

Article

Location of Death in Developed Countries: Are Hospitals a Primary Place of Death and Dying Now?

OMEGA—Journal of Death and Dying 2025, Vol. 91(2) 781–797 © The Author(s) 2022



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Abstract

Hospitals used to be a common site of death and dying. This scoping project sought published and unpublished information on current hospital death rates in developed countries. In total, death place information was gained from 21 countries, with the hospital death rate varying considerably from 23.9% in the Netherlands to 68.3% in Japan. This major difference is discussed, as well as the problem that death place information does not appear to be routinely collected or reported on in many developed countries. Without this information, efforts to ensure high quality end-of-life (EOL) care and good deaths are hampered.

Keywords

death, dying, place of death, death certificate, location of death, hospital

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Introduction

The world we live in is largely divided into developed and developing countries. The Human Development Index (HDI) was created by the United Nations to categorize countries according to their developmental state, with developed countries having an HDI score above 0.80 on a scale ranging from 0 to 1. Each assigned score reflects the "country's human development, such as education, health, and life expectancy" (United Nations Development Programme, 2020, n.p.). Although the HDI does not provide a measure of the quality or the relative availability of hospital services, all developed countries have modern hospitals that provide a wide range of healthcare services for ill and injured people. These hospital-based services understandably change over time, in keeping with changing population healthcare needs and healthcare or other developments (Wall, n.d.).

Although cure-oriented care has long been the primary focus of hospitals, this care is not always successful at sustaining life (Northcott & Wilson, 2021). The COVID-19 pandemic has reminded us that death in hospital, even those with the most advanced intensive care technologies, is still possible (Wilson & Chan, 2022). Moreover, it is important to recognize that most people in developed countries who died in recent decades have been advanced in age and they typically have had one or more end-stage chronic illnesses, conditions that are not amenable to cure-oriented hospital interventions (Jemal et al., 2005; Roser et al., 2019). This issue and others explain why long-standing concerns over hospital-based end-of-life (EOL) care have existed for some time (Bernat, 2005; Cohen & Gott, 2015). Currently, as we recover from a pandemic that greatly impacted hospitals and raised death rates, an examination of the use of hospitals for EOL care purposes is indicated. This article compares current hospital death rates across developed countries, following an historical background to explain why location of death is an important human development measure.

Historical Background

As little as 100 years ago, hospitals were often considered death places (Northcott & Wilson, 2021). Limited healthcare technologies and healthcare knowledge were prime reasons then why people who sought curative treatment in hospital often died, as little could be done to save anyone who was seriously ill (Northcott & Wilson, 2021). As the survival capabilities of hospitals grew, largely following the second World War when antibiotics and other life-saving technologies became available, hospitals began to be associated with miraculous cures (Northcott & Wilson, 2021). They also became a site of compassionate EOL care, as potent analgesics were available there, as well as healthcare professionals who could provide skilled care around the clock for dying people (Northcott & Wilson, 2021).

This positive view of hospital-based EOL care began to change in the 1970s, as hospitals started to be recognized as places where futile cure-oriented care was being routinely provided to dying people (Clark, 2007). This care was criticized for having

the potential to intensify EOL suffering and prolong inevitable dying processes (Sibbald et al., 2007). Moreover, concern over the high cost of hospital-based EOL care surfaced (Carter et al., 2017). The location of death subsequently became of major interest across developed countries (Cohen & Gott, 2015), with many 1970–2010 publications focused on hospital death rates (examples: Jarman et al., 1999; Jemal et al., 2005; Wilson et al., 2001; Wilson et al., 2009). Although informative, those reports are dated as hospitals have evolved considerably since then, such as with the addition of more outpatient and day surgery services (Wall, n.d.). An array of community-based hospice, palliative, and other non-hospital EOL services have also been initiated and typically expanded (World Health Organization [WHO], 2016). Regardless, hospitals could still be the primary place of death and therefore EOL care in many, if not most, developed countries.

