

Enterostomy Feeding Tubes: Care and Management (G- tubes, J-tubes or GJ-tubes)

Site Applicability

All VCH and PHC sites

Practice Level

Profession	Basic Competency	Advanced Competency (requiring additional education)
NP NSWOCs	<ul style="list-style-type: none"> Assessment, care & management of enterostomy tube. Replacing ballooned G-tubes. 	
RN/RPN	<ul style="list-style-type: none"> Assessment, care & management of enterostomy tube. 	<ul style="list-style-type: none"> Replacing a ballooned G-tube
LPN	<ul style="list-style-type: none"> Assessment, care & management of enterostomy tube. <p>*LPNs do not change ballooned G-tubes</p>	

Policy Statements

- The type of percutaneous enterostomy feeding tube (gastrostomy (G-tubes), jejunostomy (J-tubes), and gastrojejunostomy (GJ-tubes)) must be identified before initiating a feed or providing tube/peri-tube care as there are specific care instructions for each type of feeding tube.
- The initial replacement of a **ballooned** G-tube is done by the Physician/NP; subsequent replacements, as ordered by the Physician/NP, can be done by a RN/RPN who has had additional education for this skill.
- The following tubes can only be replaced by a physician or NP:
 - Non-ballooned G-Tubes.
 - Ballooned and non-ballooned GJ- and J-Tubes.

Bookmarks

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Appendices

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Need to Know

Definitions and Characteristics

- Percutaneous enterostomy tubes are placed through the abdomen into the stomach or small intestine to provide long-term enteral feeding or to allow for gastric decompression. See [Appendix A](#) for diagrams and definition for synonyms.
 - G-tubes are placed in the stomach
 - J- tubes are placed in the jejunum
 - GJ-tubes are placed in the stomach and extend into the jejunum
- There are specifically designed G, GJ and J tubes inserted for enteral feeding or decompression; in certain specific patient circumstances Foley catheters and drainage tubes (i.e. red rubber catheters, pigtail drains) may be used as a temporary measure and with an order from the Physician/NP.
- Type of tube, location, length and securement device should be outlined on the operative report, order set or transfer form.
- [Long shaft tubes](#) have a visible tube exiting the abdomen. Where possible, long shaft tubes can be replaced with low profile tubes once tract has matured.
- [Low profile tubes](#) sit at skin level and can be more comfortable. Low profile tubes require an

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extension tube for feedings, flushing and medication administration.

- Stabilization discs/anchors or similar devices may be used to ensure the stomach wall is in contact with the abdominal wall, allowing the tract to develop correctly. These devices are sutured into place around the insertion site. Stabilization discs are held in place with either dissolvable sutures (discs will usually fall off in 2 to 3 weeks once the sutures dissolve) or non-dissolvable sutures. Non-dissolvable sutures will need to be cut on Day 10 to 14 as per Physician/NP order. [See page 24](#)
- The use of Lopez valves with enteral feeding tubes is not recommended due to build-up of biofilm within the valve as well as safety concerns regarding improper connections (i.e. to other types of tubing), increased risk of tract erosion due to excess weight and increased risk of cap stretching impacting functionality of the tube and pre-disposing the tube to early failure.

Securement

- [Securement of the feeding tube](#) is done both internally and externally at the entry site to hold the tube in place:
 - Internal site securement (long shaft and low profile):
 - Non-ballooned – a plastic device known as disc, mushroom, funnel or dome.
 - Ballooned – The amount of sterile or distilled water in the balloon is determined by the manufacturer and is printed on the tube itself. The balloon volume can vary from 3-20cc and is inflated with sterile or distilled water. If a balloon tube is used for a tube placed directly in the jejunum, the amount of water in balloon will be less than one placed in the stomach so erosion of small bowel does not occur. The balloon should be checked at a minimum of monthly after the first four weeks to ensure correct ordered volume is present, unless otherwise directed, or if signs of leakage are noted.
 - External site securement:
 - The external bumper on the long shaft tube holds the device close to the skin and decreases migration of the tube in and out of the tract.
 - Some tubes may initially have a zip-tie or zap strap holding the external bumper in place, these can be removed after 10 days.
 - Sutures are used for those G-, J-, GJ-tubes that do not have an internal securement device (ballooned or non-ballooned), or as an added safety measure.
 - Tubing securement for long shaft tubes e.g. Stat-Lock type of securement:
 - Must be used for tubes that have no internal securement device.
 - May be used for patient comfort to minimize the weight of the long shaft tube.
 - Stat-lock type of securement may increase the risk of erosion at the site (medical device related pressure injury). Rotating the location of the securement device with every device change may mitigate this risk.
- The smaller bore tubes (sizes 8 to 14 Fr) and longer shaft e.g. J- and GJ- are more prone to clogging and kinking.
- All tubes are at risk for migration, which can then cause an obstruction (i.e. gastric outlet obstruction from long shaft G-tube migration). Checking for migration on a daily basis will mitigate the amount of migration that occurs ([see page 5 for procedure steps](#)).

Physician/NP/Dietitian Orders

- A Physician/NP order is required to initiate use of the feeding tube (feeding/flushing/medication delivery).
- Routine flushing as part of the feeding schedule is essential to maintain the patency of the tube. If an extension tubing set is not being used, then a 50 mL catheter tip syringe can be used to manually flush the feeding tube by instilling fluids directly into the feeding tube. The amount of flush is ordered by the Physician/NP/Dietitian.
- When the tube is not being used for feeding (i.e. used for venting) routine flushes must be done to maintain patency as per Physician/NP order.
- A Physician/NP order is needed for the tube to be flushed to maintain patency when:
 - A feed is put 'on hold' (Dietician can also order), or
 - The feed has not yet been initiated, or
 - The tube is being used for symptom management/palliative care decompression (venting)

Dislodgement Management

- If a non-established (less than 4 weeks) enterostomy feeding tube (G-, J, or G-J) becomes dislodged or falls out:
 - Community or Long Term Care: cover the site with a dressing and send client to ER.
 - Acute care: cover the site and notify Physician/NP.
- If an established G-tube (4 weeks or greater) becomes dislodged or falls out, insert new G-tube and secure by inflating the balloon then check placement prior to using for feeding. If a new G-tube is unavailable insert a small French catheter (12 or 14FR) until a G-tube can be inserted; do not inflate the balloon and do not use for feeding ([See Troubleshooting](#)).
- If an established J- or GJ-tube (4 weeks or greater) becomes dislodged or falls out, insert a small French catheter (12 or 14FR) to maintain the tract until a new feeding tube is placed; do not inflate the balloon, do not use for feeding. Notify the Physician/NP as soon as possible for tube replacement ([See Troubleshooting](#)).

Tube Replacement

- Frequency of tube replacement is directed by physician inserting the tube, based on manufacturer recommendations for tube duration.
- Wherever possible, consider changing a G-tube that requires replacement by Physician/NP with a G-tube that can be replaced by an RN/RPN.

Showering/bathing/swimming

- If patient wishes to shower within the first week post-insertion, cover site to ensure it does not get wet, remove dressing immediately after showering and cleanse insertion site with normal saline. It is fine to shower normally after the first week, ensuring the site is well-rinsed with water at the end of the shower to avoid any soap residue around the stoma site.
- Wait two weeks before submerging in a tub, one month before going swimming. The site should be completely healed (no crusting) prior to going into a pool.

