



Association of Stoma Care Nurses UK

A large, light blue decorative graphic consisting of several overlapping, interlocking loops that form a central circular area. The loops are thin and have a slight gradient.

**ASCN**  
**Stoma Care**  
National Clinical  
Guidelines



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*This index has been formulated in alphabetical order; page numbers have been excluded to enable future guidelines to be added.*

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## Foreward

I am delighted to be writing this foreword within my role as inaugural and current chairperson of ASCN UK.

A primary aim of the ASCN UK is to support and promote the speciality of stoma care nursing. Within the ASCN strategy, the committee recognises there is currently limited structured, academic specialist courses available. Therefore, the provision of specialist training, education and development opportunities and the need to establish a central resource for stoma care has been prioritised.

It is a recognised fact that many experienced Stoma Care Nurses (SCN's) are retiring; taking with them a wealth of expertise and specialist knowledge and clinical experience. Unfortunately, not all new SCN's to post have the benefit of specialist support, some being lone workers. We perceive these evidenced based clinical guidelines will evolve into a comprehensive resource and foundation for practice available to all UK SCN's.

Patient experience and improved patient outcomes are a high priority for all SCN's. However, this can only be achieved through safe and effective care which needs to be delivered within a systematic approach enabling equality and consistency in practice. These Stoma Care Clinical Guidelines in conjunction with the ASCN Stoma Care Standards provide the evidence to underpin practice and provide measureable expected outcomes.

I would like to express my sincere thanks to all who have invested a significant amount of time and commitment to this credible resource. Working together enables the speciality to be promoted and ultimately strive towards all our patients receiving consistency of high quality care.

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Clinical Nurse Specialist Stoma Care

Chair ASCN UK

*January 2016*



## Introduction to National Stoma Care Clinical Guidelines

A key objective for The Association of Stoma Care Nurses UK (ASCN UK) is to promote the art and science of stoma care nursing. One of the primary aims within our strategy is to improve facilities and opportunities for nurses to further their skills in the profession of specialist stoma care nursing. For our patients, there is a need to promote continuity of quality care by specifying expert practice grounded in evidence based knowledge and the need to improve care outcomes.

Following the evaluation of the ASCN UK Standards, requests for National stoma care clinical guidelines led to the development of this document. A meeting with the ASCN UK area representatives and committee members identified thirteen clinical guidelines for this first phase of the resource. Each guideline has been written utilising the same format as the Stoma Care Standards, the National Institute of Clinical Evidence (NICE) structure, process and outcome framework, to describe a level of excellence in care delivery and a measure against which practice may be audited. It also provides a structured training aid for nurses new to the speciality of stoma care.

In 2016 we will be working on evolving this resource further by adding additional clinical guidelines to the document (for example removal of urostomy stents). We are aiming for each stoma care department to have one hard copy of the collated guidelines, but are encouraging each guideline to be viewed as an individual document which can be either copied and shared with other healthcare professionals caring for patients with a stoma, or printed off from our website.

As chair of this project to initiate these clinical guidelines, I am extremely grateful to the authors for their time and expertise in contributing to this excellent practical resource, and to the committee and area representatives across the UK for peer reviewing all of the current guidelines. This resource having been collated and written by specialists, applying relevant and available evidence, has been extensively peer reviewed to ensure it is representative for all specialists in stoma care. Ultimately a consensus has been achieved with endorsement by all the peer reviewers that these clinical guidelines are to stipulate and specify National Clinical Guidelines that will guide and promote consistency and continuity of care.

In addition to all the authors identified within the index, I would like to acknowledge the following Clinical Nurse Specialists in Stoma Care who have peer reviewed these guidelines:

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And additional specialist peer reviewers for this particular guideline:

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### Statement:

Appropriate patients with a descending/sigmoid colostomy are offered the management choice of colostomy irrigation (CI).

### Structure:

The patients are assessed and taught by a specialist Stoma Care Nurse (SCN) experienced in CI.

### Process:

- Prior to commencement of any CI – documented consent from a surgical consultant must be obtained to eliminate any physiological contra-indications
- Ensure a private, confidential and safe environment where the patient can be assessed, treatment given and provided with information
- Utilising advanced specialist assessment - undertake a clinical history to assess your patient's psycho/physiological status excluding any contra-indications ([Appendix 1a](#))
- Initiate provision of training DVD, written literature (e.g. Colostomy Association), equipment and allow patient time to review this information. Offer patient opportunity to speak with another irrigator
- Talk through the procedure with the patient – involve significant others with patient's consent
- Advise of potential complications and risks of CI
- Reassure CI is not successful for everybody and this is not a failure
- Evaluate patient's understanding and ability to undertake the procedure independently
- Promote a routine to the CI procedure as identified in CA leaflet
- Obtain verbal/written consent from patient as per local policy
- Agree a training and follow up plan with patient and CI expert
- Key recommendations ascertained from current literature and expert practice ([Appendix 1b](#))
  - For the first practical undertaking of CI it is advised CI is undertaken within the acute setting where additional medical support is available to call upon if required due to risk of vagus nerve stimulation, however this will need to be assessed on an individual basis
  - Initiate CI every 24hrs, (for some patients every 48hrs) ascertain a time suitable for the individual, and advise to keep to this time of day
  - Start with 300-500mls of tepid water, and increase/titrate amount of water until no breakthrough – not exceeding 1.5L (consider administering half this amount, allow bowel to evacuate then repeat. Some patients need a second administration of water to achieve effective evacuation and prevent breakthrough)
  - If no breakthrough for 24hrs, discuss option of trialling decreasing CI to every 48hrs and monitor effectiveness
  - Time and relaxation maximises effectiveness - water to be run in slowly (min. 10-20mins), Allow evacuation of bowel for approx 15-30mins
  - Allow 6-8 weeks for bowel to regulate and get used to CI
- The individual is to be made aware of the choice of gravity and mechanical pump available – this will be subject to cost implications depending on your local area. NB: The recommendations above will therefore need to be amended if a mechanical pump is used
- Maintain telephone support and offer a follow up review at home or hospital in accordance to the patients' needs to discuss any problems and offer encouragement
- Review in clinic as per local colostomy patient follow up protocol.

### Outcome:

Patient states the nurse offered advice and expertise on the management of their stoma and CI.

Patient able to undertake CI effectively.

Patient expresses satisfaction in procedure.



## Appendix 1a: Colostomy Irrigation Checklist

Date:

CNS Name:

Patent Name:

Patient NHS No.

or DOB

Please tick the appropriate box(s)	Comments
Procedure to teach colostomy irrigation <input type="checkbox"/>	<i>Please refer to ASCN supportive information colostomy irrigation appendix</i>
Contra-indications excluded <input type="checkbox"/>	<i>Active IBD, active Diverticular disease, presence of fistulae, radiation damage, presence of existing colonic primary/metastatic disease symptomatic parastomal hernia</i>
Stoma assessment <input type="checkbox"/>	<i>Stomal complications e.g. prolapse, stenosis or large hernia</i>
Consultant consent gained <input type="checkbox"/>	<i>Written/verbal consent gained as per local policy and documented in notes</i>
Patient consent gained <input type="checkbox"/>	<i>Written/verbal consent gained as per local policy and documented in notes</i>
Current bowel function assessed <input type="checkbox"/>	<i>Assess regularity, stool preferably semi-formed or formed</i>
Time since surgery <input type="checkbox"/>	<i>Irrigation is usually recommended at 3 months (However, there are no known contra-indications for commencing earlier)</i>
Past medical history <input type="checkbox"/>	<i>e.g. irritable bowel syndrome, diverticular disease stability of cardiac/renal function</i>
Medication <input type="checkbox"/>	<i>Chemotherapy, antibiotic therapy</i>
Physical ability <input type="checkbox"/>	<i>Eyesight/good manual dexterity to manage equipment</i>
Psychological status <input type="checkbox"/>	<i>Evaluate patient's understanding, wellbeing, motivation compliance, lifestyle implications – e.g. shift patterns</i>
Environmental factors discussed <input type="checkbox"/>	<i>Suitable bathroom facilities</i>
<b>Action plan and date</b> <ul style="list-style-type: none"> <li>● Discussed ___ / ___ / ___ <input type="checkbox"/></li> <li>● Demonstrated ___ / ___ / ___ <input type="checkbox"/></li> <li>● Observed technique ___ / ___ / ___ <input type="checkbox"/></li> <li>● Independent ___ / ___ / ___ <input type="checkbox"/></li> <li>● Telephone follow up ___ / ___ / ___ <input type="checkbox"/></li> </ul>	
By whom (print name) Completion date	Signature

### Equipment required

- Water reservoir (irrigation bag)
- Tubing with flow control
- A cone: (a nozzle with a smooth rounded tip)
- Irrigation belt or flange (if using 2 piece option)
- Disposable irrigation sleeve
- Disposal rubbish bag
- Pegs/clips
- Tissues or toilet paper
- New appliance to be worn and any accessories used
- Lubrication gel

NB: If mechanical irrigation pump being used - follow manufacturers instruction manual

### The procedure in summary

Process	Explanation
Prepare the equipment.	<p>Connect the reservoir, tubing and cone together.</p> <p>Close the flow control.</p> <p>Fill the reservoir up to 2L with tepid (37-38°C) tap water (if the water is too warm mucosal damage may occur, too cold and it may cause cramping).</p> <p>Hang the reservoir on a hook, so that the bottom of the reservoir is at shoulder level or slightly above when the colostomate is in the position adopted for irrigation (any higher may cause abdominal cramping).</p> <p>Open the flow control to allow water through the tubing to expel air and let this flow directly into the sink/toilet (if air remains in the tubing this will be instilled into the colon).</p> <p>Close the control when the desired amount of water remains in the reservoir (approx 1.5L).</p>
Prepare the stoma and insert cone.	<p>Remove current appliance.</p> <p>Ask the patient to relax and sit on/next to the toilet enabling sleeve to reach into the toilet- ensure a comfortable environment.</p> <p>Digitate the colostomy to ascertain direction and relax the colon.</p> <p>Fit the irrigation sleeve over the stoma and sit on the toilet, or on a stool adjacent to it, so that the sleeve hangs into the toilet bowl.</p> <p>NB: If the patient is sitting on the toilet – the irrigation sleeve can be cut so it does not drop into the water in the toilet basin.</p> <p>Lubricate the cone (if necessary) and insert it gently into the stoma following the direction of the bowel.</p>
Run in water over 10-20 mins.	<p>Open the flow control on the irrigation bag tubing and allow the water to run slowly into the bowel.</p> <p>Regulate flow to slowly insert water into colon by adjusting the flow regulator.</p> <p>Hold the cone in the stoma.</p> <p>If back flow occurs (water bypassing the cone), stop flow – check for blockage, reposition cone and ask patient to relax as much as possible.</p> <p>Should cramping or pain be experienced during this time close the flow control - Massage the abdomen and wait a few minutes before restarting. With experience patients will find the timing that suits the effectiveness of the procedure.</p> <p>Some individuals may express they feel light-headed/faint or nauseas when inserting the water for the first time. If these vaso-vagal symptoms are experienced, temporarily stop the procedure, reassure, advise deep breathing exercises, relax, ensure hydrated and re-try the procedure.</p>

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## Appendix 1b: Supportive information Colostomy Irrigation (continued)

Process	Explanation
Remove cone – allow evacuation of faeces over 15-30mins.	<p>Once desired amount of water has entered the bowel, close roller clamp, remove the cone keeping the irrigation sleeve in situ.</p> <p>Fold over top of sleeve, secure with pegs/clip and ask patient to relax while initial peristalsis causes evacuation through the sleeve and into the toilet.</p> <p>Some patients, once the initial evacuation of faeces has occurred, may find it beneficial to move around or change their position to stimulate the bowel enabling completion of evacuation.</p> <p>Some patients will leave the sleeve in situ, but will unpeg, rinse the sleeve, then re-secure and fold up the bottom of the sleeve and secure to the top of the sleeve – this enables the patient to move around gently.</p>
Remove sleeve.	<p>Wait about five minutes after everything appears to have been expelled, then remove and discard the sleeve.</p> <p>Wash and dry around the stoma and apply the usual stoma cap/conseal plug or appliance.</p> <p>Wash the cone and base plate with warm water and antibacterial cleansing soap and allow to dry and then store until the next irrigation.</p> <p>When rinsing through the irrigation water bag if you are using a system with a thermometer do not use water hotter than 60 degrees as this would damage the thermometer.</p> <p>(Manufacturers recommend changing the cone, tubing and reservoir every 3 months).</p>

### Commonly encountered problems

	Trouble shooting
Difficulty in inserting the cone into the stoma.	<p>Advise on relaxation for patient.</p> <p>Encourage patient to change their position, suggest leaning back against the toilet/chair so angle of insertion not obstructed by rectus muscle.</p> <p>Gentle massage of abdomen to relax abdominal muscles.</p> <p>Re-digitise stoma to check patency and gentle practice of dilating stoma with finger.</p>
Water not going into the stoma and the bowel.	<p>Manoeuvre cone to ensure not against the mucosal wall.</p> <p>Digitise the lumen to ensure the cone is instilling the water in the right direction.</p> <p>Cone may be blocked with faeces – withdraw cone and clean.</p> <p>Patient may be too tense, deep breathing exercises may help.</p>
Water bypassing around the cone.	<p>Remove cone and check stool is not blocking the lumen.</p> <p>Irrigating too quickly, slow down the water via the tubing.</p> <p>Hold the cone securely within the stoma.</p>
Abdominal cramps.	<p>Is the irrigation fluid too cold or running into the colon too quickly.</p> <p>NB: some patients report increasing water temperature eases instillation of the water. However, there is no clinical evidence to support this at present.</p>
Irrigating fluid retained (or slow to evacuate).	<p>Check levels of hydration - Water absorption through the colonic mucosa will occur if the patient is dehydrated. Alcohol consumed the night before may lead to a degree of dehydration leading to the retention of more irrigation fluid than normal.</p> <p>Advise the patient to drink an additional couple of glasses of water prior to irrigation or a warm drink after insertion of the water.</p> <p>Gentle massaging of the abdomen from right to left, or standing and moving around gently with the sleeve sealed may help.</p> <p>Assess for presence of a hernia - this may contribute to an obstruction, or cause the water to pool in a loop of bowel.</p> <p>Increase the amount of water used.</p>

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	<b>Trouble shooting</b>
<b>Breakthrough of stool between irrigations.</b>	<p><i>Try using less water - if too much water enters the ascending colon it may seep out during the day (Norm. 500mls to 1500mls).</i></p> <p><i>Increase the frequency of colostomy irrigation if less than daily.</i></p> <p><i>Promote irrigation at regular time intervals.</i></p> <p><i>Trial splitting the irrigation amount into two irrigations – for example if using total of 700mls – initially insert 300mls over 10mins to clear the descending colon, then allow the bowel to evacuate. Follow this with the remainder 400mls over another 10mins.</i></p> <p><i>Suggest change time of irrigation, if irrigates in the morning, change to the evening.</i></p>
<b>Bleeding from the stoma.</b>	<p><i>May be caused by trauma to the stoma on inserting the cone.</i></p> <p><i>Lubricating and digitising the stoma is advisable before irrigating.</i></p>

(Osborne & Gunning 2013)