Information Gathering Methods

To gather published and online information on current hospital death rates in developed countries, a scoping review was conducted (Arksey & O'Malley, 2005). Scoping reviews seek all available information, including published quantitative or qualitative evidentiary reports and grey or unpublished information, to address one or more defined questions (Munn et al., 2018). Scoping reviews do not eliminate any of the identified research or other reports as all credible and available information identified through a planned, systematic, and thorough search is retained for examination (Pham et al., 2014). Given the aim of our review, the following considerations were especially important when deciding the type of review to conduct, as it was thought that much of the information sought would be reported in non-academic sources.

Scoping reviews differ considerably from systematic literature reviews and also Cochrane reviews, as they typically only seek published quantitative research reports, if not just reports of randomized trial investigations (Higgins et al., 2022). Another difference is in the search for information, as Cochrane reviews are limited to searches of the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, and also Embase if available (Higgins et al., 2022). Systematic reviews are more varied in relation to which databases are searched, but published research articles alone are normally sought (Xiao & Watson, 2019). Quality assessment tools are often used for article retention decisions in systematic and Cochrane reviews, so only high quality studies are retained, such as those with sufficient methodological details provided in the article for quality assessment purposes (Pati & Lorusso, 2018).

Our search for developed country place of death information started in early 2022 with Canada, the first author's home country, a country with an HDI score of 0.929 in 2019. The search then progressed to other countries with an HDI score denoting it was a developed country in the United Nations Development Programme (2020) report. More specifically, for each country, current or recent death place information was sought from multiple English-language sources, starting with published academic library journal articles identified through repeated searches of the Medline

and Embase library databases and also the Directory of Online Journals, the three most likely information sources. To capture recent place of death information, all searches were limited to articles containing death place information for any single year or any number of years within the decade immediately preceding the pandemic (2010–2020), as we recognized that many of the 6.5 + million COVID-19 deaths that occurred since early 2020 have taken place in hospital (World Health Organization, 2022). Four search terms were used in varying combinations to identify potential articles for review: "place or location," "death or mortality," "hospital utilization," and the name of the country. All identified potential articles were then screened in order of their publication date to determine if current or recent information on place of death was evident in them. Each potential article for review was then scanned using the title and abstract (if present), and full papers were read whenever contemporary place of death information appeared to be present.

As indicated, only articles with population-based hospital evidence dating 2010 through 2020 were retained for review. This meant articles were rejected when historical (pre 2010) information was alone reported. Other articles were rejected if they only focused on distinct sub-populations. For instance, an Irish study report focused on place of death for decedents aged 50 or older (Forma et al., 2020). Other articles were rejected when they only focused on decedents who had been diagnosed with a specific disease, such as cancer (Kelly et al., 2018), or those who were otherwise distinguished, such as by having been a registered palliative care program recipient (Higginson et al., 2017).

Ultimately, only four published articles containing the sought death place information were identified. Subsequently, for each developed country, a search for population-based place of death information was made for online government, health, mortality, or demographic reports containing the sought information. In most cases, no online place of death information was identified. Emails requesting recent population-level information on place of death were then sent to contact persons identified in the country-specific online searches; persons aligned with their country's health department and/or demographic/statistical departments. This search technique was often successful, as the sought information was either directly supplied or the correct information site was identified and the sought information could then be obtained. However, no place of death information was obtained for 45 of the 66 (68.2%) developed countries.

Current or recent place of death information was obtained for 21 countries (although data for England and Wales were combined). All of the obtained information that revealed a hospital death rate for a developed country was entered into Table 1. Rate differences across developed countries quickly became apparent. Moreover, some rate differences within countries were also noted. An examination of these in-country rate differences revealed varying data sources for the reported information. Subsequently, all sources for the information gathered and rates reported were entered into Table 1.

Table 1. Hospital Death Rate in Developed Countries (Arranged by 2019 HDI score, after Canada).

