

Case study

IAD management and prevention

Efficiency and cost optimization at Zuyderland ICU with Swash® Perineum+



Willem Voragen
Wound Specialist
ICU Zuyderland, Heerlen

Willem Voragen has worked as a nurse for 44 years. In the past 28 years he's been a wound specialist in the ICU at Zuyderland in Heerlen. Throughout his career, Willem has always tried to find better ways to care for his patients. In 2021, in the middle of the corona pandemic, he saw a presentation of the **Swash® Perineum+**, an incontinence care product, that caught his attention. Willem thought this product could help him and his colleagues at the ICU solve some of their struggles with managing IAD. He contacted the Swash® team to learn more about the product.

Problem

One of the biggest sources of frustration for Willem was that the application tool for the barrier cream was too tiny. That made it difficult to apply the product on hairy skin or on some body parts, such as the inguinal area. But the real problem with that barrier cream was the drying time after applying it.

Willem: "We had to wait for 60 to 120 seconds for the cream to dry. 60 seconds might sound like a short time, but when you need to hold an ICU patient, with all the tubes and devices connected to his body, each time you apply it to a certain area, it's not easy. Neither for the patient nor for the nurses."

The supplier of the product recommended applying the cream 2 to 3 times a day. Willem says that, in practice, they had to use more often. Sometimes even 8 time, because they could not hold the patient in a certain position until the product was completely dry; or the patient had a diarrhea right after applying it.

Solution

After talking to the Product specialist, Willem decided to start testing **Swash® Perineum+**. He got all the approvals he needed from the hospital management and the consent from the patient's family. Then, he trained all his colleagues on how to monitor the skin condition throughout the study. For each patient participating in the test, Willem and his colleagues took a picture on the first day, then after 3, 5, 7 and 9 days of using **Swash® Perineum+**.



Zuyderland
Medical Center



- Beds: **980**
- Admissions: **42,000 per year**
- Nursing days: **170,000 per year**
- Day admissions: **86,000 per year**
- ICU beds: **28**

Staff

- Employed medical specialists: **124**
- Independent medical specialists: **297**



'60 seconds might sound like a short time...'

Willem: "Every 8h we scored the IAD with the global IAD tool. That's a standard wound protocol. When the skin was very damaged and the score of the IAD was 1b or 2b, then we used (**Perineum+**) 4 times a day."

Every 3 months he had a meeting with the board where he reported on the status. Some of the patients had to be withdrawn from the study for various reasons. In the end he had complete results from a total of 35 ICU patients, over one year.

Results

The format of the product was one of the first positive impressions. The nurses liked that all the ingredients were infused in a wipe; so easy to apply to any part of the body.

Willem: "With the cloth you can reach even the most difficult skin folds. The best of it is that you don't have to wait for the lotion to dry."



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One common struggle for taking care of the ICU patient is that they have a higher risk of getting a fungus infection. Frequent incontinence episodes irritate the skin. The skin moisture is a thriving environment for fungus and bacteria. What Willem experienced after using the **Swash® Perineum+** wipes for 3 days was that the skin started to dry. On the 5th day, the skin was looking much better and by the 7th day the skin was recovered.

Willem: "When I was looking for a new product, I wanted something that could work also when the patient has fungal infection. The **Perineum+** dries the skin and the fungus dies because it cannot survive if the humidity in the skin disappears."



'The cost of the wound management became more predictable.'

Willem said he didn't see the need to use an anti-fungal cream anymore. The cost of the wound management became more predictable. The new product was also more affordable than the previous one.

Willem: "With **Perineum+** you don't need to apply it after each incontinence episode. We do it only 4 times a day. It was not needed to do it more often."

Another positive impact of the product was that patients had less pain.

Willem: "You have to imagine that those wounds on the skin look like chemical burn. It's very painful. With this product, after 3 or 4 days you give less medication, because the skin is re-covering. Some patients can even sit in a chair."

Based on the results of Willem's study, Zuyderland hospital introduced **Swash® Perineum+** as a prevention of IAD in the ICU.

Willem Voragen tested **Swash® Perineum+** for one year, on **35** patients. He presented the results of his study on the 29th of September, 2023 at the Decubitus National Congress in Kerkrade, the Netherlands.

Zuyderland hospital results of the study with **Swash® Perineum+**:



- Visible positive effect **after 3 to 5 days**
- **No need to** wait for the product to **dry**
- The product was applied **maximum 4 times a day**
- Using an **anti-fungal cream** was **unnecessary**
- **Less pain medication** administrated to the patient
- **After 3 days** some of the patients could even **sit** in a chair
- **Prevents** the development of **IAD**
- It worked on IAD **1b** and **2b**
- More **predictable cost** for IAD management

