



3.4. Pressure ulcer in patients hospitalised (QS-5)

3.4.1. Documentation sheet

Description	Prevalence of pressure ulcer in patients hospitalised in general hospitals
Calculation	Numerator: number of patients having a pressure ulcer at the moment of survey Denominator: number of patients surveyed during the prevalence study
Rationale	The occurrence of a pressure ulcer in a hospitalised patient has a serious negative impact on the individual's health and often leads to a much prolonged hospital stay. A substantial part of pressure ulcers can be prevented with good quality nursing care. Measuring the prevalence of pressure ulcers in different hospital wards can help targeting areas where preventive actions are the most needed, and can evaluate effectiveness of preventive interventions already taken.
Data source	A survey on the prevalence of pressure ulcers in general hospitals has been organised in 2012 by the Federal Council on the quality of the Nursing activities (Conseil Fédéral pour la Qualité de l'Activité Infirmière - CFQAI - Federale raad voor de kwaliteit van de verpleegkundige activiteit - FRKVA). Several structure, process and outcomes indicators were collected in the 70 participating hospitals. This report is the most recent source of data for this indicator. ¹
Technical definitions	The prevalence is established based on a <i>one day measure every 3 months</i> , among all patients hospitalised that day in services C, D, I, G and Sp. The severity of pressure ulcer can be categorised in: <ul style="list-style-type: none">• Category 1: non- blanchable erythema• Category 2: partial thickness skin loss (blister/abrasion)• Category 3: full thickness skin loss (superficial pressure ulcer)• Category 4: full thickness tissue loss (deep pressure ulcer)
Limitation	Results of a point prevalence survey should not be used to benchmark hospitals on the quality of their nursing care, as patients who developed a pressure ulcer in another healthcare institution are also included in the survey.
International comparability	The prevalence survey method is based on a method developed by the European Pressure Ulcer Advisory Panel (EPUAP), ² which has been validated internationally.
Related indicators	Incidence of pressure ulcers in long-term care facilities
Dimensions	Quality (safety of care)



3.4.2. Results

National studies

In 2012, a national study to measure the prevalence of pressure ulcers was organised by the Federal Council on the Quality of the Nursing Activities (CFQAI – FRKVA) in 70 general hospitals. It consisted of 4 point-prevalence surveys, each organised every trimester, and results are presented for the whole year 2012. A total of 90 095 patients were surveyed: the prevalence of pressure ulcer (categories 1 to 4) was 7.8% (7.1% in Flanders, 8.9% in Wallonia and 8.0% in Brussels, Table 11), and showed large variability between hospitals (Figure 42) When taking into account only cat 2-4, the prevalence was reduced to 5.1%.

In 2008 a prevalence study was organised for the first time at a national level in general hospitals, following the last European Pressure Ulcer Advisory Panel guidelines (which are specific for the registration and the classification of pressure ulcers). This study was organised in 84 hospitals and included 19 964 patients. A pressure ulcer prevalence of 12.1% was observed. The

prevalence of category 2 to 4 pressure ulcers was 7%.³ A clear distinction was made between a pressure ulcer and Incontinence- Associated Dermatitis (IAD), which showed a prevalence of 5.7%.

The comparison between these two surveys is difficult, mainly because of the differences in training of the assessors to identify pressure ulcers: in the 2008 survey 2 nurses were specially trained per ward, and had to assess patients and agree on the classification, while in the FRKV study bedside nurses were not specially trained for pressure ulcer prevalence screening. The difference between these two approaches may partly explain the differences in results between the two surveys.

Local studies

A prevalence study organised by 13 hospitals from Vlaamse Ziekenhuisnetwerk KU Leuven showed a prevalence from 3 to 5% for PU category 2 to 4 (number of patients surveyed 18 992) (see Figure 43). No information is available on category 1 pressure ulcers.