Procedure: Assessment, Care & Management

Post Insertion: Assessment

Assessment	Rationale
<p>Post-insertion assessment is to be done:</p> <ul style="list-style-type: none"> • Acute – every shift • Community – twice, after 24 hours client specific • Long Term Care – every shift 	<p>To establish a baseline assessment.</p> <p>In community the client is to be taught to assess twice a day (i.e. once upon arrival home and before going to bed) if same day discharge post insertion.</p>
<p>Review post-insertion PPO/orders for:</p> <ol style="list-style-type: none"> Frequency of vital signs. Type of tube: <ul style="list-style-type: none"> ○ G-, J- or GJ-tube ○ Low profile or long shaft tube Internal securement device: <ul style="list-style-type: none"> ○ Balloon and its fluid volume ○ Non-balloon External tube measurement (long shaft) Long shaft: Position of external bolster, external marking and measurement. Stabilization discs sutures. Feeding amount and schedule. Flushing amount and schedule. Medications. Dressings. Date of planned first tube change. Transition of Care process. 	<p>Different types of tubes require different post-insertion care and management. Location of tube is important for both feeding and replacement.</p> <p>The external long shaft measurement provides a baseline to determine if the tube migrates/dislodges.</p> <p>An order is required to initiate use of the feeding tube (feeding/flushing/medication delivery).</p>
<p>Assess the patient and compare to baseline:</p> <ol style="list-style-type: none"> Change in vital signs. Change in level of consciousness. Signs and symptoms (S&S) of: <ul style="list-style-type: none"> ○ Abdominal tenderness/distention ○ Nausea/vomiting ○ Fever/chills <p>If any of these S&S occur, immediately notify the Physician/NP or send client into ER.</p>	<p>A change in vital signs, level of consciousness or presence these S&S may indicate peritonitis. This can result if the tube is not in the correct place and requires immediate attention.</p>

<p>Assess the surrounding skin and gauze dressing <i>(which is to remain undisturbed for the first 24hrs unless any of the following)</i>:</p> <p>First 24 hours:</p> <ol style="list-style-type: none"> Pain at the site. Signs of gastric drainage. Active bleeding (a small amount of bleeding immediately post-insertion is normal). Redness beyond dressing border. Swelling beyond dressing border. <p>If bleeding and/or gastric contents observed, or redness beyond the dressing, notify the Physician/ NP or send client/resident into the ER.</p> <p>Post 24 hours:</p> <p>Assess the insertion site: For infection and/or skin breakdown; notify Physician/NP if:</p> <ul style="list-style-type: none"> Erythema greater than 2 cm at the insertion site. Swelling at the insertion site causing discomfort/pressure injury. Leaking of gastric contents and or wound drainage. Hypergranulation of the insertion site. Medical-device related pressure injury (erosion). <p>Assess for stabilization discs/anchor.</p>	<p>Inflammation and/or swelling at the site may be present initially, but should not go beyond the dressing border.</p> <p>Early intervention is needed to treat and correct the underlying cause.</p> <p>Slight swelling at the insertion site is to be expected. Swelling causing discomfort/ pressure injury needs to be addressed.</p> <p>Three stabilization discs may have been used during the tube insertion and are sutured to the skin around tube. Sutures usually dissolve within 2 to 3 weeks and the disc will then fall off.</p> <p>Some stabilization devices are sutured in place with non-dissolve sutures which are to be removed at 10 to 14 days.</p>
<p>Assess the external bumper after 24 hours:</p> <p>Long Shaft:</p> <ul style="list-style-type: none"> If too loose, (i.e. external bumper is more than 	<p>If too “firm” against the skin the bumper can cause a pressure injury; if too loose, can cause leakage of gastric contents or lead to tube migration.</p>

<p>1 to 2mm above skin level), reposition bumper by gently sliding it back down to skin level.</p> <ul style="list-style-type: none"> • May sit tight on the skin for first 24 to 72 hours. 	<p>Post insertion there may be abdominal distention for 24 to 72hrs.</p>
<p>Assess the tube for migration:</p> <p>Long shaft:</p> <ul style="list-style-type: none"> • Trace the tubing from insertion site to the connection port and compare with the insertion measurement or post insertion initial assessment. <ul style="list-style-type: none"> ○ If incremental markings are present, verify the insertion measurement with the measurement at skin level. ○ If incremental markings are not visible, measure from the skin to the connection port. Use an indelible pen to mark the tube at the exit site. <p>If greater than 2.5cm change in measurement noted:</p> <ul style="list-style-type: none"> • Complete abdominal assessment, notify Physician/NP if concerns. If patient is stable determine if length is longer or shorter than originally documented at insertion: • If length is shorter, gently pull tube back out into original position. Slide external bumper back to skin level. • If length is longer and it is a ballooned G-tube, check balloon volume, if empty remove tube and follow the troubleshooting steps for tube dislodgement (Appendix F). For all other types of tubes notify Physician/NP. <p>Low profile tube: Do not have incremental markings as they sit at skin level.</p>	<p>The connection port(s) is the most distal aspect of the tube where medications/feeds/flushes are administered.</p> <p>There should be no more than 2.5cm change in the measurement; tube placement needs to be verified (page 19) if there is inward or outwards migration of 2.5cm or more. Tube migration can lead to peritonitis and/or gastric outflow and/or bowel obstruction.</p> <p>If there is a discrepancy in measurement perform abdominal assessment and notify Physician/NP.</p> <p>Low profile tubes sit flush on the skin thus migration is not usually a concern. Tension on the low profile tube causing the tube to sit tightly on the skin can cause a medical-device related pressure injury.</p> <p>With weight gain or loss the size of the tube may need to be changed to ensure the tube is not too tight or too loose; see Appendix D for measuring for new size of low profile device.</p>
<p>Assess the cap, tube connector and tube integrity:</p> <ul style="list-style-type: none"> • Long shaft: <ul style="list-style-type: none"> ○ Ensure that the cap fits securely on the end of the tube. ○ Ensure that there are no kinks, occlusions, 	<p>To ensure system is intact and will function as intended.</p> <p>If the cap doesn't fit correctly stomach contents can leak out.</p>

<p>fractures, breaks or leaks.</p> <ul style="list-style-type: none"> • Low profile tube: <ul style="list-style-type: none"> ○ Ensure cap fits securely on the end of the tube. ○ Assess the extension tube for kinks, occlusions, fractures, breaks or leaks and that cap fits securely on the end (see Appendix C for connecting/disconnecting the extension tube). 	<p>Broken, cracked or leaking tubes must be replaced immediately, to prevent bacterial contamination.</p> <p>An extension tube is required for feeding or flushing. Extension tube may be disconnected following a feed or left in situ.</p>
<p>Feeding and flushing orders as per provider/NP/Dietitian for amount and schedule:</p> <ul style="list-style-type: none"> • Acute Care: <ul style="list-style-type: none"> ○ See Enteral Tube Feeding Administration Guideline (Acute Care) • Community <ul style="list-style-type: none"> ○ <i>In progress</i> • Long Term Care: <ul style="list-style-type: none"> ○ Enteral Nutrition Administration: Care and Management of (in Long Term Care) 	<p>Amount and schedule may differ between patients based on their individual requirements.</p>
<p>Assess patient and/or family/caregivers ability to be independent and determine learning needs as indicated.</p>	<p>To determine learning needs to allow for transition to Community.</p>
<p>On discharge from Acute to Community/Long Term Care complete the Transfer Information for Enteral Feeding form and, for Community, complete a nursing and dietitian referral, if available.</p>	<p>To allow for smooth transition to Community or Long Term Care.</p>

Care and Management: (24 hours post insertion onwards)

Care & Management Procedure (post 24 hours)	Rationale
<ul style="list-style-type: none"> • Assessment of the site is to be done daily and as required. • Cleansing of the peri-tube skin is to be done daily, as a sterile procedure, for the first 7 days post insertion. Once the site has healed cleansing of the peri-tube skin can be done with clean technique (gauze or washcloth) every 2-3 days and as required. • Rotation of the G-tube is to be done daily. 	<p>The insertion site is considered a wound for the first 7 days and therefore is at a higher risk of wound infection, thus sterile NS or sterile water is used for cleansing.</p> <p>GJ- and J- tubes are never to be rotated. Balloons can lose small amounts of water over time, causing the tube to become less secure.</p>

