



MIDEAST REGION

Wound, Ostomy, and Continence Nurses Society™

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Peristomal Skin Assessment

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Peristomal Skin Assessment

PERISTOMAL SKIN HEALTH: A WOCN SOCIETY CONSENSUS CONFERENCE



COI Disclosure

Relevant relationships to disclose:

Kelly Jaszarowski, MSN, RN, CNS, ANP, CWOCN

None

Joyce Pittman, PhD, RN, ANP-BC, FNP-BC, CWOCN, FAAN

Medline- speaker

Stealth Belt: Grant recipient

Ostoform: Grant recipient

Funding Acknowledgement

An unrestricted educational grant was provided to WOCN from Hollister, Inc.



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Learner Objectives



Participants will be able to:

describe the consensus conference process
identify evidence and consensus based
statements

Consensus Conference

Structured process

Multiple Meetings

Involves experts and stakeholders

Identify what is known

Development of consensus based statements



WOCN Consensus Conferences

Task Force

Expert reviewers/participants

Content validation reviewers



Peristomal Skin Health: What is Known?

- One million people in US & Canada have an ostomy (Mitchell et al., 2007)
- Up to 80% will have Peristomal Skin Complications (Colwell et al., 2019)
- Scant literature on healthy peristomal skin characteristics (Colwell et al., 2019)



WOCN CONSENSUS CONFERENCE

Task Force Members:

Catherine Ratliff, PhD, GNP-BC, CWOCN, CFCN, FAAN

Margaret Goldberg, RN, MSN, CWOCN

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Mikel Gray, PhD, FNP, PNP, CUNP, CCCN, FAANP, FAAN

WOCN Task Force Purpose/Charge:

- Identify what is known
- Complete a scoping literature review
- Develop evidence & consensus-based statements to guide care in peristomal skin health



Healthy Peristomal Skin Characteristics

What is known?

What are the knowledge gaps?



Ostomy Clinical Practice Guidelines

Four international clinical practice

Guideline	Organization (Country, Year)
Standards of Stomal Therapy Nursing Practice (4th Edition)	AASTN: Australian Association of Stomal Therapy Nurses Inc (Australia, 2013)
Stoma Care National Clinical Guidelines	ASCN: Association of Stoma Care Nurses (UK, 2016)
Clinical Guideline: Management of Adult Patient with Fecal or Urinary Ostomy	WOCN: Wound Ostomy and Continence Nurses Society (US, 2017)
Best Practice Guidelines – Supporting Adults Who Anticipate or Live with an Ostomy (2nd Edition)	RNAO: Registered Nurses’ Association of Ontario (Canada, 2019)

Ostomy Clinical Practice Guidelines

- Findings:
 - Focus peristomal skin complications
 - WOCN guideline: selection of an ostomy pouching system that meets individual's needs for the ostomy type and abdominal contours is an important component of PSCs prevention.



Literature Review: Scoping Questions



- What is skin health (organ health)?
- What is the influence of age, ethnicity, BMI, or sex on skin health?
- What is peristomal skin health?
- What are the effects of Transepidermal Water Loss (TEWL), pH, hydration & sebum on peristomal skin health?
- What is the definition of peristomal skin (i.e. how far around the stoma is considered peristomal skin?)

Literature Review

- Contracted with a medical librarian
- Databases - CINAHL, PUBMED, EMBASE
- Peristomal skin health within the context of skin health
 - Intrinsic factors
 - Extrinsic factors
- Evidence based statements



Literature Review: Key Terms

Peristomal skin health

Peristomal skin integrity

Peristomal skin condition

Pouching surface

Peristomal topography

Skin Health

Causative factors

Organ Health

Epithelial

Peristomal cutaneous manifestations

Characteristics of peristomal skin



Literature Review: MeSh Terms

Colostomy

Ileostomy

**Urinary
Diversion**

Urostomy

Inclusion Criteria

Articles from variety of study designs:

- RCT
- Nonrandomized comparison
- Cohort studies
- Cross-sectional or observational studies multiple case studies
- Systematic reviews with or without meta-analysis of pooled findings
- Integrative & scoping review articles
- Research reports including adult human, healthy volunteers, preclinical studies involving nonhuman subjects (in vivo, in vitro)
- Expert opinion

Inclusion Criteria

- Included full text articles
- Published in English
- January 1980 when pectin based skin barrier was released
- Through 2020