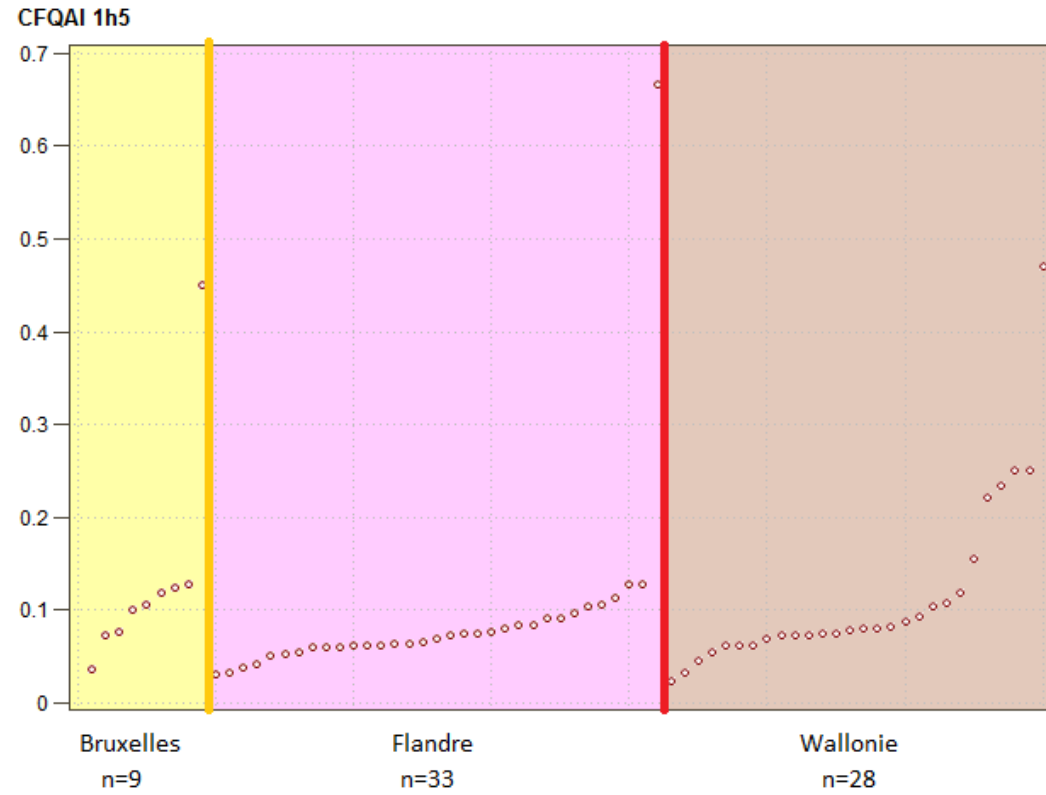
Table 11 – Prevalence of pressure ulcers in acute hospitals, results from national survey (2012)

	Belgium	Flanders	Wallonia	Brussels
Number of hospitals participating to the survey	70	33	28	9
Number of patients surveyed on one year	90095	49051	33750	7294
Number of patients having a with pressure ulcer (category 1-4)	7041	3461	2993	587
Prevalence of pressure ulcer (category 1-4)	7.8%	7.1%	8.9%	8.0%
Number of patients having a with pressure ulcer (category 2-4)	4111	1992	1739	380
Prevalence of pressure ulcer (category 2-4)	5,1%	4%	7,7%	5,9%

Source: Prevalence surveys in general hospitals, 2012, Federal Council on the quality of the Nursing activities, ¹