### References for Colostomy Irrigation

- Bail, J.P., Juglard, G., Framery, D., Deligny, M. and Charles, J.F. (1994) 'Value of colonic irrigation. Long-term followed-up in 432 colostomized patients', *Press Med*, 23 (36), pp. 1651-1654. French.
- Bekkers, M., Van Kippenberg, F. and Van den Bouren, H.W. (1996) 'Psychological adaptation to stoma surgery; a review', *Journal of Behavioral Medicine*, 18 (11), pp. 1-30.
- Burch, J. and Duncan, J. (2008) 'Bowel Irrigation', in Burch, J. (ed.) *Stoma Care*. Chichester: Wiley-Blackwell, pp. 271.
- Carlsson, E., Gylin, M., Nilsson, L., Svensson, K., Alverslid, I. and Persson, E. (2010) 'Positive and negative aspects of colostomy irrigation: a patient and WOC nurse perspective', *Journal of Wound, Ostomy and Continence Nursing*, 37 (5), pp. 511-516.
- Colostomy Association (2009) *An Introduction to Irrigation*. Available at: [http://www.colostomyassociation.org.uk/\\_assets/File/pdf/Booklets%202013%20New%20Address/introductiontoirrigation\\_015.pdf](http://www.colostomyassociation.org.uk/_assets/File/pdf/Booklets%202013%20New%20Address/introductiontoirrigation_015.pdf) (Accessed: 2 November 2013).
- Devlin, H., Plant, J. and Grigffin, M. (1971) 'Aftermath of surgery for anorectal cancer', *British Journal of Medicine*, 3 (5771), pp. 413-418.
- Dini, D., Venturini, M., Forno, G., Bertelli, G. and Grandi, G. (1991) 'Irrigation for colostomized cancer patients: a rational approach', *International Journal of Colorectal Diseases*, 6 (1), pp. 9-11.
- Emmanuel, A. (2004) 'The physiology of defecation and continence', in Norton, C. and Chelvanayagam, S. (eds.) *Bowel Continence Nursing*. Beaconsfield: Beaconsfield Publishers.
- Evans, L. (2013) Irrigation information leaflet Derby Hospitals NHS Foundation Trust; printed by Coloplast Ltd.
- Ewing, G. (1989) 'The nursing preparation of stoma patients for self care', *Journal of Advanced Nursing*, 14 (5), pp. 411-420.
- Gattuso, J.M., Kamm, M.A., Myres, C., Saunders, B. and Roy, A. (1996) 'Effect of different infusion regimens on colonic motility and efficacy of colostomy irrigation', *British Journal of Surgery*, 83 (10), pp. 1459-1462.
- Grogan, S. (2008) *Understanding body dissatisfaction in men, women and children*. 2nd edition. New York: Routledge.
- McCahon, S. (1999) 'The pre-and postoperative nursing care for patients with a stoma', *British Journal of Nursing*, 14 (6), pp. 310-318.
- McClees, N., Mikolaj, E.L., Carlson, S.L. and Pryor-McCann, J. (2004) 'A pilot study assessing the effectiveness of a glycerine suppository in controlled colostomy emptying', *Journal of Wound, Ostomy & Continence Nursing*, 31 (3), pp. 123-129.
- McKenzie, F., White, C.A., Kendall, S., Finlayson, A., Urquhart, M. and Williams, I. (2006) 'Psychological impact of colostomy pouch change and disposal', *British Journal of Nursing*, 15 (6), pp. 308-316.
- Meyhoff, H.H., Anderson, B. and Nielson, S.L. (1990) 'Colostomy irrigation: a clinical and scintigraphic comparison between three different irrigation volumes', *British Journal of Surgery*, 77 (10), pp. 1185-1186.
- O'Bichere, A., Sibbons, P., Doré, C., Green, C. and Phillips, R.K.S. (2000) 'Experimental study of faecal continence and colostomy irrigation', *British Journal of Surgery*, 87 (7), pp. 902-908.

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## References for Colostomy Irrigation (continued)

- O'Bichere, A., Bossom, C., Gangoli, S., Green, C. and Phillips, R.K.S. (2001) 'Chemical colostomy irrigation with glyceryl trinitrate solution', *Diseases of the Colon and Rectum*, 44 (9), pp. 1324-1327.
- O'Bichere, A., Bossom, C., Gangoli, S., Green, C. and Phillips, R.K.S. (2004) 'Randomised cross-over trial of polyethylene glycol electrolyte solution and water for colostomy irrigation', *Diseases of the Colon and Rectum*, 47 (9), pp. 1506-1509.
- Osborne W & Gunning A (2013) *Colostomy irrigation information for healthcare professionals*; Colostomy Association, Reading.
- Prieto, L., Thorsen, H. and Juul, K. (2005) 'Development and validation of a quality of life questionnaire for patients with a colostomy or ileostomy', *Health and Quality of Life Outcomes*, 3 (62) [Online]. Available at <http://www.hqlo.com/3/1/62> (Accessed: 8 November 2013).
- Pringle, W. (1984) 'Colostomy Irrigation', *Nursing Mirror*, 159 (8), pp. 29-31.
- Pringle, W. (2005) 'Irrigation' in Breckman, B. (ed.) *Stoma Care and Rehabilitation*. London: Elsevier Churchill Livingstone.
- Reading, L. (2006) 'Colostomy irrigation - an option worth considering', *Gastrointestinal Nursing*, 4 (3), pp. 27-33.
- Sadahiro, S., Noto, T., Tajima, T., Mitomi, T., Miyazaki, T., Numata, M. (1995) 'Fluctuation of blood pressure and pulse rate during colostomy irrigation', *Diseases of the Colon and Rectum*, 38 (6), pp. 615-618.
- Swan, E. (2010) 'Colostomy Management and Quality of Life for the Patient', *British Journal of Nursing*, 19 (21), pp. 1346-1350.
- Virgin-Elliston, T. and Williams, L. (2003) 'Psychological considerations in stoma care', in Elcoat, C. (ed.) *Stoma Care Nursing*. London: Hollister, pp. 65-74.
- Vujnovich, A. (2008) 'Pre and post-operative assessment of patients with a stoma', *Nursing Standard*, 22 (19), pp. 50-56.
- Wade, B. (1989) *A Stoma for Life: A study of Stoma Nurses and their Patients*. Harrow: Scutari Press.
- White, C. (1998) 'Psychological management of stoma related concerns', *Nursing Standard*, 12 (36), pp. 35-38.
- White, C.A. and Hunt, J.C. (1997) 'Psychological factors in postoperative adjustment to stoma surgery', *Annals of the Royal College of Surgeons of England*, 79 (1), pp. 3-7.
- Williams, N., Johnston, D. (1980) 'Prospective controlled trial comparing colostomy irrigation with "spontaneous evacuation" method', *British Medical Journal*, 281 (6233), pp. 107-109.
- Yasuda, S., Fujii, H., Yamamoto, K. and Nakagawa, M. (1992) 'A scintigraphic analysis of colonic movements in patients with colostomy: changes of colonic transit time after acquaintance with irrigation', *Surgery Today*, 22 (4), pp. 386-389.

### Additional reading

- Birch, J. (2005) 'Pre and post op care for patients with a stoma', *British Journal of Nursing*, 14 (6), pp. 310-318.
- Black, P. (2004) 'Psychological, sexual and cultural issues for patients with a stoma', *British Journal of Nursing*, 13 (12), pp. 692-697.
- Burch, J. (2004) 'The Management and Care of People with Stoma Complications', *British Journal of Nursing*, 13 (6), pp. 307-318.
- Doran, J. and Hardcastle, J.D. (1981) 'A controlled trial of colostomy management by natural evacuation, irrigation and foam enema', *British Journal of Surgery*, 68 (10), pp. 731-733.
- Elcoat, C., Katte, C., Morrisroe, J., Moss, H., Perston, Y., Porrett, T., Sharpe, A., Smith, A., Swan, E., Virgin-Elliston, T., White, M., Dean, J. and Frost, S. (2010) 'High impact actions for stoma care', Lynchwood: Coloplast. [Online]. Available at [http://www.coloplast.co.uk/OstomyCare/Documents/pdfs/High\\_Impact\\_Actions\\_Booklet.pdf](http://www.coloplast.co.uk/OstomyCare/Documents/pdfs/High_Impact_Actions_Booklet.pdf) (Accessed: 3 November 2013).
- Karadag, A., Mentis, B. and Ayaz, S. (2005) 'Colostomy irrigation: results of 25 cases with particular reference to quality of life', *Journal of Clinical Nursing*, 14, pp. 479-485.
- Schaube, J., Scharf, P. and Herz, R. (1996) 'Quality of life of tumour patients with colostomy', *Zeitschrift für Gastroenterologie*, 34 (2), pp. 55-56. German.
- Stuart, M. (1976) 'Colostomy irrigation: Its role in improving the colostomate's quality of life', *Medical Journal of Australia*, 2 (21), pp. 786.
- Varma, S. (2009) 'Issues in irrigation for people with a permanent colostomy: a review', *British Journal of Nursing*, 18 (4), pp. S15-S18.
- Venturini, M., Bertelli, G., Forno, G., Grandi, G. and Dini, D. (1990) 'Colostomy irrigation in the elderly: effective recovery regardless of age', *Diseases of the Colon and Rectum*, 33 (12), pp. 1031-1033.
- White, C. (1997) *Living with a Stoma*. London: Sheldon Press.
- Woodhouse, F. (2005) 'Colostomy irrigation: are we offering it enough?', *British Journal of Nursing*, 14 (16), pp. 14-15.



## Statement:

Patients with a stoma are safely discharged from hospital with the knowledge and skills to be independent at home. In the absence of independence then there will be structures in place to support them. They will also have details of how to contact their Stoma Care Nurse (SCN).

*Discharge planning helps reduce anxiety, reduces readmissions and should be commenced in the pre-operative stage in the elective patient or from admission in the case of an emergency admission.*

## Structure:

The patients are assessed and prepared for discharge by a specialist SCN.

## Process:

- Establish as early on as possible the home circumstances and support network that the patient has through history taking.
- Assessment of the patient to identify if independence can or cannot be achieved. If self-care is not achievable then other pathways should be explored and education provided regarding stoma care to support the patient on discharge
- The discharge address and telephone number for the patient should be confirmed. Access to the property should be discussed and Key code obtained if needed
- The patient should be discharged with enough supplies of all the equipment they are using as per the prescribing guidelines (PrescQIPP 2015) (Appendix 6a) and according to local policy and taking into consideration PiPS forum recommendations (Appendix 6b). This helps reduce anxiety.

Equipment	Colostomy	Ileostomy	Urostomy
Pouches	Yes	Yes	Yes
Night bags and Stand	No	No	Yes if used
Dry Wipes	Yes	Yes	Yes
Disposal Sacks	Yes	Yes	Yes
Adhesive Remover*	Yes if used	Yes if used	Yes if used
Accessory items*	Yes if used	Yes if used	Yes if used

(\*see Appendix 6c)

- Written instructions on changing the pouch - this can be a useful prompt for the patient doing their first couple of pouch changes at home without nurse support
- Provide additional written information as required relating to diet, exercise, support groups etc
- If the patient's discharge is out of the hospital stoma care nurse's working area, then referral to the receiving stoma nurse should be made as soon as possible, with confirmation of discharge date, referral details and contact to be made prior to home visit
- Provide date of when they will be reviewed by the stoma nurse or telephoned by them. It is also vital to ensure that the patient has the contact details of the stoma care nurse
- Ensure the patient has adequate knowledge to know what choices are available to obtain further supplies and repeat prescription within the community in accordance to local policy
- Depending on local policy – provide written information for the GP of discharge and details of supplies.

## Outcome:

Patient expresses they feel satisfied they have received adequate knowledge and skills to care for their stoma.  
Patient expresses they are aware of the follow up support they will receive.



### Key messages:

#### Responsibilities of the stoma specialists

Select and initiate the most appropriate product for treatment/management without pressure from sponsoring company, ensuring that patients have complete freedom of choice for product and prescription options (DAC/Chemist).

Ensure patient has an established treatment that they fully understand.

Only stoma products listed in part IXA and IXC of the Drug Tariff should be initiated.

#### Communicate promptly with the GP regarding:

- Product initiation (including product codes)
- Expected monthly usage
- Expected duration of treatment, or, if long term, date of next review

Monitor response to treatment, or advise GP of monitoring requirements.

Following change to prescription, advise both GP and dispensing contractor (where appropriate) of any modifications.

Ensure clear arrangements for back-up, advice and support.

*Please refer to: <https://www.prescqipp.info/resources/finish/192-continance-and-stoma-toolkit/725-prescqipp-continance-and-stoma-toolkit-high-res> for further information*

STOMA PRESCRIBING GUIDELINES		
Type	Average wear time	Average quantity per month
<b>ILEOSTOMY</b>		
One-piece drainable pouch	Pouch changed every 1 - 3 days	10 - 30 pouches
Two-piece drainable pouch	Baseplate changed 2 - 3 times a week Pouch changed every 1 - 3 days	8 - 12 baseplates 10 - 30 pouches
<b>COLOSTOMY</b>		
One-piece pouches closed pouch	Pouch changed 1 - 3 times a day	30 - 90 pouches
Two-piece baseplates closed pouch	Baseplate changed 2 - 3 times a week Pouch changed 1 - 3 times a day	8 - 12 baseplates 30 - 90 pouches
<i>Because colostomates have differing amounts of large bowel, their stomas behave differently and the number of changes they need to make each day varies enormously. At one end of the scale certain colostomates may manage their stoma by using a drainable pouch while at the other end certain colostomates may be able to irrigate. In between there will be a wide variety of one and two piece appliances and additional products used and a wide variety of changes required each day.</i>		
<b>UROSTOMY</b>		
One-piece urostomy pouch	Pouch changed every 1 - 3 days	10 - 30 pouches
Two-piece urostomy pouch	Baseplate changed 2 - 3 times a week Pouch changed every 1 - 3 days	8 - 12 baseplates 10 - 30 pouches
Open night drainage bag	Bag changed weekly	4 bags
Single use drainage bag	Bag changed daily	30 bags
<b>CONVEX PRODUCTS</b>	Convex products should only be used on the recommendation of the Stoma Care Nurse.	
<b>SUPPLEMENTARY ITEMS</b>	Additional items may be essential for problem solving with stomal complications or to extend wear time and increase confidence. These include barrier cream, skin protector wipes/spray, powders, adhesive remover, washers and pastes, deodorants, retention strips and support garments.	
<b>The quantities listed above are guidelines only. Some patients may require a higher or lower quantity than stated. If there are any prescribing concerns please refer to the patient's Stoma Care Nurse for details or an assessment.</b>		

Anyone wishing to use this material is requested to acknowledge the source: "PIPs Forum, Stoma prescribing guidelines".

