Safe acute care – surgical complications and obstetric trauma

Patient safety, relating to prevention of harm during healthcare activities, remains a pressing issue with substantial social and economic costs in OECD countries. It is estimated that up to 13% of healthcare spending goes towards treatment of patients harmed during care, the majority of which could be avoided if appropriate safety protocols and clinical guidelines were adhered to (Slawomirski and Klazinga, 2022_[1]). To achieve sustainable progress towards safe care and the goals of WHO's Global Patient Safety Action Plan 2021-30, a focus on the promotion of patient safety cultures (see section on "Safe acute care – workplace culture and patient experiences") and improvement in both processes and outcomes (see section on "Patient-reported outcomes in acute care") is vital (WHO, 2021_[2]).

Surgery for hip fracture is usually performed as an emergency procedure; thus, early intervention within the first 48 hours can drastically improve patient outcomes and minimise the risk of complications. Time to surgery is influenced by many factors, including hospitals' surgical theatre capacity, flow and access, and targeted policy interventions.

Across OECD countries, more than four out of five (80%) patients admitted for hip fracture underwent surgery within 48 hours in 2021, ranging from 99% in Iceland to 47% in Portugal (Figure 6.20). Compared to 2011, the proportion of patients whose surgery was managed in a timely manner increased in 2021 by more than 20% in Israel and Italy, which started monitoring this quality indicator to promote timely intervention of hip fracture, while rates decreased in the same period in Lithuania and Estonia. Türkiye and Lithuania registered substantial drops from 2019 to 2021, associated with capacity constraints during the pandemic (OECD, 2023_[3]).

Joint replacement surgery, often recommended as a last-line treatment for osteoarthritis if non-surgical interventions have failed, carries the risks of post-surgery pulmonary embolism (PE) and deep vein thrombosis (DVT). PE and DVT cause unnecessary pain, reduced mobility and – in some cases – death, but can be prevented by anticoagulants and other measures.

Figure 6.21 shows the substantial cross-country variation in rates in 2021, ranging from 57 cases of PE or DVT per 100 000 surgical discharges in Italy to 1 192 per 100 000 in Australia. This variation may be due to several factors, such as differences in diagnostic and coding practices. Higher rates may signal more complete patient safety monitoring systems and a transparent patient safety culture rather than worse care. Many countries reported higher rates in 2021 compared to 2019, probably related to changes in the case mix by prioritising joint replacement surgery for patients with higher risks and a decrease in acute care capacity.

Severe tearing of the perineum during vaginal childbirth is a drastic adverse patient safety event that often requires surgical intervention and may lead to complications such as perineal pain and incontinence. Although prevention is not always possible, appropriate labour management and high-quality obstetric care can reduce the occurrence of tears (Wilson and Homer, 2020[4]).

Figure 6.22 shows that rates of obstetric trauma vary between countries for instrument-assisted delivery from less than 2% in Lithuania, Israel and Poland to more than 10% in Canada, the United States and Denmark. The incidence of traumas in births without instrumental assistance ranges from less than 0.5% in

Poland, Lithuania, Costa Rica and Latvia to more than 3% in Denmark, Iceland and Canada. Differences across countries, including completeness and transparency of the patient safety monitoring system, rates of caesarean sections, coding practices, high year-on-year variation in countries with a very small number of cases of instrument-assisted deliveries, and use of administrative versus obstetric registry data influence the rates.

Definition and comparability

Figure 6.20 shows the proportion of patients aged 65 and over admitted to hospital with a diagnosis of upper femur fracture who had surgery initiated within two calendar days of admission. Although cases where the hip fracture occurred during the admission should normally be excluded, the capacity to capture time of admission and surgery in hospital administrative data varies across countries, and higher capacity could lead to overestimation.

Rates of PE and DVT using unlinked data refer to cases identified in hospitals where surgery occurred, while linked data account for patients with PE or DVT within 30 days of the surgery in and outside the hospital where surgery was initially conducted. For Latvia, the risk profile of the patients used to calculate these rates may be different from those who accessed care in the private system.

The two obstetric trauma indicators show the rates of thirdand fourth-degree tears, using International Classification of Diseases, tenth revision (ICD-10) codes O70.2-O70.3 in any field, after vaginal delivery assisted by an instrument (deliveries using forceps or vacuum extraction) and without an instrument. For Australia, Portugal and the United States, data cover women aged 15 years and above, whereas for all other countries, data are for women aged 18 years and above.

References

OECD (2023), <i>Ready for the Next Crisis? Investing in Health System Resilience</i> , OECD Health Policy Studies, OECD Publishing, Paris, <u>https://doi.org/10.1787/1e53cf80-en</u> .	[3]
Slawomirski, L. and N. Klazinga (2022), "The economics of patient safety: From analysis to action" <i>, OECD Health Working Papers</i> , No. 145, OECD Publishing, Paris, <u>https://doi.org/10.1787/761f2da8-en</u> .	[1]
WHO (2021), <i>Global patient safety action plan 2021- 2030: towards eliminating avoidable harm in health care</i> , World Health Organization, https://apps.who.int/iris/handle/10665/343477.	[2]
Wilson, A. and C. Homer (2020), "Third-and fourth- degree tears: A review of the current evidence for prevention and management", <i>Australian and New</i>	[4]

degree tears: A review of the current evidence for prevention and management", *Australian and New Zealand Journal of Obstetrics and Gynaecology*, Vol. 60/2, pp. 175-182, https://doi.org/10.1111/ajo.13127.



Figure 6.20. Hip fracture surgery initiation for patients aged 65+ within two days of hospital admission, 2011 and 2021 (or nearest years)

Source: OECD Health Statistics 2023.

StatLink msp https://stat.link/rh1ud2

Figure 6.21. Post-operative pulmonary embolism or deep vein thrombosis in hip and knee surgeries, 2021 (or nearest year)



Note: Data for Australia refer to 2020, and to 2022 for Costa Rica instead of 2021. Data labels are shown for 2021 PE + DVT. 1. Data only cover the public system. 2. Data coverage is partial, covering parts of the public and private systems. Source: OECD Health Statistics 2023.

StatLink msp https://stat.link/28m6t9

StatLink ms https://stat.link/xdtvpq



Figure 6.22. Obstetric trauma in vaginal delivery with and without instrument, 2021 (or nearest year)

Note: Data for Australia, Denmark, the Netherlands and the United States refer to 2020, and to 2022 for Costa Rica instead of 2021. Source: OECD Health Statistics 2023.



From: Health at a Glance 2023 OECD Indicators

Access the complete publication at: https://doi.org/10.1787/7a7afb35-en

Please cite this chapter as:

OECD (2023), "Safe acute care – surgical complications and obstetric trauma", in *Health at a Glance 2023:* OECD Indicators, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/f291f0b5-en

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <u>http://www.oecd.org/termsandconditions</u>.