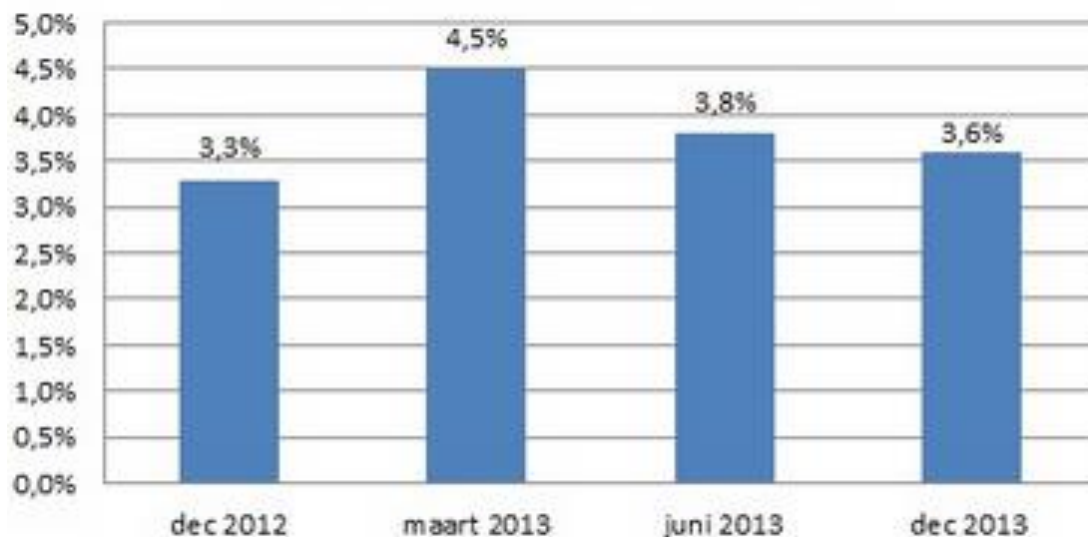
Figure 42 – Variability between hospitals in prevalence of pressure ulcer, by region (2012)



Source: Prevalence surveys in general hospitals, 2012, Federal Council on the quality of the Nursing activities, ¹
Note: Results are expressed as a proportion (from 0 to 1)



Figure 43 – Prevalence of pressure ulcer in a local study of 13 hospitals from KU Leuven network (2013)



Source: <http://www.vznkul.be/content/decubitus>

International comparison

The comparison between countries remains difficult because of differences in pressure ulcer definitions, methods of data collection and patient population.^{4,5} A recent report reviewed results of prevalence studies conducted in hospital settings in several European countries (Table 12). The reported prevalence rates ranged from 8.9% (France 2004) to 18.1% (The Netherlands, 2004). More recent surveys (2013) in the Netherlands showed a much lower prevalence, 8.4%, and evidence of decreasing trends over time.⁶

In Belgium, the prevalence of pressure ulcers has been studied twice on a national level within the hospital setting, and reported prevalence of 12.1% in the first survey (2008) and 7.8% in the second one (2012), but methodological difference between these two surveys may partly explain the differences in results.



Table 12 – Prevalence of pressure ulcers in adults, in a selection of European countries, in hospitals: international comparison

Country	Study year	Sample size (n)	Prevalence (Grade I-IV)
Belgium	2008	19 968	12.1%
	2012	90 095	7.8%
France	2004	37 307	8.9%
Germany	2004	8 515	9.0%
Italy	2005	1 097	8.3%
Sweden	2011	16 466	16.6%
The Netherlands	2004	10 237	18.1%
	2013	2989	8.7%

Source of international comparison: KCE Report 203⁷

Key points

- In 2012, the prevalence of pressure ulcer of patients hospitalised in general hospitals was 7.8% (cat 1-4) and 5.1% (cat 2-4).
- In 2008, a previous national survey showed higher prevalence rates: 12.1% (cat 1-4) and 7% (cat 2-4), but the methodology was slightly different (trained assessors in 2008 versus mandatory data collection by bedside nurses in 2012). It is thus difficult to know whether the difference between the two surveys is due to a real quality improvement in the prevention of pressure ulcer, or due to differences in sensitivity of the assessors.
- The comparison of Belgian data with other European countries also remains difficult because of differences in pressure ulcer definitions, methods of data collection and patient population. Taking into account these limitations, Belgium has the lowest prevalence rate of pressure ulcer of surveys organised in France, Germany, Italy, Sweden and The Netherlands.

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