Incorporating Patient, Professional and Industry Groups concerned with stoma and continence care

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## Appendix 6c: Types of Stoma Accessory Products

Product Types	Product forms (examples)	Indications	Other information
<b><i>Routinely recommended</i></b>			
Adhesive removers	Sprays and wipes	To reduce skin stripping use as per local policy	1-2 cans/box of 30 bags Wipes can be used instead of sprays Maximum of 1 wipe per bag
Night Drainage Bags		For urostomies and possibly high output stoma	1 night bag per week If single use, 1 night bag per urostomy bag
<b><i>Occasionally recommended</i></b>			
Adhesives	Flange extenders	Can be used to extend flange adhesive area, aiding security of pouch	Often used for patients with a parastomal hernia
Belts/Underwear	Panty girdles and belts	To aid prevention of hernias and offer abdominal muscle support	Maximum of 3 belts/year Maximum of 3 girdles/year Maximum of 6 pairs briefs or boxers per year
Discharge Solidifying Agents	Absorbent strips, gel capsules/ tablets and sachets	For use only when the faeces are watery  Warning - use with CAUTION in high output stoma as may impede recognition	1 box per box of 30 bags
Irrigation/Washout appliances	Irrigation sets and accessories	For colostomy irrigation as advised by the SCN	1 set every 6-12 months; use with warm tap water - or bottled water if abroad
Skin Fillers	Pastes, seals and washers	To provide a flat surface to apply the appliance	Used if stoma is recessed or there are creases, folds, etc. not necessarily on repeat prescription
Skin Protectors	Aerosols, creams, lotions, pastes, powders, wafers and wipes	To soothe/protect intact (at risk skin); broken or sore skin	Maximum of 1 wipe per bag Maximum 1 can per box of 30 bags  Other forms; usage will depend on need, please check with patient to avoid over ordering/wastage  Only to be prescribed after discussion with the SCN
<b><i>Not routinely recommended</i></b>			
Bag Covers	Cloth fibre or non woven	To cover the pouch	They can be washed and reused many times
Deodorants	Drops, sachets or sprays	To mask odour	Various scents; possibly only for existing patients Some CCG's will permit the use of deodorant drops if a clinical need is demonstrated



## References for Stoma Accessory Products

- Black P. (2013) The role of accessory products in patients with a stoma. *British Journal of Nursing* Vol 22 (stoma supplement (S24)).
- Burch J. (2011) Choosing the correct accessory for each stoma type. *Gastrointestinal Nursing* Vol 9 (3), p12-18.
- Fake F. & Skipper G. (2015) Cost effective collaboration between stoma care nurses and the medicines management team. *Gastrointestinal Nursing* Vol 13 (1) 19-27.
- Hayles K. (2014) Getting it right the first time: how to select stoma accessories. *Gastrointestinal Nursing* Vol 12 (7), p36-46.
- Oxenham J. (2014) Reviewing prescription spending and accessory usage. *British Journal of Nursing* Vol 23 (5), S4-S8.
- PrescQIPP (2015) <https://www.prescqipp.info/resources/finish/192-continance-and-stoma-toolkit/725-prescqippcontinance-and-stoma-toolkit-high-res> Accessed 21/12/15.
- Rudoni C. & Dennis H. (2009) Accessories or Necessities? Exploring consensus on useage of stoma accessories. *British Journal of Nursing* Vol 18 (18), 1106-1112.
- Sica J. (2011) Peristomal Skin Care. *World Council of Enterostomal Therapy Journal* 31 (3), 8-11.

## References for Discharge information

- Burch J (2013) Promoting enhanced recovery after colorectal surgery *British Journal of Nursing* vol 22 (5), (stoma care supplement) pages S4-S9.
- Burton J, Allison J, Smart N, Francis N (2011) Impact of stoma care on enhanced recovery after colorectal surgery *Gastrointestinal nursing* vol 9 (8), pages 15-19.
- Cronin E (2013) Home delivery: a valuable service *British Journal of Nursing* (stoma supplement) vol 22 (16), S4.
- NHS (2008) [http://www.institute.nhs.uk/quality\\_and\\_service\\_improvement\\_tools/quality\\_and\\_service\\_improvement\\_tools/enhanced\\_recovery\\_programme.html](http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/enhanced_recovery_programme.html) last accessed 8th March 2015.
- Walker CA & Lachman VD (2013) Gaps in the Discharge Process For Patients with an Ostomy: An Ethical Perspective *Medsurg Nursing* vol 22 (1), pages 61-61.



### Statement:

Patients with a faecal/urinary fistula are seen and assessed by the Stoma Care Nurse (SCN) and an individualised care plan formulated.

### Structure:

The patients and SCN agree a plan to manage the fistula in order to contain the effluent, prevent skin breakdown and provide comfort.

### Process:

- Ensure a private, confidential and safe environment where the patient can be assessed, treatment given and provided with information
- Using clinical expertise undertake/review a clinical history to ascertain the cause of the fistula, the type and amount of effluent, and the extent of skin breakdown
- Document all findings with photographic evidence as per local policy with patient consent
- If the output is high, use suction to keep effluent away from skin edges whilst undertaking wound care
- Clean the skin with warm tap water and dry thoroughly
- If skin is broken, protect with barrier product, otherwise apply a layer of adhesive paste around the edges of the wound using gloved finger or spatula
- Apply additional paste or hydrocolloid strips to fill any creases or skin folds
- Apply a strip of double sided hydrocolloid on top of the paste to 'Picture Frame' around the wound edges to protect the skin edges and promote seal
- Using the clear template in the wound manager packet (or alternative transparent piece of paper), place over the wound and draw around the wound edge
- Cut out so that you have a template of the wound
- Apply the template to the appliance, (ensuring it corresponds to shape of wound) draw an outline and cut out the appliance taking care not to cut the front of the appliance
- Remove the wound manager backing and apply paste directly to the cut edges of the wound manager to enhance the seal between the appliance and skin edges when applied
- Position the wound manager carefully over the wound ensuring no creases or folds (it may be advantageous for the patient to be lying as flat as possible during this process)
- If you are using a windowed appliance - you can add a layer of paste to the inside of the wound manager. Either use as a syringe or gloved finger to apply the paste
- You may need retention strips to secure the appliance edges down
- Attach night drainage bag if output high to keep wound manager empty
- Advise the patient to rest in the same position for 20 minutes following the procedure to allow the paste to dry and to promote adherence of the wound manager
- Provide verbal and written advice to the ward staff on the importance of monitoring the output and ensure they understand when to contact medical staff if concerned
- Develop a photographic care plan if possible to assist ward staff with fistula management, outlining step by step management of the fistula ([Appendix 2](#))
- Involve family and carers, where appropriate, and in agreement with the patient
- Refer to appropriate allied professionals e.g. Dietician; and feedback appropriate information as required
- Evaluate the patient's understanding of the information given
- Arrange a review at appropriate intervals as the wound may change and the template may need to be reduced.

### Outcome:

The patient states the nurse offered advice and expertise on the management of their fistula and provided a care plan to outline the process.

Ward nurses express the specialist nurse offered advice and support to enable them to manage the wound/fistula management effectively.

 <p><b>Step 1</b> Prepare all equipment Adhesive Remover Wound manager Hydrocolloid paste Large hydrocolloid Seal Hydrocolloid wafer</p>	 <p><b>Step 5</b> Apply the strip of hydrocolloid to wound edges with join at the top of the wound</p>
 <p><b>Step 2</b> Clean skin and wound well with water and dry thoroughly</p>	 <p><b>Step 6</b> Apply hydrocolloid wafer to top half of the wound</p>
 <p><b>Step 3</b> Apply hydrocolloid paste with spatula or gloved finger moistened with water</p>	 <p><b>Step 7</b> Cut the new bag according to the template</p>
 <p><b>Step 4</b> Cut a large hydrocolloid seal into one long strip</p>	 <p><b>Step 8</b> Apply bag to wound and allow patient to keep still for 20 minutes to allow the paste to set.</p>

### References for Fistula Management

- Breckman, B. (2005) *Stoma Care and Rehabilitation* (Chapter 14) Elsevier, Edinburgh.
- Burch, J. (2003) The nursing care of a patient with enterocutaneous faecal fistula. *British Journal of Nursing*, Vol 12 (12), p. 736-740.
- Burch, J. (2008) *Stoma Care* (Chapter 16) Wiley Blackwell, Chichester.
- Cobb, A., and Knaggs, E. (2003) The nursing management of enterocutaneous fistulae: a challenge for all. *British Journal of Community Nursing*, Vol 8 (9), S32-S38.
- Slater, RC. (2011) Supporting patients with enterocutaneous fistula: from hospital to home. *British Journal of Community Nursing*, Vol 16 (2), p. 66-73.



### Statement:

Patients with stomal granulomas are assessed by a Stoma Care Nurse (SCN) and an individualised stoma care plan is formulated.

### Structure:

- Ensure a private, confidential and safe environment where the patient can be assessed, treatment given and provided with information
- Using clinical expertise undertake a clinical history of the granuloma in line with the guidelines for stoma treatment as overleaf
- Assess the granuloma as per guideline ([Appendix 8](#)). Document and photograph as per local policy
- Identify any allergies to silver - silver nitrate to be omitted from treatment option
- Provide advice to the patient or carer on how to monitor for complications from the granulomas and ensure they understand when to contact medical staff if concerned
- Involve family and carers, where appropriate, and in agreement with the patient
- Feedback appropriate information to referring healthcare professional
- Evaluate the patient's understanding of the information given.

### Outcome:

The patient states the nurse offered advice and expertise on the management of their granulomas.

If granulomas do not resolve, consider alternative causes - e.g. Peyers Patches.

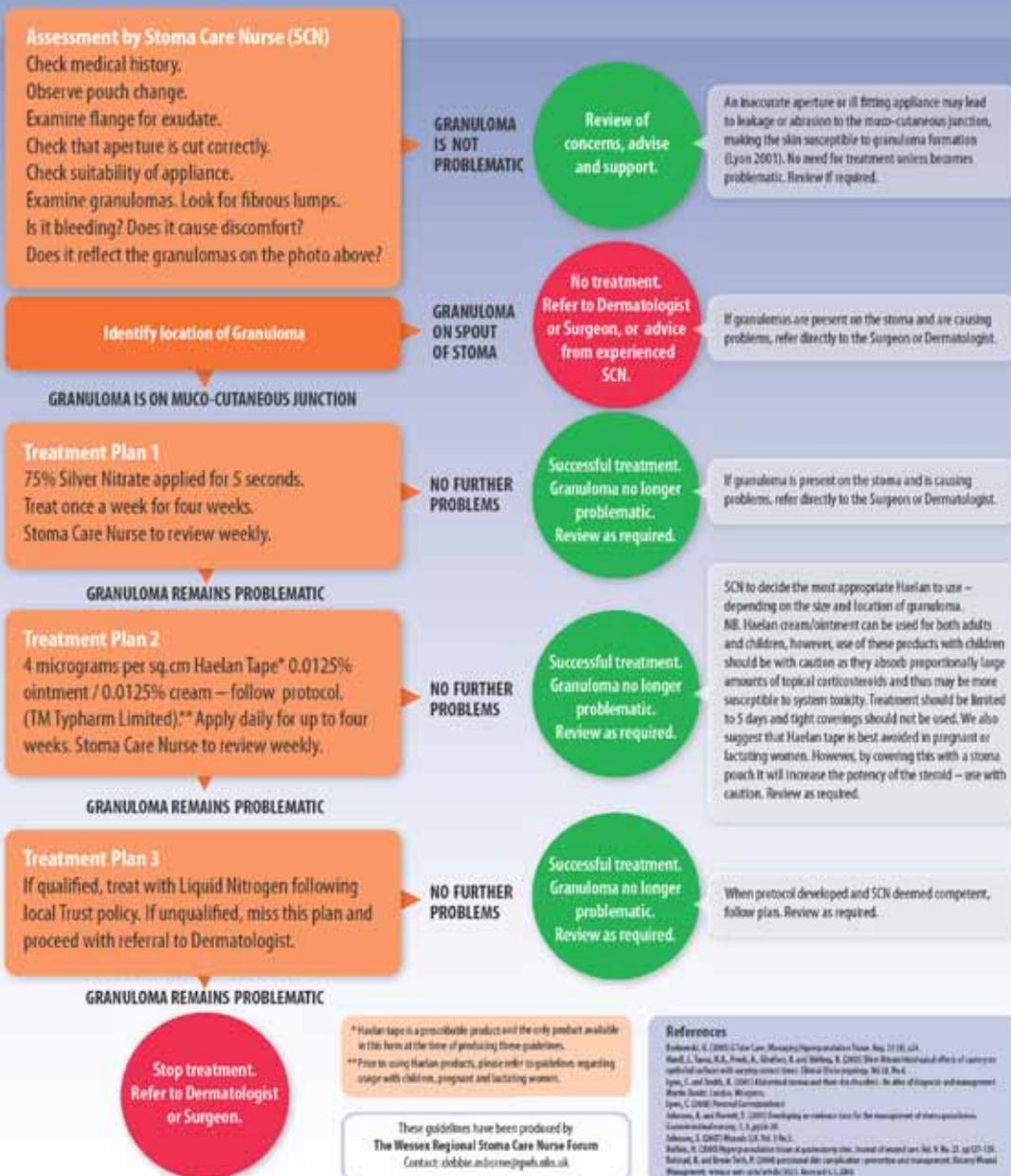
### References for Granuloma Management

- Black P (1994) Hidden problems of stoma care. *British Journal of Nursing* 3 (14): 707–11.
- Blackley P (1998) *Practical Stoma Wound and Continence Management*. Research Publications, Vermont, Victoria, Australia.
- Borkowski S (2005) G tube care: managing hypergranulation tissue. *Nursing* 35 (8): 24.
- Bray Healthcare (2003) Silver nitrate and caustic product information. [www.bray.co.uk/silver-nitrate.html](http://www.bray.co.uk/silver-nitrate.html) (accessed 27 January 2010).
- Burch J (2004) The management and care of people with stoma complications. *British Journal of Nursing* 13 (6): 307–14.
- Connolly M, Armstrong JS, Buckley DA (2006) Tender papules around a stoma. *Clin Exp Dermatol* 31(1): 165–6.
- Dukes S, Lowther C, Martin T, Osborne D (2001) Guidelines for treating stoma granulomas at the mucocutaneous junction GIN vol 8 no 1.
- Hampton S (2007) Understanding overgranulation in tissue viability practice. *British Journal of Community Nursing* 12 (9): S24–30.
- Hanif J, Tasca RA, Frosh A, Ghufoor K, Stirling R (2003) Silver nitrate: histological effects of cautery on epithelial surfaces with varying contact times. *Clin Otolaryngol Allied Sci* 28 (4): 368–70.
- Jackson C, Colver C, Dawber R (2006) *Cutaneous Cryosurgery*. Taylor and Francis Group, London.
- Johnson A, Porrett T (2005) Developing an evidence base for the management of stoma granulomas. *Gastrointestinal Nursing* 3(8): 26–8.
- Johnson S (2007) Haelan tape for the treatment of overgranulation tissue. *Wounds UK* 3 (3): 70–5.
- Lansdown AB (2004) A review of the use of silver in wound care: facts and fallacies. *British Journal of Nursing* 13 (Suppl 6): S6–19.
- Lyon C, Beck MH (2001) Irritant reactions and allergy. In: Lyon C, Smith A, eds. *Abdominal Stomas and Their Skin Disorders: An Atlas of Diagnosis and Management*. Martin Dunitz, London.
- Lyon CC, Smith AJ, Griffiths CE, Beck MH (2000) Peristomal dermatoses: a novel indication for topical steroid lotions. *J Am Acad Dermatol* 43 (4): 679–82.
- Macleod E, Winslow F (2005) Silver need not be second best. Poster presentation. RCN Gastroenterology and Stoma Care Nursing annual conference. November 2005, Telford.
- Mallipeddi J (2009) Practical procedures. In: Buxton PK, Morris-Jones R, eds. *ABC of Dermatology*, 5th edn. Wiley-Blackwell, West Sussex.
- Porrett T, McGrath A (2005) *Essential Clinical skills for Nurses: Stoma Care*. Blackwell Publishing Ltd, Oxford.
- Rollins H (2000) Hypergranulation tissue at gastrostomy sites. *J Wound Care* 9 (3): 127–9.

# Guidelines for standardising the treatment of stomal granulomas at the muco-cutaneous junction



Granulomas are friable tender papules often occurring at the muco-cutaneous junction of an abdominal stoma, which can bleed easily and impair appliance adhesion. (Lyon 2008)



This resource is accredited by the Royal College of Nursing Accreditation Unit as at January 2010. Accreditation applies only to the educational content of the resource and does not apply to any product.

## Statement:

Patient has a stoma output of >1500mls/24hours (Travis et al 2008).  
 Patient is experiencing increased frequency in emptying appliance.  
 Stoma output is a watery consistency.

## Structure:

- The symptoms of high output stoma (HOS) are recognised and appropriate action is taken within 24 hours
- Patients with a high intestinal fluid loss either following surgery or periodically in the long term are managed effectively to:
  - Reduce intestinal loss
  - Manage any electrolyte imbalance and dehydration secondary to the high output
  - Prevent poor skin integrity due to appliance leakage
  - To re-establish effective bowel function and prevent further complication
  - Ensure that advice and treatment offered is consistent and research-based.
- Prioritise actions appropriately:
  - Immediate Actions
  - Actions within 12 hours
  - Actions within 24 hours.

