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Development and Validation of the Satisfaction Concerning Stoma Care Questionnaire (SSCQ)

Sebastiaan L. van der Storm ◆ Esther Z. Barsom ◆ Rob J. de Haan ◆ Marlies P. Schijven

ABSTRACT

PURPOSE: The purpose of this research was to develop the Satisfaction Concerning Stoma Care Questionnaire (SSCQ) and evaluate its structural and convergent validity and internal reliability.

DESIGN: Instrument development and evaluation of validity and reliability.

SUBJECTS AND SETTING: A preliminary 22-item SSCQ was administered in a larger web-based survey to members of 2 ostomy-related patient associations with members throughout the Netherlands. The data of patients who underwent surgery within 2 years were selected for analysis.

METHODS: The development of the SSCQ was informed by a preexisting survey that focused on the experiences of stoma patients with general health care. Structural validity and homogeneity of the SSCQ were assessed using explanatory factor analysis and Cronbach's α coefficients. Convergent validity was also evaluated.

RESULTS: The final SSCQ comprised 20 items covering 3 domains: "preoperative care and information," "postoperative care and guidance," and "contact with and ostomy nurse." The SSCQ demonstrated structural and convergent validity and internal reliability. The Cronbach's α value of the SSCQ was 0.95, whereas the independent domains retrieved a high α coefficient ranging from 0.90 to 0.93. The SSCQ and independent domains were able to distinguish between high and low patients' ratings for satisfaction concerning the received stoma care.

CONCLUSIONS: The SSCQ demonstrated structural and convergent reliability, along with internal consistency. It may be used to measure the satisfaction of patients with ostomies concerning stoma care. Future prospective studies using the SSCQ are needed to generate additional insights into providing optimal care for ostomy patients.

KEY WORDS: Colostomy, Ileostomy, Ostomy, Ostomy care, Patient satisfaction, Questionnaire, Stoma, Validation

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INTRODUCTION

Approximately 100 000 people in the United Kingdom and over 750 000 people in the United States are living with an ostomy.^{1,2} In the Netherlands, this number is stated at being almost 40 000.³ Living with an ostomy may negatively impact daily functioning and health-related quality of life.⁴⁻⁶ Learning to cope with an ostomy is challenging and may result in insecurities and a variety of psychosocial problems such as depression, stress, anxiety, reduced social participation, and sexual problems.⁷ Patients are also at risk of encountering specific stoma-related complications such as peristomal skin damage, undermining, and leakage underneath ostomy pouching systems, along with parastomal hernia or a stomal.^{8,9} Self-efficacy is associated with a reduction of psychosocial problems and ostomy-related morbidities.^{10,11} Good pre- and postoperative ostomy care is of critical importance to adequately cope with an ostomy and reestablish a robust health-related quality of life after ostomy surgery. Several heterogeneous educational health care pathways for ostomy care have been described, all of which showed positive results.¹² However, which pathway provides the best clinical outcomes, highest health-related quality of life, or highest patient satisfaction related to ostomy care is not known. Patient satisfaction, a focus of this study, is defined as how patients perceive/experience care provided to them; thus, it is a subjective parameter reflecting the quality of care. Evaluation of patient satisfaction related to ostomy care and clinical support is valuable as satisfaction impacts patient outcomes.¹² Patient satisfaction is associated with adherence to

clinician instructions, which is an important determinant of health outcomes.^{13,14} We searched the literature and found a paucity of studies evaluating patient satisfaction related to ostomy care. Despite the importance of ostomy care, an ostomy-specific, reliable, and valid questionnaire measuring patient satisfaction is lacking. The aim of this study was to both develop and validate the Satisfaction Concerning Stoma Care Questionnaire (SSCQ).

