**R. B. Turnbull Jr. MD WOC Nursing Education Program**

**Mini Case Studies: Ostomy**

Cleveland Clinic

Student Name & Date: Sherrie Powell
Reviewed by:_____
Score: /40

This assignment focuses on applying the assessment of an individual with an ostomy to pouching principles. First, basic principles are identified. Then, principles are applied to clinical situations. *Answer the four questions below* and then read the instructions on the next page

To support your actions, include at least three relevant references in addition to the course textbooks. (Use 7th edition APA formatting)

1. Identify the nursing orders for changing a pouching system on a person with no peristomal skin breakdown. **(2 points)**

   Nursing orders to change a pouching system for a person with no peristomal skin breakdown include using a Coloplast 1-piece, cut to fit, drainable, roll and seal pouch (#15821) for routine pouch changes every 3-4 days or as needed for leakage around the barrier.

   *Gather your supplies, including pouch, ostomy scissors, cloth to clean, cloth to dry, and bag for old appliance disposal
   *Remove old pouch by pulling the bag toward the stoma using the push/pull technique paying attention to the amount and consistency of effluent or stool
   *Clean the peristomal skin gently with warm water and allow it to dry completely
   *Assess the stoma for changes in color or shape
   *Assess the peristomal skin for any breakdown or irritation
   *Measure your stoma and cut the pouch barrier wafer to fit around the stoma, allowing 1/8" of peristomal skin exposure from the barrier wafer's edge
   *Apply Coloplast 1-piece drainable cut-to-fit barrier pouch (#15821)
   *Empty pouch when 1/3 to 1/2 full and change every 3-4 days or as needed for leakage
   *Call the ostomy clinic for any stoma-related issues
   (Carmel & Goldberg, 2022)

2. Identify nursing orders for changing a pouching system on a person with peristomal skin breakdown**.** **(2 points)**

   Nursing orders to change a pouching system for a person with peristomal skin breakdown include performing "crusting technique" to the peristomal skin by sprinkling skin barrier powder (stoma powder) on denuded skin, brushing off the excess, and sealing it with liquid skin barrier, before using a Coloplast 1-piece, cut to fit, drainable, roll and seal pouch (#15821) for routine pouch changes every 3-4 days or as needed for leakage around the barrier.

*Gather your supplies, including pouch, adhesive spray remover, cloth for cleaning, cloth for drying, stoma powder, 3M Cavilon no-sting barrier film, ostomy scissors, and a bag for old appliance disposal
*Remove old pouch by pulling the bag toward the stoma using the push/pull technique while assessing the amount and consistency of effluent or stool
*Clean the peristomal skin gently with warm water and allow it to dry completely
*Assess the stoma for changes in color or shape
*Assess the peristomal skin for severity of skin breakdown
*Measure your stoma and cut the pouch barrier wafer to fit around the stoma, allowing 1/8" of peristomal skin exposure from the barrier wafer's edge
*Sprinkle stoma powder around the stoma on the non-intact areas of skin, making sure to avoid the stoma
*Gently dust away excessive stoma powder
*Lightly dab 3M Cavilon no-sting barrier film to peristomal skin making sure to cover all areas sprinkled with stoma powder and allow to dry completely
*Apply Coloplast 1-piece drainable cut-to-fit barrier pouch
*Empty pouch when 1/3-1/2 full and change every 3-4 days or as needed for leakage
*Use adhesive remover on future pouch changes to prevent further tissue damage from pouch removal
(Colwell & Hudson, 2022; Carmel & Goldberg, 2022)

3. Identify nursing orders for changing a pouching system on a person with peristomal skin breakdown and the presence of satellite lesions**. (2 points)**

Nursing orders to change a pouching system for a person with peristomal skin breakdown and presence of satellite lesions include treating the underlying fungal infection by performing "crusting technique" to the peristomal skin by sprinkling nystatin powder over the fungal rash, brushing off the excess, and sealing it with liquid skin barrier, before using a Coloplast 1-piece, cut to fit, drainable, roll and seal pouch (#15821) for routine pouch changes every 3-4 days or as needed for leakage around the barrier.