## Process:

- Assess the patient for signs of dehydration

Does the patient feel:	Does the patient have:
Thirsty	Postural systolic hypotension
Dry (mucous membranes, skin turgor)	Low volume of concentrated urine
Lethargic	A negative fluid balance
Faint	Dry mucous membranes
Muscle weakness/cramps	Reduced skin turgor
Headache	Rapid reduction in body weight
	Serum electrolytes of Low Sodium (Na), Low potassium (K), Low Magnesium (Mg)
	High creatinine/urea

## Immediate action:

- Apply a high output stoma bag (available via local stoma care department) for continuous drainage and check peristomal skin for signs of breakdown
- Check blood biochemistry (Na/K/Mg/Creatinine)
- Perform a Urine Sodium test
- Administer intravenous fluids
- Record accurate input/output on fluid balance chart
- Advise to send stool specimen for M, C & S. (Only test for C Difficile toxin if increased output cannot be attributed to any other cause, or is suspected):
  - Review drug chart with medical team
  - Stop NSAIDs
  - Stop laxatives
  - Start loperamide 4mg 4 x daily - 45 mins before meals and at night (Baker et al 2009)
  - Omeprazole 40mg twice daily
  - Review for IVI, until stomal output stabilised and patient hydrated.

*Continued on next page.*



## High Output Stoma Management - Hospital Setting *(continued)*

### Action within 12 hours:

Ensure the patient is wearing an appropriate appliance to reduce the risk of leakage

- Refer to dietician re oral fluid and dietary intake
- Hypotonic oral fluid restriction (500-1000mls/24hrs), British Society of Gastroenterology Guidelines (2006)
- Low fibre meals.

### Action within 24 hours:

- Daily reassessment of stoma output and fluid balance
- Recheck blood biochemistry daily
- Review medication daily
- The dose of Loperamide can be increased on medical advice; until output is 1200mls/24hrs (Nightingale 2001) Loperamide in tablet form is preferable
- Consider use of codeine phosphate 30mg tds/120-480mg day (Forbes, 2007)
- Consider review by medical staff for octreotide
- Review stool specimen result
- Introduction of isotonic fluids with dietetic guidance

#### Isotonic (Hypertonic) Recipe

800mls tap water, squash (not sugar free), 1 level teaspoon salt

OR Lucozade Sport with 1 teaspoon salt

OR Double Strength Dioralyte – 2 sachets in 200-300mls water

- Explain rationale of isotonic fluid to patient to encourage compliance as fluid can be unpalatable
- Check adhesion of stoma appliance
- Refer to gastroenterology team if cause of HOS is not apparent.

### Outcome:

The patient states they feel comfortable and well hydrated.

The stoma output is contained effectively and skin integrity is maintained.

The cause of the high output stoma is established.

## Statement:

Patient has a stoma output of >1500mls/24hours (Travis et al 2008)  
 Patient is experiencing increased frequency in emptying appliance.  
 Stoma output is a watery consistency.

## Structure:

- The symptoms of high output stoma (HOS) are recognised and appropriate action is taken within 24 hours
- Patients with a high intestinal fluid loss either following surgery or periodically in the long term are managed effectively to:
  - Reduce intestinal loss
  - Manage any electrolyte imbalance and dehydration secondary to the high output
  - Prevent poor skin integrity due to appliance leakage
  - Re-establish effective bowel function and prevent further complication
  - Ensure that advice and treatment offered is consistent and research-based.
- Prioritise actions appropriately:
  - Actions within 12 hours
  - Actions within 24 hours

## Process:

- Assess the patient for signs of dehydration

Does the patient feel:	Does the patient have:
Thirsty	Postural systolic hypotension
Dry (mucous membranes, skin turgor)	Low volume of concentrated urine
Lethargic	Dry mucous membranes
Faint	Reduced skin turgor
Muscle weakness/cramps	Rapid reduction in body weight
Headache	Serum electrolytes of Low Sodium (Na), Low potassium (K), Low Magnesium (Mg)
	High creatinine/urea

## Action within 12 hours:

- Check blood biochemistry (Na/K/Mg/Creatinine)
- Perform a Urine Sodium test
- Monitor oral input/ fluid output
- Stop NSAIDs
- Stop laxatives start loperamide 4mg 4x daily - 45 mins before meals and at night (Baker & Greening 2009)
- Omeprazole 40mg twice daily
- Hypotonic oral fluid restriction (500-1000mls/24hrs), (Nightingale2006)
- Low fibre meals
- Send stool specimen for microscopy, culture and sensitivity (MC&S) (Only test for C Difficile toxin if increased output cannot be attributed to any other cause, or is suspected)
- Inform GP
- Ensure the patient is wearing an appropriate appliance to reduce the risk of leakage
- Apply a high output stoma bag (available via local stoma care department) for continuous drainage and check peristomal skin for signs of breakdown.

*Continued on next page*



## High Output Stoma Management - Community Setting (*continued*)

### Action within 24 hours:

- Daily reassessment of stoma output
- Recheck blood biochemistry
- Review medication
- The dose of Loperamide can be increased on medical advice; until output is 1200mls/24hrs (Nightingale 2001) Loperamide in tablet form is preferable
- Consider use of codeine phosphate 30mg tds/120-480mg day (Forbes, 2007)
- Consider review by medical staff for octreotide
- Review stool specimen result
- Introduction of isotonic fluids with dietetic guidance

#### Isotonic (Hypertonic) Recipe

800mls tap water; 200mls squash (not sugar free), 1 level teaspoon salt

OR Lucozade Sport with 1 teaspoon salt

OR Double Strength Dioralyte – 2 sachets in 200-300mls water

- Explain rationale of isotonic fluid to patient to encourage compliance as fluid can be unpalatable
- Check adhesion of stoma appliance
- Refer to gastroenterology team if cause of HOS is not apparent.

### Outcome:

The patient states they feel comfortable and well hydrated.

The stoma output is contained effectively and skin integrity is maintained.

The cause of the high output stoma is established.

*Addendum - high output traffic light tool under current review.*



## References/reading List for High Output Stoma

- Achenbach U, Ecker K, Greinwald R, Loffler J, Stallmach A. (2005) Long- term treatment of high Intestinal Output syndrome with budesonide in patients with Crohn's disease and ileostomy. *Diseases of Colon and Rectum*. 2005 Feb; 48 (2): 237-42.
- Baker M., Nightingale J.M., Tsao S.K. (2005) High Output Stoma after small-bowel resections for Crohn's disease. *Nature clinical practice. Gastroenterology & Hepatology*, December 2005, vol./is.2/12 (604-608; quiz 609), 1743-4378.
- Baker M, Greening L. (2009) Practical management to reduce and treat complications of high output stomas. *Gastrointestinal Nursing* 7 (6): 10-17 (July 2009).
- Baker M., Nightingale J., Williams R.N., (2009) Causes and Management of High Output Stoma. "Accepted Article"  
*Colorectal Disease* doi: 10.1111/j.1463-1318.2009.02107.
- Barwell J (2012) High-output stoma management following bowel perforation: *British Journal of Nursing* | Vol 21 | No Sup 6 | March 2012 | pp S4-S7.
- Burch J. (2005) Management of a high output stoma in the community: case study. *British Journal of Community Nursing*, September 2005, vol./is. 10/9 (411-413), 1462-4753 (Sept 2005).
- Burch J., Sica J. (2007) Management of intestinal failure and high –output stomas. *British Journal of Nursing*, July 2007, vol./is. 16/13(772, 774,776-777), 0966-0461 (2007 July 12-25).
- Carlson G (2001). Care of intestinal stoma and enterocutaneous fistula. In: Nightingale J (ed). *Intestinal Failure*. 1st edn. Greenwich Medical Media Ltd, London.
- Cook ALJ., Haq A.I. (2007) MRSA enteritis causing a high stoma output in the early postoperative phase after bowel surgery. *Annals of the Royal College of Surgeons of England*, April 2007, vol./is. 89/3 (303-308), 0035-8843.
- Cottam J (2003) Management of high output ileostomy following rectal resection. *Gastrointestinal Nursing* 1(7):19–23.
- Donoghue A., Norton C., Shihab O. (2009) A novel method for the management of high – output ileostomies. *Colorectal Disease*, June 2009, vol./is 11/37, 1462-8910.
- Forbes A (2001) *Inflammatory Bowel Disease: a Clinician's Guide*. 2nd edn. Arnold. London.
- Gabe S (2013) Managing high-output stomas: module 2 of 3 : *British Journal of Nursing* | Vol 22 | No Sup 16 | September 2013 | pp S18-S20.
- Haboubi N, Jones S, Shannon E, Srivastava E. (2004). A Novel Approach to a patient with Crohns Disease and a high output: a Missed Opportunity? *Scan J gastroenterology*. 2004; 4: 398-400. Hemingway, D, Rai S. (2003) Acute adrenal insufficiency presenting as high output ileostomy. *Ann R College Surgery England*; 85: 105-106.
- Hemingway D, Miller A.S., Williams R. N. (2009) Enteral Clostridium difficile, an emerging cause for high output ileostomy. *Journal of Clinical Pathology*, October 2009, vol./is. 62/10(951-953), 0021-9746; 1472-4146 (October 2009).
- Higham S.E., Read N.W. (1990) Effect of ingestion of fat on ileostomy effluent. *Gut*, 1990, vol./is.31/4 (435-438), 0017-5749.
- Jeejeebhoy, K. (2001) Assessment of nutritional and fluid status. In: Nightingale J (ed). *Intestinal Failure*. 1st edn. Greenwich Medical Media Ltd, London.
- McDonald, A. (2014) Orchestrating the management of patients with high-output stomas; *British Journal of Nursing* | 23:12 | pp 645-649
- Medlin, S. (2012) Nutritional and fluid requirements: high-output stomas. *British Journal of Nursing* | Vol 21 | No Sup 6 | March 2012 | pp S22-S25.
- Medlin, S. (2012) Nutritional fluid requirements: high-output stomas: *Gastrointestinal Nursing* | Vol 10 | No 7 | September 2012 | pp 42-49.
- Newton, CR., Gonvers JJ, McIntyre PB, Preston DM, Lennard-Jones JE (1985). Effect of different drinks on fluid and electrolyte losses from a jejunostomy. *J R Soc Med* 78(1).
- Nightingale, JM, Woodward JM (2006). Small Bowel and Nutrition Committee of the British Society of Gastroenterology (2006) Guidelines for management of patients with a short bowel. *Gut* 55(Suppl 4).
- Nightingale J., Woodward JM. (2006) Guidelines for management of patients with a short bowel. *GUT*. 2006; Aug; 55 (Suppl 4): iv1-iv12. BMJ Publishing Group and British Society of Gastroenterology.
- Nightingale J., M D. (2001) Management of patients with a short bowel. *World Journal of Gastroenterology*. December 7 (6): 741-751.
- Nightingale J. (2001) (Ed) *Intestinal Failure management of a high output stoma*, (Greenwich Medical Media) p.375 -392. <http://www.amazon.co.uk/Intestinal-Failure-Greenwich-Medical-Media/dp/1900151936>.
- Sica J, & Burch J. (2007) Management of intestinal failure and high-output stomas: *British Journal of Nursing* | 16:13 | July 2007 | pp 772-777.
- Slater, R. (2012) High-output stomas: challenges with a large laparostomy wound: *British Journal of Nursing* | Vol 21 | No Sup 6 | March 2012 | pp S26-S33.
- Slater R & Gabe S. (2012) Managing high-output stomas: Module 3 of 3: *British Journal of Nursing* | Vol 22 | No 22 | December 2013 | pp 1280-1285.
- Slater R. (2012) Managing high-output stomas; *British Journal of Nursing* | Vol 21 | No 22 | December 2012 | pp 1309-1311.
- Turnbull, G. (2006) Management of High – Output Fecal Stomas. *Ostomy/ Wound Management*. Vol 52 Issue 8 : 10, 12 . 2006.



### Statement:

Patients with leakage from a stoma appliance are seen and assessed by the Stoma Care Nurse (SCN) and an individualised care plan formulated to address the issue.

### Structure:

- Evidence of competency in Stoma Care to undertake a detailed assessment of patients with stomal leakage
- Evidence of an agreed treatment/management plan to resolve the problem.

### Process:

- Ensure a private, confidential and safe environment where the patient can be assessed, treatment given and provided with information
- Obtain verbal consent from patient to undertake an assessment and devise a care plan
- Using clinical expertise undertake an assessment to ascertain the site, shape and size of the stoma and the factors contributing to the leakage problem ([Appendix 5](#))
- Assess and document the extent of skin breakdown caused by the leakage problem as per local skin tool documentation procedure (please refer to ASCN skin soreness guideline)
- Document all findings with photographic evidence if possible as per local protocol
- Choose the correct appliance and/or accessories as required to manage the problem in accordance with local guidelines and expert opinion
- Refer to other agencies i.e dermatology as required (Consider patch testing of other flange material to rule out allergies to products before referral to dermatology)
- Impart information as required to the patient to prevent the problem from recurring
- Involve family and carers, where appropriate, and in agreement with the patient
- Feedback appropriate information to referring healthcare professional
- Evaluate the patient's understanding of the information given
- Agree a follow up contact as appropriate to the individual and local policy.

### Outcome:

The patient states the nurse offered advice and expertise on the management of stoma leakage and provided a care plan to outline the process.

Problem	Contributing Factors	Evidence	Solution
Poor fitting appliance	<p>Inaccurate template due to:</p> <ul style="list-style-type: none"> <li>Reduced stomal oedema post op</li> <li>Weight loss/gain</li> <li>Change in shape of stoma</li> <li>Granulomas</li> <li>Abdominal wall induration post op</li> </ul> <p>Poor technique due to:</p> <ul style="list-style-type: none"> <li>Physical limitations such as poor vision, arthritis in hands</li> <li>Mental incapacity</li> <li>Non compliance</li> <li>Incorrect choice of appliance</li> <li>Inappropriate or outdated product</li> </ul> <p>Poor adhesion from over use of accessories or not shaving excessive hair</p> <p>Macerated skin due to exposure of effluent on skin (common in urostomy patients)</p>	<p>Exposed sore skin or trauma to stoma from ill fitting appliance</p> 	<p>Re measure stoma and ensure correct hole to fit</p> <p>Clean and shave skin thoroughly to increase adhesion of product</p> <p>Protective barrier wipe</p> <p>Add seal under appliance for added protection</p> <p>Observe the patient removing, cutting and applying a new pouch</p> <p>Consider appropriate and/or newer products</p> <p>Consider colostomy irrigation as an alternative method of stoma management</p>
Flush or retracted stoma or minimal spout for liquid output	<p>Weight loss/gain</p> <p>Pregnancy</p> <p>Adhesions</p> <p>Disease which limits surgical technique</p> <p>Active disease</p> <p>Stenosed stoma</p>	<p>Sore skin from contact with effluent, ileostomy/urostomy 'flush' to skin</p> 	<p>Consider and assess for convexity to fill moat or allow spout to protrude</p>
Skin creases and skin folds	<p>Weight loss/gain</p> <p>Scar tissue or previous surgery</p> <p>Loss of skin tone</p> <p>Emergency stoma sited in poor site</p>	<p>Assess depth of crease with patient sitting, does effluent leak along channel created?</p> 	<p>Fill crease with filler, paste or seal to improve pouch adherence</p> <p>Soft or firm convex pouch with or without belt following an assessment by a SCN</p>
<p>Functional issues include:</p> <p>Pancaking</p> <p>Twisted drainage/night bag</p> <p>Overfilling of pouch</p> <p>Clothing/Belts</p> <p>Obstructive symptoms</p>	<p>Post operative function of stoma</p> <p>Dietary/hydration</p> <p>Efficiency of filter on pouch</p> <p>Use of support garments</p> <p>Poor technique when applying products /managing stoma</p> <p>Infrequent emptying or loose stool</p> <p>Restrictions or impact of clothing over and above appliance</p> <p>Stoma 'explodes' after a period of inactivity</p>	<p>Faeces 'sit' on stoma and cause sore skin and leaks</p> 	<p>Advise re measures to prevent pancaking such as Vaseline/oil in bag, filter cover etc</p> <p>Assess patient/carer technique and advise</p> <p>Encourage more frequent emptying</p> <p>Assess clothing and advise accordingly</p> <p>Seek medical advice re obstructive episodes</p>

Continued on next page.

