

# Medical Procedure for Gastrostomy Tube Feed and Clean Intermittent Catheterization (CIC)

## Practice Procedures for the Administration of Clean Intermittent Catheterization (CIC) and Feed via Gastrostomy Tube and Monitoring/Care of Catheterization Site or Gastrostomy Tube in the Educational Setting

### 1.0 Purpose

- The purpose of these guidelines is to provide direction on safe practice for the administration of clean intermittent catheterization (CIC) and gastrostomy tube feed and the care of the catheterization and gastrostomy tube site.
- To provide support to those required to provide catheterization and tube feedings to students while at school.

### 2.0 Scope

- These guidelines refer to all services where CIC or feed via gastrostomy tube is provided within the school environment.

### 3.0 Recommendations and Education Requirements

- It is recommended that all staff working with students who require CIC or gastrostomy tube feeding become familiar with the procedure and to keep their knowledge current by reviewing the resource book provided.
- It is recommended that the student's caregiver provide any information pertinent to the care of the catheterization site or gastrostomy tube feeding site, supplies required, any changes in care, or special instructions.
- It is recommended that the student's caregiver, the school employees, and any other identified partners attend an annual case conference to review the practice procedure as well as emergency plan for each individual student at the beginning of each school year and as needed.
- It is recommended that the school division provide training to staff on CIC or gastrostomy tube feeding if this is not within their professional scope of practice. For instance, Registered Nurses are trained in the administration of CIC and will not require further in-service, however Educational Associates will require training.
- Educational Associates will receive both theory and hands on training when CIC or gastrostomy tube feeding is required. A refresher session will be provided at the beginning of each school year for those involved in the care of students requiring CIC or gastrostomy tube feeding.

### 4.0 Definitions

#### ***Clean Intermittent Catheterization (CIC)***

Urine is produced by the kidneys and carried to the bladder where it is stored. When emptying is appropriate, the bladder outlet control muscle (sphincter) normally relaxes while the bladder muscle contracts to expel the urine through the urethra ("urine passage").

Sometimes, the bladder may not empty completely or at all, usually because of obstruction of its outlet (occasionally seen after pelvic surgery), weakening of the bladder muscle, or complications with the nerves controlling the bladder (Spina Bifida). The bladder must then be emptied through a hollow plastic or rubber tube, a catheter, passed through the urethra.

For many individuals with incomplete bladder emptying, it is possible to learn to insert and remove a catheter themselves (clean intermittent catheterization or CIC), decreasing the risk of infection and minimizing discomfort with little inconvenience. Children who require CIC may need help during all or part of the process.

*Catheter:* A tubular medical device for insertion into canals, vessels, passageways, or body cavities for diagnostic or therapeutic purposes (Merriam-Webster 2006). They vary in length and diameter and can come pre-lubricated for ease of use.

*Catheterization:* The use of or insertion of a catheter as in or into the bladder (Merriam-Webster 2006).

*Clean:* Free from disease or infectious agents (Merriam-Webster 2006).

*Intermittent:* Coming and going at intervals: not continuous (Merriam-Webster 2006).

*Supine:* Lying on the back or with face upward (Merriam-Webster 2006).

*Urethra:* The canal that carries off the urine from the bladder (Merriam-Webster 2006).

### ***Gastrostomy Tube Feeding***

Enteral Feeds/Tube Feeds/Formula: are commercially prepared and pre-packaged and sterile; this reduces the risk of microbial contamination. They vary according to the pharmaceutical company and prescription. Feeds are administered on either a continuous or intermittent basis depending on the nutritional requirements of and the condition of the user.

Gastrostomy Tube: a tube used to introduce nutrients into the stomach--also called G-tube or stomach tube (Mosby 2006).

