

## **White Paper:**

### **Wear Time of a Fecal or Urinary Pouching System**

#### **Definition**

Wear time for the person with a fecal or urinary diversion is defined as maintenance of the pouching seal for a consistent, predictable time frame. Minimal acceptable wear time is three days but will be dependent upon: the amount and consistency of the effluent, the integrity of the peristomal skin, peristomal plane and stomal characteristics, the type of skin barrier (shape, size and the adhesive components), patient preferences / activities, needs and economics.

#### **Background**

Wear time, the amount of time between the pouching system application and removal with an intact seal, should be predictable. The basic factors that contribute to wear time include: the amount and consistency of the effluent, the integrity of the peristomal skin, peristomal plane and stomal characteristics, the type of skin barrier (shape, size and the adhesive components), patient preferences / activities, needs and economics. High volume output (over 1000 ccs/24 hours) and high moisture content (such as urine or mid ileal or above) can erode many skin barriers leading to pouch failure. The loss of epidermis and resultant moisture in the peristomal area will erode the pouch seal. Shifts in the peristomal plane from flat to concave as well as movement of the stoma in various positions (from flush to concave to protuberant) can cause loss of the intact pouch seal. The shape of the skin barrier must mirror the peristomal plane and accommodate folds, creases and scars; the size of the skin barrier should be matched to the stoma diameter

and the adhesive components will be chosen based upon the characteristics of the stoma effluent as well as the degree of skin moisture. The preferences of the patient must be worked into the decision of the choice of a pouch seal, as some users of the ostomy pouching seal would prefer to change the seal after a short period of time, while others prefer a longer period of time. Some people with a fecal or urinary diversion have special physical needs that must be factored into the acceptable wear time (reliance on an outside source for pouch application, for example). Some users of products will make decisions based upon cost factors, using reimbursement guidelines to make the utilization of the products affordable.

Determining a typical wear time will provide the person with a fecal or urinary diversion with security (no “leaks”), maintain the peristomal skin and give the health care provider and the patient a minimal acceptable standard of care.

### **Questions**

1. Is it possible to place a standard measurement on ostomy pouching system wear time?
2. Is a three day wear time an acceptable standard?
3. Have all factors that determine wear time been identified?
4. Do the characteristics of the collection device (the pouching system) affect wear time and should the pouch be included in the factors that affect wear time?

### **References**

1. Arumugam PJ, Bevin L. et al. A prospective audit of stomas-analysis of risk factors and complications and their management. *Colorectal Dis* 5:49-52, 2003.
2. Black PK. Stoma care: finding the most appropriate appliance. *Br J Nurs* 4:188-192, 1995.

3. Brown H, Randle C. Living with a stoma: a review of the literature. *J Clin Nurs* 14:1365-2705, 2005.
4. Colwell JC. Principles of stoma management. In: Colwell, JC, Goldberg MT, Carmel JE: *Fecal and urinary diversions: management principles*, St. Louis, 2004, Elsevier.
5. Erwin-Toth P. Ostomy pearls; a concise guide to stoma siting, pouching systems, patient education and more. *Ostomy Wound Manage*. 16:146-152, 2003.
6. Lyon CC, Smith AJ, et al. The spectrum of skin disorders in abdominal stoma patients. *B J Derm* 143:1365-2133, 2000.
7. Robertson I, Leung E, et al. Prospective analysis of stoma related complications. *Colorectal Dis* 7:279-285, 2005.
8. Rolstad BS, Erwin-Toth PL. Peristomal skin complications: prevention and management. *Ostomy Wound Manage* 9:68-77, 2004.
9. Turnbull G, Colwell JC, Erwin-Toth P. Quality of life: pre, post and beyond ostomy surgery. *Ostomy Wound Manage*. 50(7A Suppl):2-21, 2004.
10. Turnbull GB, Erwin-Toth P. Ostomy care: foundation for teaching and practice. *Ostomy Wound Manage* 45 (1A Suppl) 235-30S, 1999.
11. Wells JA, Doughty DB. Pouching principles and products. *Ostomy Wound Manage* 40:50-58, 1994.