**Supplemental Digital Content: Appendix A: Literature Review Pre-Defined Search Terms and Boolean Combinations**

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| Ostomy | Post-Operative | Convexity | Peristomal Skin Conditions | Other Adverse Events |
| * Colostomy   + Enterostomy   + Ileostomy   + Urostomy   + Interostomy   + Ileal conduit   + Jejunostomy   + Diverting ostomy   + Urinary diversion | * Post-operative * Post operative * Post-op * Post-surgical * Post surgical * Post surgery * Enhanced recovery after surgery * ERAS * Perioperative care * Operative care | * Convex * Convexity * Flexible * Moldable * Creases * Folds * Soft Barrier * Soft abdomen * Firm abdomen * Firm Barrier * Abdominal plane * Abdominal Contour * Light convexity * Deep convexity * Oval Convexity * Inward body profile * Outward body profile | * Peristomal skin condition * Peristomal skin complication * PSC * Peristomal Skin infection * Peristomal skin damage * Peristomal infection * Contact dermatitis * Peristomal Skin Erosion * Denuded Peristomal Skin * Irritant contact dermatitis * Peristomal wound * MASD * Moisture associated skin damage * Peristomal abscess * Pyoderma gangrenosum | * Urinary leakage * Fecal leakage * Silent leak * Mucocutaneous separation * Stomal protrusion * Maceration * Mucocutaneous junction * Folliculitis * Peristomal pressure injury * Peristomal fistula * Stomal retraction * Stoma retraction * Stomal necrosis * Stomal prolapse * Protective barrier |
| Additional notes:   * Include alternative spellings:   + Stoma, Stomal | | | | |
| Boolean Relationship:   * “Ostomy” AND “Post-Operative” AND “Convexity” * “Ostomy” AND “Peristomal Skin Conditions” AND “Convexity” * “Peristomal Skin” AND “Convexity” * “Other Adverse Event” AND “Convexity” * “Convexity” AND “Post-Operative” | | | | |