Country and HDI Score	Deaths in Hospital (Proportion and Year Reported)	Information Source(s)
Canada 0.929	*58.9% (2019), 167,464 deaths in hospital/ 284,082 deaths that year.	* Statistics Canada. (2020). Deaths, by place of death (hospital or non-hospital). https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310071501. * Report on death certificate data collected from all provinces and territories in Canada, with deaths in any place in a hospital identified as a hospital death, including deaths pronounced upon arrival in emergency departments.
	**43.7% (Apr I, 2014 - Mar 30, 2015), 88,100 deaths in inpatient hospital beds/200,837 deaths that year.	** Wilson, D. M., Shen, Y., & Birch, S. (2017). New evidence on end-of-life hospital utilization for enhanced health policy and services planning. <i>Journal of Palliative Medicine</i> , 20(7), 752–758. https://doi.org/10.1089/jpm. 2016.0490 ** Used national hospital data, with deaths in an inpatient hospital bed recorded as a discharge option.
Norway 0.957	*32.5% (2012), 13,617 deaths in hospital/41,913 total deaths. **33.3% (over 2 combined years, 2011 and 2012), 26,920 deaths in hospital/80,813 total deaths.	* Statistics Norway. (no date). Causes of death. https://www.ssb.no/en/statbank/table/03297 * Population-level hospital and demographic data. ** Kjellstadli, C., Allore, H., Husebo, B. S., Flo, E., Sandvik, H., & Hunskaar, S. (2020). General practitioners' provision of end-of-life care and associations with dying at home: A registry-based longitudinal study. Family Practice, 37(3), 340–347. https://doi.org/10.1093/fampra/cmz059 ** Reported on population-level cause of death and other data gained from the Norwegian Cause of death Registry, Norwegian Patient Registry, Statistics Norway, and Control and payment of reimbursement to health service providers databases.

Table I. (continued)

Country and HDI Score	Deaths in Hospital (Proportion and Year Reported)	Information Source(s)
Republic of Ireland 0.955	49.97% (2019), 15,582 died in private and public hospitals across Ireland/31,184 total deaths.	Annual information reports obtained Mar 10, 2022 from the Irish vital Statistics office (VitalStats@cso.ie): PxStat tables VSD36 and VSD37, deaths by area of residence and place of occurrence. Hospital death count would include deaths taking place in hospital emergency (A&E) and outpatient or day surgery departments.
Switzerland 0.955	38.4% (over 5 years, 2007– II), 22,532 plan registrants died in hospital/58,732 total registrant decedents.	Reich et al. (2013). Place of death and health care utilization for people in the last 6 months of life in Switzerland: A retrospective analysis using administrative data. BMC Health Services Research, 13, 116. https://doi.org/10.1186/1472-6963-13-116 Used healthcare and demographic data on all decedents who had mandatory health insurance through the Helsana group, the largest health insurer in Switzerland.
Iceland 0.949	46.4% (2020), died in hospital/2305 deaths of persons domiciled in Iceland.	Rate obtained Mar 14, 2022 from Iceland's Directorate of Health, with this rate derived from the Icelandic Causes of Death Register.
Germany 0.947	*45.64% (2019), 428,753 deaths in hospital/939,520 total deaths.	* Hospital death rate data obtained Mar 16, 2022 from the Federal statistical office of Germany (zentraler Auskunftsdienst, Statistisches Bundesamt - destatis), for hospital deaths and total deaths per year (1953–2019): https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Gesundheit/Krankenhaeuser/_inhalt.html#sprg234206
	**52.2% (2011), 6478 hospital deaths/12,424 total, and 57.6% (2001), 6669 deaths in hospital/ 11,585 total deaths.	**Dasch, B., Blum, K., Gude, P., & Bausewein, C. (2015). Place of death: Trends over the course of a decade: A population-based study of death certificates form the years 2001 and 2011. Deutsches Arzteblatt International, 112(29–30), 496–504. ** Study used death certificate data gained from select rural and urban areas in Germany.

Table I. (continued)

