



Title: "A new approach of risk assessment and prevention: using the UZLeuven risk assessment in a pro-active pressure ulcer prevention policy"

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Introduction:

Pressure ulcers (PU's) incidence rates in Belgian hospitals are unknown, however a PU prevalence of 12.1% is described (1). PU's have a major impact on patient's physical and psychological health, increases costs to healthcare providers and are an important care-quality indicator (2).

In our University hospital the PU prevention policy consisted of a risk-assessment (Norton), nurses clinical judgement and associated preventive measures. This policy has been in place since 2012. During this time there was no decrease in PU prevalence (+/-5%) and hospital management and staff felt that a new policy and risk-assessment tool was required.

In collaboration with another university hospital we developed a new PU risk-assessment tool, implemented in a more pro-active policy in an attempt to reduce PU incidence.

What did you do and how did you do it? Which actions and steps did you take?:



First we developed the new pragmatic RA tool which is based on international EPUAP guidelines (3) and available RA tools. The new RA tool uses 2 variables, the presence of a PU injury and the presence of immobility (absent autonomous mobilization every three hours).

The RA tools predictive validity was tested in our university hospital in 2017.

Secondly we reshaped our PU prevention protocol in a pro-active policy. Now we start on admission (including on ER) and it's applicable for all patients. With elective surgery we now start with a pre-risk start of preventive measures.

We updated our preventive aids: basic supporting mattresses on ER, boots for offloading heels, seat cushions and active therapy 1-in-4 cell cycle mattress. Preventive aids are 24/7 available to guaranty a quick start of measurements.

Thirdly, we started using incidence rates and tracers to evaluate the impact of our policy. We plan to give feedback to nursing units and together we start tailor-made action plans for improvement.

What were the results? Which improvements did you see?: The incidence of category 2-4 pressure ulcers across the hospital (including ICU patients) has decreased from 420 (0.62%) in 2015 to 297 (0.44%) in 2018. We have noticed a more pro-active positive working mindset with nursing staff including the ER.

Discussion and further steps:



Initiating focused, PU preventive measures starting immediately after patients are admitted into our hospital has reduced the risk of patient harm by pressure injuries.

Furthermore we will be looking to reduce PU incidence, using the action plans to further optimize prevention and reduce faulty processes like under registrations of PU's or incorrect differential diagnoses with IAD. In this way we also hope to reduce the overshoot of resources which will decrease costs.

However the simplified RA tool has simplified risk assessment, we still need to refine this tool. This will be done in collaboration with the other University hospital and could become a national RA tool for use across Belgium.

Clinical relevance: A pro-active preventive policy using a new RA tool based on only 2 variables (PU status and immobility)

References:

1. Beeckman D, Matheï C, Van Lancker A, Vanwalleghem G, Van Houdt S, Gryson L, Heyman H, Thyse C, Toppets A, Stordeur S, Van den Heede K. Een nationale Richtlijn voor de behandeling van decubitus. Federaal kenniscentrum voor de gezondheidszorg. KCE reports 193A. 2013.
2. Demarré L, Van Lancker A, Van Hecke A, Verhaeghe S, Grypdonck M, Lemey J, Annemans L, Beeckman D. The cost of prevention and treatment of pressure ulcers: A systematic review. *Int J Nurs Stud*. 2015 Nov;52(11):1754-74.
3. EPUAP. Prevention and treatment of pressure ulcers. National Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. (2014)