METHODS

Satisfaction questionnaires related to ostomy care were searched in the databases PubMed and Embase and on the search engine Google to base the SSCQ upon. English and Dutch keywords related to ostomy care, satisfaction, and questionnaires were incorporated in the search. Only 1 preexisting Dutch survey study was retrieved; the “Consumer Quality Index Stoma Care” (CQISC), mapped the medical status of ostomy patients and their experiences with the overall health care.¹⁵ For the CQISC survey, items covering all aspects of care for ostomy patients were identified by a literature review, which was augmented with insights from focus group interviews with ostomy patients who had ostomy surgery within the past 2 years. The survey was psychometrically evaluated and subsequently adapted to its final version consisting of 73 items that queried general health care of ostomy patients, such as type of surgery, waiting time for surgery, visits/contacts with health care providers, and patient satisfaction. To develop a feasible satisfaction questionnaire specifically concerning stoma care, the CQISC survey was assessed by Wound Ostomy and Continence (WOC) nurses, colorectal surgeons, members of the research team based at Amsterdam University Medical Centers, and the Dutch Ostomy Patient Association. Only specific items regarding experiences with ostomy care were adopted in the preliminary pilot version of the SSCQ. These items focus on items that queried information/advice to patients with an ostomy provided by general health care providers and WOC nurses. The items query whether sufficient information is given preoperatively, whether sufficient time for instruction and asking questions was provided preoperatively, whether instructions are understandable, whether the respondent identified missing information about the consequences of an ostomy, information about stoma site selection, instructions, and ostomy care at discharge, information about complications, recognition of and what to do when experiencing a complication, guidance during preoperative period, hospital course and postdischarge. Items also queried accessibility of the ostomy nurse specialist, prompt access to health care services, continuity of care, empathy of the ostomy nurse specialist, attention to emotional consequences, and individualization of care (Table 1). This version was reviewed for clarity, logical flow of the questions and the appropriateness of the answers. In addition, 3 other preexisting satisfaction questionnaires (Satisfaction With Outpatients’, The Patient Satisfaction Questionnaire Short Form, and Satisfaction questionnaire of González) were evaluated and reviewed to identify important dimensions in defining the construct.¹⁶⁻¹⁸ Social desirability is a major bias in satisfaction questionnaires, as patients intended to rate the received care as positive.¹⁹ Therefore, the questions directly rating the received care had an answer scale purposefully shifted to the right, making the middle option positive instead of neutral. This adjustment was made to account for social desirability bias in the SSCQ. Five-

point Likert-type scales were used to rate each item with 2 following 5-point Likert scale: strongly disagree, disagree, neither agree nor disagree, agree, strongly agree; other items were answered using this 5-point Likert scale: poor, moderate, good, very good, excellent.

The pilot version of the SSCQ comprised 22 items designed to assess 4 care domains: “information provision” (11 items), “guidance” (5 items), “accessibility and continuity of healthcare” (3 items), and “support and respect” (3 items). The SSCQ is designed to retrospectively assess patient satisfaction during the first 2 years after ostomy surgery; we selected this period because in-hospital stoma care is most frequent in this period. The questionnaire is a self-administered instrument to be completed by persons living with an ostomy. Subscale scores can be obtained by adding the individual scores of the concerning domain or subscales. The overall score on the questionnaire is the sum of all 22 items.

Data Collection

For this validation study, a database encompassing 1868 patients with an ileostomy, colostomy or urostomy was used. These patients were members of the Dutch Stoma Association (“Stomavereniging”) and the Dutch Patient Foundation “Stomaatje” who participated in a retrospective survey of these associations in February 2020. Select members of the Dutch Stoma Association were selected to be part of an active panel that regularly responds to surveys. This group received a unique and personal invitation link by email. In addition, the entire membership of the Dutch Patient Foundation received an open invitation link by email. Approximately 5270 patients were invited to complete a web-based survey including the pilot version of the SSCQ and 1868 patients answered the survey (response rate of 35%). To prevent recall bias, only patients who underwent ostomy surgery within 2 years were selected from the database to validate the SSCQ. Respondents with incomplete SSCQ data were excluded.

Evaluation of the Reliability and Validity of the Satisfaction Concerning Stoma Care Questionnaire

Initially, the structural validity of the SSCQ was evaluated using explanatory factor analysis in order to identify meaningful domains within the construct of satisfaction. This statistical approach uses the correlation patterns of item scores to examine whether these items can be described in a limited number of underlying factors. Items that correlate highly with each other will cluster in 1 factor; alternatively, items within one factor should have a low or weak correlation with items in other factors. A factor with an “eigenvalue” (statistical value resulting from factor analysis) above 1.0 indicates an independent factor; independent factors will cluster several items within the instrument. The eigenvalues and a scree plot were used for factor selection. A factor loading of an item with a minimum value of 0.40 was considered acceptable.²⁰ Items that did not load on any of the identified factors were removed.