Problem	Contributing Factors	Evidence	Solution
<p>Altered stool i.e. diarrhoea</p> <p>Obstructive symptoms</p> <p>Hernia and prolapse</p>	<p>GI Infection, dietary causes, disease activity, medication i.e. chemo, antibiotics, laxative abuse</p> <p>Stress</p> <p>Poor diet to control output</p> <p>Stoma 'explodes' after a period of inactivity</p> <p>Weight gain, excessive strain on abdominal muscles, poor tone of abdominal muscles, post op coughing, vomiting</p> <p>Poor technique during physical exertion e.g. lifting objects/ exercise</p>	<p>Liquid/watery stool on base of flange</p> <p>Reduced area of adhesive after cutting flange</p> 	<p>Ascertain the cause of diarrhoea and treat</p> <p>Return function to normal i.e. stool thickeners</p> <p>Add solidifying agent to the inside of pouch</p> <p>Seek medical advice re obstructive episodes</p> <p>Alternative appliance with flexible, large area of adhesive. Remeasure the expanding stoma</p> <p>Consider support belt</p> <p>Seek medical advice re repair if appropriate</p>
<p>Other factors:</p> <p>Skin changes such as menopause, excess sweating, use of inappropriate remedies around stoma</p> <p>Skin conditions i.e. psoriasis, eczema, allergy</p> <p>Ulceration i.e. pyoderma gangrenosum</p> <p>Pressure ulcers</p> <p>Bleeding i.e. granulomas</p>	<p>Inappropriate use of cream based products preventing adherence. Sweat prevents adhesion of pouch</p> <p>Lesions may prevent adhesion of pouch and require treatment which may further affect pouch adherence</p> <p>Acute, wet, sore lesions undermine pouch adhesion</p> <p>Blood from granulomas undermines pouch adhesion</p>		<p>Assess the skin condition and use of treatment therapies</p> <p>Antiperspirant to control sweating</p> <p>Seek medical advice re skin condition and appropriate treatments and/or investigations</p> <p>Treat granulomas with silver nitrate or cryotherapy as per ASCN granuloma guideline</p> <p>Review medication (e.g. nicorandil, immunosuppressants; steroids)</p>



## References for Stomal Leakage

- Association of Stoma Care Nurses (2013), *Stoma Care Nursing Standards and Audit Tool*, ASCN UK.
- Black P (2007) Peristomal Skin Care; an Overview of Available Products, *British Journal of Nursing*, Vol 16, No 17, pgs 1048-1056.
- Burch J (2014), Looking after the Stoma and the Surrounding Skin, *Nursing and Residential Care*, Vol 16, No 4, pgs 190-195.
- Chandler P (2015), Preventing and treating peristomal skin conditions in stoma patients, *British Journal of Community Nursing*, Vol 20, No 8, pgs 386-388.
- Cutting K (2006), Silicone and Skin Adhesive, *Journal of Community Nursing*, Vol 20, No 11, pgs 36-37.
- Denyer J (2011), Reducing Pain During the Removal of Adhesive and Adherent Products, *British Journal of Nursing*, Vol 20, No 15, S28-35.
- Gabe S and Slater R (2013), (Stoma Supplement) Managing High Output Stomas: module 1 of 3, *British Journal of Nursing*, Vol 22, No 5, pgs S26-S30.
- Herlufsen P, Olsen AG, Carlsen B, Nybaek H et al (2006), Study of Peristomal Skin Disorders in Patients with Permanent Stoma, *British Journal of Nursing*, Vol 15, No 16, pgs 854-862.
- Lowther C and Osborne W (2013), Peristomal Skin Assessment, *Gastrointestinal Nursing*, Vol 11, No 7, Pgs 11-12.
- Martins L, Tavernelli K, Serrano JLC (2008), Introducing a Peristomal Skin Assessment Tool: The Ostomy Skin Tool, *Journal of Wound Care and Enterostomal Therapy*, Vol 28 (2Suppl) S3-S13.
- Martins L, Tavernelli K, Sansom W et al (2012), Strategies to Reduce Treatment Costs of Peristomal Skin Complications, *British Journal of Nursing*, Vol 21, No 22, pgs 1312-1315.
- Nichols TR and Riemer M (2011), Body Image Perception, the stoma peristomal skin perception, *Gastrointestinal Nursing*, Vol 9, No 1, pgs 22-26.
- Raman S, Fadipe Y, Perston Y and Karandikar S (2012), Nicorandil-induced ulceration complicating a novel treatment of a peristomal tubovillous adenoma, *Gastrointestinal Nursing*, Vol 10, No 8, pgs 46 - 50.
- Richards A (2005) Intestinal Physiology and its Implications for patients with Bowel Stomas Chapter 2 in: Breckman B (2005) (Editor) *Stoma Care and Rehabilitation*, Elsevier Ltd.
- Rolstad BS, Ermer-Seltun J and Bryant RA (2012), Relating Knowledge of Anatomy and Physiology of the Skin to Peristomal Skin Care, *WCET Journal (Supplement)*, Vol 32, No 1, pgs 4-10.
- Rudoni C (2011), Peristomal Skin Irritation and the use of a silicone –based barrier film, *BJN (Stoma Care Supplement)*, Vol 20, No 16, pgs S12-S18.
- Skellet AM, Cullen P, Dootson G (2009), peristomal ulceration caused by nicorandil, *Clinical and Experimental Dermatology*, Vol 34, No 1, pgs 87-8.
- Stephen-Haynes J (2014), The Outcomes of Barrier Protection in Peri wound Skin and Stoma Care, *British Journal of Nursing (Stoma Supplement)*, Vol 23, No 5, S26-S30.
- Thompson H, North J, Davenport R and Williams J (2011), Matching the Skin Barrier to the Skin Type, *British Journal of Nursing (Stoma Supplement)*, Vol 20, No 16, Pgs S27-S30.
- Voegeli D (2013), Moisture Associated skin damage: an Overview for Community Nurses, *British Journal of Community Nursing*, Vol 18, No 1, pgs 6-12.
- White M (2014), Silicone Use in Stoma Care, *British Journal of Nursing (Stoma Supplement)*, Vol 23, No 17, S14-S16.
- Williams JD and Lyon C (2010), Dermatitis: Contact Irritation and Contact Allergy Chapter 3 in: Lyon C and Smith A (Editors) (2010), *Abdominal Stomas and Their Skin Disorders*, Informa Healthcare UK.

*Pancaking occurs when faeces accumulates around the stoma at the top of the pouch.*

### Statement:

Patients who are experiencing a problem with 'pancaking' are assessed by a Stoma Care Nurse (SCN) and an individualised stoma care plan is formulated.

### Structure:

The patient and nurse agree on an appropriate management regime to prevent pancaking and reduce risk of pouch leakages.

### Process:

- Ensure a private, confidential and safe environment where the patient can be assessed and appropriate advice given
- Using clinical expertise, undertake a clinical history to ascertain the extent of pancaking
- Discuss diet with the patient. The intake of more fibre may help the consistency of the stoma output to drop into the bag
- Assess output using Bristol Stool chart ([Appendix 7](#))
- Assess fluid intake, this often needs to be increased to 8-10 glasses/cups per day (unless contra indicated i.e. renal failure)
- Insert lubricating gel into the top of the pouch – avoiding the filter
- Insert the backing from the bag or tissue paper into the pouch prior to applying to prevent both sides of appliance sticking together
- Ensure there is air in bag before applying
- Advise using the filter covers (usually supplied in the boxes)
- If using a drainable pouch or 2 piece, encourage regular 'de-vac-ing' of the pouch (separating pouch form baseplate, or opening the drainable pouch to encourage air into the pouch)
- Trial alternative makes of pouches as the filter may be more effective for the individual depending on the position of the filter
- If pancaking persists, alternative pouches with soft convexity or no integral filter may be helpful. Or even a drainable pouch or 2 piece to enable regular 'de-vac-ing' of the pouch
- If pancaking persistent offer colostomy irrigation as an alternative management option
- Assess for review of a laxative/stool softener to make faecal matter less 'sticky' and a looser consistency
- Ensure skin integrity is observed and maintained.

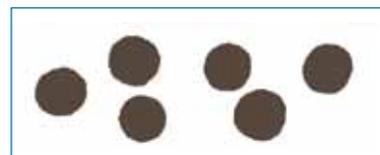
### Outcome:

The patient states the nurse offered advice and expertise on the management of pancaking.

### References for Pancaking

- Boyles A, (2010) Keeping up to date with stoma accessories: Enabling Informed choice. *Gastrointestinal Nursing* Vol 8 (6), p 28 - 42.
- Bristol Stool Chart [http://static1.l.sqspcdn.com/static/f/1451532/22180508/1363249562587/bristol\\_stool\\_chart.pdf](http://static1.l.sqspcdn.com/static/f/1451532/22180508/1363249562587/bristol_stool_chart.pdf) accessed 21/12/15.
- Hayles K, (2014) Getting it right the first time: how to select stoma accessories *Gastrointestinal Nursing* (12), (7).
- Perrin A, Redmond C, Cowin C, Wiltshire N, Smith A, Lovelady N, Carlson G, (2013) Patients experiences of pancaking while living with a colostomy: A survey. *British Journal of Nursing* Vol 22 (16), p S6-S9.

Type 1: Separate hard lumps, like nuts (hard to pass)



Type 2: Sausage shaped but lumpy



Type 3: Like a sausage but with cracks on its surface



Type 4: Like a sausage or snake, smooth and soft



Type 5: Soft blobs with clear-cut edges (passed easily)



Type 6: Fluffy pieces with ragged edges, a mushy stool



Type 7: Watery, no solid pieces *ENTIRELY LIQUID*





### Statement:

Patients with a stoma are assessed by a Stoma Care Nurse (SCN) and an individualised prevention of parastomal hernia plan is formulated.

### Structure:

The patient and nurse agree on an appropriate prevention of parastomal hernia plan to minimise the risks and consequent complications.

### Process:

- Ensure a private, confidential and safe environment where the patient can be examined, assessed and provided with information
- Using clinical expertise undertake a clinical history to ascertain predisposing factors of parastomal hernia such as type of stoma, obesity (high BMI), lifting, muscle weakness due to age or multiple abdominal surgeries, straining, coughing and lifestyle ([Appendix 3a](#))
- Complete the Stoma QOL questionnaire to enable baseline QOL measurement ([Appendix 3b](#))
- Discuss activities that increase risks of parastomal hernia formation. e.g. Occupation that involves heavy lifting, strenuous exercise, gardening, vacuuming or lifting heavy wet washing
- Advise that driving after surgery should be avoided until after 4 weeks if laparoscopic surgery and 6 weeks after open surgery if wounds have healed (to be confirmed against patients insurance policy)
- Describe to patient what a parastomal hernia is and how one develops
- Explain the consequences of parastomal hernia, including the appearance, discomfort, complications and possible surgical intervention, supported with appropriate evidence based research
- Provide relevant advice to patients for hernia prevention post surgery, supported with written information including exercises, demonstrate if required ([Appendix 3c](#))
- Advise patient to purchase lightweight support underwear from a high street store or obtain prescribed garment if required ([Appendix 3d](#))
- Advise patients who irrigate, development of a parastomal hernia may impact on effectiveness of irrigation by restricting the the flow of water into the stoma
- Reinforce information on parastomal hernia prevention at regular intervals. e.g. at 1,3,6 months and annually
- Involve family and carers, where appropriate, and in agreement with the patient.
- Feedback appropriate information to GP, surgeon, D/N or other relevant health care professional
- Evaluate the patient's understanding of the information given.

### Outcome:

The patient states the nurse offered advice and expertise on the prevention of parastomal hernia.



### Statement:

Patients with a parastomal hernia are assessed by a Stoma Care Nurse (SCN) and an individualised treatment/management plan is formulated.

### Structure:

The patient and nurse agree on the appropriate management of the parastomal hernia, aiming to minimise the risk of complications and further weakening of rectus abdominus.

### Process:

- Ensure a private, confidential and safe environment where the patient can be assessed, examined, treated and information provided
- Using clinical expertise undertake a clinical history to ascertain predisposing factors for parastomal hernia development, e.g. Lifting, smoking, obesity, type of stoma ([Appendix 3a](#))  
Complete Quality of Life hernia assessment to ascertain any change in QOL ([Appendix 3b](#))
- Examine the patient both lying and standing to determine the size and severity of the parastomal hernia  
Document size of hernia in patients notes (size of stoma to be measured on standing width/height in cms. Sizing of the hernia relates to the largest of the 2 measurements: small-less than 5cm; medium 5-10cm; large greater than 10cm (Muysoms et al 2009)
- Assess size of stoma as this often changes in the presence of a parastomal hernia. Patient may require a new cutting size for the flange or a different product or accessories
- Assess peristomal skin integrity; if skin appears thin and fragile due to it being stretched take measures to provide skin protection with accessories, ensuring appliances are correctly fitted or adhesive remover to reduce skin stripping
- Utilising clinical expertise, determine the level of support underwear/garment required for the parastomal hernia, taking into account patients mobility, life style, dexterity and their own personal preference, advising patient of both high street and prescription support underwear and garments ([Appendix 3d](#))
- Assess and measure the patient for the required support garment, taking the measurement at the level of the stoma. Openings in the support wear should be avoided unless they have a prolapse cover as the hernia can often push through. NB: refer to a specialist as per local procedure for fitting of hernia support garments, communicate with GP safeguarding prescription details of support garment
- Provide information on justification and reasoning why and how to wear support garments, apply belts when lying down
- Arrange review date within 3 months after they have received their support wear to ensure they are wearing it appropriately and plan yearly review to re-evaluate
- Discuss potential complications of parastomal hernia eg obstruction and evaluate understanding
- Assess functional output, reviewing patient's diet to prevent diarrhoea or constipation
- Offer advice re: importance of regular exercise and core muscle exercises ([Appendix 3c](#))
- Assess and advise patients who irrigate this may not be possible as the parastomal hernia may restrict the flow of water into the stoma
- Discuss the implications of surgical repair of the parastomal hernia e.g. repair does not guarantee the hernia could not reoccur
- If the parastomal hernia is symptomatic and impacting on QOL complete referral form for referral for CT scan and referral back to GP/Colorectal consultant as per local policy ([Appendix 3e](#))
- Involve family and carers, where appropriate, and in agreement with the patient
- Feedback appropriate information to referring healthcare professional and surgeon
- Evaluate the patient's understanding of the information given.

### Outcome:

The patient states the nurse offered advice, appropriate support wear and expertise on the management of their parastomal stoma.



