

Stoma product selection: an update

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There are three main output stomas, with each type requiring a different stoma appliance to collect and contain the output. It can be useful to consider the output to better understand the stoma appliance required. To ensure that the appliance is well-fitted, the aperture should be the same shape as the stoma, but 2–3 mm larger (Figure 1). The aperture in the stoma appliance can be cut or companies make them with pre-cut circles of different sizes.

Types of stomas

A **colostomy** is formed from the colon and the output is flatus with formed faeces. The colostomy output needs to be collected in a closed appliance as it is thick in consistency and cannot be drained. A colostomy appliance is commonly replaced daily. Also, as flatus is passed, it will need a filter to release it.

If formed from the small bowel (ileum), the stoma is called an **ileostomy** and the output is flatus with loose faeces. The ileostomy output needs to be collected in a drainable appliance (Figure 2). The loose faeces needs to be drained into the toilet between 4–6 times each day and sometimes once at night. There is also a flatus filter in an ileostomy appliance.

A **urostomy**, also termed an ileal conduit, will pass urine and a small amount of mucus that is made by the small bowel conduit. The urostomy appliance will need to have a tap or bung to release the urine into the toilet several times a day but there will be no flatus and therefore no flatus filter.

Factors to consider when selecting a stoma appliance

Another potential factor to consider when selecting a stoma appliance is how long it will remain *in situ* and who will replace it. Most people choose to change their stoma appliance between once a day and every 3 days. The frequency of appliance change will depend upon

several factors, which includes patient preference as well as peristomal skin integrity.

Stoma appliances are formed from two different sections. There is an adhesive part that has many terms including flange, faceplate or baseplate. This adhesive is often made from a hydrocolloid, so it is skin-friendly and contains healing properties. There is also a collection part that stores the stomal output. These two sections can be joined and this is termed a one-piece appliance. Alternatively, the sections can be separate and subsequently joined when undertaking the appliance change, termed a two-piece appliance. There are positives and negatives for both the one-piece and two-piece appliances. One-piece appliances can be considered simpler to use as there is just one piece to apply to the peristomal skin. However, some people prefer being able to visualise that the flange is well adhered to the peristomal skin, which is simpler with a two-piece appliance. The mechanism for joining the adhesive and the collection part varies between appliance manufacturers. For some people, such as people with dexterity issues, this might be complex to join. However, some people with visual issues might not be able to safely place a flange in the correct position but can change the collection part, when needed.

Another factor to consider when selecting a stoma appliance is the size of the collection part. Most appliance



Figure 1. Apertures, which are usually 2–3mm larger than the stoma appliance, can be cut in. Likewise, companies make pre-cut circles of different sizes.

Abstract

There are three main output stomas—colostomy, ileostomy and urostomy. Each of these requires a different stoma appliance to collect and contain the stoma output. This article discusses stoma product selection, things to consider before choosing a product, as well as caring for the stoma.

Keywords: Stoma • ostomy • colostomy • ileostomy • urostomy



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Figure 2. A type of product is the ileostomy output appliance, which is drainable and collects flatus and loose faeces.

manufacturers will produce them in small, medium and large sizes. These, again, can be governed by patient choice. A small appliance size might be chosen when undertaking sporting or sexual activities. A larger size might be chosen for long journeys.

Some manufacturers also have different coloured fabric-type material over the plastic of the collection section. This helps prevent sweating but can also be chosen for different skin tones or to be less visible under clothing.

Most people use a flat flange. There are also convex or concave flanges available. A convex flange pushes into the abdominal wall. A convex flange is useful if the stoma is flush with the abdominal wall, to prevent the output from seeping under the adhesive flange. A concave flange is useful where there is a curved abdominal wall such as a parastomal

bulge. If someone who is living with a stoma has repeated leaks, it is useful to refer them to their local Stoma Care Nurse Specialist (SCNS) (Colwell et al, 2022). Choosing a convex appliance is something that a specialist should do, as there are risks associated with the use of convexity such as peristomal skin bruising, trauma and erosion.

A further complicating factor when selecting stoma appliances are the many different appliance manufacturers that are available. *Table 1* lists the websites for the more common manufacturers in the UK.

Additional stoma products also exist, sometimes called accessories. Accessories can be needed to securely adhere an appliance to the abdominal wall, to protect and to heal the peristomal skin. To complicate selection of these products, names of the accessories may differ between each manufacturer.

