

The patient safety indicators related to obstetric trauma flag cases of potentially preventable third- and fourth-degree perineal tears during vaginal delivery. Such tears extending to the perineal muscles, anal sphincter and bowel wall require surgical treatment after birth. Possible complications include continued perineal pain and anal incontinence. A recent study found that around 10% of women who had such tears will suffer from faecal incontinence initially (compared to 3% of women who do not have a tear). Almost 45% of women with initial symptoms had remaining problems after four to eight years (Sundquist, 2012).

The proportion of deliveries involving higher degree lacerations is a useful indicator of the quality of obstetrical care. These types of tears are not possible to prevent in all cases, but can be reduced by employing appropriate labour management and care standards. A third- or fourth-degree trauma is more likely to occur in the case of first vaginal delivery, baby's high birth weight, labour induction, occiput posterior position, prolonged second stage of labour and instrumental delivery. Obstetric trauma indicators have been used by the US Joint Commission as well as by different international quality initiatives analysing obstetric data (AHRQ, 2007). As the risk of a perineal laceration is significantly increased in instrument-assisted labour (vacuum, forceps), rates for this patient population are reported separately.

Figures 4.6.1 and 4.6.2 show the variation in reported rates of obstetric trauma during vaginal delivery with and without instrument. The rate of obstetric trauma after vaginal delivery with instrument shows high variability among countries. Reported rates vary from below 3% (Slovenia, Portugal, France, Belgium, and Italy) to more than 10% (Sweden). Rates of obstetric trauma after vaginal delivery without instrument range from 0.2% to 3.2%. Denmark, Sweden and Switzerland stand out as having the highest reported rates for obstetric trauma without instrument. The lower rate of obstetric trauma in Finland compared to other Nordic countries (Denmark, Norway, and Sweden) may be explained by the variation in delivery method and episiotomy practice (Laine *et al.*, 2009).

Furthermore, findings from a recent study showed that enhanced midwifery skills in managing vaginal delivery reduce the risk of obstetric anal sphincter injuries (Hals *et al.*, 2010).

There is a strong relationship between the two obstetric trauma indicators shown in Figures 4.6.1 and 4.6.2. Countries such as Belgium, Finland, France, Italy, Portugal, Slovenia and Spain report lower than EU average obstetric trauma rates for both indicators. Latvia, on the other hand, has high rates of trauma when an instrument was used but low rates when an instrument was not used during delivery. This makes it more difficult to draw any clear conclusions from these two indicators for Latvia.