<ul style="list-style-type: none"> • Checking balloon inflation is to be done at a minimum of monthly or if there are signs of leakage after the first 4 weeks post insertion. 	
<p>Gather equipment and supplies:</p> <ul style="list-style-type: none"> • Personal Protective Equipment (PPE) • Clean gloves x 1 • Dressing tray (1st 7 days, then gauze or washcloth) • Paper measuring guide • Insertion site cleansing: <ul style="list-style-type: none"> ○ Normal Saline(NS)/Sterile Water(SW) first 7 days ○ NS/SW or Potable water after 7 days • Dressing (fenestrated gauze) 4 x 4 if needed • Tape if using dressing • For ballooned tube: <ul style="list-style-type: none"> ○ One 10 to 20cmL syringe empty ○ One 10 to 20mL of sterile/distilled water for weekly balloon check. • New extension tubing every 2 weeks. 	<p>The use of hydrogen peroxide or antiseptics can be drying and harmful to the skin and should be avoided.</p> <p>Balloon size can vary depending on the tube and manufacturer.</p> <p>Slip tip syringe is preferred. Syringe should be filled with recommend fluid volume for tube inserted.</p>
<p>Perform hand hygiene & don gloves.</p> <p>Set up supplies.</p> <p>Cleanse the peri-tube skin and the tube:</p> <ul style="list-style-type: none"> • For long shaft with bumper, cleanse the skin under the bumper: <ul style="list-style-type: none"> ○ Slip gloved fingers under one side of the bumper and cleanse; repeat with the other side. ○ Return bumper to original position, approximately 1-2mm above the skin. • Cleanse the peri-tube skin and pat dry. <p>Stabilize the feeding tube with one hand and cleanse from the insertion site to the end of the feeding tube, including the extension tube if used, with a damp gauze/cloth.</p>	<p>This allows the insertion site (stoma) to heal tightly to the tube, which reduces leakage and movement of the tube.</p> <p>The 1-2mm (width of a dime) space avoids excessive tension between the interior and exterior bumper, preventing device related pressure injury.</p>

<p>Rotate the G-tube (long shaft & low profile)</p> <p>After first 24 hours:</p> <ul style="list-style-type: none"> Gently rotate one full 360 degree turn plus ¼ turn. <p>Do not rotate J-tube or GJ-tube as the torque created by the rotation may cause these tubes to retract into the stomach and cause kinking /knotting of the tube.</p>	<p>To prevent tissue from adhering to the tube, to relieve pressure on the skin and to allow for air circulation.</p> <p>Low profile and long shaft G- tubes should turn freely; rotation is done to prevent the tube from adhering to the tract.</p>
<p>Check external securement devices.</p> <ul style="list-style-type: none"> Long shaft: <ul style="list-style-type: none"> Verify the external bumper (bolster, disc, phalange, or anchor) is in the correct position (1-2mm above the skin); evaluate with the patient in a sitting position. If no bumper used, secure the tube using a recommended securement device. If tube hangs to one side use securement device to prevent pulling and erosion on the tract. Low profile tubes: <ul style="list-style-type: none"> A securement device is not used as the tube sits at skin level. 	<p>If the tube is not properly secured, the movement of the tube will cause the insertion site (stoma) opening to enlarge, increasing the potential for drainage around the tube and the development of hypergranulation.</p> <p>Migration of the tube can occur leading to gastric outlet obstruction/aspiration.</p> <p>If the tube is pulled to one side erosion of the tract can occur leading to an enlarged tract.</p> <p>Securement device should allow tube to be positioned at 90 degrees relative to the abdomen.</p>
<p>Apply dressing:</p> <ul style="list-style-type: none"> Only if required (e.g. drainage from the site). If used, the thickness of the dressing should be limited to one layer of a drain sponge. <p>If there is drainage, see trouble-shooting appendix.</p>	<p>Dressings under the disc/flange create a warm moist environment for bacterial contamination.</p> <p>Excessive layers of dressing under the external site bolster can result in the internal site securement device eroding into the stomach wall.</p>
<p>Cleansing low profile tube extension tubing:</p> <ul style="list-style-type: none"> Acute: extension tube may be left attached to feeding tube and cleansed as part of the post-feed flush. Replace every 2weeks. Community/Long Term Care: following feeds, the disconnected extension tubing is cleansed with mild detergent and rinsed with water. Keep tubing 	<p>Signs of compromised tube integrity are:</p> <ul style="list-style-type: none"> change in colour brittleness blockage

in a clean dry place, replace when tubing loses integrity.	
<p>Check the G- and GJ-tube balloon inflation every month, unless otherwise indicated, starting after 4 weeks.</p> <ul style="list-style-type: none"> • Check order set for the volume of fluid initially instilled. • Pre-fill 10 to 20 mL slip-tip syringe with extra sterile/distilled water. • Attach a different empty 10 to 20 mL syringe, slip tip preferred, to the balloon port. • Stabilize the tube with non-dominant hand. • Aspirate the sterile/distilled water from the balloon. • Note the amount of sterile/distilled water withdrawn and compare to the volume initially instilled. • Re-instill fluid into balloon with same syringe, use pre-filled syringe if necessary to top up volume. • Re-position the bumper. 	<p>Balloon size can vary depending on the tube and manufacturer.</p> <p>Size of the syringe will depend on the volume of the balloon.</p> <p>The balloon is semipermeable and can slowly lose water over time, increasing the risk of the tube falling out due to an inadequately inflated balloon. Difficulty maintaining balloon inflation indicates a failing balloon, necessitating a tube change.</p> <p>Salt from normal saline (NS) can cause precipitation and encrustations resulting in failure of the balloon.</p> <p>Sterile/distilled water is used to inflate the balloon as minerals in saline may cause blockage of the balloon port and/or the saline may seep through the balloon surface.</p> <p>If there is a significant discrepancy in fluid volume (i.e. greater than 25% reduction in volume) retrieved the balloon may be compromised and the tube may need replacement, discuss with Physician/NP.</p>
On discharge from Acute to Community/Long Term Care complete the transfer document See flowsheet and for Community, do a nursing and dietitian referral if available.	

Flushing Procedure: (For tubes not being used for feeds)

Procedure Steps	Rationale
Check Physician/NP orders.	Volume of flushes may vary. Minimum flush volume is 25 mL.
Perform hand hygiene.	
Fill a 50 mL catheter tip syringe (preferably a slip-tip) with the amount of potable water ordered.	Drinking water (potable) is the accepted fluid for flushing.
Flush: <ul style="list-style-type: none"> • Apply a clamp or pinch the tubing prior to removing the cap. • Remove the cap from the feeding tube port and attach the syringe • Open the clamp • Instill the water into the tubing; then close the clamp or pinch. • Remove the syringe and put the cap back onto the end of the tubing. 	Gastric contents may leak out if not clamped prior to cap removal.

Ballooned G-tube Replacement Procedure:

 (If the G-tube is **NOT** a ballooned tube **DO NOT** remove)

Procedure Steps	Rationale
The initial change is done by a Physician/NP in a hospital; all subsequent changes can be done in the patient/client/people living in Long-Term Care's care setting.	The initial change is done in hospital to manage any complications that may occur.
Ensure appropriate to proceed: <ul style="list-style-type: none"> • Check for Physician/NP order to do the change. • Explain procedure to patient/client/people living in Long-Term Care and obtain verbal consent. 	An order from a Physician/NP is required for all tubes changes. Consent is required for all procedures.
Assess patient condition: <ul style="list-style-type: none"> • Prior to changing a Low Profile device, assess whether client's weight has changed significantly; if so, consult the physician, NSWOC/ Wound Clinician to have the tract measured for a new size of low-profile device. • Assess for abdominal pain or distention. 	Assess patient in same position as previous assessment. Weight changes can be seen by: <ul style="list-style-type: none"> • Weight loss: the tube is more than 1-2mm above skin level • Weight gain: the tube may be very tight causing the tube to be pulled inwards.