Country and HDI Score	Deaths in Hospital (Proportion and Year Reported)	Information Source(s)
Sweden 0.945	37% (2020), 35,938 deaths in hospital/98,229 total deaths.	Information obtained Mar 10, 2022 from Ministry of Health and Social Affairs, Sweden, with information based on "cause-of-death certificates" completed by physicians: https://www.statista.com/statistics/525353/swedennumber-of-deaths/
Australia 0.944	53.5% (2019), 86,277 deaths in hospital/ 161,300 total deaths.	Information gathered from three online sites: (1) https://www.abs.gov.au/statistics/people/population/deaths-australia/latest-release (2) https://www.abs.gov.au/statistics/research/classifying-place-death-australian-mortality-statistics (3) https://www.abs.gov.au/statistics/research/classifying-place-death-australian-mortality-statistics
Netherlands 0.944	23.09 (2019), 35,065/ 151,885 total deaths.	Information on total deaths and places of death received Mar 10, 2022 from Statistics Netherlands infoservice: https://www.cbs.nl/nl-nl/maatwerk/2020/37/sterfte-naar-locatie-van-overlijden
Denmark 0.9440	41.82% (2019), 21,860 deaths in hospitals and hospices/52,277 reported deaths by place.	Information is available on table 2, page 24 of the 2020 report: RAPPORT 2020 Dødsårsagsregisteret 2019 Tal og analyse: file:/// C:/Users/Donna%20Wilson/Downloads/ Doedsaarsagsregisteret_2019.pdf; see also https://www.dst.dk/en/Statistik/emner/borgere/befolkning/doedsfald
Singapore 0.938	62.2% (2019), 13,340 deaths in hospital/21,446 total deaths.	* Information available on page 59 of Report on Deaths in Singapore Private and Public Hospitals: https://www.ica.gov.sg/docs/default-source/ica/stats/annual-bd-statistics/stats_ 2019_annual_rbd_report.pdf; see also https://www.moh.gov.sg/resources-statistics/singapore-health-facts/principal-causes-of-death
Finland 0.938	* 59.99% (2019), 32,375 deaths in health care units/53,962 total deaths.	* Received information on Mar 10, 2022 from Statistics Finland, statistical Information service. Note: the designation of "health care units" does not include social care units, which would be nursing homes or social housing for older or disabled persons.

Table I. (continued)

Country and HDI Score	Deaths in Hospital (Proportion and Year Reported)	Information Source(s)
Wales and England combined 0.932	* 42.44% (2020), 257,974 deaths in hospital/ 607,926 total deaths.	* Received information on Mar 10, 2022 from Health.Data@ons.gov.uk; Deaths Registered in Wales and England, Table 10: Deaths by place of occurrence, sex, underlying cause, and age group' deaths registered in 2020, England and Wales.
Scotland 0.932	* 43.11% (2020), 27,631 deaths in hospital/64,093 total deaths.	* Obtained information on Mar 11, 2022 through online open data portal available from the Scottish Government, Statistics.GOV.SCOT — Population — National records of Scotland; and information was confirmed in table 5.09 in the National records of Scotland, 2020 report, retrieved Mar 14, 2022 from: https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/general-publications/vital-events-reference-tables/2020/list-of-data-tables#section5
Northern Ireland 0.932	* 43.23% (2020), 27,439 deaths in hospital/17,614 total deaths.	* Obtained information on Mar 14, 2022 from Northern Ireland Statistics and Research Agency, registrar general Annual report 2020 deaths; Table 5.11: https://www.nisra.gov.uk/ publications/registrar-general-annual-report- 2020-deaths
Belgium 0.93 l	* 46.52% (2018), 51,470 hospital deaths/110,645 total deaths.	* Information on total deaths and places of death received on Mar 10, 2022 from Directorate-General Statistics – Statistics Belgium.
USA 0.926	* 28.5% (2019), 813,249 inpatient hospital deaths/2,854,838 total deaths. Also: 35.09% (2019), 1,001,838 hospital deaths (all locations) /2,854,838 total deaths. **28.97% (2010), 715,000 hospital deaths/2,468,435 deaths in total.	* Centers for Disease Control and Prevention. Information gained Mar 17, 2022 through an open data request; <i>Underlying Cause of Death, 1999-2020.</i> Results, place of death, Deaths occurring through 2019: https://wonder.cdc.gov/controller/datarequest/D76;jsessionid=C171B1B47154267E4DB939430026** Hall, M. J., Levant, S., & DeFrances, C. J. (2013). Trends in inpatient hospital deaths: National hospital discharge survey, 2000–2010. NCHS Data Brief, 118, 1–8. https://www.cdc.gov/nchs/products/databriefs/db118.htm

Table I. (continued)