*Gather your supplies, including pouch, adhesive spray remover, cloth for cleaning, cloth for drying, Nystatin powder, 3M Cavilon no-sting barrier film, ostomy scissors, and a bag for old appliance disposal
*Remove old pouch by pulling the bag toward the stoma using the push/pull technique while assessing the amount and consistency of effluent or stool
*Cleanse the peristomal skin gently with warm water and allow it to dry completely
*Assess the stoma for changes in color or shape
*Assess the peristomal skin for location and extent of the fungal rash
*Measure your stoma and cut the pouch barrier wafer to fit around the stoma, allowing 1/8" of peristomal skin exposure from the barrier wafer's edge
*Sprinkle Nystatin powder to the peristomal skin on all areas of rash and redness, making sure to avoid the stoma
*Gently dust away excessive Nystatin powder
*Lightly dab 3M Cavilon no-sting barrier film to peristomal skin making sure to cover all areas sprinkled with Nystatin powder and allow to dry completely
*Apply Coloplast 1-piece drainable cut-to-fit barrier pouch
*Empty pouch when 1/3-1/2 full and change every 3-4 days or as needed for leakage
*Use adhesive remover on future pouch changes to prevent further irritation from pouch removal
*Discontinue the use of the Nystatin powder once rash has resolved
*Dry the pouching system thoroughly after showers or bed baths
*Contact the doctor for worsening rash or failure to respond to treatment
(Colwell & Hudson, 2022; Carmel & Goldberg, 2022; Salvadalena & Hanchett, 2022)

4. Differentiate the standard wear barrier from an extended wear barrier. Identify the type of ostomy or situation where each type of barrier would be indicated, and provide a *specific* example for each. Identify manufacturer name, product name, and manufacturer product number. **(4 points)**

The differentiation of the standard wear barrier from the extended wear barrier is in its material ingredients and usage. Both barriers used ingredients such as hydrocolloid, pectin, polymers, and carboxymethyl cellulose (CMC) to absorb moisture and keep the barrier adhered to the peristomal skin. Extended wear barriers, however; add ingredients to lower the absorption and fortify the adhesive barrier to the peristomal skin giving a longer wear time, usually up to 7 days. Extended wear barriers are best used for liquid stool or urine as in the ileostomy or urostomy due to its increased resistance to erosion from liquids and standard barriers are best used for the colostomy as these types of ostomies have lower liquid content. (Colwell & Hudson, 2022)

-An example of a standard wear barrier would be the SenSura Mio 1-piece drainable pouch; product (#14061).

-An example of the extended wear barrier for an ileostomy is SenSura Convex Light Click barrier Xpro extended wear 2-piece pouch; barrier product #11012 and pouch SenSura Click Midi drainable pouch with filter; product (#11114).

-An example of extended wear for the urostomy would be the SenSura Convex Light 1-piece urostomy pouch; product (#11814).

## For each of the below ostomy patient case scenarios:

- Use the information provided to identify an ostomy pouching plan.
    - ***Be specific*:** It is important to note a pouching system is a skin barrier wafer and a pouch. A complete answer should include both unless otherwise indicated. **Include the manufacturer, manufacturer product number, and full product name**. Make sure to include accessory products as needed.
    - When providing the rationale: Describe abdominal characteristics, stoma characteristics, and one other reason why you would choose the specific system.
- The first half of the first case study has been completed for you below as an example.
- To support your actions, include at least three relevant references in addition to the course textbooks. (Use 7th edition APA formatting)
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**Example + Scenario 1**


**55-year-old with a history of colon cancer. Colostomy was created 2 months ago and presents today in the ostomy clinic for assessment and management. Pt is very active and would like to consider a more flexible pouching system. Pt is changing his pouching system every other day because he is fearful of leakage.**

**Assessment: Stoma is pink, budded, and protrudes above skin level. No erythema on parastomal skin. No reports of leakage.**

**Identify a one and two-piece pouching system option along with rationale for choice.**

Image courtesy of Wound, Ostomy, and Continence Nurses Society™ image library.