	<p>Incorrect size of tube can result in dislodgement or hypergranulation if too loose. If too tight, buried bumper syndrome or pressure injury can result.</p> <p>There could be an underlying reason for abdominal pain or distention; if concerned do not proceed with tube change, notify Physician/NP and/or send to ER.</p>
<p>Ensure patient comfort:</p> <ul style="list-style-type: none"> Have the patient/client/people living in Long-Term Care take analgesia 40 minutes prior to procedure, if needed and as ordered. 	<p>Removal of the old G-tube may be uncomfortable as the balloon is usually slightly bigger than the tract size.</p>
<p>Hold feeds/medications:</p> <ul style="list-style-type: none"> A continuous feed should be stopped for 30 minutes before the G-tube change, where possible. A bolus feed, if due within 30 to 60 minutes of tube change, should be given after the tube has been changed. Medications should be held for 30 minutes before the change. 	<p>This will prevent leakage of gastric contents during the procedure.</p>
<p>Check the patient record for documentation of:</p> <ul style="list-style-type: none"> Any concerns with previous G-tube changes. The size of tube currently inserted. Long Shaft: most current insertion measurement. 	<p>Review of documentation of previous challenges with tube replacement will allow you to prepare for similar challenges (i.e. bleeding at insertion site or difficulty removing tube etc.).</p>
<p>Gather equipment and supplies:</p> <ul style="list-style-type: none"> Personal Protective Equipment (PPE) Two Replacement tubes: <ul style="list-style-type: none"> one the same size as current tube one size smaller Water based lubricant Clean gloves x2 Dressing tray Paper measuring guide For Balloon tube: <ul style="list-style-type: none"> Sterile Water (SW) for cleansing, filling the balloon and flushing 	<p>The smaller size tube should be available in case there is difficulty in replacing the same size tube.</p> <p>NS is not used as it can cause the balloon to leak over time.</p>

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<ul style="list-style-type: none"> ○ Two 10 to 20mL slip-tip syringe for emptying/filling the balloon ● 50 mL catheter tip syringe for flushing ● Dressing (gauze) 4 x 4, if needed ● Tape if using a dressing ● Securement device for long shaft tube 	Balloon size can vary depending on the tube and manufacturer.
<p>Prepare work area:</p> <ul style="list-style-type: none"> ● Position patient/client/people living in Long-Term Care semi-recumbent with head no higher than 30 degrees. ● Perform hand hygiene, don clean gloves and other PPE as indicated. ● Set up dressing tray and supplies. 	
Inspect new tube for cracks or kinks.	A tube with cracks or kinks will need to be replaced.
<p>Check the balloon (Long Shaft and Low Profile):</p> <ul style="list-style-type: none"> ● Check the balloon on the new tube by instilling the appropriate amount of SW and ensuring that the balloon inflates fully. ● Deflate the balloon by withdrawing the instilled SW. 	The tube will state the manufacturer's requirement amount of fluid for the balloon.
<p>Check the movement of the bumper (Long Shaft only):</p> <ul style="list-style-type: none"> ● Bumper (bolster, disc, and phalange) should move freely up and down the tube. Slide bumper to the port end of the tube. 	Bumper is often adhered to tube when first taken out of package and can be difficult to maneuver once tube is placed.
<p>Prepare the tube:</p> <ul style="list-style-type: none"> ● Ensure all port ends have their caps in place. ● Generously lubricate the balloon end of the tube with water-based lubricant. 	To prevent leakage of gastric contents. This will aid insertion and reduce discomfort for patient/client/people living in Long-Term Care.
Fill the appropriate size of syringe for filling balloon (preferably a slip-tip) with the recommended volume of SW.	To aid ease of inflating balloon after insertion of tube. A new tube requires new SW in the balloon.
<p>Confirm measurement of inserted device (Long Shaft):</p> <ul style="list-style-type: none"> ● If insertion marking is present on the inserted tube, 	To ensure that the new tube is inserted to the same length as initial insertion.

<p>note the length.</p> <ul style="list-style-type: none"> If marking not present, then measure the length of the tube from the top of the bumper to the distal end of the tube. 	
<p>Deflate the balloon on old tube:</p> <ul style="list-style-type: none"> Prepare the syringe by pulling down the plunger on the empty syringe, slip-tip preferred, to break the syringe vacuum. Attach the syringe to balloon port; allow the SW to drain into the syringe under the balloon's gravity/pressure. Detach, check the volume in the syringe and discard syringe. 	<p>If the balloon does not appear to be emptying, very gently pull back the syringe plunger to initiate withdrawal and water should start to flow from balloon slowly.</p> <p>The volume in the syringe should be documented on the flowsheet and compared to the instilled volume. If the volume is less than instilled volume the balloon may need to be checked more frequently. If the balloon has minimal volume the balloon may be broken and the tube needs replacement.</p>
<p>Remove the tube:</p> <ul style="list-style-type: none"> Apply lubricant at exit site and rotate the tube to ensure that the lubricant is covering the entire site. Apply firm traction on the tube and apply more lubricant, rotate the tube again to spread lubrication beyond tract opening. Gently pull the tube out. <p>Note: If unable to remove the tube, advance the tube to previous noted marking and secure. Do not reinflate the balloon. Inform Physician/ NP to have the tube replaced as soon as possible. Do not use tube for feeding.</p>	<p>This will release any adhesions / kinks in the tube and aid removal.</p> <p>Some resistance will be felt as the balloon end of the tube has a larger circumference than the rest of the tube. Do not reinflate the balloon if unable to remove as there is a risk the tube has migrated and balloon can be inflated in the abdominal wall.</p>
<p>Inspect the old tube:</p> <ul style="list-style-type: none"> to ensure it is intact note any build-up of encrustation 	<p>Discolouration (slightly opaque to black) of the end of the tube is normal. If encrustations are noted, consult Physician/NP/ Dietitian.</p>
<p>Cleanse the site:</p> <ul style="list-style-type: none"> Clean the stoma site and surrounding skin with sterile water. Dry thoroughly. Remove gloves. 	

Perform hand hygiene and don new clean gloves.	
<p>Measure the Long Shaft tube for insertion:</p> <ul style="list-style-type: none"> If the measurement of the previous tube is known, then measure the new tube from the port end down the tube to determine the level of insertion as per the old measurement (cm); mark this level using a permanent marker. If the measurement markings of the old tube are not visible, lay the old tube close to the new tube in order to see where the old tube's insertion mark is, as noted by the discolouration of the tube; mark the new tube at the same level using a permanent marker. 	When placing the new G-tube alongside old one ensure not to contaminate new tube.
<p>Insert new ballooned G-tube into the tract:</p> <ul style="list-style-type: none"> Long Shaft: advance approximately 2 cm beyond the identified length. Low Profile: insert until button is flush with skin surface. If resistance is met, rotate the tube, withdraw slightly and try another angle of insertion. 	<p>This will prevent the balloon being inflated within the stoma tract.</p> <p>DO NOT USE force. If resistance is still met, do not try to reinsert and contact the physician/NP.</p>
<p>Inflate the balloon (internal site securement):</p> <ul style="list-style-type: none"> Attach syringe to balloon port and slowly inflate with syringe filled earlier. Monitor patient for pain or discomfort during balloon inflation. Stop inflating if this occurs and reassess length of tube. Detach syringe and discard. Long Shaft: gently pull up on the tube until resistance is met. The balloon will now be snug to the stomach wall. 	<p>Refer to balloon port for amount of SW to be instilled (will vary according to manufacturer). This will avoid the balloon being inflated inside the tract.</p>

