse the area around the stoma with wipes – small amount of bleeding is normal
- Dry completely
- Remove adhesive backing and press hole over the stoma
- Gently push around the centre and outer of ring to fit – it is important that there is a firm seal

**Warning:** Do not flush pouch down the toilet.

**Infection control**
When dealing with any bodily fluids standard precautions are adhered to for the prevention of contamination and spread of infection.
- Wash hands **before and after** any procedure
- Wash hands after disposing of any used materials
- Wear gloves when dealing with any bodily fluids - changing or cleaning the stoma
- Dispose items into general waste.

**Taking care of a stoma long term**
- Always follow the advice of the doctor or surgeon
- Seek advice and support from a Stoma therapist. They will be able to advise on different types of colostomy bags, skin sealants, skin barriers and powders available.
• The skin surrounding the stoma must be kept very clean
• Occasionally, the stoma may need to be irrigated to prevent constipation
• Follow ways to reduce gas formation and excessive odours by eating small, frequent meals; limiting foods such as cabbage, onions, beans and fizzy drinks
• Avoid activities that encourage air to be swallowed, such as gum chewing, drinking through a straw and smoking
• Charcoal tablets or anti-flatulent preparations may help to reduce odour
• Limit intake of foods that have strong odours, such as onions, fish, eggs, cheese and asparagus
• Eat a low-residue diet for the first couple of months to reduce the strain on your bowels and stoma.

There are commonly experienced problems associated with a stoma. They can include managing gas or wind production, diarrhoea, blocked stoma, leaking of the stoma, bleeding from the stoma, inflammation and irritation.

Problems that can occur

Hernia
The most common problem after ostomy surgery (other than skin irritation) is herniation around the ostomy site. A hernia is the bulging of a loop of organ or tissue through the belly (abdominal) muscles (called an abdominal hernia). This bulging can happen around a stoma.

Signs of a hernia may include a bulge in the skin around the stoma, partial obstruction (blockage) and sometimes prolapse of the colon (the bowel pushes itself out through the stoma). These changes tend to happen slowly over time. Seek medical advice if you suspect a herniation.

Severe skin problems
Large areas of skin that are red, sore and weeping (always wet) will make it difficult to achieve a good seal around the stoma. It is important to treat minor irritations right away. If there is a large irritated area, contact the doctor or ostomy nurse. They may prescribe medicine to help dry out and heal your skin.

Constipation, loose stools, and diarrhoea
In a normal state of health, the form of stool that the bowel puts out is related to what is put in. Timing and frequency of meals, emotional states, medicines, and sickness also play a role.

Constipation is often the result of an unbalanced diet or not drinking enough liquids. Certain medicines may also be the cause. DO NOT use laxatives without talking to a doctor first.

Diarrhoea is usually a warning that something is not right. Diarrhoea is defined as frequent, loose, or watery bowel movements in greater amounts than usual. Diarrhoea is different from loose bowel movements. Loose stools are common in transverse and ascending colostomies. This is because of the shortened length of the colon and is not a sign of sickness or disease. Certain foods or drinks may cause diarrhoea. If this happens, you should try to avoid these foods.

Inform a doctor or ostomy nurse if your client has ongoing diarrhoea or constipation.

Blockage (obstruction)
If your client has cramps, vomiting and/or nausea, stomach swelling, stoma swelling, little to no output, or gas from their stoma the intestine could be blocked (obstructed). Call a doctor or ostomy nurse right away if this happens.

To assist a client who may be showing signs of blockage, you could suggest the following:
• Drink plenty of fluids
• Take a warm bath to relax your abdominal muscles
• Sometimes changing their body position, such as drawing their knees up to the chest, may help move along the food in the gut
- Do **NOT** take a laxative
- High-residue foods (foods high in fibre) such as Chinese vegetables, pineapple, nuts, coconut, and corn can cause obstruction. Obstruction can also be caused by internal changes such as adhesions (scar tissue that forms inside your abdomen after surgery).

**When you should call the doctor**

You should call the doctor or stomal nurse if your client has:

- Cramps lasting more than 2 or 3 hours
- Continuous nausea or vomiting
- Bad or unusual odour lasting more than a week (this may be a sign of infection)
- Unusual change in the stoma size or colour
- Blockage at the stoma (obstruction) and/or the inner part of the stoma coming out (prolapse)
- A lot of bleeding from the stoma opening (or a moderate amount in the pouch that you notice several times when emptying it)
- Injury to the stoma
- A cut in the stoma
- Continuous bleeding where the stoma meets the skin
- Bad skin irritation or deep ulcers (sores)
- Watery output lasting more than 5 or 6 hours

**Ostomies and food**

It is important to know the effects that different foods and beverages have on the stoma output. Depending on the type of stoma, the effects may vary. It is important to introduce new foods gradually, chew all foods well and have an adequate fluid intake.