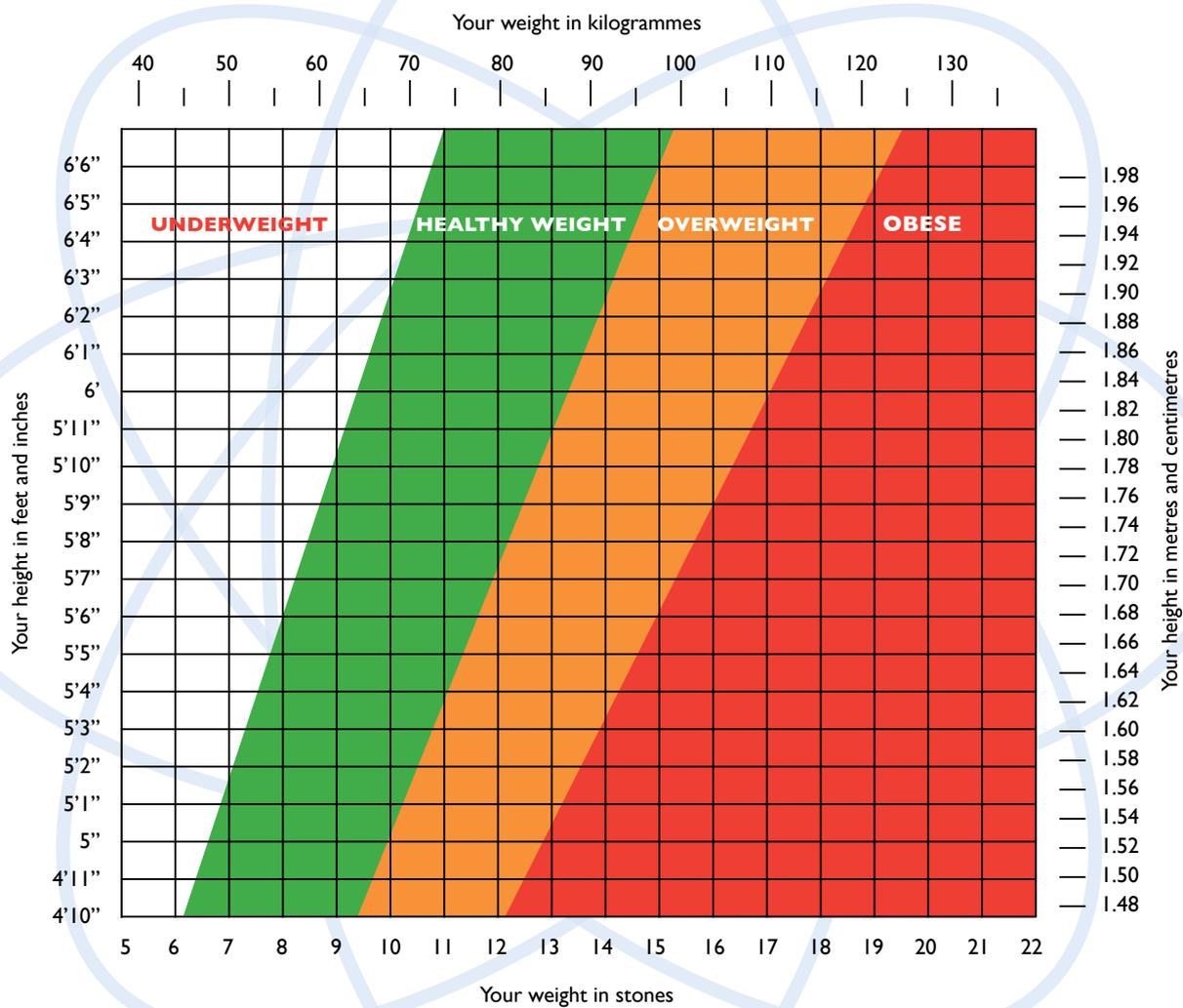
## Appendix 3a (i): Guide to inform clinical history for assessment of predisposing factors for prevention of Parastomal Hernia

Parastomal hernia development is the highest stomal complication (North 2014). We as SCNs have a responsibility to advise our patients of the risk factors.

All patients with a stoma are at a lifelong risk of developing a parastomal hernia due to the surgical defect created within the abdominal wall. The need to identify risk factors to advise and educate patients about this is essential.

It is recommended that these risk factors are re-assessed and discussed on every clinical assessment.

Predisposing consideration	RISK Factors	Additional information/ explanation	Reference
Age	Children The over 70	Rectus muscle underdeveloped in paediatrics. Rectus muscle gets weaker as collagen reduces with age	Thompson (2008)
BMI (Appendix 3a (ii))	Obese	Undue strain and force on rectus abdominis	McGrath/Porrett (2006) Thompson (2008)
Occupation/ lifestyle	Manual Young family	Undue strain and force on rectus abdominis	
Activity 1-5 1 lie on sofa - 5 gym/sport every day	Sports - e.g. weight lifting	Undue strain and force on rectus abdominis	Kane et al (2004)
Surgery	Emergency Post op infection Multiple abdominal surgery Malnutrition	Risk of infection, larger aperture of stoma with emergency surgery  Deficiency in iron, selenium, zinc	Bucknel & Ellis (1982) Bucknel & Ellis (1984) McGrath/Porrett (2006)  Pearl (1989) Pilgrim et al (2010)
Stoma - site	Transverse colostomy Colostomy Out of rectus muscle Previous hernia repair Surgical technique (trephine/ aperture of stoma greater than 35mm/X incision)	Research currently indicates higher risk in colostomist Incidence reduced if within rectus muscle Implications of abnormal collagen and PMH of herniosis Likelihood of recurrence	McGrath/Porrett (2006) Carne et al (2003) Cowin & Redmond (2012) Pilgrim et al (2010)
Diagnosis/ PMH	Malignancy  Diverticular Existing Hernia Previous Hernia AAA  Connective tissue disorders  Steroids Diabetes	Diverticular/AAA/hernia – suggest abnormal collagen as a result of genetic make up could be contributing to history of herniosis  Non-specific collagen  Steroids/diabetes impair healing	Muysoms et al (2009) Hernia (Springerlink.com) RC Read (2011) Readding (2014) Pilgrim et al (2010)
Smoking	Smoker	4 x greater risk of PSH in smokers	McGrath/Porrett (2006)
Raised intra abdominal pressure	COPD/emphysema Ascites Acute/chronic constipation (colostomists/urostomist)	Persistent coughing/forceful sneezing/vomiting leads to undue strain within the abdomen Risk of constipation post operatively due to poor fluid intake secondary to the change in absorption and alterations in renal function acutely or long term	Thompson (2008) Readding (2014)





## Appendix 3b: The Stoma Quality of Life Questionnaire (QoL)

### User instructions for a questionnaire designed to measure quality of life among people with a stoma: The Stoma-QoL

The Stoma-QoL is developed to measure quality of life among people with a stoma. The questions in Stoma-QoL are outcomes of a lot of interviews with people with a stoma, which were carried out in several countries in order to address the issues that were most relevant in relation to quality of life for this group of people.

#### The following issues are covered:

Concerns about sleeping, concerns about intimate relations, concerns regarding relationships with family and close friends and concerns regarding relationships with people other than family and close friends.

The questionnaire consists of 20 questions. An example of a question could be: *“I worry that the pouch will loosen.”* All the questions must be answered on a 4-point scale.

#### The options for answering each question are:

- 1 Always
- 2 Sometimes
- 3 Rarely
- 4 Not at all

Please be aware that ALL 20 questions must be answered in order for the questionnaire to work. Therefore, there should not be any unanswered questions. Furthermore, ONLY ONE answer must be given for each question.

The questionnaire is on the next page, the questions are very simple and it will take approximately 5-10 minutes to complete.

### Reference

\*Adapted from Prieto et al (2005)



## Appendix 3b: The Stoma Quality of Life Questionnaire (QoL) (continued)

Please answer ALL the questions.

Please tick the response that best describes how you are feeling at the moment.

		Always	Sometimes	Rarely	Not at all
1	I become anxious when the pouch is full	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
2	I worry that the pouch will loosen	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
3	I feel the need to know where the nearest toilet is	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
4	I worry that the pouch may smell	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
5	I worry about noises from the stoma	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
6	I need to rest during the day	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
7	My stoma pouch limits the choice of clothes that I can wear	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
8	I feel tired during the day	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
9	My stoma makes me feel sexually unattractive	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
10	I sleep badly during the night	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
11	I worry that the pouch rustles	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
12	I feel embarrassed about my body because of my stoma	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
13	It would be difficult for me to stay away from home overnight	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
14	It is difficult to hide the fact that I wear a pouch	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
15	I worry that my condition is a burden to people close to me	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
16	I avoid close physical contact with my friends	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
17	My stoma makes it difficult for me to be with other people	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
18	I am afraid of meeting new people	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
19	I feel lonely even when I am with other people	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
20	I worry that my family feel awkward around me	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>

Thank you for filling out the questionnaire.

Ensure you are safe and comfortable before commencing your exercises.

Lay with your head on a pillow, knees bent and feet flat.

It is important that you perform exercises gently and to your ability during the first 6 weeks.

These should not be painful or put excessive strain upon your abdominal muscles.

Avoid sit-ups or abdominal crunches.

### 1. Abdominal Exercise (Lying)

With your hands gently resting on your tummy, breathe in through your nose and as you breathe out, gently pull your tummy button down towards your spine.

As you feel the muscles tighten, try to hold for 3 seconds and then breathe away normally.



### 2. Pelvic Tilt

Comfortably position your hands in the hollow of your back.

Tighten your tummy muscles as before, flatten your lower back onto your hands and lift your bottom.

Hold for 3 seconds and then breathe away normally.



### 3. Knee Roll

Tighten your tummy muscles as before and gently lower both knees to one side as far as is comfortable.

Slowly bring them back to the middle and relax.

When ready, repeat this movement to the other side.



### 4. Abdominal Exercise (Standing)

Stand with your back against a wall.

Tighten your tummy muscles and try to keep your back in contact with the wall.

Hold for 3 seconds and relax.

You should aim to do each of these exercises 5 times per day.

Do more repetitions as you feel able.

Maintaining this regime for up to 12 weeks after surgery may reduce your risk of herniation.



*Continued on next page*



### Appendix 3c: Parastomal Hernia - Exercises (continued)

It is generally accepted by physiotherapists that most people can return to active exercise 12 weeks post surgery. This is whether you had a laparotomy (incision through your abdominal wall) or laparoscopic surgery (key hole surgery).

Returning to all activities previously undertaken is extremely important. Remember you can be as active as you wish to be.

Exercise can include, but not limited to:

<i>Walking</i>	<i>Aqua aerobics</i>	<i>Tennis</i>
<i>Pilates</i>	<i>Golf</i>	<i>Hill climbing</i>
<i>Yoga</i>	<i>Gardening</i>	<i>Gym activities</i>
<i>Tai Chi</i>	<i>Fishing</i>	<i>Skiing</i>
<i>Swimming</i>	<i>Football</i>	<i>Scuba diving</i>

- Preparing your body before surgery is as important as following surgery to reduce the risk of developing parastomal hernia
- Physiotherapists generally recommend you commence gentle abdominal exercise 3-4 days after surgery unless otherwise advised by your surgeon or Stoma Care Nurse
- It is important to persevere and carry out these exercises daily. It is a long term commitment to help prevent you from developing a parastomal hernia  
Slowly build your activity level as you feel fit, aiming to return to the active life you enjoyed before surgery
- Walking is a great way of keeping fit. Start slowly with a 5-10 walk daily, gradually increasing to a 30-45 minute walk by week 6 or until you return to your ability before surgery
- If your work or leisure activities involve heavy lifting or strenuous exercise it is important that you seek advice from your SCN
- Exercise is a very important part of health and well-being. A long term exercise plan is recommended.

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## Appendix 3d: Clinical Recommendations for Prevention of Parastomal Hernia

Based on current evidence, preventative measures are strongly advocated to decrease the incidence of parastomal hernia formation. This includes promoting core muscle exercise regimes and support garments (North 2014, Thompson & Trainer 2005, Bloom 2001).

- These guidelines therefore advise All patients with a stoma be informed of core muscle exercises initiated post operatively as they will contribute to maintaining strength and reducing weakness of the rectus abdominis (Appendix 3c)  
These core muscle exercises are deemed as a minimal exercise regime and further advice to slowly build up and continue exercising is beneficial
- In conjunction with core muscle exercises: ALL patients should be advised of the availability of high waisted support underwear (with lycra) – These are readily available from high street stores, (e.g. Matalan, Primark, M&S, department stores, and even sports shops – especially for gentleman). Specialist support underwear is available on prescription, but it would be advised consideration of prescription costs and local policy should be taken into account when providing advice
- It is strongly recommended completion of the stoma QOL (Prieto et al 2005\*) (Appendix 3b) is completed on each clinical assessment. This will record a baseline QOL assessment so that if development of a symptomatic parastomal hernia occurs, deterioration of QOL can be demonstrated and justification for referral for a CT scan and surgical review by a colorectal surgeon can be completed (Appendix 3e)
- For those patients who are identified as possessing higher risk factors, (Appendix 3a(i) & 3a(ii)) these individuals should be advised and provided with relevant information to reduce the risk where possible (e.g. smoking/weight/lifestyle). In conjunction with a clinical assessment of individuals who possess these higher risk factors, a higher level of support garments should also be considered as per local policy.

*\* Addendum - an additional guideline is currently being developed for the assessment and competency required in relation to support garments.*



## Appendix 3e: Referral Form for Symptomatic Parastomal Hernia

PATIENT DETAILS - NHS No.		GP PRACTICE DETAILS	
Hospital No.		Name of GP	
Title	Surname	Name of Practice	
First Names		GP Address	
Date of Birth			
Address		Post Code	
		Telephone No.	
Post Code			
Daytime Telephone No.			
Home Telephone No.			
<b>REVIEW REQUIRED</b> (Please tick the appropriate box)		<b>URGENT</b>	<b>ROUTINE</b>
<b>CLINICAL DETAILS</b> - referral to GP/Colorectal Surgeon for symptomatic parastomal hernia			
<b>TYPE OF STOMA</b>	End/Loop	Ileostomy	Colostomy
Date of Stoma formation			
Reason for surgery for Stoma			
Stoma formation	Planned	Emergency	Unknown
Size of parastomal hernia (Measured width/height in cms on standing*) (Please circle)	Small (less than 5cms) * relates to the larger of width/height measurement	Medium (5-10cms)	Large (greater than 10cms)
History of presenting symptoms			
Abdominal pain related to hernia - symptomatic			
	NO	YES	If yes - pain score of _____ (1 mild - 10 severe)
Problematic stoma pouch management			
	NO	YES	If yes - last seen by CNS for review date _____
Persistent leakages (not resolved following CNS assessment)			
	NO	YES	
Persistent skin soreness (not resolved following CNS assessment)			
	NO	YES	
Other related stomal complications (e.g. prolapse)			
	NO	YES	
Alteration in bowel function			
	NO	YES	If yes - symptoms of obstruction NO / YES (Circle)
Support garment assessment completed. Is the garment worn?			
	NO	YES	If no - please specify why
Has QOL been impacted as a result of parastomal hernia			
	NO	YES	If yes - please record stoma QOL change in score
Diabetes	NO <input type="checkbox"/>	YES <input type="checkbox"/>	Previous Abdominal/parastomal hernia
			NO <input type="checkbox"/>
			YES <input type="checkbox"/>
			Steroids
			NO <input type="checkbox"/>
			YES <input type="checkbox"/>
Past medical history			
Further information			
<b>OTHER INFORMATION</b>			
BMI - Please state _____			
Allergies	NO <input type="checkbox"/>	YES <input type="checkbox"/>	If yes, please give details _____
Smoker	NO <input type="checkbox"/>	YES <input type="checkbox"/>	If yes, cigarettes smoked per day _____
Alcohol	NO <input type="checkbox"/>	YES <input type="checkbox"/>	If yes, number of units per week _____
			Chemo/DXT in last 6 months
			NO <input type="checkbox"/>
			YES <input type="checkbox"/>
			On Warfarin
			NO <input type="checkbox"/>
			YES <input type="checkbox"/>
<b>STATUS</b>			
CT scan performed PRONE	Not requested yet <input type="checkbox"/>	Awaiting CT scan <input type="checkbox"/>	Results of CT scan available <input type="checkbox"/>
Name of referring nurse		Telephone No.	
Email address			