PEG Tube: Percutaneous endoscopic Gastrostomy feeding tube in one which has been inserted directly through the abdominal wall into the stomach. (CREST 2004)

Gastrostomy Feeding: the introduction of nutritional feeding through a tube that it is surgically inserted into the stomach through the abdominal wall (Mosby 2006)

## **5.0 Supplies**

### ***Clean Intermittent Catheterization (CIC)***

- A clear plastic or soft rubber sterile catheter, size 12, 14 or 16 French (as directed by doctor)
- Water soluble lubricant (e.g. KY Jelly™, Muko™, etc.). **Do not use petroleum jelly (e.g. Vaseline) or mineral oil.**
- Soapy wash cloth, disposable towelettes or unscented diaper wipes
- Clean, dry towel
- Urine collection container
- Latex free gloves (non-sterile)

### ***Gastrostomy Tube Feeding***

- Appropriate formula
- Appropriate administration set (bag with tubing)/possibly a pump
- Pole or something to hang infusion set on
- 60ml catheter tipped syringe (for flushing the tube)
- Clean covered container for syringes and caps (if required)
- Water for flushing after the feed.
- Gloves

## **6.0 Guidelines**

### ***Clean Intermittent Catheterization Technique (female):***

Proper “clean” technique will usually prevent infection without the need for absolute sterility. CIC may be performed in any clean washroom; counter space within reach is useful.

1. Assemble the necessary supplies and have them close at hand.
2. Position the individual in supine or semi –reclined position.
3. Wash your hands thoroughly with soap and water, then, rinse and dry. It is best to keep your fingernails short and clean. Apply gloves and open catheter packaging taking precautions to ensure catheter does not come into contact with any surfaces.
4. Lubricate about 8cm (three inches) of the catheter tip (if not pre-lubricated) with water soluble lubricant.
5. Spread thighs wide apart and separate vaginal labia with one hand. Wash from front to back with soap and water, then rinse with water and dry. A damp towelette can be used as an alternative.
6. With your non-dominant hand (i.e. left hand for right-handed), spread labia with your index finger and thumb to expose the urethral opening.
7. Using your dominant hand, slowly insert the catheter into the urethra until urine begins to flow (about 5cm or two inches). Advance the catheter another 3cm (about one inch) to ensure that the tip is well into the bladder.
8. Drain urine into a container. Gentle straining or supra pubic pressure may help bladder emptying.
9. When urine stops flowing, pinch the catheter and withdraw slowly. Urine may flow irregularly as additional pockets are drained. Take note of the amount of urine obtained as well as the color and quality.
10. You may wish to wipe the urethral opening with tissue paper.
11. Discard catheter and used supplies in garbage.

### ***Gastrostomy Tube Feeding***

#### **Guidelines for administration via gravity**

- a. Wash hands thoroughly with soap and water
- b. Ensure student is seated in an upright or semi-upright position
- c. Fill the feeding bag with the prescribed amount of formula and run it to the tip of the tubing to clear out all the air. (air will not harm the person but may cause gas and bloating)
- d. Apply gloves
- e. Check the site for any redness or leaking and document it on the feeding administration log (see attached)
- f. Check to make sure the tube is not plugged by flushing the tube with the 60ml syringe using the prescribed amount of water
- g. Connect the end of the tubing to the gastrostomy tube by opening port and inserting the tube and hang the feeding bag at least 18 inches above the level of the stomach
- h. Open the clamp and allow the feed to flow into the gastrostomy tube. A feeding should take anywhere from 15-30 minutes
- i. Follow the feed with the prescribed amount of water ( using a 60ml syringe)
- j. Rinse the bag and the tubing thoroughly after each feed and wash with soap and water every 24 hours and rinse thoroughly with water
- k. Wash hands
- l. Document feed on Gastrostomy Tube Feed Administration Log