Task Force Review

Selected Articles

**Bibliographic
Review**

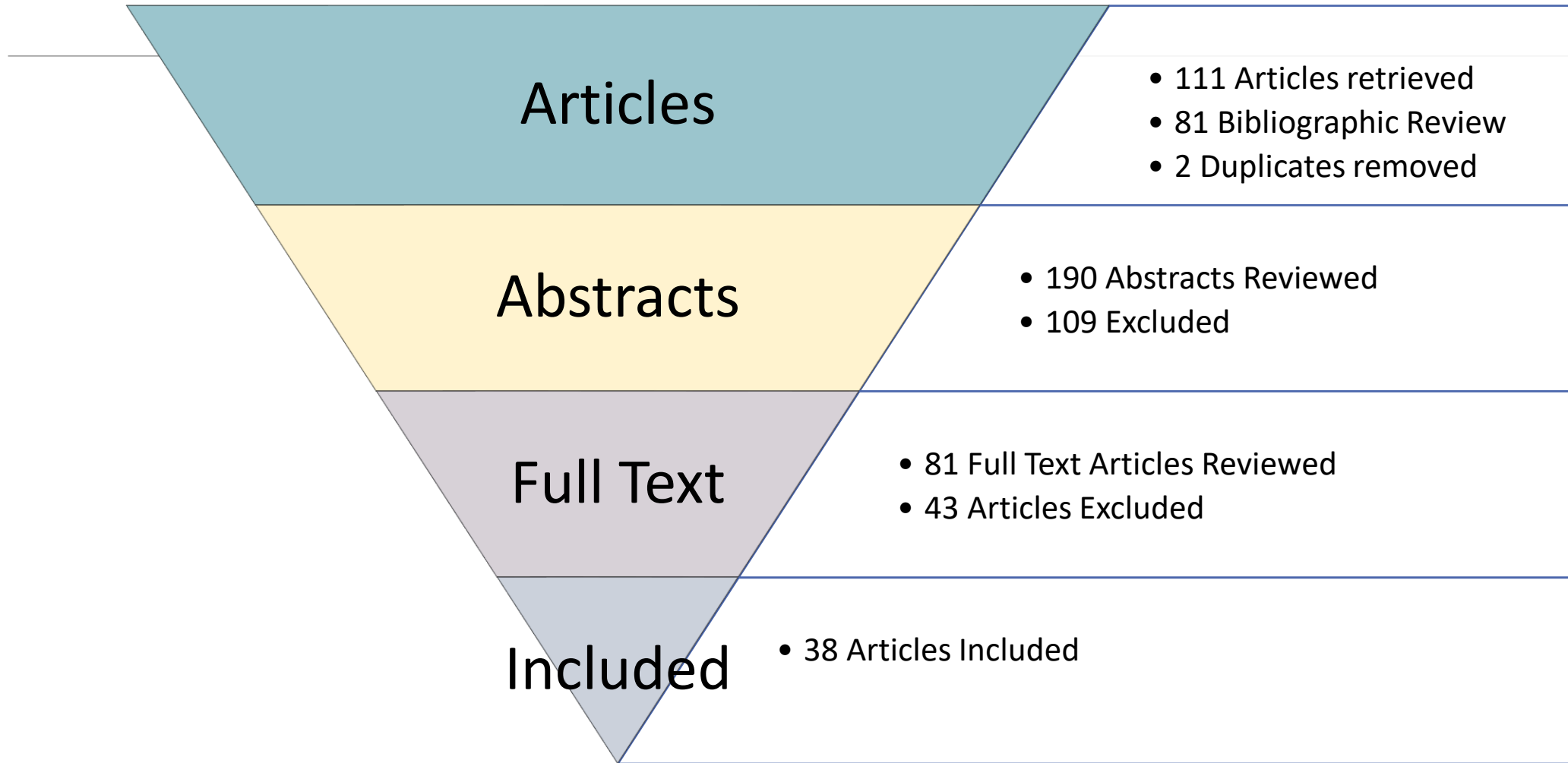
**Task Force Identified
Articles**

**Skin Health Experts:
Alan Cottenden Laura Edsberg**

Task Force Review



Scoping Review Results



Strength Of Evidence

Level	Supported by:
A	Consistent findings from 2 or more randomized controlled trials (RCTs) or a systematic review with meta-analysis (pooled data) of multiple clinical trials
B	Consistent findings from 1 RCT or >1 nonrandomized clinical trial or inconsistent (mixed) evidence from 2 or more RCT or systematic reviews with meta-analysis
C	Expert opinion based on consensus among clinical experts, findings from a single nonrandomized clinical trial, case study, or series of clinical case studies

Ebell MH, Siwek J, Weiss BD, et al. Strength of recommendation taxonomy: a patient centered approach to rating evidence in the medical literature. *Am Fam Phys.* 2004; 69:548–556.