**One Piece System:** *Hollister Premier one-piece drainable pouch flat Flexwear barrier (**#8031)** with clamp closure, change every 5-7 days and PRN.*

**Rationale:** *This system is flexible and matches the contours of this patient's abdomen. It is appropriate for budded stomas with an even peristomal plane and is manufactured for wear for multiple days.*

**Two Piece option:** Hollister New Image Flextend Extended-Wear, flat skin barrier.
**Skin Barrier wafer:** flat skin extended wear barrier with tape border (#14604). Change every 5-7 days and PRN for leaks.

**Pouch:** Hollister 12 in. New Image Lock 'n Roll Microseal Closure, Drainable Pouch with Integrated Waterproof AF300 Filter and Belt Tabs (#18184)

**Rationale:** This system has a flexible barrier to match the patient's abdominal contours and active lifestyle, as well as giving the patient more confidence in leakage control with the tape border option. The extended wear function is appropriate for multiple days of wear. The pouch is filtered to reduce gas build up and ballooning and decrease interruptions in the patient day with the need to burp the pouch. (Colwell & Hudson, 2022)

/2 points

**Scenario 2**

**42-year-old with Laparoscopic colostomy stoma placement on <u>soft</u>, obese abdomen, 1 week post op.**

**Assessment: Stoma pink, budded, and protruding. Edema and necrosis circumferential at stomal edge. Serosanguineous drainage in pouch. Skin barrier wafer removal notes being cut too small, restricting and causing trauma to the stoma.**

**Identify a one and two-piece pouching system option along with rationale for choice.**

Image courtesy of Wound, Ostomy, and Continence Nurses Society™ image library.

**One Piece option:** Coloplast SenSura 1-piece EasiClose Wide Outlet transparent Maxi flat barrier pouch (#15821) cut 1/8 of an inch larger than the stoma, application of calcium alginate dressing over area of necrosis with changes every 3-4 days and PRN for leaks in barrier.

**Rationale:** The necrosis around the stoma's edge appears to be from the pouching system being cut too small for the stoma. The new pouch should be measured for the proper amount of peristomal skin exposure to protect but not too close to injure the stoma. Placement of calcium alginate over the area of necrosis will help to facilitate the sloughing of necrotic tissue with the new barrier being placed over the product with a good seal. The pouch should be clear to visualize the drainage, the area of necrosis, and the stoma. (Pittman, 2022)

**Two Piece option:** Hollister New Image 2-Piece Pouching System

**Skin Barrier Wafer:** Hollister New Image Flextend, Extended-Wear, flat skin barrier (15604) cut 1/8 of an inch larger than the stoma with application of Stomahesive powder to area of necrosis, change every 5-7 days and PRN for leakage

**Pouch:** Hollister 12 in. New Image Lock 'n Roll Microseal Closure, Drainable Pouche without Filter with belt tabs (#18004)

**Rationale:** As mentioned above, necrosis around the stoma's edge appears to be from the pouching system being cut too small for the stoma. The new pouch should be measured for the proper amount of peristomal skin

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| exposure to protect but not too close to injure the stoma. Stomahesive powder on the area of necrosis will help to facilitate the sloughing of necrotic tissue. The extended wear barrier can be placed over these products with a good seal. The pouch should be clear to visualize the drainage, the area of necrosis, and the stoma. (Pittman, 2022) |
| /4 points |

**Scenario 3**

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|  <br>**56-year-old obese individual with ruptured diverticulitis. A red rubber catheter in place as a bridge for the loop ostomy. Stoma is slightly budded and red. Peristomal skin with erythema and partial thickness wound 4-7 o'clock Etiology may be due to trauma from red rubber catheter movement.**<br><br>Image courtesy of Wound, Ostomy, and Continence Nurses Society™ image library. |
| **Pouching recommendations:** Coloplast SenSura, Flat Standard Wear EasiClose Wide Outlet 1-piece drainable cut to fit pouch (#15821). After cleaning peristomal skin with warm water and allowing to dry, use of crust and seal methond with Stomahesive powder dusting to the peristomal skin then dabbing 3m barrier film to seal. Placement of a flattened small Eakin barrier ring around the stoma before applying the pouching system. Change pouch every 3-4 days and PRN for barrier leaks. |
| **Rationale:** The crusting with stoma powder and 3m barrier film will help to protect and heal the under lying skin while small Eakin ring applied around the stoma will give light convexity and stop the stoma bridge rubbing the peristomal skin. (Salvadalena & Hanchett, 2022) |
| /2 points |