Country and HDI Score	Deaths in Hospital (Proportion and Year Reported)	Information Source(s)
Austria 0.922	* 47.63% (2020), 43,629 deaths in hospital/91,599 total deaths.	* Information on total deaths and places of death received Mar 10, 2022 from Statistik Austria Statistics Austria, direktion Bevölkerung directorate population, demographie & gesundheit demography and health.
Japan 0.919	68.3% (2020), Estimate of 776,571 deaths in hospital/1.37 million deaths.	* Hospital death percentage obtained Mar 11, 2022 from Inter-ministry Information System for Official Statistics (Japan). Publicly available information on total number of deaths in Japan in 2020 and the percentage figure were then used to estimate the actual number of people who died in hospital.
Spain 0.904	54.3% (2012–2015), 875,189/1,611,767 deaths in 2012–2015 time period.	Cabañero-Martínez et al. (2020). Place of death of people with conditions needing palliative care in the different autonomous communities (regions) of Spain. <i>Anales del Sistema Sanitario de Navarra</i> , 43(1), 69–80. https://doi.org/10.23938/ASSN.0856

Discussion

As illustrated in Table 1, the 21 identified country-specific hospital death rates varied considerably, from 23.9% for the Netherlands to 68.3% for Japan. Caution must be exercised however in making any direct comparisons of rates. For instance, the data years varied from a combined 2007-11 timeframe to 2020. Moreover, there are 66 countries identified as developed in the United Nations Development Programme (2020) list, and yet place of death information was only obtained from around one third of these. In addition, some of the reported rates were based on deaths that took place in all hospital areas or departments, and not just inpatient beds after an admission to hospital had taken place. For instance, the Japanese death in hospital rate of 68.3% is likely based on deaths that occurred in all possible hospital locations, including emergency departments although deaths there are often pronounced on arrival. As such, some rates are likely higher, if not much higher, than if only inpatient hospital deaths were reported. Inpatient hospital beds are primarily associated with cure-oriented care, but also palliative or EOL care in some cases. Another consideration is that the reported hospital death rate for Switzerland is based on incomplete population data. Regardless, the large discovered difference in country-specific hospital death rates is a major finding.

Among other concerns, this finding raises a number of hospital utilization concerns. This includes the high cost of hospital-based EOL care as compared to EOL care in community settings, such as the home or a hospice where comfort-oriented EOL care is provided (Luta et al., 2021). Another consideration is the use of often a fixed or finite number of hospital beds for dying people, limiting availability for potentially savable people. Although it could be said that dying people have as much right to a hospital bed as other people who could potentially be saved, the COVID-19 pandemic has raised global awareness of hospital accessibility constraints and healthcare resource limitations, where it became necessary to define priorities and to ration care in the pandemic, actions which posed practical as well as ethical challenges (WHO, 2020).

More specifically, the large number of persons admitted to hospital due to COVID-related illness in 2020–2022 meant that many people needing inpatient surgical or medical care could not be admitted to hospital. In these cases, their needed care was delayed or denied, with some of these persons experiencing worsening health conditions needing greater intervention at a later date. Some avoidable deaths also occurred as a result of full or over-capacity hospitals during the pandemic (French et al., 2021). These avoidable deaths inside and outside of hospitals highlight patient safety issues, particularly those associated with hospital admission practices and policies (Bergman et al., 2021). Moreover, more avoidable deaths are expected to happen in the future as a consequence of reduced screening during the pandemic, with less potential then for early diagnoses of serious progressive illnesses such as cancer (Marzo-Castillejo et al., 2021; Maringe et al., 2020).

The finding of a large difference in hospital death rates across the 21 developed countries also raises a number of ethical issues. A major ethical issue arises from death in developed countries being an anticipated event now in the majority of cases, with deaths that could have been and should have been planned for. Advanced care planning has long been advised, but this requires some level of accurate prognostication and also compassionate open communication. It is not clear how much open and honest communication about an impending death occurs within families now or across people involved in contemporary healthcare system encounters. Yet, research has established that a large or considerable proportion of terminally-ill or dying people in developed countries will express a wish to die at home when asked, with this location choice intended, in part, to avoid hospital-based EOL care (Gomes et al., 2013). The ethical importance of enabling dying people to choose a death at home has become influential in many countries; for instance, personal autonomy underpins Australian national palliative care policies now (Lobb et al., 2019). Hospital deaths may be unavoidable, however, if difficult symptoms or untenable care circumstances arise as death nears, but it is not clear if autonomous place preferences are always respectfully noted and acted upon. Moreover, intra-family conflict and other family-related considerations such as minimal home care services to help family caregivers who are providing home-based care can reduce the possibility of EOL care and death taking place outside of a hospital (Wilson et al., 2020).