<p>Long Shaft: Position the bumper (external site securement):</p> <ul style="list-style-type: none"> • Thoroughly remove any residual lubricant. • Slide bumper down towards stoma site. • Position the bumper 1 to 2mm above the opening of the stoma. <p>Low Profile: Ensure low profile tube sits flush with skin</p>	<p>The lubricant will cause the bumper to slide out of position if not removed, leading to tube migration.</p> <p>The bumper should sit comfortably on surface of skin without causing pressure.</p> <p>A low profile tube ideally sits at skin level.</p>
<p>Rotate the tube:</p> <ul style="list-style-type: none"> • Do a 360 degrees rotation of the tube 	<p>To ensure free movement of the tube within the tract.</p>
<p>Confirm placement:</p> <p>Long Shaft:</p> <ul style="list-style-type: none"> • External measurement of the tube should be consistent with the measurement of the initial insertion (done in Radiology, Endoscopic Clinic, OR) and/or previous documentation of the old tube's measurements. <p>Long Shaft and Low Profile:</p> <ul style="list-style-type: none"> • Use 50 mL catheter tip syringe to withdraw gastric secretions. • Test with pH paper. Normal pH 1.5 to 3.5 <p>X-ray is required if:</p> <ul style="list-style-type: none"> • There is concern that the tube is not correctly placed (smaller size or Foley). • There are no prior external measurements to go by. • If a new size of low profile device was used. • Unable to verify with pH paper. <p>Note: if there is any question regarding placement do not use the tube (feed or flush) until placement is confirmed.</p>	<p>This should appear similar to the most recent feeding, or other gastric contents. Note: gastric contents can appear clear, have the consistency and color of mucous or contain some residual feed.</p> <p>Note: it is not possible to distinguish whether the tube is in the stomach/ esophagus /small bowel with this method (Aspen 2009). However, as the tube is only advanced as far as the previously noted markings / length for short tubes it can reduce the need to confirm placement via radiology when there is minimal or no gastric secretions on aspiration.</p> <p>Discussion with a Physician/NP is required if an X- ray is indicated.</p> <p>The tube cannot be used until placement has been confirmed.</p>

<p>Flush the tube:</p> <ul style="list-style-type: none"> Fill a 50 mL catheter tip syringe with 25 mL of sterile/ potable water. Attach the syringe to the Feed port and flush the tube. 	<p>To prevent blockage of tube with gastric contents and to check for leaks.</p>
<p>Complete the procedure:</p> <ul style="list-style-type: none"> Apply dressing if there is the potential for drainage or if it is patient/client/people living in Long-Term Care preference. Secure the Long Shaft tube with an appropriate securement device as needed. Do not use tape. 	<p>If stoma site is clean and dry, then a dressing is not indicated. A Stat-lock type device is used to help form the initial tract when there is pulling on the G-tube (minimizes tube migration and site irritation).</p>
<p>Reposition patient if needed and clean-up work area.</p>	
<p>Discontinuation of balloon G-tube:</p>	
<p>Follow procedure above for removal of G-tube.</p>	
<p>Apply an appropriate cover dressing to allow for moist wound healing.</p>	<p>A wound will be present initially after tube removal and may take a few weeks to heal completely.</p>

Documentation

- For the flush, document the amount, date/time on the Intake & Output Flowsheet (or as site specific practice).
- For site assessment and care & management, document on the [Enterostomy Feeding Tube Flow Sheet or EHR](#).
- For the ballooned G-Tube replacement procedure, document the following in the Progress Notes:
 - Patient/client/people living in Long-Term Care consent.
 - The nature of the procedure.
 - Patient's/client's/people living in Long-Term Care's tolerance of the procedure.
 - Any difficulty inserting the tube (i.e. resistance met, angle of insertion).
 - The size of the tube.
 - The amount of water in the balloon.
 - The length of tube inserted.
 - The date and time of next G-tube change.

Patient and Family Education

- [BB.210.T79 - Tube Feeding At Home: A Guide book for Patients, Families & Caregivers](#)
- [BB.210.C37 - Caring For Your Jejunostomy Tube](#)
- [BB.210.R33 - Radiologic Percutaneous Gastrostomy/Gastrojejunostomy](#)
- [FK.235.V565. - Venting Gastrostomy Tube \(G-tube\)](#)

Related Documents

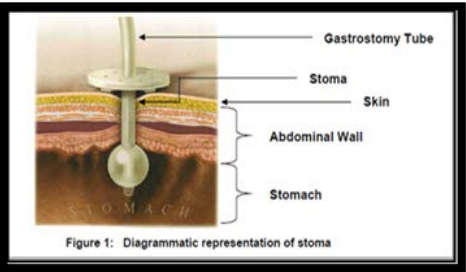
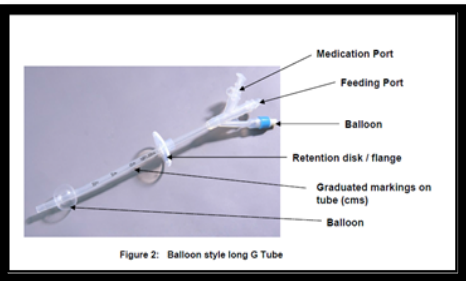
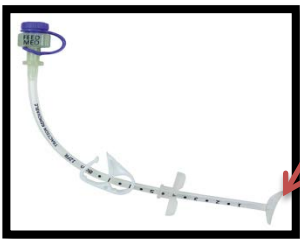
- [D-00-07-30144 - Decompression Gastrostomy Tube in Acute Palliative Care Settings - Adult Only](#) (Richmond only)
- [Transfer Information for Enteral Feeding Form](#)

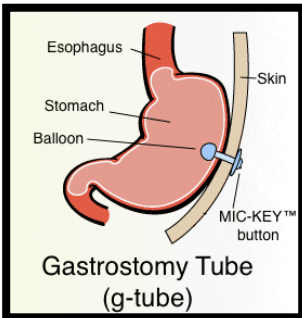

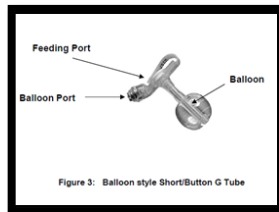


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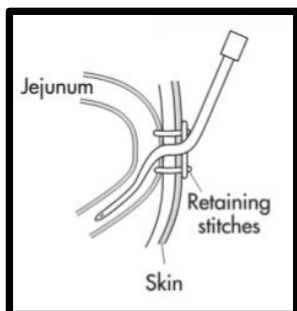
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Appendix A: Descriptions/Drawings of Enterostomy Feeding Tubes

Gastrostomy Tube - G-tube Long Shaft	
<p>Gastrostomy Tube</p>  <p>Figure 1: Diagrammatic representation of stoma</p>	<ul style="list-style-type: none"> Initial Tube is placed via endoscopy, radiology, or surgery. Procedure is performed under local anesthetic with conscious sedation by a gastroenterologist, radiologist or surgeon. Endoscopic is the preferred method in which a gastrostomy feeding tube is inserted.
<p>Long Shaft balloon</p>  <p>Figure 2: Balloon style long G Tube</p>	<ul style="list-style-type: none"> The tube lumen is generally large 16 - 24 Fr. The balloon needs to be checked weekly or as otherwise directed, starting, after the first 4 weeks.
<p>Long Shaft Non-balloon</p>  <p>Internal securement bolster</p>	

Gastrostomy Tube - Low Profile G-Tube	
<p>Low Profile G-tube</p>   	<ul style="list-style-type: none"> • This tube has a very short external tube and requires an extension tube for feeding or flushing. • The tube itself sits very close to the skin and is held in place by the balloon or mushroom/dome (internal site securement) and external site securement is the feeding port itself. • Any significant weight change (up or down) may require a different length of tube to be used so that the tube is not too loose or too tight. The tract will need to be measured to determine the new size of tube (see Measuring for a New Device).
<p>Low Profile Extension Set</p> <p>Bolus extension tube set</p>  <p>Continuous feed set</p> 	<p>Both bolus and continuous feed extension tubing sets can be used interchangeably.</p> <p>Bolus sets are used for intermittent feeds, flushes and medication and are usually removed after feed or medication administration.</p> <p>Continuous feed set has two ports; one for feed and flush and one for medications.</p>

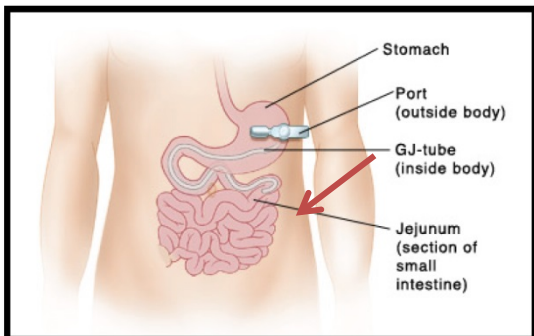
Jejunostomy Tube - J-tube



- Tube is placed in the jejunum via endoscopy, radiology, or surgery.
- Used for patients who have a non-functioning stomach, impaired gastric emptying or severe reflux disease as these patients have increased risk of aspiration with gastric feeds.
- Tube lumen is 8 to 14 Fr.
- The smaller bore tubes are more inclined to twist/kink on their own. These tubes are **should never be** rotated.
- Feedings can be continuous or intermittent with regular flushes with water.
- Tube is replaced by Physician or NP with additional education only.