**Appendix B: Glossary of Terms**

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| Term Category | Specific Term | Description |
| Leakage |  | Leakage is the undermining of the pouch seal by stoma effluent, which can cause detachment of the pouch seal from the skin and allow stoma effluent to make contact with the skin.  The consequences of leakage will cause injury to the peristomal skin (irritant contact dermatitis). Any loss of the epidermis will result in a moist painful area that makes maintaining a seal on the pouching system difficult starting a cycle of continued effluent leakage with increased severity of the irritant contact dermatitis.  If the stoma effluent undermines the seal to the edge of the pouching system, this will cause odor, soil clothes, and social embarrassment.  It is important to discuss all types of leakage with patients so that they are aware of the detrimental effects and to remove potential ambiguity about the user’s perception of what constitutes leakage and when to contact their ostomy nurse. |
| Types of Ostomy | Colostomy | A surgically created opening into any section of the colon through which stool will pass thru a stoma. |
| Ileostomy | A surgically created opening into the distal portion of the small intestine, the ileum through which stool will pass thru a stoma. |
| Urostomy | A surgically created opening into the abdominal wall throughwhich urine will pass through a stoma. This can be constructed from small or large intestine. The type of urinary diversion will be an ileal or colon conduit. |
| Type of Stoma | End Stoma | A stoma that is created by dividing the intestine, bringing the proximal end of the intestine through the abdominal wall, and maturing the stoma once outside of the abdominal wall to attach to the skin. |
| Loop Stoma | A stoma that is created in the small or large intestine by mobilizing the side of the intestine up through the abdominal wall, making a transverse incision on the intestine, and maturing the mucosa. A supportive rod can be placed under the stoma to prevent stoma retraction. The stoma will have two lumens, proximal and distal. |
| Loop-end Stoma | A stoma that is transected from the lower bowel. After closing this end with a stapler, a loop of intestine approximately 10 cm proximal to this stapled end is brought to the abdominal surface. Externally, there is no difference in how a loop or loop-end stoma looks. With loop-end construction, the distal lumen leads to a blind pouch. The blind segment is usually not very long and will produce mucus as the bowel is viable. Loop-end construction is used in bowel stomas when the person has a thick abdominal well, shortened mesentery, or a combination, and there is concern about adequate blood supply to the distal end of the stoma |
| Characteristics of a Stoma |  | The following characteristics of a stoma should be considered when assessing a patient’s pouching system needs:   * Location of stoma opening (os) - above, even or below the plane of the peristomal skin * The position of stoma opening as the patient moves in the sitting, standing and supine positions * Type of stoma (loop, end, loop end) * Shape and size * Extent of protrusion or retraction * Peristaltic movement (progressive wave of contraction and relaxation or moving in and out) |
| Topography of Area Around the Stoma |  | The surface and sub-dermal area around the stoma which can be either uniform or variable, soft or firm. There can be irregularities caused by superficial creases, scars, or deep folds. |
| Peristomal Body Profile and Stoma Profile |  | The shape and depth of the area around a stoma, also referred to as the peristomal plane. The peristomal body profile is best assessed in a standing, sitting, and laying positions.  Peristomal Body Profile Terminology:  Regular – the area around the stoma is more or less level with the abdomen.  Inward – the area around the stoma sinks into the abdomen creating a hollow or dip around the stoma opening.  Outward – the area around the stoma rises from the abdomen creating a peak or bulge.  The area around the stoma can also be:  Uniform – area is even approximately 4 inches around the stoma, or  Variable – area approximately 4 inches around the stoma is not even or  Soft – area around the stoma is supple/flexible, or  Firm – area around the stoma is hard/unyielding.  There can also be irregularities in the peristomal skin with:  Superficial creases –soft wrinkles, puckers, or scars, or  Deep folds –creases with some depth.  The location of the stoma can be:  Above the bend line (near the ribs), or  At the bend line (where the abdomen folds when bending), or  Below the bend line.  The position of the stoma opening in relation to the skin surface can be:  Above skin surface, or  Level with skin surface, or  Below skin surface. |
| Peristomal Skin Complications |  | Skin inflammation, injury, or damage that occurs within the 3 to 4 inches of skin surface surrounding a stoma or skin covered by the adhesive portion of the pouching system. Healthy peristomal skin is intact and free of visible signs of infection or other complications. Injury or damage to the peristomal skin can be caused by:   * **Chemical Exposure:**  prolonged exposure to stoma effluent, typically a poor pouching system seal, prolonged wear time, and/or inappropriate use of products. * **Mechanical Damage:** skin stripping from aggressive or inappropriate adhesive removal and/or pressure injury from incorrect product use, referred to as medical adhesive related skin injury or medical device related injury.   The following additional complications can occur from chemical, mechanical or microbial damage:   * Bacterial, viral or fungal infection * Contact allergic dermatitis * Folliculitis * Hyperplasia * Open lesions |
| Stoma Effluent |  | Discharge or output from a stoma and includes fecal matter, mucus or urine and can be in the form of liquid, solid or gaseous emission. |
| Secure Seal |  | A pouching system that prevents leakage of effluent onto the peristomal skin. |
| Wear Time |  | The predictable number of days that a person wears the pouching system with no leakage or undermining. |
| Mucocutaneous Separation |  | The detachment of the stoma from the surrounding peristomal skin. |
| Skin Barrier Shapes |  | Flat – Even or smooth  Convex – outer curvature  Concave – inner curvature |
| Convexity Skin Barriers |  | A convex skin barrier is the interface between the skin and skin barrier of the pouching system that has curvature varying between a minimal amount of curvature (light or shallow convexity) to a maximum amount of curve (deep convexity) as well as soft/flexible or firm/rigid.  Types of convexity products:   * Flexible * Soft * Deep * Shallow/ Light * Firm * Rigid |