During the second step, the reliability (homogeneity or internal consistency) of the identified domains was assessed. Homogeneity refers to the statistical coherence of the domain items and thus the extent to which the items measure a common concept. This was analyzed using Cronbach’s α coefficient, which is based on the average inter-item correlation within a domain. A Cronbach’s $\alpha \geq 0.70$ indicates

TABLE 1.
Summary of Explanatory Factor Analysis Results for the Satisfaction Concerning Stoma Care Questionnaire (N = 280)

Item	Rotated Factor ^a Loadings		
	Postoperative Care and Guidance	Contact With Stoma Nurse	Preoperative Care and Information
Sufficient information is given preoperatively	-0.01	0.04	<i>0.89</i>
Sufficient time and room for information and questions preoperatively	-0.08	0.06	<i>0.95</i>
The preoperative information is understandable	0.08	-0.11	<i>0.89</i>
Missing information about the consequences of a stoma	-0.34	-0.12	-0.20
Information about the stoma site selection	0.04	-0.03	<i>0.78</i>
Information about the instructions at discharge	<i>0.72</i>	0.21	-0.05
Information about the ostomy care at discharge	<i>0.63</i>	0.12	0.14
Information about the complications at discharge	<i>0.93</i>	-0.04	-0.09
Ability to recognize complications	<i>0.91</i>	-0.10	-0.02
Knowledge what to do when experiencing a complication	<i>0.91</i>	-0.11	-0.01
All needed information is given	<i>0.68</i>	0.15	0.11
Guidance preoperatively	0.26	0.20	<i>0.50</i>
Guidance during hospitalization	<i>0.47</i>	0.22	0.19
Guidance after hospitalization	<i>0.56</i>	0.27	0.09
Ability of self-care at discharge	<i>0.45</i>	-0.07	0.07
More guidance is desired	-0.61	-0.16	0.00
Accessibility of the ostomy nurse	0.06	<i>0.87</i>	-0.10
Rapid access to health care services	0.04	<i>0.88</i>	-0.08
Continuity of health care	0.05	<i>0.78</i>	0.04
Empathy of ostomy nurse	-0.10	<i>0.87</i>	0.14
Attention to emotional consequences	0.07	<i>0.82</i>	0.01
My treatment was individualized	-0.02	<i>0.82</i>	0.06
Eigenvalues	10.61	2.35	1.54
% of variance	48.23	10.69	6.99

^aAfter direct oblimin rotation; this is a statistical procedure to identify the underlying satisfaction dimensions.

Factor loadings >0.40 are displayed in bold. Kaiser-Meyer-Olkin measure of sampling adequacy is 0.93 meaning that a factor analysis is appropriate and should yield distinct and reliable factors. Bartlett's test of sphericity is $P < .001$ indicating that the inter-items correlations were sufficiently large for factor analysis.

acceptable homogeneity.²¹ However, Cronbach's α depends on the number of items of the domains. Therefore, the corrected item-total correlation was used to additionally evaluate the internal consistency of the SSCQ scores. An item-total correlation ≥ 0.30 is considered to be sufficient.²²

The third and final step of our analysis focused on the convergent validity of the questionnaire. Support for convergent validity is provided if an instrument correlates substantially with an instrument that measures the same construct. However, given the absence of similar instruments used to measure satisfaction with ostomy care, we evaluated convergent validity by correlating both the subscale and total scale scores of the SSCQ with a global satisfaction measure (GSM) which was also available in the database. The GSM indicates patient satisfaction, but it is difficult to determine why the patient satisfaction is rated in a certain way.²³ The GSM consisted of the patients' rating of their overall satisfaction concerning the received stoma care on a scale from 1 to 10. To evaluate the capacity of the SSCQ to differentiate between low and high satisfaction, the GSM was dichotomized. A relatively high cutoff of 7 was chosen to limit the social desirability bias.

Data Analysis

Patient characteristics were summarized using appropriate descriptive statistics. Factor analysis (principal component analysis) was conducted with direct oblimin rotation (an alternative to Varimax rotation that allows factors to correlate). The Kaiser-Meyer Olkin measure²⁴ of sampling adequacy and the Bartlett's test of sphericity²⁵ were used to assess the statistical appropriateness of the factor analysis. The Cronbach's α was used to assess the reliability of the items in the domains. Convergent correlation patterns were expressed in Pearson correlation coefficients. Differences in mean SSCQ scores in relation to the GSM ratings were analyzed using the 2-group t test. In this analysis, the GSM ratings were dichotomized based on a cutoff point of 7. The effect sizes were expressed in Hedge's g (between-group difference in mean scores divided by the weighted pooled standard deviation of the scores). An effect size of 0.20 refers to a small effect, 0.50 to a medium effect, and 0.80 to a large effect.²⁶ A P value of $< .05$ was considered to be statistically significant. All statistical analyses were performed in IBM-SPSS (version 26).

