

## LETTER TO THE EDITOR

## Wound healing isn't everything

Dear Editor,

Patients with advanced illness, defined as those patients with incurable diseases (cancer and/or non-cancer), where the life expectancy is generally less than 6 months, represent the cohort within health care with the highest overall prevalence of all wound classes (1). Pressure ulcers represent the class of wounds with the highest prevalence among such patients at the point when they are referred for supportive and palliative care (1). Goal setting is challenging in this context given their high level of complexity, often rapidly evolving illness trajectory, and limited life expectancy (2–4). Furthermore, goals of care change as patients traverse life's continuum (2–4). Although complete wound healing is the most coveted target, clinicians should not discount nor marginalise the value of achieving other significant outcomes. The concept of wound maintenance (stabilisation) has been defined in both patients with advanced illness as well as non-terminally ill patients (2–4). In addition to optimal wound palliation (wound-related pain and symptom management or palliative wound care), it is also imperative to provide health care that is patient-centered/patient empowered, while promoting the best achievable levels of health-related quality of life and well-being (2–5). Moreover, it is also vitally important to exercise maximal primary and secondary preventive endeavours given the propensity of this patient population to develop new wounds from all classes (2–4).

Our recent publication, in this journal, showed that a small, although not negligible, proportion of patients with advanced illness experience complete healing of pressure ulcers, especially within stage I and stage II (2). Subsequent analyses, on the same data set, were carried out to assess the proportions of pressure ulcers that showed improvement (healing), deterioration, as well as those that did not show any significant change at all (maintenance). Data is presented in Table 1, and is stratified by NPUAP pressure ulcer stage.

Within this analysis, 'wound healing' was defined as a summation of wound improvement (reduction in wound dimensions) and complete wound healing (complete epithelialisation). The tendency to demonstrate wound healing trended inversely with degree of tissue injury. The highest levels

of healing were observed in stage I (36.24%) and stage II (20.09%). The composite healing rate for stages III, IV, and US was 11.93%. Although unstageable pressure ulcers demonstrated the highest levels of deterioration and the lowest levels of wound healing, they nonetheless carried the highest levels of wound maintenance.

In summary, our data shows that with comprehensive wound management, the majority of pressure ulcers (92.87%), in the setting of patients with advanced illness referred for supportive and palliative care, achieve either wound maintenance or some degree of wound healing. Moreover, only 7.13% of pressure ulcers deteriorated given their associated infirmities that were beyond our control. Overall, wound healing occurred 3.42 times more often than wound deterioration. Therefore, the combination of high levels of wound maintenance together with modest levels of wound healing and low levels of wound deterioration, within the most compromised patients within health care, must be recognised as successful outcomes in wound management.

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### References

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**Table 1** Range of wound outcomes stratified by pressure ulcer stage

	Wound deterioration Number (%)	Wound maintenance Number (%)	Wound healing Number (%)	Number of pressure ulcers
Stage I	13 (5.96)	126 (57.80)	79 (36.24)	218
Stage II	18 (7.53)	173 (72.38)	48 (20.09)	239
Stage III	1 (4.76)	17 (80.95)	3 (14.29)	21
Stage IV	2 (7.14)	21 (75.00)	5 (17.86)	28
Stage US	6 (10.91)	47 (85.46)	2 (3.63)	55
All PU stages	40 (7.13)	384 (68.45)	137 (24.42)	561