## **Guidelines for administration with Pump**

- a. Wash hands
- b. Fill feeding bag with prescribed amount of feeding and run it to the tip of tubing to clear out the air
- c. Apply gloves
- d. Check the site for any redness or leaking and document it on the feed administration log (see attached)
- e. Connect the end of the feeding bag tube to the gastrostomy tube by opening port and inserting the tube. Set the pump rate to flow at the required amount of ml per hour
- f. Check to make sure the tube is not plugged by flushing the tube with the 60ml syringe using the prescribed amount of water
- g. Open the clamp on the tubing and push the start button on your pump.
- h. When the feeding is complete, disconnect the feeding set
- i. Connect your syringe to your feeding tube and slowly push in the prescribed amount of water
- j. Rinse the bag, tubing and syringe after each feeding and with warm soapy water every 24 hours
- k. Wash hands
- l. Document feed on Gastrostomy Tube Feed Administration Log

## **7.0 Monitoring and Possible problems**

### ***Clean Intermittent Catheterization Technique (female)***

If urine does not flow, make sure that the catheter is not in the vagina. Use a clean catheter if the first one goes into the vagina.

- Pain or resistance with the passage of a catheter may indicate that you are not using enough lubricant. Occasionally, it may be a sign of scar formation in the bladder outlet.
- Blood on the catheter or in the urine suggests the possibility of injury to the urethra or bladder. Concern arises when bleeding is continuous, frequent or heavy.
- Cloudy, foul-smelling urine, painful urination, fever (over 38.5°C or 101°F), chills or abnormal sweating may indicate infection.

If you are unable to insert the catheter after several attempts, you should follow emergency plan. Please contact your doctor or urology nurse if you have any of these problems. CIC is a safe and effective way of emptying the bladder when necessary.

### ***Gastrostomy Tube Feeding***

#### **Monitoring of Gastrostomy Site**

- Staff providing tube feed will look at the gastrostomy site and document its condition with each water/formula administration
- In the event that they are concerned about the gastrostomy site and the concern is NOT emergent they will contact the primary caregiver by phone or in writing to express their concern
- Where available, the primary caregiver or other identified partners such as home care or members of a health care team may be involved in a routine assessment of the gastrostomy site at school. This will be determined at the annual case conference.

#### **Procedure related to a blocked tube**

- Turn off feed
- Check that all clamps are open and tubes are not kinked
- Attempt to flush the tube with tepid water
- Never insert anything into a plug tube
- **If unable to flush, follow procedure outlined in the individualized emergency plan.**

### Procedures related to a tube that has fallen out

- The tract where the tube is inserted can close in 2 hours. Immediate action must be taken.
- **Follow procedure outlined in the individualized emergency plan.**

### 8.0 Emergency Plan

- It is acknowledged that there are possible risks and complications that may occur associated with CIC or the tube feed such as blocked tube, a tube coming out, or infection.
- An individualized emergency plan will be determined and reviewed annually with members of the school staff, the caregiver, and any other identified partners.
- See emergency plan form.

### 9.0 References

- Alberta Home Nutrition Support Services (2008) *Gastrostomy Tube Feeding your Child: A resource Booklet for Families*. Retrieved on June 1, 2010 from the world wide web:  
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- The Canadian Urological Association (2009) *Clean Intermittent Self-Catheterization for Women*. Retrieved September 29, 2010 from the World Wide Web:  
[http://www.cua.org/documents/patient\\_information/02e-scfe0609r.pdf](http://www.cua.org/documents/patient_information/02e-scfe0609r.pdf)
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- Merriam-Webster (2006). *Merriam- Webster's Medical Dictionary* (New Edition). Merriam-Webster, Incorporated: Springfield, Massachusetts, USA.
- Mosby's (2006) *Mosby's Dictionary of Medicine, Nursing and Health Professionals* (7<sup>th</sup> eds.). Mosby Elsevier: St. Louis MO.



