

Several European studies have documented that between 8% and 12% of patients admitted to hospitals suffer from adverse effects whilst receiving health care (UK Department of Health, 2000; WHO Europe, 2012b). The European Commission estimates that without any policy changes, there are likely to be 10 million adverse events related to hospitalisations (including infection-related ones) in the European Union per year, of which almost 4.4 million would be preventable (EC, 2008d).

Patient safety has, in recent years, become an important part of the policy agenda in Europe. In 2009, the Council of the European Union adopted a recommendation on patient safety, including the prevention and control of health care associated infections (European Union, 2009). This recommendation is intended to bring about a political commitment from all EU member states to address the patient safety challenge.

Figures 4.5.1 to 4.5.4 show reported complication rates related to surgical and medical care for four patient safety indicators: i) sentinel events, such as a foreign body left in a person during a surgical procedure, are those that in theory and practice should never happen and thus whose occurrence indicates failure of safeguards to protect patients during care delivery; ii) accidental puncture or laceration during a surgical procedure is a recognised risk, but increased rates of such complications may indicate system problems; iii) postoperative pulmonary embolism and deep vein thrombosis cause unnecessary pain and death, but can be prevented through the appropriate use of anticoagulants and other preventive measures; and iv) sepsis after elective surgery is a severe complication that can lead to multiple organ dysfunction and death. Many cases of postoperative sepsis can be prevented through infection prevention measures such as hand hygiene, sterile surgical techniques, good postoperative care and, where necessary, the appropriate use of prophylactic antibiotics.

Comparable data are available for between eight and thirteen European countries, depending on the indicator. There are considerable differences across countries for these four patient safety indicators. Whereas Denmark and Germany report complication rates that are below the EU average for each of the four patient safety indicators, other countries show less consistent results. For example, Belgium, France, Ireland and Switzerland perform well on some indicators but report worse than EU average results for others.

Differences in the prevalence of patient safety complications across countries may reflect – at least in part –

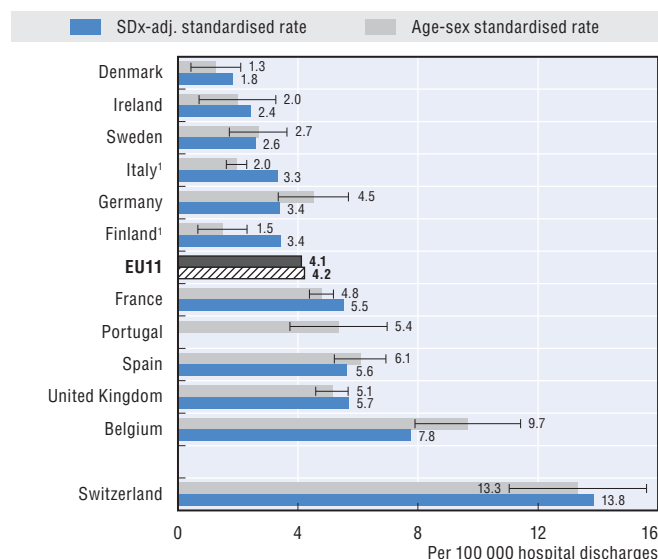
differences in the willingness of health workers to admit to medical errors as well as differences in the sensitivity of monitoring or surveillance systems across countries. Nevertheless, these indicators do show that numerous patients have been affected by patient safety events. International efforts to harmonise documentation and data systems, and the results of ongoing validation studies, will provide more information on the validity and reliability of patient safety measures based on administrative hospital data in the future.

Definitions and comparability

Patient safety indicators are derived from the Quality Indicators developed by the US Agency for Healthcare Research and Quality (AHRQ). AHRQ's patient safety indicators are a set of indicators that provide information on hospital complications and adverse events following surgeries, procedures, and childbirth. The indicators were developed after a comprehensive literature review, analysis of ICD-9-CM codes, clinician panel review, implementation of risk adjustment, and empirical analyses (AHRQ, 2006).

All procedural or postoperative complications are defined as the number of discharges with ICD codes for complication in any secondary diagnosis field, divided by the total number of discharges (medical and surgical or surgical only) for patients aged 15 and older. Data are based on administrative hospital discharge data. The rates have been age/sex standardised, apart from postoperative sepsis rate (this is due to the use of modified exclusion criteria within the algorithm for the calculation of this indicator). The patient safety rates have also been adjusted by the average number of secondary diagnoses (SDx) (Drösler et al., 2011) in order to improve cross-country comparability. Despite this adjustment, the results for the two countries (Finland and Italy) that are reporting less than 1.5 diagnoses per record may be underestimated. Differences in coding practice, coding rules (e.g. definition of principal and secondary diagnoses), coding for billing purposes and the use of diagnosis type markers (e.g. "present at admission") may also influence indicators.

4.5.1. Foreign body left in during procedure, 2009 (or nearest year)



Note: Some of the variations across countries are due to different classification systems and recording practices. 95% confidence intervals represented by I—I.

