

### **Welland Medical Ltd**

Design and manufacture of stoma care pouches and accessories  
Crawley, West Sussex

### **Diane McInerney**

Product Design  
Brighton University

**Providing innovative improvements for an existing product range and developing it for new markets**



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## EFFECTIVE SOLUTIONS FROM SHELL STEP

Welland Medical Ltd develops and manufactures products for the survivors of intestinal cancer whose surgical treatment has left them with a small opening through which faecal matter is collected. The company has a unique product line, the Free Style Flushable (FSF) range, which allows users to get on with their daily lives, emptying their stoma pouches using any toilet system. The range was incredibly popular, but an awkward way of ripping the outer pouch meant that some patients were choosing other options.

Having played host to the UK's 'Most Enterprising Student' in 2004 Research and Development Consultant, Dr Rory Smith, signed up for Shell Step again. He wanted someone to take a fresh, innovative look at the FSF range to make it more user-friendly and start development of a reusable outer pouch. His local agent, The Sussex Innovation Centre, matched him with Diane McInerney.

### **The Process:**

Diane's final designs had to fit strict requirements including leak and odour tests, comfort, and be discreet with regard to size, bulk and not rustling underneath clothing. Her project involved:

- Shadowing nursing staff and wearing stoma products to fully understand patient needs
- Studying production processes and cost factors to rule out unworkable solutions at an early stage
- Working alongside Welland Medical's research and development team to identify possible solutions
- Carrying out initial testing and developing successful designs to improve performance
- Making final recommendations

### **The Results:**

Welland received innovative solutions and a wealth of research information. Diane proposed printing instructions on the disposable outer pouch and using different materials to address the usability issues and she made considerable headway in developing a new, reusable option. Her tests ruled out a number of solutions whilst identifying a potential design and are now having a direct impact on the FSF product range.

On top of the obvious skills required for this project such as problem solving, creative thinking and communication, Diane had an invaluable opportunity to see product development in a real life business. The experience showed her how to apply creativity within strict guidelines and how early testing is vital in order to sort potential and unworkable solutions.

**Diane McInerney:** "I gained a lot of new learning during my 8 weeks with Welland and if my concepts lead them down a route which gives them the products they desire I will feel that I have fulfilled my brief.

**Dr Rory Smith:** "Diane understood the brief immediately and made rapid progress. She is self motivated and decisive and able to inject realism into her designs, we would seriously consider her for a future vacancy"

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