Another ethical consideration is that the possibility of dying at home may have been greatly reduced by the pandemic, as deaths in hospital were much more common in 2020–2022 than before, as most countries had observed a reduction in hospital deaths in recent decades (Wilson et al., 2009). Many factors have been identified as responsible for this past reduction in hospital deaths (Wilson et al., 2014, 2018). One of the most important of these factors is the incorporation of palliative and patient rights' considerations in public policies and organizational care philosophies that were designed and intended to improve EOL care processes (Ahmed et al., 2013). In this sense, knowing the factors that currently determine or influence place of death may be helpful (Gomes & Higginson, 2006). For instance, people who have an EOL place preference may be more successfully enabled to die in their preferred place, with this achievement a major indicator of good EOL care (De Roo et al., 2014).

Cultural considerations are another important discussion point as globally-diverse cultural norms help explain some of the hospital death rate differences found across the 21 studied countries. For instance, we now know that major culturally-based differences in the acceptability of advance care planning exist (McDermott & Selman, 2018). Advanced care planning is often impactful on place of death. Moreover, in many developed countries, a sustained low birth rate that followed the baby-boom years means dying people now often only have one or a few (if any) available family members to provide EOL care at home or in any other location outside of hospital (Wilson et al., 2014). Understanding the complexities of EOL care and the support needs of family caregivers in the home environment are needed to ensure high quality home deaths and increase the number of home deaths (Lobb et al., 2019).

Great differences in the availability of free-standing hospices and hospices offering day onsite or home services across the 21 countries is another culture-based factor to consider for its impacts on place of death. In addition, as deaths of nursing home residents are another non-hospital EOL care location possibility, it should be noted that nursing homes are not commonly found in all developed countries, including some of those highlighted in this report. The care of older people and also dying people is extensively culturally-based, such that nursing homes are rarely found in countries where there is an age-old expectation that the family will provide that care. These are the countries that have or could have a high hospital death rate now.

Before concluding, a number of limitations with our scoping review should be highlighted. As outlined above, only four published articles were identified for review. It is possible that place of death is not a major concern among researchers now, but it arguably should be for many ethical and practical reasons. It is also likely that many challenges and barriers to accessing population-based hospital utilization data or death certificate data exist for researchers. Indeed, population-based government data reports were only found for 21 of the most developed countries globally, and with many of these reports requiring the assistance of health or population data employees to locate them. It is possible that place of death information exists for other countries, but if it is not readily accessible then it has little or no value for policy-making or for EOL practice and service developments.

Conclusion

This identification of recent hospital death rates across 21 developed countries revealed a large difference in the use of hospitals for death and dying care purposes. As illustrated, these rates varied from 23.9% to 68.3%. One of the prime questions now, as we recover from a pandemic that strained hospital resources in every country and that increased the number of deaths in hospital and thus also the proportion of total annual deaths in hospital, is if hospitals should continue to be a primary or even a secondary location for dying people to receive EOL care. The initiation and growth world-wide of community-based hospices and other community-based specialist EOL services such as palliative home care and palliative nursing home care have made it possible to consider and plan for high quality dying outside of hospitals. Place of death is not only a human development consideration then, but also a major quality of death measure (Driessen et al., 2021).

These are not new concerns or considerations. Although there may be many reasons for stasis in addressing place of death concerns, a lack of routinely collected and reported information on place of death could be a prime factor (Dasch et al., 2015). This report on place of death in developed countries was hampered by information not being available for many developed countries. Location of death information should be routinely gathered, assessed, and openly reported on to enable the identification and examinations of trends, and ultimately to determine if acute care hospitals are being used as expected. Hospitals are a finite resource, and a very expensive EOL care option, when more deaths outside of hospital could be better supported through home-based palliative care services, nursing home-based palliative care, and more in-home and freestanding inpatient hospice care services. Moreover, it is important to examine place of death to determine if the preferences of dying people and their families are being met in relation to their desired place and type of EOL care. In short, place of death information indicates how well developed countries have recognized that dying people have EOL care needs. This information also indicates how well these countries have planned for those needs, so dying people do not need to rely on hospitals for their EOL care.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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References