Gastrostomy-Jejunal Tube – GJ-tube

G-J tubes





- The GJ-tube is two tubes in one and is placed through a gastrostomy tract.
- The jejunal portion is advanced into the intestine to bypass the stomach for feedings (under fluoroscopy).
- The feedings go through the jejunal port while the medications are to be administered through the gastric port unless otherwise ordered.
- Feeding can be continuous or intermittent.

Stabilizing Discs/Anchors



- Stabilization discs/anchors can be used to secure the stomach to the abdominal wall to aid in tract formation during initial insertion for some tubes, based on physician preference.
 - There are usually three of them.
 - Discs/anchors with dissolvable sutures are left in place until they fall off at 2 to 3 weeks.
 - Discs/anchors with non-dissolvable sutures need to be removed at 10 to 14 days.

Appendix B: Long Shaft Tubing Securement

Tube Securement Devices	
<p>Long Shaft Tubing Securement Device</p> <p>Stat-lock</p>  <p>Grip-lock</p> 	<p>If an external site securement (bumper) is not present then a tube securement device must be used (i.e. Stat-lock or Grip-lock type of securement device) to stabilize the tubing and prevent migration or dislodgement.</p>

Appendix C: Low Profile Device Extension Tubing: Connecting/Disconnecting

Device	How to Connect	How to Disconnect
Mic-key	<ul style="list-style-type: none"> • Open safety cap of Button device. • Select the desired extension set and close its clamp. • Align the black line on the set with the black line on the Mic-key feed port. • Lock into place by pushing in and turning the connector clockwise until a slight resistance is felt (about $\frac{3}{4}$ turn). • Do not turn the connector past this point. 	<ul style="list-style-type: none"> • Rotate it counter clockwise until the black line on the extension set aligns with black line on the Mic-key. • Remove the set and replace the cap.
Bard	<ul style="list-style-type: none"> • Open safety cap of Button device. • Select the desired tube and close its clamp. • Attach the tube's adaptor to the Button device with a slight twisting action and slight pushing pressure. • The adaptor should be completely inserted to assure a secure fit. 	<ul style="list-style-type: none"> • Remove the continuous feeding tube with a slight twisting action and slight pulling pressure. • Close the safety cap to keep the lumen clean and minimize gastric reflux.

Appendix D: Procedure for Measuring for a New Ballooned Low-Profile Device (NSWOC/Wound Clinician)



Supplies:




- Low-profile tube measuring device
- Sterile water
- 5cc to 10cc syringe for balloon inflation, slip tip preferred




Procedure:

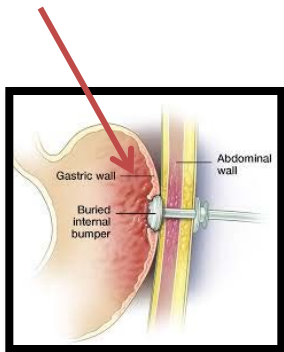
1. Cap the measuring device.
2. Moisten tip of measuring device with water soluble lubricant.
3. With patient in upright position, insert device through stoma in stomach – do not force.
4. Fill the balloon with 5cc of SW.
5. Pull device outward until balloon is against the inside of the stomach wall.
6. Slide the plastic disc down to the skin.
7. Read the number above the plastic sliding disc.
8. Repeat steps 5 to 7, average the measurements.
9. If there is a question choose the longer length.
10. Record the measurement.
11. Remove the water from the balloon and remove the device.
12. If the client is unable to sit up for measurement ADD 2 lines (4 to 5mm) on the stoma measuring device.
13. Order the new Low-Profile tube.

Appendix E: Trouble-Shooting Skin Complications

Problem	Nursing Interventions
Leakage around the insertion site 	<p>Assess for:</p> <ul style="list-style-type: none"> • Patient positioning during feeding • Tube displacement • Improper balloon inflation • Inadequate tube stabilization • Recent weight loss • Failure of tract closure related to inadequate wound healing • Presence of granulation tissue/hyperplasia • Increased abdominal pressure related to <ul style="list-style-type: none"> ○ Persistent cough ○ Constipation, ○ Hypertonicity/spasticity ○ Inability to decompress gastric content (i.e. burp) ○ Delayed gastric motility ○ Body structure changes (spinal stenosis, scoliosis) • Type of fluid: gastric contents, wound drainage • Assess appropriateness of tube (i.e., low profile for a patient who pulls the tube; gastrostomy tube with a stabilizer vs. using a Foley catheter)
Peri-Tube Moisture Associated Skin Damage – mildly denuded skin 	<ul style="list-style-type: none"> • If using a dressing, do not apply dressing, leave site open to air. • Correct the reason for leakage. • Apply skin protectant to peri-tube skin (i.e. Remedy Hydraguard). • Consider crusting procedure: <ul style="list-style-type: none"> ○ Ostomy powder to denuded skin ○ Dust off excess ○ Dab with skin prep ○ Repeat a second time

Problem	Nursing Interventions
	<ul style="list-style-type: none"> Initiate a referral to radiology or surgical team for management should be done, options include resize, resite or suture around the insertion site.
<p>Hypergranulation of the Stoma</p>  	<p>Assess for:</p> <ul style="list-style-type: none"> Tube migration causing friction. Stabilization, position of bumper for long shaft (if applicable) and tube length for low profile. Leakage around stoma site. <p>Treatment:</p> <ul style="list-style-type: none"> Stabilize the tube. Consider: <ul style="list-style-type: none"> Dressing to wick exudate from insertion site (i.e. Mepilex transfer) Use of PHMB foam or Hydrofera Blue foam dressing. Application of silver nitrate to hypergranulation area. Corticosteroid to hypergranulation area only.
<p>Infection</p> <p>Fungal/Candidiasis: patchy red macropapules with characteristic satellite lesions, itchy/discomfort, may cause deterioration of the tube and skin problems.</p>	<p>If fungal:</p> <ul style="list-style-type: none"> Notify physician/NP for antifungal prescription. Treat with a prescribed topical anti-fungal powder/cream. Apply moisture wicking dressing to maintain a dry intact area around the tube (Interdry Ag or Mepilex transfer). <p>Assess tube deterioration, breaks and decreased integrity and change if present.</p>

Problem	Nursing Interventions
 <p>Cellulitis: Indurated erythemic skin area with intense pain, purulent drainage at insertion site, high white blood cell count and fever.</p>  <p>Bacterial: characterized by redness greater than 2cm, induration, purulent drainage, pain.</p>	<p>If cellulitis:</p> <ul style="list-style-type: none"> ○ Notify Physician/NP. ○ Antimicrobial dressing ○ Considering changing the tube to coincide with the antibiotics as the tube will be heavily contaminated. <p>If bacterial:</p> <ul style="list-style-type: none"> ○ Notify physician/NP. ○ Antimicrobial dressing <p>Considering changing the tube to coincide with the antibiotics as the tube will be heavily contaminated.</p>
<p>Medical Device-Related Pressure Injury: non-blanchable redness or open wound.</p> 	<ul style="list-style-type: none"> • Rotate external site securement bumper daily to change the position of any pressure points. • Ensure correct placement of the bumper, needs to be 1 to 2mm from the skin in sitting position