**Scenario 4**

**66-year-old obese individual with a loop ileostomy stoma in an abdominal fold. Appliance leakage causing contact dermatitis. Wear time has been less than 8 hours. Irritation is painful.**

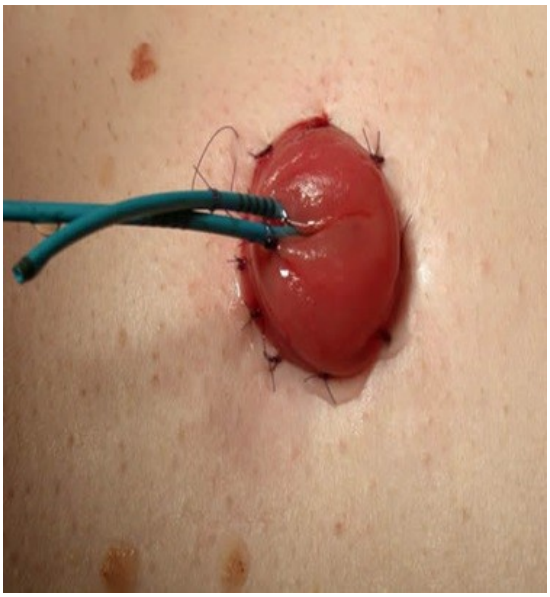
Image courtesy of Wound, Ostomy, and Continence Nurses Society™ image library.

**Pouching Recommendations:** Coloplast SenSura Flex Xpro 2-piece Cut-to-Fit Convex Light Extended Wear Barriers (#11308) with Coloplast 11 ½ in. SenSura Flex EasiClose Wide Outlet Drainable Pouch (#11517). After cleaning with warm water and allowing to dry, crust and seal with Stomahesive to peristomal skin and dabbing 3M Cavilon Barrier Film to seal. Flattened piece of Eakin ring applied to crease at both sides of stoma. Then overlay with a large Eakin around the stoma. Then apply the pouching system.

**Rationale:** Using the crust & seal technique to help heal and protect the skin with a barrier against leaks that will not interfere with pouch adherence. Eakin ring applied to the abdominal fold to help flatten the peristomal plane. Large Eakin ring applied around the stoma to help enhance the peristomal plane. Light convexity barrier pouching system to help protrude the stoma while giving flexibility to the obese abdomen. (Salvadalena & Hanchett, 2022; Colwell & Hudson, 2022)

/2 points

Scenario 5



**A 76 year old patient is seen on a urology floor for a initial post operative visit. Urostomy noted with 2 stents in place, draining clear/pink tinged urine bilaterally. Surgeon requesting to be able to access stents. Pouching system removed was a one-piece post operative pouch. The patient is not yet ready for education and is currently non-ambulatory.**

Image courtesy of SER, 2006

**Pouching option:** Coloplast SenSura Mio Post-Op Transparent Drainable Pouch with Measuring Scale (#18691) change every 3-4 days and PRN for barrier leakage.

**Additional accessories to consider:** 3M Cavilon no-sting barrier film, Eakin barrier rings, Stomahesive powder are a few accessories to consider for Urostomy. They all either protect the peristomal skin or enhance the barrier. (Colwell & Hudson, 2022)

/2 point

Scenario 6

**46-year-old presents to the ostomy clinic with peristomal redness to periphery. Patient is currently in a one piece system with a 12" pouch. Irritation limited to appliance tape collar region. Satellite lesions present. Stoma is budded and round. States has had their ileostomy for 6 months and has not had any problem until recently after Home Health changed the products. Patient also expresses the pouch is too long with the end of the pouch falling into the groin area Abdominal space is small with short distance from stoma to groin.**

Image courtesy of Wound, Ostomy, and Continence Nurses Society™ image library.