Ahmed, S., Manaf, N. H. A., & Islam, R. (2013). Effects of lean six sigma application in healthcare services: A literature review. *Reviews on Environmental Health*, 28(4), 189–194. https://doi.org/10.1515/REVEH-2013-0015

- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. International Journal of Social Research Methodology, 8(1), 19–32.
- Bergman, L., Falk, A. C., Wolf, A., & Larsson, I. M. (2021). Registered nurses' experiences of working in the intensive care unit during the COVID-19 pandemic. *Nursing in Critical Care*, 26(6), 467–475. https://doi.org/10.1111/NICC.12649
- Bernat, J. L. (2005). Medical futility: Definition, determination, and disputes in critical care. *Neurocritical Care*, 2(2), 198–205. https://doi.org/10.1385/NCC:2:2:198
- Cabañero-Martínez, M. J., Nolasco, A., Melchor, I., & Fernandez-Alcantara, M. (2020). Place of death of people with conditions needing palliative care in the different autonomous communities (regions) of Spain. *Anales del Sistema Sanitario de Navarra*, 43(1), 69–80. https://doi.org/10.23938/ASSN.0856
- Carter, H. E., Winch, S., Barnett, A. G., Parker, M., Gallois, C., Willmott, L., White, B. P., Patton, M. A., Burridge, L., Salkield, G., Close, E., Callaway, L., & Graves, N. (2017). Incidence, duration and cost of futile treatment in end-of-life hospital admissions to three Australian public-sector tertiary hospitals: A retrospective multicentre cohort study. *British Medical Journal Open*, 7(10), Article e017661. https://doi.org/10.1136/bmjopen-2017-017661
- Clark, P. A. (2007). Medical futility: Legal and ethical analysis. *American Journal of Medical Ethics*, 9(5), 375–383. https://doi.org/10.1001virtualmentor.2007.9.5.msoc1-0705
- Cohen, J., & Gott, M. (2015). Dying in place in old age: Public health challenges. In L. Van den Block, G. Albers, S. M. Pereira, B. Onweuteaka-Philipsen, R. Pasman, & L. Deliens (Eds.), Palliative care for older people: Public health perspective (pp. 107–119). Oxford University Press.
- Dasch, B., Blum, K., Gude, P., & Bausewein, C. (2015). Place of death: Trends over the course of a decade: A population-based study of death certificates form the years 2001 and 2011. *Deutsches Arzteblatt International*, 112(29–30), 496–504. https://doi.org/10.3238/arztebl. 2015.0496
- De Roo, M. L., Miccinesi, G., Onwuteaka-Philipsen, B. D., Van Den Noortgate, N., Van den Block, L., Bonacchi, A., Donker, G. A., Lozano Alonso, J. E., Moreels, S., Deliens, L., & Francke, A. L., EURO IMPACT. (2014). Actual and preferred place of death of homedwelling patients in four European countries: Making sense of quality indicators. *Plos One*, 9(4), Article e93762. https://doi.org/10.1371/journal.pone.009376
- Driessen, A., Borgstrom, E., & Cohn, S. (2021). Placing death and dying: Making place at the end of life. *Social Science & Medicine*, 291, 113974. https://doi.org/10.1016/j.socscimed.2021. 113974
- Forma, L., Aaltonen, M., Raitanen, J., Anthun, K. S., & Kalseth, J. (2020). Place of death among older people in Finland and Norway. *Scandenavian Journal of Public Health*, 8(8), 817–824. https://doi.org/10.1177/1403494820944073