## References for Parastomal Hernia

- Arumugam PJ, Bevan L, Macdonald L, et al (2003) A prospective audit of stomas: analysis of risk factors and complications and their management *Colorectal Dis* 5 (1): 49–51.
- Bloom B (2001) Daily regimen and compliance with treatment. *BMJ* 323: 647.
- Carne PW, Robertson GM, Frizelle FA (2003) Parastomal hernia. *British Journal of Surgery* 90 (7): 784–93.
- Cheung MT (1995) Complications of an abdominal stoma: an analysis of 322 stomas. *Aust N Z J Surg* 65 (11): 808–11.
- Cingi A, Cakir T, Sever A, Aktran A (2006) Enterostomy site hernias, a clinical and computerized tomography evaluation. *Dis Colon Rectum* 49 (10) 1559–63 Goligher J (1984) *Surgery of the Anus, Colon and Rectum*. 5th edn. Balleire Tindell, London.
- Health and Social Care Information Centre (2012) Hospital Episode Statistics, Emergency readmissions to hospital within 28 days of discharge. <http://tinyurl.com/najniq4> (accessed 4 March 2014).
- Johnson A, Sandford J, Tyndall J (2003) Written and verbal information versus verbal information only for patients being discharged from acute hospital settings to home. *Health Educ Res* 20 (4): 423–9.
- Layla A, Hamilton J, Daniel T (2002) Audit of stoma care services in a District General hospital [Poster abstract]. *Colorectal Disease* 4 (supp 1):41-84 doi: 10.1046/j.1463-1318.4.s1.8.x.
- Leenen L, Kuypers J (1989) Some factors influencing the outcome of stoma surgery. *Dis Colon Rectum* 32 (6): 500–4.
- Leong A, Londono-Schimmer E, Phillips R (1994) Life-table analysis of stomal complications following ileostomy. *British Journal of Surgery* 81(5): 727–9.
- McGrath A, Porrett T, Heyman B. (2006) Parastomal hernia: an exploration of the risk factors and the implications. *British Journal of Nursing* 15 (6): 317–21.
- Muysoms F.E. et al (2009) Classification of primary incisional abdominal wall hernias, *Hernia* 13:407-414.
- North J (2014) Early Intervention, parastomal hernia and quality of life: A research study. *British Journal of Nursing* 2014 stoma supplement Vol:23 (5): S14-18.
- Oxford Radcliffe Hospitals (2013) Physiotherapy advice after abdominal surgery. <http://tinyurl.com/ogtxf44> (accessed 6 March 2014).
- Pearl RK (1989) Parastomal hernias. *World J Surg* 13 (5): 569–72.
- Pilgrim C, McIntyre R, Bailey M (2010) Prospective audit of PSH: prevalence and associated co-morbidities. *Dis Colon Rectum* 53 (1): 71–6. doi: 10.1007/DCR.0b013e3181bdee8c.
- Prieto L, Thorsen H, Juul K (2005) Development and validation of a quality of life questionnaire for patients with colostomy or ileostomy. *Health Qual Life Outcomes* 3: 62.
- Porter J, Salvati E, Ruben R, Eisenstat T (1989) Complications of colostomies. *Dis Colon Rectum* 32 (4): 299–303.
- Pringle W, Swan E (2001) Continuing care after discharge from hospital for stoma patients. *British Journal of Nursing* 10 (19): 1275–88.
- Raymond T, Abulafi A (2002) Parastomal hernia repair: a novel approach [Poster abstract]. *Colorectal Disease* 4 (supp 1): 41-84 doi: 10.1046/j.1463-1318.4.s1.8.x.
- Thompson M, Trainor B (2005) Incidence of parastomal hernia before and after prevention program. *Gastrointestinal Nursing* 3 (2): 23–7.
- Thompson M, Trainor B (2007) Prevention of parastomal hernia: a comparison of results 3 years on. *Gastrointestinal Nursing* 5 (3): 22–8.

**\* Size classification for parastomal hernia has been derived from a literature review of abdominal hernia classification. A consensus of opinion was determined within the parastomal hernia project group, which will be evaluated within subsequent studies.**



### Statement:

Patients with sore peristomal skin are seen and assessed by the Stoma Care Nurse (SCN). The cause/contributing factors are identified and an appropriate treatment regime is agreed.

### Structure:

The SCN educates the patient to promote participation of the treatment regimen to facilitate optimal skin healing.

### Process:

- Ensure a private, confidential and safe environment where the patient can be assessed, treatment given and provided with information
- Utilising advanced specialist assessment ([Appendix 4a](#)) undertake a clinical history, observation of technique and examination to ascertain the cause of the peristomal skin soreness ([Appendix 4b](#))
- When undertaking clinical history consider pre-existing skin conditions ie: eczema and psoriasis Also consider medications such as chemotherapy, steroid therapy and insulin
- Following assessment, implement appropriate advice and solutions in consultation with the patient
- Utilising clinical expertise, provide appropriate information on accessories and appliance usage according to identified individual's needs
- Be aware of up to date treatments
- Consider use of assessment tool to document in an accurate and measureable way – e.g. DET score (Coloplast Ostomy skin tool as per local documentation procedure) ([Appendix 4c](#))
- Use photograph of sore skin if appropriate and documented consent gained from patient according to local policy
- If soreness is not resolving after initial treatment, consider skin swab to exclude infection, patch testing for sensitivities or referral to dermatologist
- Involve family and carers, where appropriate, in agreement with the individual
- Notify GP of any changes to appliances or introduction of accessories
- Ensure timely follow up is made to re assess method of healing.

### Outcome:

Effective management of peristomal skin soreness is achieved.

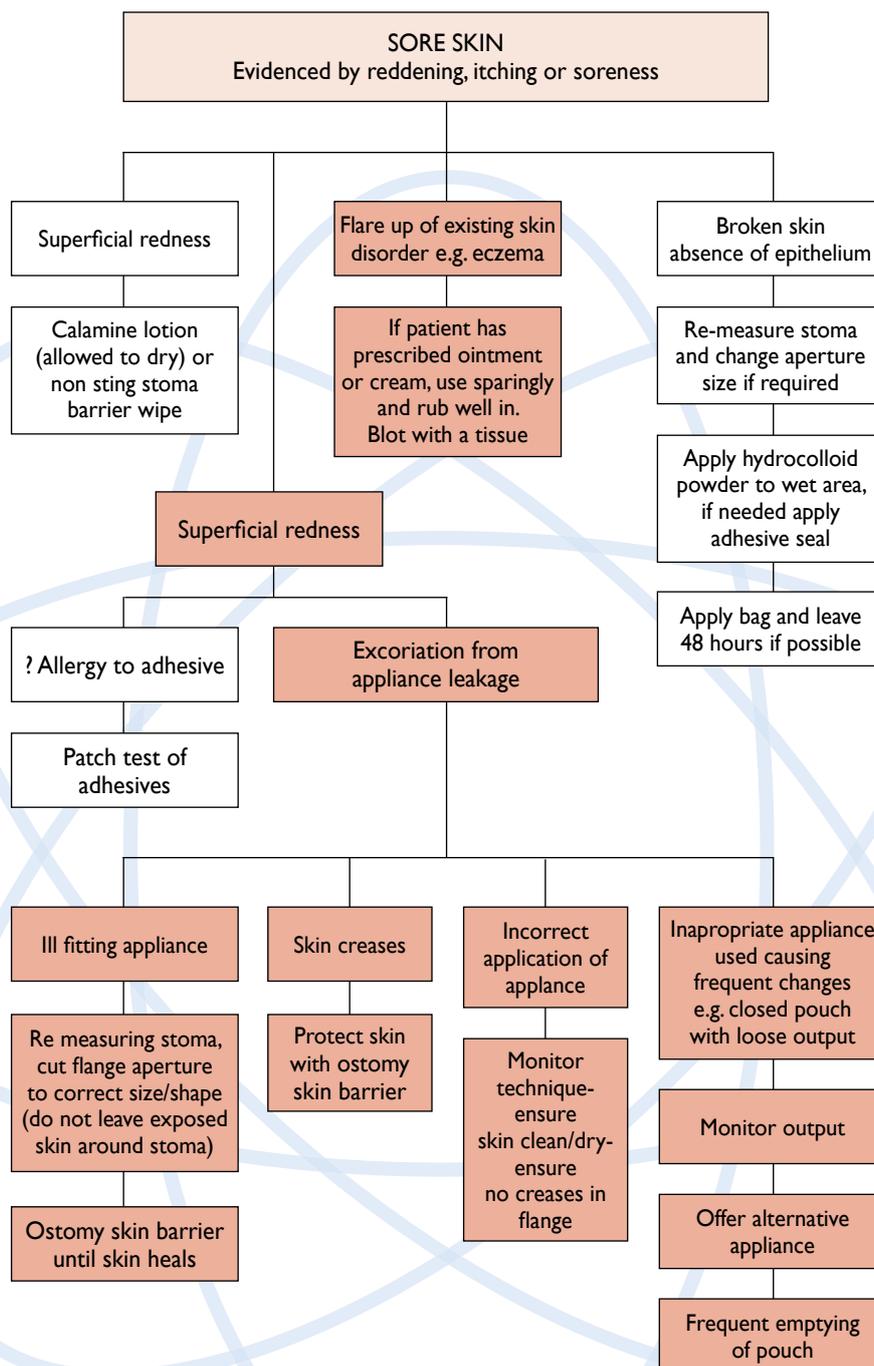
Problem	Contributing Factors	Evidence	Solution
<p>Sore, wet skin/ macerated (Inflammation and skin discolouration)</p>	<p>Macerated skin due to constant exposure of effluent on skin e.g. sudden change in output e.g. Diarrhoea</p> <p>Persistent leakage - chronic irritant dermatitis due to unresolved issues such as ill fitting appliance, or poor adherence of pouch:</p> <p>Retracted stoma</p> <p>Irregular abdominal surface (creases/dips/scarring/skin folds)</p> <p>Inaccurate template</p>	<p>Exposed sore skin or trauma to stoma from ill fitting appliance</p> 	<p>Ascertain cause</p> <p>Re measure stoma and ensure template correct</p> <p>Clean and shave skin thoroughly to increase adhesion of product</p> <p>Protective barrier wipe/hydrocolloid powder to create dry surface</p> <p>If macerated – apply calamine lotion (if not currently having DXT) to create dry surface</p> <p>Assess for thin hydrocolloid ring/seal under appliance for added protection/ moisture absorption</p> <p>Observe patient technique - removing, cutting and applying a new pouch</p> <p>Reassess need for appropriate appliance</p> <p>Document status of skin condition using an ostomy skin tool as per local documentation agreement</p> <p>Consider colostomy irrigation as an alternative method of stoma management</p>
<p>Sore, wet skin superficially broken (Skin discolouration)</p>	<p>Flush stoma</p> <p>Retracted stoma</p> <p>Sliding retraction (telescoping)</p> <p>Stenosis</p> <p>Weight loss/gain</p> <p>Parastomal hernia</p> <p>Irregular abdominal surface (creases/dips/scarring/skin folds)</p> <p>No pre-op siting</p> <p>Pancaking</p> <p>Patient technique - positioning</p> <p>Infection</p> <p>Inaccurate template</p> <p>Inappropriate appliance</p>	<p>Sore skin from contact with effluent, stoma 'flush' to skin/retracted</p> 	<p>Ascertain cause</p> <p>Reassess for appropriate product</p> <p>If skin dry – apply skin barrier</p> <p>Consider and assess for convexity to fill moat or allow spout to protrude/ Convex Seal underneath existing appliance</p> <p>Review technique for positioning</p> <p>If soreness persists – swab if any indication of infection</p> <p>If pancaking – review product/advice offered</p> <p>If soreness persists – assess for topical hydrocortisone</p> <p>Document status of skin condition using an ostomy skin tool as per local documentation agreement</p>

Continued on next page.

Problem	Contributing Factors	Evidence	Solution
<p><b>Superficial dry skin irritation</b> – reddened/itchy Rash Raised lesion</p>	<p>Skin stripping Shaving rash/folliculitis Pancaking Positioning Product/accessory sensitivity Underlying skin condition (eczema/psoriasis)</p>	<p>Irritation under flange</p> 	<p>Assessment for cause-patchy/under whole flange Assess if infected/non infective Treat as per local policy i.e: topical hydrocortisone advising patient to use sparingly, reapply at each pouch change Reassess for alternative appliance If shaving rash – advice use of disposable razor, changed after each use If soreness persists for 1 week after review as above – skin swab to exclude infection If product related – patch test Refer to dermatology as per local policy if no improvement Consider use of skin tool for accurate documentation</p>
<p><b>Parastomal ulceration</b> (Breakdown of epidermis/dermis leading to an open wound)</p>	<p>Parastomal hernia (thinning of skin, skin stripping) Convexity/stoma belt pressure Side effects of medication ie. Vasodilator medication e.g. nicorandil Pyoderma gangrenosum IBD ulceration (Crohns) Hydroadenitis suppurativa Epidermolysis bullosa Malignancy/neoplasms Wound dehiscence</p>		<p>Assessment of cause as this will impact on treatment options (e.g. ulceration with painful overhanging purple edge, consider pyoderma gangrenosum; wound breakdown and presence of infection) If ulceration painful discuss management of this Treat ulcers as per local policy e.g. topical steroid such as haelan tape/scalp lotion/beclomethasone inhaler – reapply at each pouch change Deeper ulceration to have primary dressing applied (as per local policy) with a hydrocolloid secondary dressing to promote stoma appliance adherence Referral to dermatology if no improvement after a week Contact GP to discuss/change of medication if patient prescribed vasodilators (nicorandil) Consider skin swab to exclude infection</p>

Continued on next page.

Problem	Contributing Factors	Evidence	Solution
Granulomas (inflammatory nodule)	<p>Poorly fitting appliance causing friction</p> <p>Chronic contact dermatitis</p> <p>Presence of non dissolved surgical sutures</p>		<p>Assessment of cause – template, appropriateness of appliance; if recent surgery, check for suture material and remove if able</p> <p>Note position of granulomas – stoma mucosa or muco-cutaneous junction</p> <p>If granuloma positioned on the stoma mucosa – assessing for friction of the appliance. Assess for lubricating gel within pouch</p> <p>Refer to ASCN granuloma guideline</p>
Chronic papillomatous dermatitis	<p>Occur around urostomies as a result of chronic contact dermatitis (build-up of phosphate deposits)</p> <p>Thickening of skin around stoma, often whitish in colour, warty in appearance</p> <p>Some vascular proliferation may be present, common in inflamed skin</p>		<p>Assessment of cause, template, appliance appropriateness, note for leaking or pooling under flange</p> <p>Consider convexity appliance if not using one</p> <p>Topical application of 50% white vinegar/water soaks at each pouch change</p> <p>Assess oral fluid intake in relation to the individual - Encouraging fruit juice or take vitamin C supplement</p> <p>If unable to create seal and prevent leakages then catheterisation of urostomy could be considered for short term</p> <p>Surgical review for refashion/re-siting may be necessary if problems of leakage persist</p>



NB: If sore skin persisting with above assessments review for skin swab for microscopy, culture and sensitivity (MC&S) including MRSA to eliminate any infection



## Appendix 4c: Example of an Ostomy Peristomal Skin Assessment Tool - DET Score

With kind permission of Coloplast Ltd. <http://www.coloplast.co.uk/stoma/professional/helping-your-patients/> accessed 21/12/15

### How to calculate the DET Score

#### Step 1:

Examine the peristomal skin (not the stoma mucosa) and evaluate the skin based on the descriptions in each of the three domains (Discolouration, Erosion and Tissue overgrowth).