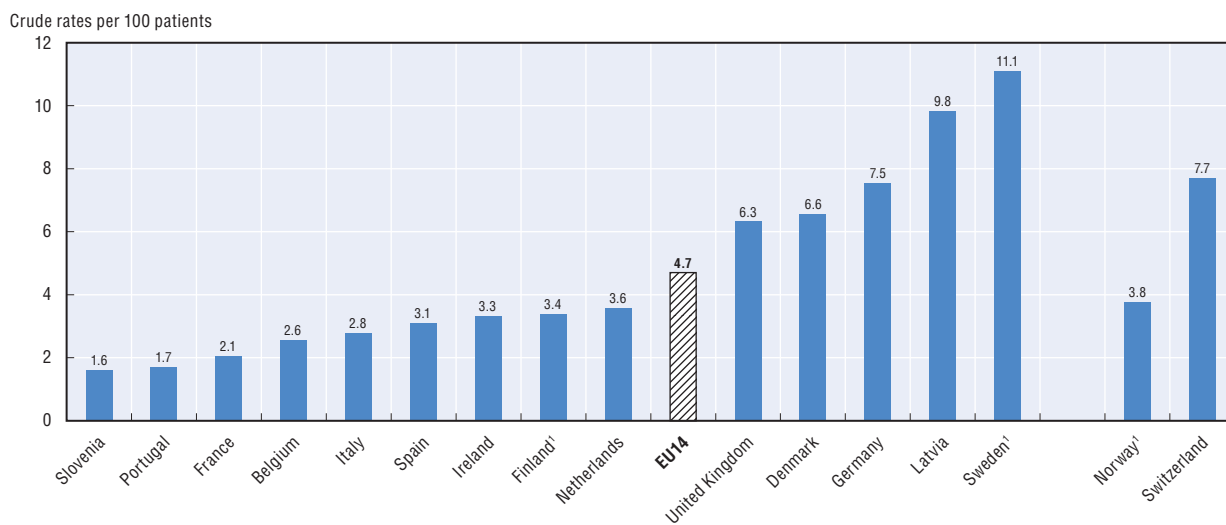
Definitions and comparability

The two obstetric trauma indicators are defined as the proportion of instrument assisted/non-assisted vaginal deliveries with third- and fourth-degree obstetric trauma codes in any diagnosis and procedure field. Therefore, any differences in the definition of principal and secondary diagnoses have no influence on the calculated rates.

Several differences in data reporting across countries may influence the calculated rates of obstetric patient safety indicators. These relate primarily to differences in coding practice and data sources. Some countries report the obstetric trauma rates based on administrative hospital data and others based on obstetric register. There is some evidence that registries produce higher quality data and report a greater number of obstetric trauma events compared to administrative datasets (Baghestan *et al.*, 2007).

See box on "Definitions and comparability" for Indicator 4.5 "Procedural or postoperative complications", for more information on patient safety indicators.

4.6.1. Obstetric trauma, vaginal delivery with instrument, 2009 (or nearest year)

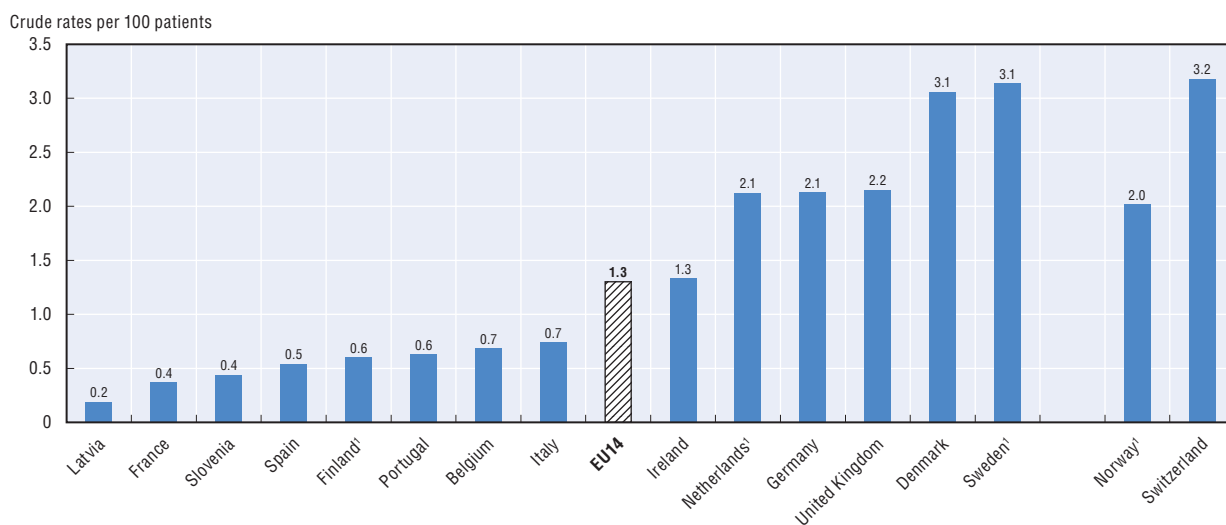


1. Obstetric register data.

Source: OECD Health Data 2012.

StatLink <http://dx.doi.org/10.1787/888932705064>

4.6.2. Obstetric trauma, vaginal delivery without instrument, 2009 (or nearest year)



1. Obstetric register data.

Source: OECD Health Data 2012.

StatLink <http://dx.doi.org/10.1787/888932705083>