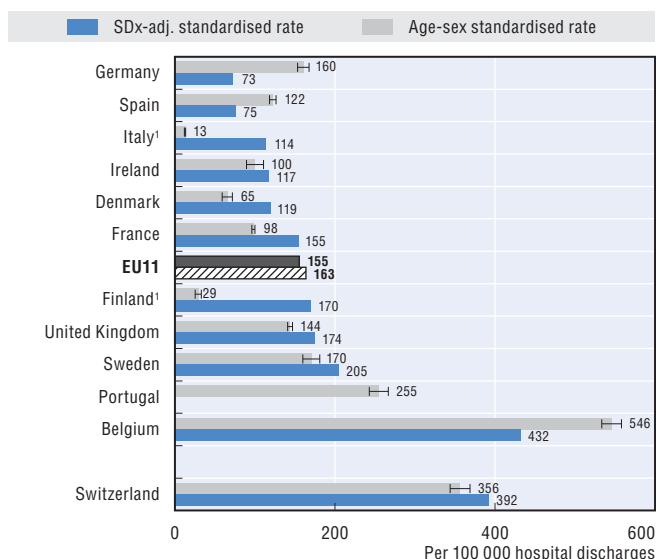
SDx: Secondary diagnoses adjustment.

1. The average number of secondary diagnoses is < 1.5.

Source: OECD Health Data 2012.

StatLink <http://dx.doi.org/10.1787/888932704988>

4.5.2. Accidental puncture or laceration, 2009 (or nearest year)



Note: Some of the variations across countries are due to different classification systems and recording practices. 95% confidence intervals represented by I—I.

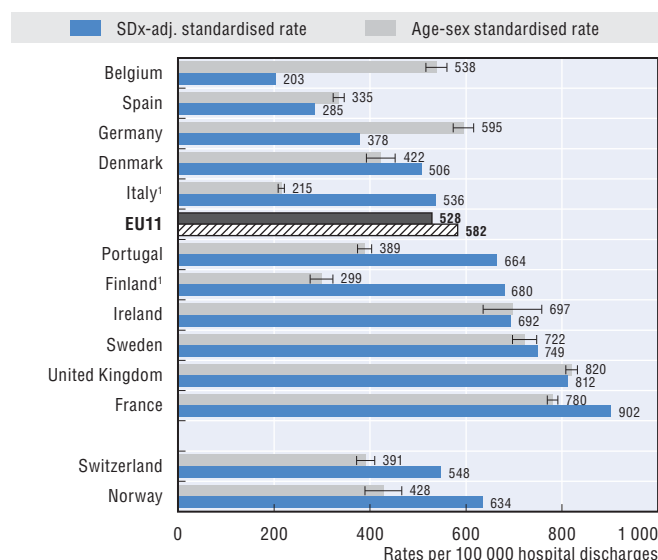
SDx: Secondary diagnoses adjustment.

1. The average number of secondary diagnoses is < 1.5.

Source: OECD Health Data 2012.

StatLink <http://dx.doi.org/10.1787/888932705007>

4.5.3. Postoperative pulmonary embolism or deep vein thrombosis, 2009 (or nearest year)



Note: Some of the variations across countries are due to different classification systems and recording practices. 95% confidence intervals represented by I—I.

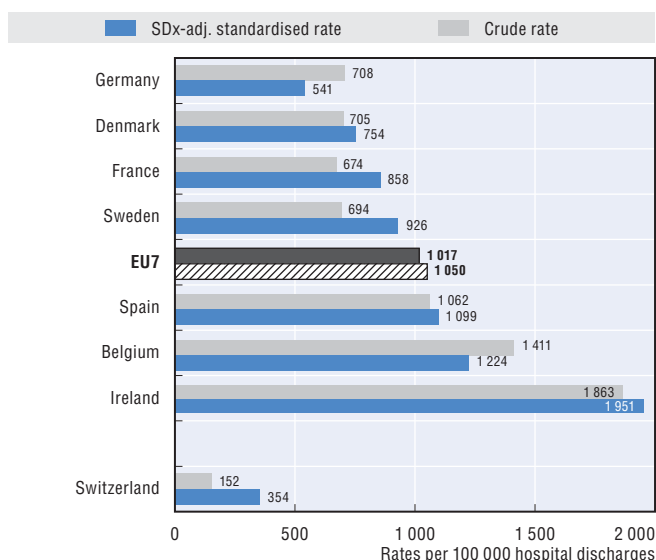
SDx: Secondary diagnoses adjustment.

1. The average number of secondary diagnoses is < 1.5.

Source: OECD Health Data 2012.

StatLink <http://dx.doi.org/10.1787/888932705026>

4.5.4. Postoperative sepsis, 2009 (or nearest year)



Note: Some of the variations across countries are due to different classification systems and recording practices.

SDx: Secondary diagnoses adjustment.

Source: OECD Health Data 2012.

StatLink <http://dx.doi.org/10.1787/888932705045>



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