

# Summary: The resource impact of wounds on health-care providers in Europe<sup>1</sup>

*Most of the literature focuses on the resources required to manage particular wound types, rather than the cost of wounds to health-care organisations. Until this information is available, wound care is unlikely to be a management priority.*

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Good wound care is important because any wound is at risk of bacterial contamination, which inhibits the healing process and prevents wound closure. Non-healing wounds impact on mortality risk, patient function and quality of life. The resource impact on health-care providers is equally important: a substantial proportion of acute hospital beds are occupied by patients with wounds and in some areas most community nurse time is spent on wound care. Wound complications are associated with longer and more intensive treatment, extended hospital stays, readmission and specialist medical or surgical intervention. Despite this, the true significance of wound care for health-care providers is poorly understood, and this is important because lack of awareness inhibits local attempts to improve the quality of wound-care provision.

## Objective

This research reviews the evidence on the prevalence of wounds and their treatment costs in major European countries. As far as we are aware, this is the first review to do this. One of the objectives is to highlight gaps in the literature and to assess the need for a new research focus in this area. Our hypothesis is that awareness of the importance of wound care is low partly because the literature has focused on the epidemiology and treatment costs of particular wound types, rather than on the resource impact of wounds in the organisations providing wound care.

## Results

Information on the cost of wounds to hospital or community healthcare providers in Europe is very limited. Two UK prevalence studies found 3.70 and 3.55 patients per 1000 population with a wound under treatment, most of whom (70%-80%) were treated by community-based nurses. Evidence on the prevalence of wounds among hospital inpatients is also limited, and the range of estimates is wide: from 27% to 51% of occupied beds. The typical prevalence of pressure ulcers among hospital inpatients is 20%-25%, the majority of which (51%-80%) are hospital-acquired. The incidence of surgical wound infection is between 3% and 4%. Surgical wound infection is associated with increased mortality risk, extended length of hospitalisation, readmission and the need for re-operation.

## Conclusion

Wounds are a major source of morbidity to patients and a major cost to hospital and community healthcare providers. The true extent of this cost is not recognised because local evidence is lacking. As a consequence, the vital importance of good wound care may be underestimated. Improving the evidence base at an organisational level should be a priority. There are opportunities here for collaboration between wound-care professionals to facilitate local studies (using standard methods and data-collection instruments) which could be compared internationally.

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**Patients with a wound**

- Population prevalence = 3-4/1000
- EU-27 population = 491 m
- Prevalence = 1.5m-2.0m individuals
- Annual incidence = 8/1000
- Incidence = 4m individuals
- Compared with other conditions: Annual incidence of cancers (3.9m), diabetes (2.0m), cerebrovascular disease (3.9m)

**Hospital resources**

- Between 25% and 50% of acute hospital beds are occupied by patients with a wound
- Around 55%-60% are non-healing wounds (infected surgical wounds, pressure ulcers, leg/foot ulcers)
- Many are hospital-acquired and therefore avoidable, including surgical infections and hospital-acquired pressure ulcers
- Any wound has the potential to become a non-healing wound