TABLE 2.
Patient Characteristics

	Full Dataset (N = 1868)	Selected Patients N = 280
Gender, male	1011 (54.1%)	133 (47.5%)
Age, mean (SD)	67.5 (11.6)	63.0 (12.7)
Nationality		
Dutch	1837 (98.3%)	278 (99.3%)
Other	31 (0.9%)	2 (0.7%)
Level of education ^a		
Low	796 (44.0%)	107 (38.9%)
Medium	312 (17.2%)	50 (18.2%)
High	701 (38.8%)	118 (42.9%)
Stoma-Ostomy		
Colostomy	983 (52.6%)	137 (48.9%)
Ileostomy	461 (24.7%)	74 (26.4%)
Urostomy	300 (16.1%)	53 (18.9%)
Other	124 (6.6%)	16 (5.7%)
Time since ostomy surgery, median (interquartile range) in months	6.6 (3.0-12.4)	1.0 (0.6-1.5)
Possible reversal of ostomy-		
No, ostomy is permanent	1565 (86.8%)	237 (84.6%)
Yes, ostomy is temporary	222 (12.3%)	41 (14.6%)
Not known yet	17 (0.9%)	2 (0.7%)
Indication for surgery		
Malignancy	1094 (60.6%)	164 (58.6%)
Benign	710 (39.4%)	116 (41.4%)
Hospital		
Regional hospital	1385 (76.8%)	211 (75.4%)
University hospital	419 (23.2%)	69 (24.6%)
Aware of ostomy creation before surgery		
No, acute situation	242 (13.0%)	33 (11.8%)
Yes, knowledge ostomy creation was likely	265 (14.2%)	29 (10.4%)
Yes, ostomy creatin was certain	1279 (68.5%)	216 (77.1%)
Other	18 (0.9%)	2 (0.7%)

^aLow education: pre-vocational secondary or vocational education; Middle education: senior general secondary or pre-university education; High education: university of applied sciences or academic university education.

RESULTS

In the database used to validate this instrument, 318 of the 1868 patients who responded to the survey underwent ostomy surgery less than 2 years ago and were considered eligible for analysis. Data were incomplete for 38 patients, who were excluded from further analysis, resulting in a sample of 280 patients. Patient characteristics are summarized in Table 2. Most were female (n = 147, 52.5%), had a colostomy (n = 137, 48.9%), and underwent ostomy surgery for management of colorectal cancer (n = 164, 58.6%). Their mean age was 63.0 years. The selected demographic and clinical characteristics of the included patients are comparable with the total sample of the database (N = 1868).

A factor analysis was conducted on the 22 items of the draft instrument. The initial analysis, with a forced entry of 4 factors, resulted in a factor solution that was not clinically interpretable nor suitable (Supplemental Digital Content, Appendix 1, available at: <http://links.lww.com/JWOCN/A122>). Factor analysis revealed that the data could be best described by a 3-factor solution that explained 66% of the scale score variance. Table 1 shows the factor loadings of the 3 identified domains. The items that cluster on factor 1 reflect the postoperative care and guidance and represent the largest part of the score variance (48%). Factor 2 refers to contact with the stoma nurse, whereas the third factor captures the preoperative care and information. The item "Information about the consequences of a stoma is missing" was removed due to low factor loadings. A summary of explanatory factor analysis results with 4 forced factors for the SSCQ is provided in Supplemental Digital Content, Appendix 1, available at: <http://links.lww.com/JWOCN/A122>.

Reliability

The Cronbach's α coefficient of the total scale (21 items) was 0.95, with a range of the correct item-total correlations from 0.37 to 0.86. The homogeneity analyses for the separate domains are presented in Table 3. In the domain "Postoperative care and guidance", 1 relatively weak item was identified. Removing the item Ability of self-care of the stoma at discharge improved the homogeneity of the domain to $\alpha = 0.93$. The Cronbach's α coefficient of the domains "Preoperative care and information" ($\alpha = 0.90$) and "Contact with the stoma nurse" ($\alpha = 0.93$) could not be further improved by removing items (Supplemental Digital Content, Appendix 2, available at: <http://links.lww.com/JWOCN/A122>).