# Medical Services Administration Log

Student's Name: \_\_\_\_\_

Type and Size of:

Gastrostomy Tube \_\_\_\_\_

Clean Intermittent Catheterization

Formula (type, frequency of feed, and amount prescribed): \_\_\_\_\_

Time and position: \_\_\_\_\_  
\_\_\_\_\_

Amount/frequency of water to be given:  
\_\_\_\_\_  
\_\_\_\_\_

Size and type of catheter:  
\_\_\_\_\_  
\_\_\_\_\_

Date	Time	Description of Site	Amount Given/Obtained	Amount of Water Given	Initials



# MEDICAL RELEASE/ ADMINISTERING MEDICAL SERVICES

Student's Name: \_\_\_\_\_

Date of Birth: \_\_\_\_/\_\_\_\_/\_\_\_\_  
(month/ day/ year)

Address: \_\_\_\_\_

Parents/Guardians: \_\_\_\_\_

Home Telephone: \_\_\_\_\_ Business Telephone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

## Medical Services

Medical Services are:

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Specific time(s) medical services are to be provided:

_____	_____
_____	_____
_____	_____

Other pertinent information:

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## Authorization

I hereby request and authorize the administration of medical services for my child as detailed above. I recognize the administration of medical services will be handled by non-medically trained staff. I release school personnel from liability should reactions result from medical services.

Parent's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Administrator's Signature: \_\_\_\_\_

Date: \_\_\_\_\_



**Health Care Provider Form  
Procedures for Performing Medical Services**

Student \_\_\_\_\_

Date of Birth \_\_\_\_\_

Medical Procedure \_\_\_\_\_

Administration Procedures:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Possible Risks:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Action to be taken in an Emergency:

\_\_\_\_\_  
\_\_\_\_\_

Qualifications Required to Perform These Services:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Health Care Provider (Physician, Nurse Practitioner, Registered Nurse) \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

\_\_\_\_\_  
Health Care Provider's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent's Signature

\_\_\_\_\_  
Date



## Emergency Plan for Clean Intermittent Catheterization (CIC) Complications

**Student Name:** \_\_\_\_\_

**Clean Intermittent Catheterization Catheter Type & Size:**  
 \_\_\_\_\_

**Emergency Contact Information:**

Primary Care Giver: \_\_\_\_\_ Relationship to Student: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Work Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Second Emergency contact: \_\_\_\_\_ Relationship to Student: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Work Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Physician/Health Care Provider: \_\_\_\_\_

Phone: \_\_\_\_\_

**Emergent Concerns:** (steps will be outlined to determine action to be taken in case of emergent event)

- Name of condition/procedure: Clean Intermittent Catheterization (CIC)
- Special precautions: Gloves should be applied at all times due to possible contact with body fluids. CIC procedure should be followed.
- Medications/equipment required: Private space required. Other supplies outlined in CIC procedure.
- Qualifications: CIC in-service by qualified health care provider and hands on training.

Monitoring of Catheterization Site & Non- Emergency Concerns:

- Communication about concerns regarding the site will be: \_\_\_\_\_  
 \_\_\_\_\_
- Partners involved in care will be: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 Parent's Signature

\_\_\_\_\_  
 Date

## Emergency Plan for Gastrostomy Tube Complications

**Student Name:** \_\_\_\_\_

**Gastrostomy Tube type & Size:** \_\_\_\_\_

**Emergency Contact Information:**

Primary Care Giver: \_\_\_\_\_ Relationship to Student: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Work Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Second Emergency contact: \_\_\_\_\_ Relationship to Student: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Work Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Physician/Health Care Provider: \_\_\_\_\_

Phone: \_\_\_\_\_

**Emergent Concerns:** (steps will be outlined to determine action to be taken in case of emergent event)

- Gastrostomy Tube has fallen out:
  
  
  
  
  
  
  
  
  
  
- Blocked Tube:

**Monitoring of Gastrostomy Site & Non- Emergency Concerns:**

- Communication about concerns regarding the site will be: \_\_\_\_\_  
\_\_\_\_\_
- Partners involved in care will be: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Parent's Signature

\_\_\_\_\_  
Date