Maximum points in each domain:

- 3 points for the size of the affected area
- 2 points for the severity

#### Step 2:

Assess the size of **the area affected** in each of the three domains and score based on the key below.

Area* affected	Score
Unaffected	0
<25%	1
25–50%	2
>25%	3

*\*Area is defined as the peristomal skin area that is covered by the adhesive.*

Assess the severity in each of the three domains using the definitions and photographs as a guide.

- If there is no discolouration then the skin is healthy – the area score is 0 and the total DET score must be 0
- If there is discolouration, assess the area affected and the **severity** within this domain and in the other two domains
- If the area score is 0 in either the erosion or tissue overgrowth domains then the severity score within that domain will automatically be 0 as well.

For each of the three domains calculate the subscore.

#### Step 3:

##### Calculating the Total Score:

- Calculate the Total Score (maximum 15) by adding all of the subscores from each domain together.

Please go through the descriptions for each score in the scoring system every time you perform an assessment. The total DET score gives information on overall severity, while the subscores for each domain help define the skin problem.

**Note:** In a situation where a large area of skin with low severity includes a small area with a high severity, the highest severity should always be scored even though the area is small.

*Continued on next page.*

**Domain 1: Discolouration** - Area of discolouration (including eroded areas and tissue overgrowth).

<p>Normal skin (absence of any visible change and damage to epidermis). If the Area of discolouration score is 0, the score for Domain 1 must be 0 + 0. The skin is normal and the Total score must be 0. <b>Score = 0</b></p>	<p>Less than 25% of the skin covered by the adhesive is affected. Please assess severity. <b>Score = 1</b></p>	<p>Between 25% and 50% of the skin covered by the adhesive is affected. Please assess severity. <b>Score = 2</b></p>	<p>More than 50% of the skin covered by the adhesive is affected. Please assess severity. <b>Score = 3</b></p>	<input type="checkbox"/>
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**Severity of discolouration** +

<p>Discolouration of the peristomal skin. <b>Score = 1</b></p> 	<p>Discolouration of the peristomal skin with complications (pain, shiny, indurated, hot, itching, burning). <b>Score = 2</b></p> 	<input type="checkbox"/>
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**Domain 2: Erosion** - Area of erosion/ulceration +

<p>No erosion. If the Area of erosion score is 0, the score for Domain 2 must be 0 + 0. <b>Score = 0</b></p>	<p>Less than 25% of the skin covered by the adhesive is affected. Please assess severity. <b>Score = 1</b></p>	<p>Between 25% and 50% of the skin covered by the adhesive is affected. Please assess severity. <b>Score = 2</b></p>	<p>More than 50% of the skin covered by the adhesive is affected. Please assess severity. <b>Score = 3</b></p>	<input type="checkbox"/>
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**Severity of erosion/ulceration** +

<p>Damage to the upper level of the skin. <b>Score = 1</b></p> 	<p>Damage to the lower layers of the skin with complications (moisture, bleeding or ulceration). <b>Score = 2</b></p> 	<input type="checkbox"/>
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**Domain 3: Tissue overgrowth\*** - Area of tissue overgrowth +

<p>No tissue overgrowth. If the Area of tissue overgrowth score is 0, the score for Domain 3 must be 0 + 0. <b>Score = 0</b></p>	<p>Less than 25% of the skin covered by the adhesive is affected. Please assess severity. <b>Score = 1</b></p>	<p>Between 25% and 50% of the skin covered by the adhesive is affected. Please assess severity. <b>Score = 2</b></p>	<p>More than 50% of the skin covered by the adhesive is affected. Please assess severity. <b>Score = 3</b></p>	<input type="checkbox"/>
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**Severity of tissue overgrowth** +

<p>Raised tissue above skin level. <b>Score = 1</b></p> 	<p>Raised tissue above skin level with complications (bleeding, pain, moisture). <b>Score = 2</b></p> 	<input type="checkbox"/>
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\*Tissue overgrowth is defined as raised tissue above skin level including hyperplasia, hypergranulation or keratinisation. = Total score



## References for Peristomal Skin Soreness

- Boyles A, (2010) Stoma and peristomal complications: predisposing factors and management. *Gastrointestinal Nursing* 8 (7) 26-36.
- Burch J (2010) Caring for peristomal skin: what every nurse should know. *British Journal of Nursing* 19 (3): 166-172.
- Burch, J., Sica, J. (2008) Common peristomal skin problems and potential treatment options *British Journal of Nursing* 17 (17): S4,S6,S8.
- Breckman B, (2005) *Stoma Care and rehabilitation*. Elsevier: Churchill Livingstone.
- Lee J, (2001) Common Stoma problems: a brief guide for community nurses. *British Journal of Community Nursing*. 6 (8) 407-413.
- Lyon C, Smith A (2010) *Abdominal stomas and their skin disorders. An Atlas of diagnosis and management*. 2nd ED. Informa UK.
- Martins L, Ayello E, Claessens I, Hansen A, Poulson L, Sibbald R, Jemec G (2010) The Ostomy skin tool: tracking peristomal skin change. *British Journal of Nursing* 19 (15) 960-964.
- Ostomy Skin Tool (DET score) <http://www.coloplast.co.uk/stoma/professional/helping-your-patients/> accessed 21/12/15.
- Porrett T, McGarth, A (2005) *Stoma Care*. Oxford: Blackwell publishing.
- Sica J; Burch J (2011) Peristomal skin care. *WCET Journal* 3:3 July/September p8-11.
- Williams J, Gwillam B, Sutherland N, Matten J, Hemmingway J, Ilsey H, Somerville M, Vujnovich A, S Day, Redmond C, Cowin C, Fox K, Parker T (2010) Evaluating skincare problems in people with stomas. *British Journal of Nursing* 10 (17): S6-S15.



*A prolapse occurs when the bowel telescopes out of the skin and is much longer in length than normal.*

### Statement:

Patients with a prolapsed stoma are assessed by a Stoma Care Nurse (SCN) and an individualised stoma care plan is formulated.

### Structure:

The patient and nurse agree on an appropriate management regime to prevent stoma prolapsing and reduce risk of pouch leakages.

### Process:

- Ensure a private, confidential and safe environment where the patient can be assessed, treatment given and provided with information
- Using clinical expertise undertake a clinical history to ascertain the severity of prolapse. Ascertain if the stoma is functioning, if the patient is complaining of abdominal pain or pain at the stoma site and if the patient is vomiting
- Wash hands and apply gloves. Examine the stoma looking for signs of ischaemia, ulceration and ensuring the stoma is warm to touch
- If the bowel is functioning and there are no signs of ischaemia the patient can be reassured but given clear written/verbal information to act as an alert for when to seek medical advice
- The aperture of the flange should be cut larger, at least 5mm skin minimum should be visible around the stoma. Seals/washers/protective barrier wipes can be used to protect this skin
- Laying the patient flat on a bed and applying a cold swab or wrapping ice in a towel and placing over the stoma will often help the stoma to reduce in size enabling the pouch to be applied more easily. (if this is not effective – discuss with medical staff for use of a sugar solution - icing sugar/5% dextrose which when applied directly to the stoma will promote an osmotic effect and reduction of oedema)
- The use of a swab to cover the stoma whilst placing the pouch will prevent the adhesive getting wet. Alternatively having a small split in the backing paper can be helpful. Place the flange over the stoma to the skin then remove the backing paper when in situ
- The use of a rigid protective shield and/or abdominal support belt without an opening can help to withhold the prolapse
- The patient may require alternative bags with increased flange and pouch capacity, lubricating oil inserted inside the top of the pouch may help reduce friction
- If there are signs of ischaemia or obstruction for greater than 4hours (i.e. non functioning stoma, vomiting, distended abdomen) the patient must be referred to medical staff urgently as surgical intervention may be necessary
- Remove gloves, wash hands and document in appropriate notes including a photograph in accordance with local policy and patient's consent
- Reassure the patient (and any relevant significant others) as they may be frightened of the size of the stoma, have difficulty applying the pouch and also have body image issues if the stoma/pouch is more prominent under their clothing
- Evaluate the patient's understanding of the information given, ensuring they are fully aware of the importance of contacting medical staff if any necrosis or bowel obstruction is evident
- SCN to agree regular follow up and review of the prolapse
- Communicate findings to either consultant or GP in case patient deteriorates or requires emergency care.

### Outcome:

The patient states the nurse offered advice and expertise on the management of their prolapsed stoma.

Patient is able to manage the stoma prolapse in their own environment.



## References for Prolapsed Stoma

Chandler P, Cox H, Lowther C, (2013) Management of a Prolapsed Stoma in *Gastrointestinal Nursing* Vol 11 (5), p 12-14.

Kwiatt M, & Kawata M (2013) Avoidance and Management of Stomal Complications *Clin Colon Rectal Surg*, 26 (2), 112-121.

Lawson A, (2003) 'Complications of Stomas' in: Elcoat C, (ed) *Stoma Care Nursing*. London, Hollister.

Maeda K, Murata, M, Utsumi T, Sato H, Masumori K, Aoyama H, (2003), Pathophysiology and prevention of loop stomal prolapse *Tech Coloproctol* 7 108-111.

Porrett T, McGrath A, (2005) Accessories used in Stoma Care in: *Stoma Care*. Blackwell, Oxford, p 89.

Thompson T, North J, Davenport R, Williams J, (2011) Matching the skin barrier to the skin type *British Journal of Nursing* Vol 20 (16). S27-S30.



Stenosis is a narrowing or contracting of the stomal opening that may occur at the skin or fascial level which impairs drainage from the stoma (Butler 2009).

### Statement:

Patients with a stenosed stoma are assessed by a Stoma Care Nurse (SCN) and an individualised stoma care plan is formulated.

### Structure:

The patient and nurse agree on an appropriate management regime for a stenosed stoma, and minimise risk of complications.

### Process:

- Ensure a private, confidential and safe environment where the patient can be assessed, treatment given and provided with information
- Using clinical expertise undertake a clinical history to ascertain the level of stenosis and risk from bowel obstruction
- If patient has a Urostomy, monitor urine output and if concerned refer for assessment of renal function
- If patient has a faecal stoma, assess output, observe for signs of bowel obstruction seek physician advice
- Assess peristomal skin integrity; if 'faecal pancaking' has occurred take measures to resolve as per ASCN Pancaking guideline
- Provide skin protection and refer to ASCN peristomal skin tool, ensuring appliances are correctly fitted
- If not too painful; perform a digital examination of the stoma to assess the depth of mucosa stricture, if this is not possible refer to surgeon
- With consent from the referring health care professional - teach patient how to dilate the stoma to try and maintain the lumen with a stoma dilator once or twice daily as directed by medical staff
- For both colostomist and ileostomist encourage low residue diet
- A colostomist may also benefit from a review for laxatives to maintain soft stool
- Provide advice to the patient or carer on how to monitor for complications from the stenosis and ensure they understand when to contact medical staff if concerned
- Involve family and carers, where appropriate, and in agreement with the patient
- Feedback appropriate information to referring healthcare professional
- Evaluate the patient's understanding of the information given
- Stoma care nurse to agree a timely follow up regime to review the management for the individual with the stenosed stoma.

### Outcome:

The patient states the nurse offered advice and expertise on the management of their stenosed stoma.

### References for Stenosis

- Butler, D. L. (2009). Early postoperative complications following ostomy surgery: A review. *Journal of Wound, Ostomy and Continence Nursing*, 36 (5), 513-9; quiz 520-1. doi:10.1097/WON.0b013e3181b35eaa.
- Breckman B. (2005) *Stoma Care and Rehabilitation* Elsevier: Churchill Livingstone.
- Coloplast Ltd (2010) DET Score available: [www.coloplast.com/OstomyCare/Topics/EducationTools/TheOstomySkinTool/About/Documents/04108\\_MKG\\_Ostomy\\_handbook\\_A5\\_AW.pdf](http://www.coloplast.com/OstomyCare/Topics/EducationTools/TheOstomySkinTool/About/Documents/04108_MKG_Ostomy_handbook_A5_AW.pdf).
- Johnson A, (2007) Stomal Stenosis, A complex stoma complications case study. *Gastrointestinal nursing* 5 (1), 17-22.
- Lyon C and Smith A. (2001) *Abdominal Stoma and their skin Disorders*. London: Martin Dunitz Ltd.
- Porrett T and McGarth A, (2005) *Stoma Care*, Oxford: Blackwell Publishing.
- Williams J, (2011) Assessment and management of stoma stenosis, *Gastrointestinal Nursing* 9 (3), 19-20.
- Williams J, (2012) Considerations for managing stoma complications in the community. *British Journal of Community Nursing* 17 (6), 266-269.



### Statement:

Patients consented for stoma formation (either potential or definite) will have their stoma correctly sited by a registered nurse with a defined level of competency to perform this procedure.

### Structure:

The Stoma Care Nurse (SCN) will:

- Provide a confidential and reassuring environment
- Assimilate referral information to ensure relevant information is tailored to the needs of the patient
- Have access to patient health care records to ensure information pertinent to diagnosis and proposed correct stoma site is marked in accordance with operation to be carried out
- Include family/carers with consent/agreement of patient
- Utilise specialist skills to assess the patient's ability to understand information regarding the importance of pre-operative information and optimum site for stoma formation
- Provide a level of information appropriate to the individual patient's needs utilising written, verbal, social media options as applicable
- Gain verbal or written consent (in line with Trust policy) prior to physical assessment for marking of stoma site
- Assess factors that influence the choice/limitation of stoma site for each patient by examination, observation and discussion. This should include contributory factors such as lifestyle, culture, and disabilities (eg manual dexterity, visual impairment, religious beliefs etc.)
- Avoid scars/wrinkles, skin folds, creases, bony prominences, suture lines, umbilicus, belt/waistline, hernia, mobile abdominal tissue, radiation sites and/or pendulous breasts. Choose a site the patient can easily see
- Mark the optimum site for the stoma with a permanent marker pen; supply a pen to the patient so that he/she can continue to mark the site until the date of operation, if sited early in accordance to local policy
- Review the definitive marked site with the patient
- Facilitate opportunity for the patient to ask questions and seek clarification in relation to the site chosen
- Record the outcome of site marking in relevant medical records – consider taking photographic evidence to be included in the patient's medical notes if the siting procedure is particularly challenging.

### Outcome:

- Patient understands that pre-operative site markings are a guide – final selection is determined by the surgeon at the time of operative procedure
- There is evidence that the patient expressed verbal consent for siting
- Patient confirms they are satisfied with the marked site for stoma formation
- Patient states they were involved in selecting the stoma site
- Patient states they were able to ask questions.

### References for Stoma Siting

- ASCN Nursing Standards and Audit Tool. ASCN UK (2013).
- Berry K et al (2007) Stoma Siting Procedure WOCN.
- Cronin E, (2014) Stoma Siting: why and how to mark the abdomen in preparation for surgery. *Gastrointestinal Nursing* 12:3 (2014).
- Hollister (2008) Stoma Site Selection: Ostomy Care Tips. Hollister Ltd.
- Preece V. & Pearson T. (2015) Stoma site selection: getting it right for the patient. *Gastrointestinal Nursing* 13:5 14-16.
- Rust J, (2009) Understanding the complexities of the Clinical Nurse Specialist: A focus on stoma siting. *Gastrointestinal Nursing* 7:4 (2009).
- Rust J.A. (2011) Complications arising from poor stoma siting. *Gastrointestinal Nursing* 9:5 17-22.
- Slater R. (2010) Optimising patient adjustment to stoma formation: siting and self management. *Gastrointestinal Nursing* 8:10 21-25.



Association of Stoma Care Nurses UK

## ASCN Stoma Care National Clinical Guidelines

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