**Pouching Recommendations:** Coloplast 11 ½ in. SenSura, Flat Standard Wear EasiClose Wide Outlet 1-piece drainable cut to fit pouch (15821). Cleaning the peristomal skin with warm water and allow to dry. Use the crust and seal method by dusting Nystatin powder over the peristomal skin on the area of the rash, then dabbing 3m barrier film to seal. Placement of a flattened small Eakin barrier ring around the stoma before applying the pouching system. Change every 3-4 days and PRN for barrier leaks.

**Rationale:** Using the Nystatin as the crusting agent will help to heal the underlying fungal infection characterized in the scenario provided. Using the Coloplast 11 ½ in. pouch give the option to roll the bag further in pouch provided. This will further decrease the length of the pouch for the patient. (Salvadalena & Hanchett, 2022)

**Provide an alternative pouching recommendation to address the patient's concern regarding pouch length.**

To address the patient concerns of pouch length, we could recommend a shorter pouch such as Hollister's Premier One-Piece Cut-to-Fit, Drainable Ostomy Pouch – Flat SoftFlex barrier, Lock 'n Roll with Microseal Closure, Filter (#88800). (Colwell & Hanchett, 2022)

/3 points

Scenario 7

**An 80 year old legally blind patient presents to ostomy clinic due to peristomal hernia causing peristomal skin breakdown. Abdomen is firm. Appliance wear time has decreased since parastomal hernia development. Stoma is flush with skin. Os at 4 o'clock area. Complains of odor. "The odor is really bad when I empty the pouch".**

Image courtesy of Wound, Ostomy, and Continence Nurses Society™ image library.

**Pouching Recommendations:** Coloplast 1-piece SenSura Mio Extended Wear, Maxi Drainable Pouch, Covex Flip (#18341). Cleaning the peristomal area with warm water, allow to dry, paint the peristomal area with 3M Cavilon no-sting barrier and allow it to dry, apply a small flattened piece of barrier around the stoma from 3-5 o'clock, then apply small Eakin barrier ring around the entire stoma, then apply the pouch. Change every 5-7 days and PRN for leaks.

**Rationale:** The pouch has a curved, star shaped barrier specifically designed for patients with hernias; this barrier helps to add convexity to protrude the stoma while preventing creases in the barrier. I chose to layer the Eakin ring around the where the Os is located to help to raise the Os and increase convexity to prevent breakdown from leakage to that area. I chose the transparent bag to help with the patient's visual deficit in visualization and assessment of the pouch drainage and the stoma. (Salvadalena & Hanchett, 2022; Colwell & Hudson, 2022)

**Odor Management Strategies:** Recommend to the patient the use of in pouch odor eliminator agents like Adapt lubricating deodorant which is added directly into a clean pouch, or oral agents such as Devrom which contains bismuth and chlorophyll. Education about avoiding odor and gas causing foods such as beans, soy, cabbage, onions, and dairy products. Lastly, educate the patient on drinking odor controlling liquids like tomato juice, orange juice, or cranberry juice. (Colwell & Hudson 2022)

/3 points

**Scenario 8**

**A pediatric Individual presents to the emergency room with stoma prolapse. Caregiver expresses inability to apply pouching system related to stomal protrusion. Stoma is red and healthy. No peristomal irritation.**

**Identify one pouching system with rationale for choice along with one consideration with appliance application specific to a prolapsed stoma.**

Image courtesy of Wound, Ostomy, and Continence Nurses Society™ image library.

**Pouching Recommendations:** Hollister 7 in. Lock 'n roll Microseal closure Mini Drainable 1-piece Cut-to-Fit Pouch with flat skin barrier (#88700). Change 3-4 times a week.

Clean with peristomal skin with warm water, allow to dry completely, then apply the pouch and secure using the fingers starting from the barrier closest to the stoma and work outward. Place hand of the pouch for 5 minutes to help secure and enhance the pouch barrier .

**Rationale:** An infant with a prolapsed stoma may require an adult-sized one-piece pouch to avoid trauma to the stoma. (Wound, Ostomy and Continence Nurses Society et al., n.d.)

