**Definition**

Convexity is the outward curving of the skin barrier and is designed to interface with the immediate peristomal skin. Convex skin barriers promote a good fit between the ostomy pouching system and the peristomal skin where flat barriers would be unsuccessful. This is achieved as the convexity barrier pushes on the surrounding skin, opens or flattens skin folds or helps the stoma protrude more.

**General Information**

- A secure and reliable seal between the peristomal skin and ostomy skin barrier is necessary to protect healthy peristomal skin from stoma discharge
- Skin barriers are either convex or flat. Convex simply describes the shape of the barrier
- Convexity may be recommended to increase the wear time of the ostomy pouching system

**Assessing for Convexity**

- A simple patient assessment methodology can assist in determining the need for convexity. Refer to the Hollister Fit Indicator Tool
- Assessing when convexity is required should be done in consultation with an ostomy care nurse
- Ideally the patient should be assessed in the sitting position
- The pouch should be removed prior to assessment
- A distal stoma assessment is recommended for all loop stomas

**Convexity May be Considered When:**

- **Stoma Assessment**
  - Liquid/Loose stoma output
  - The opening of the stoma is at or below the skin surface
  - The opening of the stoma is off-center
  - The stoma protrudes <3/4” (20mm) or is retracted below the skin surface
  - The stoma becomes flush/retracted during peristalsis (telescopes)
- **Peristomal Assessment**
  - The peristomal topography is uneven or irregular
  - The abdominal tone is flaccid
Convex Products

- Convexity can either be built into the pouching system (integrated) or added with an accessory to the skin barrier
- Convexity is available in one-piece and two-piece options
- Convexity is available in pre-sized or cut-to-fit options
  - Note: When using cut-to-fit options for oval or irregular shape stomas, choose a barrier that is closest to the largest measurement so the convex curvature of the barrier is as close to the stoma as possible
- **Soft** convexity can be integrated into the pouching system or created by adding a convex barrier ring to a flat one-piece pouching system (Refer to Ostomy Care Tip on Adapt convex barrier rings)
- **Firm** convexity can be integrated into the pouching system or created by adding a convex barrier ring to a convex barrier to deepen the curvature when necessary

Convexity Considerations

- Selecting the right convex product may require regular reassessment of products used, condition of the peristomal skin and the pouching system wear time
- Some ostomy care nurses recommend an ostomy belt to enhance the effect of the convexity. (Refer to the Ostomy Care Tip for Adapt ostomy belts)
- The following peristomal conditions do not preclude the use of convex products, however, caution and frequent reassessment is recommended in patients with:
  - Pyoderma Gangrenosum
  - Crohn’s ulcers
  - Caput medusa (peristomal varices)
  - Parastomal hernia
  - Pressure injury
- Patients should be encouraged to contact an ostomy care nurse if there are stomal/peristomal changes, pouching system leakage or weight gain/loss

References:

- “Patient Assessment Guidelines for Convexity” – Hollister Incorporated © 2013
- Best Practice Document: Convex Products – WOCN 2012
- “Adapt Convex Barrier Rings” – Ostomy Care Tip – Hollister Incorporated © 2012
- Lyon, C. & Smith, A. 2010 – Abdominal Stomas and Their Skin Disorders

For product questions, sampling needs, or detailed clinical questions concerning our products in the US, call 1.888.740.8999. In Canada call 1.800.263.7400.