Evidence-Based Statements	Level of Evidence
The incidence of peristomal skin complications are higher in the first 30 days (Ayik et al., 2020)	B
Irregularity in topography (creases and folds in the peristomal skin) negatively affect peristomal skin health (Salvadalea et al., 2020)	B
Peristomal skin health is impaired by repeated removal of skin barriers, resulting in epidermal stripping and increased transepidermal water loss (Nichols et al.,2019)	B
Skin barriers with stronger adhesive forces are associated with higher rates and longer persistence of peristomal skin changes than those skin barriers with weaker adhesive forces (Omura et al.,2010)	B
Mixed evidence suggests that infusion of various additives (aloe, ceramides, manuka honey, vitamin E) may prevent peristomal skin complications (Grove et al., 2019)	B
A ceramide infused skin barrier was shown to reduce itching in a single randomized control trial (Colwell et al., 2018)	B

Consensus Conference: Purpose

To develop consensus-based statements that will serve as guidance for bedside providers of ostomy care in the promotion of peristomal skin health.



Virtual Consensus Conference November, 2020



**Moderator Facilitated
Session**

Panel Members

- Expertise in peristomal skin health
- Years of clinical experience
- Educational Background
- Geographic representation
- Diverse practice settings

Consensus Conference Participants

PARTICIPANT	PRACTICE SETTING	AFFILIATION
Carole Bauer, MSN, RN, ANP-BC, OCN, CWOCN	Outpatient Care/Clinic	Beaumont Health System, Troy, MI
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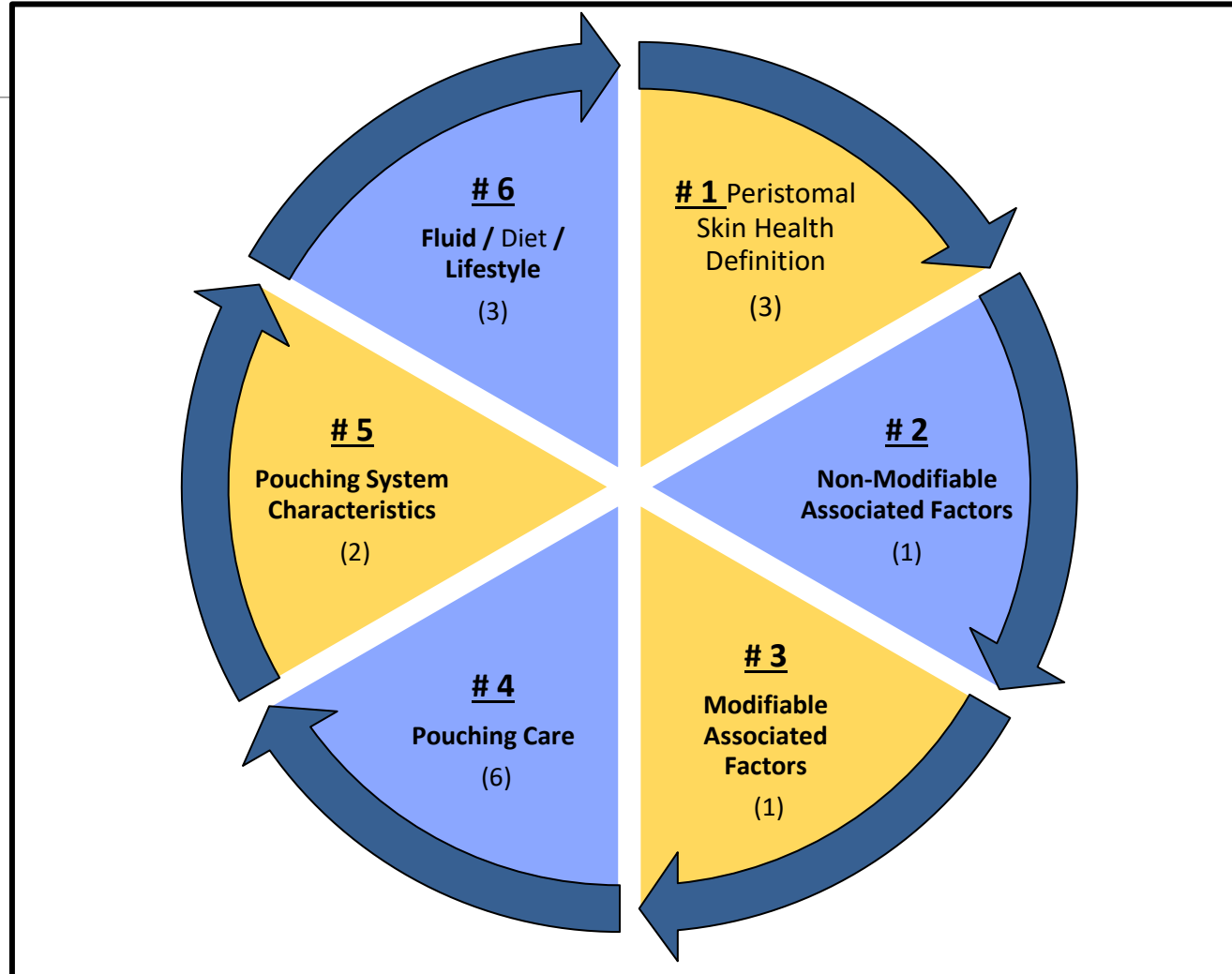
Consensus Process