Some general guidelines of what some foods and beverages can do to stoma output:

- **Foods that obstruct**
  Apple skins, raw cabbage, celery, Chinese vegetables, citrus fruits, coconut, coleslaw, corn kernels, dried fruit, grape skins, mushrooms, nuts, peas, pineapple, popcorn, potato skins, sausage skins, seeds, tomato skins

- **Foods and drinks that can increase output**
  Alcohol, beef, bran cereals, broccoli, cooked cabbage, fresh fruit – not bananas, grape juice, leafy greens, licorice, milk, prunes and juice, raisins, spicy foods, raw vegetables

- **Foods and drinks that can thicken output**
  Apple sauce, stewed apples, bananas, bread, buttermilk, cheese, marshmallows, boiled milk, noodles, pasta, peanut butter, pretzels, white rice, tapioca, toast, yoghurt

- **Foods and drinks that can produce wind**
  Alcohol, beans, broccoli, brussel sprouts, cabbage, carbonated drink, cauliflower, corn, cucumber, dairy products, meringues, mushrooms, nuts, onions, peas, radishes, soy, spinach

- **Foods and drinks that can cause odour**
  Asparagus, baked beans, broccoli, brussel sprouts, cabbage, cauliflower, strong cheese, cod liver oil, eggs, fish, garlic, mustard, onions, peanut butter, spices

- **Foods and drinks that can help odour control**
  Buttermilk, cranberry juice, orange juice, parsley, tomato juice, yoghurt

- **Foods and drinks that could help with constipation**
  Warm/hot beverages, cooked fruits, cooked vegetables, fresh fruits, fruit juices, water
Managing or coping with a stoma and ostomy bag

Stomal therapy nurses

Stomal therapy nurses are medical professionals who have undergone special training to cater to the specific needs of people with an ostomy. A stomal therapy nurse can provide assistance prior to and after surgery and ongoing care and advice.

Stomal therapy nurses work in many hospitals. In the community, some nursing services have Stomal therapy nurses. Many ostomy associations, which supply the bags, can put a person in touch with a Stomal therapy nurse. The doctor and the Cancer Council Helpline (13 11 20) can also help in finding a Stomal therapy nurse.

Having a stoma, even just for a short time, is a big change in a person's life and takes some adjustment as it impacts on the emotional, physical and social aspects of a person's life. A Stomal therapy nurse will discuss all aspects of living with a stoma and provide booklets and videos if desired. The family may also need information and support, and the Stomal therapy nurse will be happy to include them in these discussions.

Ostomy support groups

It is advised that people with an ostomy join an ostomy association so free bags and related products can be obtained. There are support groups for people of all ages. Support groups for young people up to the age of 35 are available in each state and territory, and other support groups are available for people over the age of 35.

Lifestyle adjustments

People living with an ostomy often need to make significant lifestyle adjustments. This significant life change impacts on the physical, emotional and social aspects of their lives. There are privacy needs which need to be met with in managing the ostomy bag.

A person with an ostomy will have to make physical adjustments to their lifestyle. These physical adjustments relate to their changed body image, issues with maintaining a healthy body weight and privacy needs. Fitting the ostomy equipment into their existing lifestyle requires reorganisation of their usual activities. It also may impact on their recreational activities especially something like swimming. These changes may have a physical and psychological impact on their personal or intimate relationships.

Having an ostomy can cause a range of emotional responses, all of which are normal. It is important to recognise that feelings of anger, grief, fear or isolation are likely to occur and sometimes reoccur. As carers or health professionals, establish a partnership with the client in overcoming any difficulties.

Other concerns may include the impact that having an ostomy may have on the social aspect of their lives, particularly associated with odour. A person may feel that this could have a significant impact during social events. Wanting to be with others socially will remain an important part of life and needs to be incorporated into their changed circumstances. Ensure the client uses all resources available to them, particularly Stomal Therapy Nurses who offer practical advice and support on managing the stoma and ostomy bag.

Points to remember:
- Change and acceptance of that change takes time
- The individual should not be excluded from normal activities
- The individual can still travel and wear normal clothes
- Washing and showering can be with or without the bag in place
- Most people can eat and drink the same with some considerations
- Exercise within the individual’s limitations is encouraged

Ostomy associations

Australian ostomy associations are non-government, voluntary, self-help organisations which distribute stoma appliances and provide information, encouragement and emotional support to their members concerning most aspects of living with a stoma.

There are 22 ostomy associations across Australia, serving approximately 36 000 Australian’s.
The Department of Health and Ageing gives each ostomy association a schedule of stoma appliances and related items. There is no charge for an item if it is in the Schedule. Australia currently has a government sponsored Stoma Appliance Scheme which provides every ostomy association member with a wide range of Commonwealth government funded ostomy supplies adequate for their needs, on a regular basis. The choice of appliances is vast and is constantly updated.

Under the Stoma Appliance Scheme most ostomy appliances and related items are available to all Australian residents who have undergone stomal surgery and who hold a Stoma Appliance Entitlement Card.
Ostomy and stoma care references and resources

**Department of Health and Ageing**
Stoma appliance scheme; also links to Stoma Associations; types of ostomy
National Bowel Cancer Screening Program

**Convatec**
Links: For health professionals; for carers; Living life to the fullest; peristomal skin care; products etc.

**Royal Children's Hospital, Melbourne**
[http://www.rch.org.au](http://www.rch.org.au)

**Links to: Victorian Children's Stoma Association**
Stomal Therapy Unit, Royal Children's Hospital 03 9345 5338

**Young Ostomates United Inc.**
P.O. Box 1433 MDC
Narre Warren VIC 3805
[home.vicnet.net.au/~youinc/](http://home.vicnet.net.au/~youinc/)

**Department of Health, Victoria**
Home Page Keyword search: Stoma

**Department of Human Services, Victoria**
Home Page Keyword search: Stoma

**Better Health Channel, Victoria**
Home Page Search: Stoma, ileostomy, digestive system.

**Gastroenterological Society of Australia**
Digestive Health Foundation

**Australian Council of Stoma Associations Inc.**

**Emedicinehealth**
Inflammatory bowel disease

**ABC Radio National**
Health Report Inflammatory Bowel Disease (IBD) Oct 2009

**Coloplast Australia**
Ostomy care – products and education