Problem	Nursing Interventions
<p>Buried Bumper Syndrome (BBS) BBS is the migration of the internal site securement (balloon, mushroom, dome) through the gastric lumen such that it becomes lodged in the gastric wall or along the gastrostomy tract.</p> 	<p>Contributing factors:</p> <ul style="list-style-type: none"> • Excessive traction on the feeding tube. • Inadequate daily rotation of tube. • The external bumper is sitting too tight on the skin resulting in tension on the tube and the internal bumper being pulled into the gastric wall. • Increased weight leading to increased fat on abdominal wall. <p>Signs/Symptoms:</p> <ul style="list-style-type: none"> • Leakage round the G-tube. • Inability to feed through the G-tube including leakage at the time of infusion. • Inability to rotate or move the tube in and out of the stoma. • Pain, swelling and local infection. <p>Treatment: Notify the Physician/NP/NSWOC if the patient presents with the above symptoms. NSWOC to measure for new tube. May need to consider a new site if the wound is extensive.</p>
<p>Hemorrhage</p>	<p>Bleeding at the tube insertion site is rare as only a small incision is made during the procedure.</p> <p>If the patient presents with hematemesis, melena and/ or presence of fresh blood in the gastrostomy tube the medical team should be informed immediately.</p>

Appendix F: Trouble-Shooting Tube Complications

Deterioration of the Feeding Tube	<ul style="list-style-type: none"> Assess for the presence of pitting of the tube shaft, ballooning of the tube during feeds, and a foul smell and significant changes in colour of the tube. Change the ballooned G- tube or refer to Physician/NP to have non-ballooned G-tube, J-tube or GJ-tube replaced.
Tube is blocked -feeds/medication cannot be administered	<ul style="list-style-type: none"> Go along the length of the tubing, starting at the port, to check for kinks and pill fragments. If there is a kink unbend the tubing to fix it and break up pill fragments if able. If there is no kink, take a 50 mL syringe and aspirate as much of the contents out of the tube as possible and throw away the fluid. Draw up 10mL of warm water in the 50 mL syringe and using a back and forth motion apply pressure for 1minute to help clear the blockage. Clamp the tube for 5 to 15 minutes. Try to aspirate again. Flush with warm water. If tube remains clogged, notify the provider for further instructions and orders for sodium bicarbonate and pancreaticlipase). <p>Instructions for unclogging Feeding Tube:</p> <ol style="list-style-type: none"> Crush and dissolve one sodium bicarbonate 325 mg tablet and one pancreaticlipase tablet in 15 to 30 mL warm tap water. Draw up solution into a syringe. Wearing a mask and goggles is recommended due to possible splash back. If able, attach an empty syringe to the feeding tube; then draw back on plunger of syringe to decompress all air and fluid from the feeding tube. Pinch off the tube with your fingers, and discard syringe. Or allow tube contents to drain out by gravity to allow enzyme solution to reach the blockage. Instill pancreaticlipase/bicarbonate solution into feeding tube. Clamp the tube or leave the syringe attached to end of feeding tube and wait 30 minutes. After 30 minutes, flush the tube with 30 mL of warm tap water. Repeat once if necessary.

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	<p>9. Discuss tube replacement with the physician if 2 attempts to clear the tube have failed and other causes of tube occlusion (e.g. kinked tube) have been ruled out.</p> <p>** Do not instill any type of soda pop into the tube. The sugar in the pop can cause a greater blockage or promote bacterial growth.</p>
Tube is dislodged	<ul style="list-style-type: none"> • Stop feeds. • Check placement. • Replace tube if ballooned; notify Physician/NP if non-ballooned.
Tube falls out	<ul style="list-style-type: none"> • For a non-established (less than 4 weeks) G-, J-, or GJ-tube: Community/Long Term Care, cover the site with a dressing and send client to ER; in Acute Care cover the site and notify Physician/NP. • For an established ballooned G-tube (4 weeks or greater): RN can insert new ballooned G-tube or a small French catheter (12 or 14FR) until a G-tube can be inserted. • For an established non-ballooned G-, J- or GJ-tube (4 weeks or greater): RN can insert a small Foley catheter (12 or 14FR) to maintain the tract until a new feeding tube is placed; <u>do not</u> inflate the balloon. Notify the Physician/NP as soon as possible for tube replacement.

Appendix G: Enterostomy Feeding Tube Assessment Flowsheet

<u>Enterostomy Feeding Tube (EFT):</u> G- J- GJ-Tube Assessment Flowsheet		Addressograph/Sticker
Type of Feeding Tube: <input type="checkbox"/> G <input type="checkbox"/> J <input type="checkbox"/> GJ <input type="checkbox"/> Other _____ EFT: <input type="checkbox"/> Long Shaft <input type="checkbox"/> Low Profile Manufacturer: _____	Insertion Date: _____ Placement confirmed by: <input type="checkbox"/> Radiology Report <input type="checkbox"/> GI Report Other _____	
Internal Site Securement: <input type="checkbox"/> Balloon <input type="checkbox"/> Non-Balloon External Site Securement: <input type="checkbox"/> Bumper <input type="checkbox"/> Sutured at the site <input type="checkbox"/> Stabilization Disks : Date to remove disk sutures _____	Balloon Volume at insertion : _____ ml N/A Long Shaft length from skin to end of tube at first assessment: _____ cm	
Completed by Nurse <input type="checkbox"/> Initials: _____ Date: _____	Expected Date of Tube Replacement: _____ Location: <input type="checkbox"/> Radiology <input type="checkbox"/> Residential Hospital <input type="checkbox"/> Home	

Careplan (in addition to above)

Assessment & Care/Management	Date:								
Peri-tube skin: Intact Denuded Erythema Induration (ID)									
Hypergranulation Pressure Injury (PI)									
Site: Drainage noted: Y/N If Yes then:									
Colour: Brown Green Red Yellow									
Amount: Small Moderate Large									
Tube free from abnormalities (cracks, breaks, kinks) Y/N									
Long Shaft skin level position: _____ cm									
Long Shaft length from skin to end of tube _____ cm.									
Long Shaft migrated in or out of more than 2cm? Y/N or N/A if Yes then:									
Notify Physician or NP									
Low Profile approx. 0.5cm above skin Y/N or N/A									
Peri-tube skin and tube cleansed as per DST:									
Daily until site healed and then q2-3 days and prn <input checked="" type="checkbox"/> if done									
G-tube (long/low) rotated 360° and % daily: <input checked="" type="checkbox"/> if done									
Flushed as per orders (document on In/Out sheet) <input checked="" type="checkbox"/> if done									
Balloon water withdrawn / water added to balloon qweekly									
Record (in mLs) withdrawn/amount instilled (after 4 weeks)									
Dressing applied if needed: <input checked="" type="checkbox"/> if done or N/A									
Tubing securement device (long shaft) is insitu: Y/N									
Tubing securement device changed: <input checked="" type="checkbox"/> if done or N/A									
Low-Profile extension tube replaced q2weeks: <input checked="" type="checkbox"/> if done									
Progress Note									
Nurse Signature									
Treatment plan	PN (v)	Date initiated	Initials						

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Appendix H: Competency checklist: Ballooned G-tube Replacement

Please print a separate checklist for a Long shaft and a low profile tube. Must be signed off for both Long Shaft and Low profile devices. (Can be completed at different times)

Skill Demonstration	Met	Unmet	Initials of Assessor
Considers safety aspects of performing change.			
Checks for Physician/NP order to do the change.			
Explain procedure to patient/client/people living in Long-Term Care and obtains verbal consent.			
Assesses that the stoma tract is established.			
Hold feeds/medications 30 minutes prior to tube change.			
Check the chart for documentation of previous change procedures.			
Long Shaft: Checks for most current insertion measurement.			
Assembles required equipment and supplies as per Ballooned G-tube change procedure.			
Performs hand hygiene appropriately throughout the procedure.			
Position patient appropriately for procedure.			
Inspects new tube for cracks or kinks.			
Checks the balloon.			
Long Shaft: Check the movement of the bumper.			
Demonstrates how to determine depth new catheter needs to be inserted to ensure correct placement.			
Procedure for changing a Balloon G tube (long shaft and low profile)			
Prepares the tube.			
Cleanses the site appropriately.			
Demonstrates appropriate tube removal process.			
Cleanses the insertion site.			
Insert new ballooned G-tube into the tract.			
If resistance is met, troubleshoots the resistance.			
Inflates the balloon.			
Long Shaft: gently pulls up on the tube until resistance is met.			
Long Shaft: Position the bumper and removes residual lubricant.			
Low Profile: Ensures low profile tube sits flush with skin.			
Rotates the tube.			