**Further Considerations:** The baby can lay flat on the back while applying a cold cloth and light pressure to the stoma for about 10 minutes to try to retract the stoma (an alternative is to sprinkle sugar). (Pittman, 2022)

/3 points

**Scenario 9**

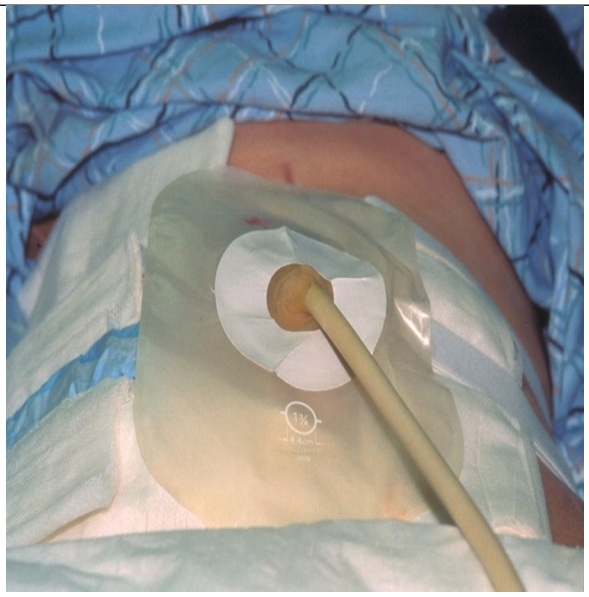


Image courtesy of Judy Mosier, MSN, RN, CWOCN

**You are consulted to see a patient with a new colostomy. Upon entering the room, you note there is an indwelling catheter in the stoma. Nursing report pouch leakage as the hole in the pouch for the tube is cut to fit the stoma resulting in a "big hole" in the front of the pouch. The surgeons's request is to continue to pouch the stoma while pulling the tube through the pouch.**

**Describe how you will secure the tube while separately pouching the stoma and the tube….**

**…using a commercial access port:**

Obtain a Hollister universal catheter access port kit( #9779) which includes the port, hard plastic blue cone to help insert the port, and plastic rings to hold the port in place. Place a hole on top of a clean ostomy bag. Put the outer ring over the hole and place the tip of the soft white cone tip down into the hole. Put glue around the perimeter of the outer ring making the pointed part of the tube adapter face outward. Snip the tip of the port enough to only let the tube through. Pull the tube through the opening of the port then secure the pouch to the skin.

**…in the absence of a commercial access port:**

Using a clean pouch, place a catheter holder device over the front of the pouch, then an X in the middle for the catheter tube to come through. Cut a clean baby nipple tip vertically and horizontally; large enough to pull the tube through. Clean the peristomal skin with warm water then dry. Pull the tube through the opening of the clean bag then secure the pouch to the skin. Use water-proof tape around pouch and seal the opening of the nipple anchoring it to the catheter holder device. (Fellows & Rice, 2022)

/2 points

**Scenario 10**

**86-year-old obese individual presents to the ostomy clinic with a retracted stoma. States has a soft-formed stool once a day. Pouch changed daily as stool goes under the skin barrier wafer, and at times, no stool goes into the pouch.**

**It is determined a convex pouching system should be used. A convex skin barrier wafer is not available.**

**Identify two strategies to create convexity in the absence of a convex skin barrier wafer.**

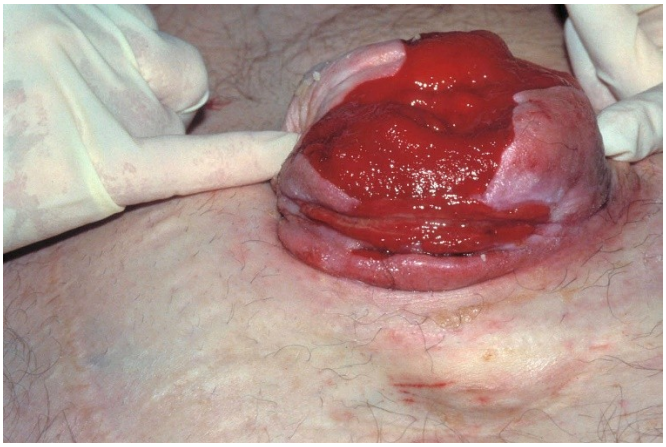
Image courtesy of Wound, Ostomy, and Continence Nurses Society™ image library.