Draft Statement Read by Moderator

- Votes cast utilizing anonymous electronic system
- Quota for approval of 80%
- If statement did not reach 80% agreement criteria:
 - Up to three rounds of moderated discussion
 - Each round followed by electronic voting
- If statement failed to reach 80% agreement on 3rd attempt, statement was discarded



Consensus Statements



Peristomal Skin Health

1. Peristomal skin is the abdominal skin surrounding the stoma beneath the adhesive portion of the pouching system (barrier and tape).
2. Peristomal skin health =
 - Intact abdominal skin surrounding the stoma (under the adhesive portion of the pouching system)
 - Similar in color and texture to adjacent and contralateral abdominal skin
 - Free of inflammation
 - Has no altered sensitivity such as itching, burning or pain*
3. Peristomal skin assessment should include a standardized approach and be based on recognition of the characteristics of healthy peristomal skin.



Peristomal Skin Health

Intrinsic (Non- Modifiable) Factors:

- Age - Skin pH
- Sex
- Race - skin texture
- Time since ostomy surgery
- Type of ostomy
- Presence of skin disorders



Extrinsic (Modifiable) Factors:

- Pouching care
- Pouching system characteristics
- Fluid/diet/lifestyle

Peristomal Skin Health: Best Practice

- Preoperative peristomal stoma site marking
- WOC nurse involvement for accurate physical assessment, pouching assessment and ongoing care.
- **Correct pouching care**
- **Consider pouching system characteristics**
- **Fluid/Diet/Lifestyle**



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Peristomal Skin Health: Pouch Care

Pouch application:

1. The opening of the barrier should closely fit around the base of the stoma (at the mucocutaneous junction) except for special situations such as stomal prolapse or edematous stoma.
2. Clean the skin with clean water, avoid alkaline soaps to maintain skin's pH, rinse thoroughly, dry well.
3. In the event of residual debris on the peristomal skin, gently cleanse with non-alkaline soap or cleanser, or use an alcohol-free adhesive remover/releaser, followed by thorough rinsing.



Peristomal Skin Health: Pouch Care

Pouch application:

4. Clip or shave hair when necessary - shave away from the stoma, in the direction of hair growth. Do not dry shave. Do not use depilatories; may consider permanent hair removal options.
5. Apply barrier without tension, pulling or stretching.
6. Smooth the barrier into place with firm gently pressure, emphasizing the barrier closest to the stoma.



Peristomal Skin Health: Pouch Care

Pouch Removal

1. Gently remove barrier- pushing skin down and away from the barrier. Continue to move your hand as necessary to support newly exposed skin.
2. Remove the barrier as low and parallel to the skin as able, in the direction of hair growth if possible.
3. Use alcohol-free adhesive remover/releaser, followed by thorough rinsing if needed to loosen the adhesive bond or remove debris.