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Confirms placement.			
Flushes the tube.			
Assesses the need for a dressing.			
Assesses clients for pain, site bleeding.			
Discards all supplies.			
Documents procedure as per VCH/PHC documentation standards.			
Identifies methods to assess frequency of catheter changes.			
Completes Quiz; must obtain 100%. If less must re-review CPD and repeat.			

Learning Plan if competency not met:

Add in learning plan: Awaiting template from Provincial

Date: _____

Registered Nurse / Registered Psychiatric Nurse / Licensed Practical Nurse

Print Name _____ Signed _____

Assessor (Experienced doing Balloon G-Tube changes and uses CPD to guide staff assessment)

Print Name _____ Signed _____

(One copy for nurse; one for file)

Appendix I: Ballooned G-tube Replacement Quiz

This quiz will test your knowledge of the ballooned G-tube replacement procedure.

1. **Your client has a new ballooned G-tube that was inserted 6 weeks ago and the tract is healing well. You have received a physician's order to change the tube next week. Please indicate which statements are true regarding who can change the ballooned G-tube.**
 - a. RN can change the tube as there is a physician's order and the tract will be 7 weeks old at the time of removal
 - b. Physician/NP must do the change
 - c. Physician/NP must do the change in a hospital setting
2. **Your client has a long shaft ballooned G-tube and wants to change to a low profile, what do you need to consider prior to doing this? Select all that apply:**
 - a. Have a measuring device to determine length of tube needed
 - b. Is the length of the low profile device suitable for the client
 - c. 2 low profile tubes, 1 the same Fr size of the current long shaft tube and one Fr size smaller
 - d. The cost is significantly higher for the client
 - e. All of the above
3. **When changing a ballooned G-tube how will you gauge the length of the new tube if there are no markings present on the tube? ____**

4. **When removing ballooned G-tubes some clients find it painful. Which of the following techniques can be used to minimize pain? Select all that apply**
 - a. Rotate catheter 360 degrees prior to removal
 - b. Have client take a deep breath and remove tube with one swift pull and slight rotation
 - c. Lubricate tract prior to removal
 - d. Take analgesia 40 min prior to procedure
 - e. All of the above
5. **You have inserted a new ballooned G-tube to the depth as measured prior to old G-tube removal and you inflate the balloon. On checking placement you cannot confirm that it is in the stomach, what should you do?**
 - a. Remove G-tube and re-attempt insertion as G-tube is in the wrong place
 - b. Contact physician/NP
 - c. Advance G-tube after deflating balloon and re-inflating and if still not able to confirm placement contact NP/Physician

- 6. Following ballooned G-tube insertion you notice some bleeding around the insertion site. What should you do? Select all that apply**
- a. Advise client to monitor bleeding around the site and if it doesn't stop to call NP/Physician
 - b. Advise client some bleeding is expected
 - c. Advise client to clean and remove dressing every 2 hours until bleeding stops
 - d. All of the above
- 7. Following ballooned G-tube change client education should include:**
- a. Reporting any increasing abdominal pain, blood, leakage from the insertion site
 - b. To apply a new clean dressing to site every morning
 - c. Signs and symptoms of peritoneal infection
 - d. All of the above
- 8. Your client is taking warfarin and is due for a ballooned G-tube change, who can change the catheter? Select all that apply**
- a. RN
 - b. LPN
 - c. Nurse Practitioner
 - d. Physician
 - e. All of the above
- 9. When performing the ballooned G-tube change it is important to prepare all materials prior to removal of the old catheter because:**
- a. Demonstrates good organizational skills
 - b. It is the best way to maintain a sterility throughout the procedure
 - c. Insertion of the new tube must be done quickly to prevent pain and spasm
 - d. Insertion of the new tube must be done quickly to ensure the tract does not close
 - e. All of the above

Date: _____

Name: _____

Score ____/9

Self-Assessment Quiz Answers

The answers to the quiz are found below. If you get any questions wrong, review the appropriate section of the DST guideline and procedure.

1. **Answer: c**
Although a Physician and NP must do the change the first change must be done in a hospital setting.
2. **Answer: e**
All of the points need to be considered when changing to a low profile device
3. **Either looking at the measurement on the tube or measuring the length of the tube from the skin to the hub and comparing with the initial tube measurement**
4. **Answer: e**
All of the points should be considered
5. **Answer: c**
If you have not inserted the tube far enough you will not get gastric contents back
6. **Answer: d**
7. **Answer: a and c**
A clean dressing is NOT required, only if needed or preferred by client
8. **Answer: a, c, d**
RN, NP, Physician can change the Balloon G tube but must check the clients' INR first and forewarn clients that they will likely have evidence of blood around the insertion site following a change.
9. **Answer: e**

If your answers are incorrect consider reviewing the procedure for changing a Balloon G tube.

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	Endorsed By: PHC Professional Practice Standards Committee	Endorsed By: (Regional SharePoint 2nd Reading) Health Authority Profession Specific Advisory Council Chairs (HAPSAC) Health Authority & Area Specific Interprofessional Advisory Council Chairs (HAIAC) Operations Directors Professional Practice Directors Final Sign Off: Vice President, Professional Practice & Chief Clinical Information Officer, VCH
Owners: <i>(optional)</i>	VCH / PHC	
	DST Developer Lead(s): Regional Skin and Wounds Committee Clinical Nurse Specialist, Wound, Ostomy, Continence, Professional Practice, VCH Clinical Nurse Specialist, Wound, Ostomy & Skin Care, Professional Practice and Nursing, PHC Development Team member(s): Nurse Case Manager, Health Services for community living, VCH Practice Initiatives Lead, Professional Practice, VCH NSS Assessment-Coordination, PHSA Practice Leader Clinical Dietetics, Clinical Dietetics, VCH Nurse Practitioner, WOCN Long-Term Care Program, VCH VCH Regional Professional Practice Initiatives Lead for Wound Ostomy, Professional practice, VCH Nurse Educator IV Therapy, Patient Educator IV Program, IV Therapy, PHC	

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	<p>Enterstomal Therapist, Surgery Program, VCH</p> <p>Nurse Clinician/Educator - 6W- Orthopedics, 6E General Surgery Acute Services, VCH</p> <p>Richmond, VCH</p> <p>Enterostomal Therapist/WOCN Nurse Long-Term Care Practice, VCH</p> <p>Prof Practice Director, Nursing & Allied Health Long-Term Care Practice, VCH</p> <p>Community Health Nurse Health Services for Community Living, VCH</p> <p>Wound Ostomy Clinician, Continuing Care, VCH</p> <p>Wound Ostomy Continence Clinician, Raven Song Community Health Centre, VCH</p> <p>Clinical Practice Leader, Long-Term Care Practice, VCH</p> <p>Clinical Nurse Educator Clinical Educator - Nursing, VCH</p> <p>Wound Care Clinician, Medical/Surgical Inpatient Services, VCH</p> <p>Nurse Educator, Nursing Administration, PHC</p> <p>Wound Ostomy Clinician, Professional Practice & Nursing, VCH</p> <p>Nursing Practice Initiatives Lead, Professional Practice, VCH</p>
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