**Alternative convexity option #1:** Use Eakin barrier rings to build convexity around a stoma. Stack or mold to create light or deeper convexity with increase in number of rings protrude the stoma then place a flat barrier pouching system. (McNichol et al., 2021)

**Alternative convexity option #2:** Attach a flat 1-piece or 2-piece pouching system to the ostomy site and use an ostomy belt to apply targeted pressure and tension, creating convexity to protrude the stoma. (McNichol et al., 2021)

/2 points

**Scenario 11**



**A 70-year-old patient presents to the ED with pouching difficulty. They report using a fistula pouch previously, however, this has become too costly of an option. Their stoma measures *4 1/3”* in diameter and they are at a loss for pouching options. The patient will need pouching long term. Identify one product that is manufactured as an ostomy product to accommodate a stoma of 4” or greater in size.**

Image courtesy of Dr. James Wu

**Pouching option:** Hollister Premier Flextend One-Piece Drainable High Output Ostomy Pouch Flat Extended Wear Non Sterile Soft Tap 110mm 4-1/3" Cut-to-Fit (#80110) with change every 5-7 days and PRN for barrier leaks

/2 points

*References: (3 points)*


Carmel, J., & Goldberg, M. T. (2022). Postoperative education for the patient with a fecal or urinary diversion. In J. Carmel, J. Colwell, & M. T. Goldberg (Eds.), *Wound, Ostomy, and Continence Nurses Society core curriculum: Ostomy management* (2nd ed., pp. 189-200). Wolters Kluwer.

Colwell, J., & Hudson, K. (2022). Selection of pouching system. In J. Carmel, J. Colwell, & M. T. Goldberg (Eds.), *Wound, Ostomy, and Continence Nurses Society core curriculum: Ostomy management* (2nd ed., pp. 172-188). Wolters Kluwer.

Fellows, J., & Rice, M. (2022). Nursing management of the patient with percutaneous tubes. In J. Carmel, J. Colwell, & M. T. Goldberg (Eds.), *Wound, Ostomy, and Continence Nurses Society core curriculum: Ostomy management* (2nd ed., pp. 304-315). Wolters Kluwer

Forest-Lalande, L. (2023). Best practice guidelines for ostomy care in neonates, children, and Adolescents. *Journal of Wound Ostomy and Continence Nursing*, *50*(5), 381–385. https://doi.org/10.1097/won.0000000000001001

McNichol, L., Cobb, T., Depaifve, Y., Quigley, M., Smitka, K., & Gray, M. (2021). Characteristics of convex skin barriers and clinical application. *Journal of Wound Ostomy and Continence Nursing*, *48*(6), 524–532. https://doi.org/10.1097/won.0000000000000831

Pittman, J. (2022). Stoma complications. In J. Carmel, J. Colwell, & M. T. Goldberg (Eds.), *Wound, Ostomy, and Continence Nurses Society core curriculum: Ostomy management* (2nd ed., pp. 270-282). Wolters Kluwer.

Wound, Ostomy and Continence Nurses Society, Bookout, K., D'Italia, J., Dudley, J., Hafeman, C., Harrison, B., McLane, K., Rogers, V., & Shelley, A. (n.d.). *PEDIATRIC OSTOMY CARE BEST PRACTICE FOR CLINICIANS*. https://cdn.ymaws.com/member.wocn.org/resource/resmgr/document_library/PEDIATRIC_OSTOMY_CARE-_BEST_.pdf

Salvadalena, G. D., & Hanchett, V. (2022). Peristomal skin complications. In J. Carmel, J. Colwell, & M. T. Goldberg (Eds.), *Wound, Ostomy, and Continence Nurses Society core curriculum: Ostomy management* (2nd ed., pp. 250-269). Wolters Kluwer.