Peristomal Skin Health: Pouch System Characteristics

1. Selection of skin barrier & accessory adhesives based on individual needs are essential to maintenance of peristomal skin health.
2. Pouching adhesive barrier- select the best product based on its purpose (intended duration) and the adhesive characteristics- gentleness, breathability, stretch, conformability, and flexibility.
 - Karaya
 - Hydrocolloid- short or long duration
 - Silicone
 - Transparent
 - Foam



Peristomal Skin Health: Pouch System Characteristics

1. Correctly select the pouching system to maintain the seal.
2. Pouching system should:
 - a. Maintain sufficient adhesion to keep stomal effluent off the skin
 - b. Minimize peel force upon removal
 - c. Maintain barrier integrity
 - d. Provide predictable and reliable wear-time
 - e. Accommodate abnormalities in peristomal plane (creases, skin folds, bulges, scars) and conform to abdominal contours (edema, activity)



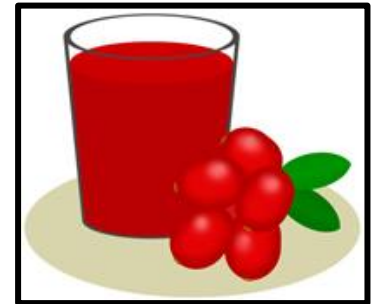
Peristomal Skin Health: Pouch System Characteristics

Pouching system should:

- f. Accommodate variation in stomal height and os position
 - g. Maintain skin's epidermal/moisture barrier.
 - h. Fit the opening in the barrier to fit close to the stoma
3. Pouching system change frequency should be predictable, prior to the occurrence of itching, burning and leakage
 4. Consider the use of ostomy accessories - paste rings, strips, barrier extensions-based on the needs of the individual.
 5. Consider the use of an ostomy support belt/garment.*

Peristomal Skin Health: Fluid/Diet/Lifestyle

1. Drink fluids! Stay hydrated. Follow National Academy of Medicine/United States Food and Science Board recommended daily allowances for fluid intake
2. Additional fluid intake & stool consistency modulation (diet modification and/or medication) may be necessary in the presence of prolonged liquid stool or a high output ostomy.
3. Consider ingestion of cranberry products for those with a urinary diversion.
4. Reassess the pouching system effectiveness when weight fluctuation (gain or loss) occurs.





Peristomal Skin Health: Fluid/Diet/Lifestyle

1. Bathing (showers or immersion) with an ostomy pouching system on or off is acceptable.
2. The social determinants of health (e.g., housing, socioeconomic status, available food, access to healthcare/supplies, cognitive status, vulnerable population membership, educational level, cultural/spiritual/ethnic influences) should be assessed by clinicians as they engage with persons with an ostomy to promote peristomal skin health.



Content Validation



The Society contracted with a 3rd party experienced in the process of content validation

- 20 internationally known subject matter experts (SME):
- Performed a secondary review and content validation of the consensus statements
 - Ranked individual items on the degree of relevancy and appropriateness of the statement

Content Validation Panel Members

PARTICIPANT	PRACTICE SETTING	AFFILIATION
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Content Validity Index (CVI)

- Content Validation Panel (20) completed ratings by December 1, 2020
- All 19 consensus statements
 - Met the recommended cut-off threshold of 0.78
 - Were rated as either 3 or 4
 - 3 = “relevant and needed only minor alteration”
 - 4 = “very relevant and appropriate”
 - S-CVI/Ave (average I-CVI value across statements)
 - 0.94 = Acceptable congruency
 - 0.90 = Cut-off criterion

Peristomal Skin Health: WOC Impact

Peristomal skin is the abdominal skin surrounding the stoma beneath the adhesive portion of the pouching system (barrier and tape).

Peristomal skin health is intact, similar in color and texture to adjacent and contralateral abdominal skin, free of inflammation and has no altered sensitivity such as itching, burning or pain.

Modifiable best practices include appropriate pouch care, appropriate use of pouching system characteristics and fluid/diet/lifestyle modification.

Promoting peristomal skin health is foundational to preventing peristomal skin irritation.



References

Colwell JC, Bain KA, Hansen AS et al. (2019). International consensus results: development of practice guidelines for assessment of peristomal body and stoma profiles, patient engagement and patient follow-up. *Journal of Wound Ostomy and Continence Nursing*;46(6):497-504.

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