The final version of the SSCQ comprises 20 items measuring 3 care domains: preoperative care and information (5 items with scores ranging from 5 to 25), postoperative care and guidance (9 items with scores ranging from 9 to 45), and contact with the ostomy care nurse (6 items with scores ranging from 6 to 30). Thus, the cumulative score for the SSCQ ranges from 20 to 100 points; a high score indicates greater satisfaction with ostomy care. Dutch and English language versions of the SSCQ are presented in Supplemental Digital Content, Appendices 3 and 4, available at: <http://links.lww.com/JWOCN/A122>.

The SSCQ was translated into English for an illustrative purpose for this publication; however, this version is not yet fit for testing in English-speaking populations since a cross-cultural validation including a forward and backward translation was not done.

Convergent Validity

The mean scores of the 3 domains and the total scale were significantly higher for patients who rated the received stoma care with a 7 or higher (Table 4). A moderate correlation was observed for the preoperative care and information ($r = 0.59$), while good correlations were found for the other 2 domains (range correlations $r = 0.70-0.71$) and the total scale ($r = 0.78$).

DISCUSSION

Patient satisfaction is an important and often underreported indicator for the perceived quality of care.^{13,14} Evaluation of patient satisfaction provides insights how to improve patient-oriented care which may increase treatment adherence and

TABLE 3.
Reliability Analysis of the Three Domains of the Satisfaction Concerning Stoma Care Questionnaire (N = 280)

Domain	Items	α If Item Deleted	Corrected Item-Total Correlation ^b
Preoperative care and information $\alpha = 0.90$	Sufficient information is given preoperatively	0.87	0.80
	Sufficient time and room for information and questions preoperatively	0.86	0.86
	The preoperative information is understandable	0.87	0.82
	Information about the stoma site selection	0.90	0.68
	Guidance preoperatively	0.90	0.65
Postoperative care and guidance $\alpha = 0.91$	Information about the instructions at discharge	0.90	0.74
	Information about the ostomy care at discharge	0.90	0.73
	Information about the complications at discharge	0.90	0.76
	Ability to recognize complications	0.90	0.75
	Knowledge what to do when experiencing a complication	0.90	0.74
	All needed information is given	0.90	0.77
	Guidance during hospitalization	0.90	0.67
	Guidance after hospitalization	0.90	0.72
	Ability of self-care at discharge	0.93	0.37
	More guidance is desired ^a	0.91	0.65
Contact with ostomy nurse $\alpha = 0.93$	Accessibility of the ostomy nurse	0.91	0.79
	Quick health care provision	0.91	0.80
	Continuity of health care	0.92	0.76
	Empathy of ostomy nurse	0.91	0.80
	Attention to emotions consequences	0.91	0.80
	Individualized treatment	0.91	0.79

^aItem is reversed.^bThe correlation between the item and the respective domain score excluding that item.

clinically relevant outcomes.^{12,27} However, we searched the literature and found that a well-developed and validated questionnaire measuring patient satisfaction concerning ostomy care was lacking. This article describes the development and validation of such an instrument; the SSCQ.

Based on clinimetric evaluation and pragmatic reasoning, one weak item that queries “information about the consequences of an ostomy” and one relatively weak correlating item that queried the patient’s perceived “ability of self-care of the ostomy at discharge”) were identified and removed. Factor analysis extracted 3 factors independently correlating

to patient satisfaction, being (1) preoperative care and information, (2) postoperative care and guidance, and (3) contact with the ostomy nurse. Scores on these domains may be used to identify the specific areas of ostomy care that may benefit from further refinements.

The 3 domains or subscale scores turned out to be reliable in terms of homogeneity and showed moderate to good convergent correlation patterns with another GSM. The Cronbach’s α coefficient of the total scale was 0.95, with an item-total correlation ranging from 0.57 to 0.79 (Supplemental Digital Content, Appendix 2, available at:

TABLE 4.
Mean (SD) Scores and Hedge’s G Effect Sizes of the Satisfaction Concerning Stoma Care Questionnaire Domains in Relation to the Global Satisfaction Measure (GSM), and Their Correlations With the GSM

Scale	Score			Effect Size (Hedges’ <i>g</i>)	Correlation Coefficient
	GSM < 7	GSM > 7	Difference		
Preoperative care and information	13.9 (5.1) N = 36	19.4 (4.2) N = 250	5.6 ^a	1.27	0.57
Postoperative care and guidance	19.5 (5.3) N = 36	32.4 (6.8) N = 254	12.9 ^a	1.94	0.71
Contact with ostomy nurse	18.2 (5.7) N = 38	25.5 (3.6) N = 255	7.3 ^a	1.86	0.70
Total scale	51.5 (10.6) N = 34	77.6 (12.4) N = 242	26.2 ^a	2.14	0.78

^aAll $P < .001$.