Products to help adherence include adhesive paste, seals and adhesive strips. Adhesive paste will often come in a tube and is thick in consistency. Some companies use alcohol in the preparation of the adhesive paste, which can be uncomfortable or sting if used on broken skin. Adhesive strips are similar to adhesive paste but are more mouldable. A seal has multiple names, including donut or washer. A seal is round with a hole in the centre, some can be stretched to fit any stoma shape and size, other seals come with pre-made apertures in different sizes. A seal is useful if additional adhesion is required around the entire stoma. Adhesive paste and adhesive strips can be used in skin dips or skin creases that are under the stoma flange near the stoma. The additional adhesive can prevent the stomal output from seeping into the dip or crease.

To improve security of a stoma appliance, an elastic belt or adhesive tape can be used. A thin elastic belt can be attached to the edges of the stoma appliance on each side to hold the appliance more securely to the body. This

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Table 1. Stoma appliance manufacturers

Company	Website
BBraun	https://www.bbraun.com/en.html
Coloplast	https://www.coloplast.co.uk/
ConvaTec Group	https://www.convatec.com/en-gb/
Dansac UK	https://www.dansac.com/en-gb
Hollister Incorporated UK	https://www.hollister.co.uk/en-gb
Pelican Healthcare Ltd	https://www.pelicanhealthcare.co.uk/
Salts Healthcare Ltd	https://www.salts.co.uk/
Trio Ostomy Care	https://trioostomycare.com/
Peak Medical	https://peakmedical.co.uk
Welland Medical	https://wellandmedical.com/

can be useful when someone has a convex flange to pull it tightly to the abdominal wall. A stoma belt might also provide security when undertaking exercise, for example. Adhesive tape can be used on the outer edges of the flange to improve security. The adhesive tape can be useful if the skin surface is uneven, or if the outer edges of the stoma appliance do not adhere well. Adhesive tape should not be used to contain a leak as this will increase the risk of peristomal skin damage.

To protect peristomal skin that is at risk of damage, there are barrier films available. Barrier films are available as a wipe or spray. People at risk of skin damage include people with fragile skin such as older people and caution is needed with any stoma products on skin of the very young and advice from a paediatric CNS Stoma Care is required. Dark skin tones can be more dry than pale skin tones and risk of damage from appliance removal needs to be considered. Another risk factor for skin damage is a loose output, with an ileostomy compared to a colostomy potentially causing more risks. Unfortunately, leaks are encountered by most people at some time and skin damage is also common (Krogsgaard et al, 2022).

If skin damage occurs, there is stoma powder to improve its integrity. Powder is useful if the skin is damaged and moist; powder can dry the area by soaking up any moisture. For minor skin damage, most appliance flanges are formed from hydrocolloid, which has healing properties and nothing additional is necessary. For extensive skin damage it is advisable to refer to the SCNS for review. Care is

needed when considering using creams and ointments on peristomal skin. Unless the skin is very dry, most creams are greasy and this might compromise the properties of the appliance adhesive.

Finally, wearing support garments can be useful. There is dated research that describes a reduction in the formation of a parastomal hernia for people who undertook core strengthening exercises as well as wearing a support belt. Support belts can be useful when undertaking heavy, strenuous work to protect the abdominal muscles. Protecting abdominal muscles by strengthening them is also important.

It can be seen that selecting the most appropriate stoma products is complicated. There are many different appliances available, all are effective, but not all are effective for each individual person living with a stoma. If in doubt, contact the SCNS for more advice. **BJCN**

Accepted for publication: March 2023

Declaration of interest: None

Colwell JC, Stoia Davis J, Emodi K et al. Use of a convex pouching system in the postoperative period: a national consensus. *J Wound Ostomy Continence Nurs.* 2022; 49(3):240-246. <https://doi.org/10.1097/won.0000000000000874>

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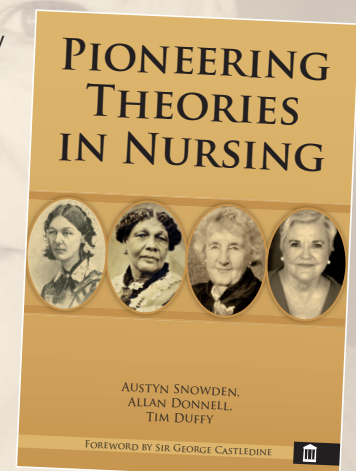
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