<http://links.lww.com/JWOCN/A122>). These findings suggest that a cumulative score of the SSCQ also may be used as an overall indicator of patient satisfaction concerning ostomy care. In the future, additional psychometric and clinimetric properties of the SSCQ may be explored, such as test-retest reliability in various populations and responsiveness to change in patient care over time. Additional research is needed to better interpret the clinical significance of the (sub)total scores and to establish the minimal clinically important difference.

Patient satisfaction concerning received care is a complex construct that depends on all relevant aspects of care received and may be influenced by several additional factors such as sociodemographic characteristics. Its measurement may be biased in several ways.²⁸ Patients may have the tendency to give socially desirable answers or an overall positive experience may shape all other judgments to a positive level, even if the specific items would not have matched this. Although patient satisfaction may be biased in its measurement, it is important to assess it as it impacts patient outcomes.¹³ In our study, the social desirability effect is believed to be not a confounder of much impact, as the Likert-scale was adjusted and shifted more to the right, the questionnaires were collected preserving anonymity and were provided by the patient associations and not by their healthcare provider.

Limitations

The development of the SSCQ was based on previous work by Triemstra and Asmoredjo that involved patient association.¹⁵ This was the only questionnaire to base the SSCQ upon; the search for additional instruments was repeated on February 24, 2022, without any new findings. We did not conduct additional literature searches and focus groups on relevant items because we did not anticipate these tasks would yield other items. Moreover, our clinical and research team have iteratively refined the SSCQ, but the questionnaire was not pilot-tested by patients. In addition, the SSCQ was developed using the Dutch language and it was validated in the Netherlands. Whether these results are generalizable in other countries would require a forward-backward translation and an additional cross-cultural validation of the SSCQ. A third limitation is the possibility of selection bias. Although we included only patients who had ostomy surgery less than 2 years prior to data collection to limit the recall bias and to fit the perioperative period during which the need for information and adherence to care is believed to be most influential; there is no guarantee that this sample is representative of patients who have recently undergone ostomy surgery. However, post-hoc analysis showed that the SSCQ score of patients who had surgery less than 6 months ago did not differ in comparison to patients who had surgery 2 years ago (data on request available).

The sample population used in our study were members of patient support/advocacy associations. These patients may be more involved in their own ostomy care, or perhaps better educated or skilled when compared to peers who did not join an association. However, our experience suggests that patient recruitment through these associations is the best way to include a significant number of patients. Lastly, the convergent validity could only be evaluated by correlating the subscale with a GSM since the SSCQ is the first satisfaction questionnaire concerning ostomy care. The GSM indicates

patient satisfaction, but it is difficult to determine why the patient satisfaction is rated in a certain way.²³

CONCLUSIONS

We searched the literature but found no validated questionnaire on patient satisfaction concerning ostomy care. In response to this gap, we developed and validated the SSCQ. This study indicates that the SSCQ is a promising instrument to measure patient satisfaction concerning ostomy care validly and reliably based on high correlation scores within the instrument's domains. Both the cumulative score and the independent domain scores can be used to evaluate satisfaction with ostomy care. Prospective studies are needed to assess additional psychometric properties of the SSCQ.

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Call for Authors: Ostomy Care

- Original research reports comparing surgical outcomes for patients who undergo preoperative stoma site marking by a WOC nurse compared to patients who do not.
- Case studies, case series or original research reports focusing on stomal or peristomal complications.
- Case studies, case series or original research reports focusing on other potential sequelae of ostomy surgery including physical manifestations such as low back pain or psychosocial manifestations such as depression, altered sexual function or embarrassment.
- Original research reports confirming or challenging the assertions of the ongoing WOCN Ostomy Consensus Session including ostomy pouch wear time and minimum standards for immediate postoperative education of patient and family.