- French, G., Hulse, M., Nguyen, D., Sobotka, K., Webster, K., Corman, J., Aboagye-Nyame, B., Dion, M., Johnson, M., Zalinger, B., & Ewing, M. (2021). Impact of hospital strain on excess deaths during the COVID-19 pandemic United States, July 2020–July 2021. *Centers for Disease Control and Prevention Weekly Morbidity and Mortality Report*, 70(46), 1613–1616. https://www.cdc.gov/mmwr/volumes/70/wr/mm7046a5.htm
- Gomes, B., Calanzani, N., Gysels, M., Hall, S., & Higginson, I. J. (2013). Heterogeneity and changes in preferences for dying at home: A systematic review. *BMC Palliative Care*, *12*, (1), 15–17. https://doi.org/10.1186/1472-684x-12-7
- Gomes, B., & Higginson, I. J. (2006). Factors influencing death at home in terminally ill patients with cancer: Systematic review. *British Medical Journal (Clinical Research ed.)*, 332(7540), 515–521. https://doi.org/10.1136/bmj.38740.614954.55
- Hall, M. J., Levant, S., & DeFrances, C. J. (2013). Trends in inpatient hospital deaths: National hospital discharge survey, 2000–2010. NCHS Data Brief, 118, 1–8. https://www.cdc.gov/ nchs/products/databriefs/db118.htm
- Higgins, J. P. T., Thomas, J., Chandler, J., Cumpston, M., Li, T., Page, M. J., & Welch, V. A. (2022). Cochrane handbook for systematic reviews of interventions version 6.3 (updated February 2022). Cochrane. www.training.cochrane.org/handbook
- Higginson, I. J., Daveson, B. A., Morrison, R. S., Yi, D., Meier, D., Smith, M., Ryan, K., McQuillan, R., Johnston, B. M., & Normand, C. (2017). Social and clinical determinants of preferences and their achievement at the end of life: Prospective cohort study of older adults. BMC Geriatrics, 17(271), 1–14. https://doi.org/10.1186/s12877-017-0648-4
- Jarman, B., Gault, S., Alves, B., Hider, A., Dolan, S., Cook, A., Hurwitz, B., & Lezzoni, L. I. (1999). Explaining differences in English hospital death rates using routinely collected data. British Medical Journal, 318(7197), 1515–1520. https://doi.org/10.1136/bmj.318.7197. 1515
- Jemal, A., Ward, E., Hao, Y., & Thun, M. (2005). Trends in the leading causes of death in the United States, 1970-2002. *Journal of the American Medical Association*, 294(10), 1255–1259. https://doi.org/10.1001/jama.294.10.1255
- Kelly, M., O'Brien, K. M., Lucey, M., Clough-Gorr, K., & Hannigan, A. (2018). Indicators for early assessment of palliative care in lung cancer patients: A population study using linked health data. BMC Palliative Care, 17(1), 37. https://doi.org/10.1186/s12904-018-0285-5
- Kjellstadli, C., Allore, H., Husebo, B. S., Flo, E., Sandvik, H., & Hunskaar, S. (2020). General practitioners' provision of end-of-life care and associations with dying at home: A registry-based longitudinal study. *Family Practice*, 37(3), 340–347. https://doi.org/10.1093/fampra/cmz059
- Luta, X., Ottino, B., Hall, P., Bowden, J., Wee, B., Droney, J., Riley, J., & Marti, J. (2021). Evidence on the economic value of end-of-life and palliative care interventions: A narrative

- review of reviews. BMC Palliative Care, 20(1), 89. https://doi.org/10.1186/s12904-021-00782-7
- Maringe, C., Spicer, J., Morris, M., Purushotham, A., Nolte, E., Sullivan, R., Rachet, B., & Aggarwal, A. (2020). The impact of the COVID-19 pandemic on cancer deaths due to delays in diagnosis in England, UK: A national, population-based, modelling study. *The lancet Oncology*, 21(8), 1023–1034. https://doi.org/10.1016/S1470-2045(20)30388-0
- Marzo-Castillejo, M., Guiriguet Capdevila, C., & Coma Redon, E. (2021). Retraso diagnóstico del cáncer por la pandemia COVID-19. Posibles consecuencias [The impact of COVID-19 on cancer diagnosis delay: Possible consequences]. *Atencion Primaria*, 53(9), 102142. https://doi.org/10.1016/j.aprim.2021.102142
- McDermott, E., & Selman, L. E. (2018). Cultural factors influencing advance care planning in progressive, incurable disease: A systematic review with narrative synthesis. *Journal of Pain and Symptom Management*, 56(4), 613–636. https://doi.org/10.1016/j.jpainsymman. 2018.07.006
- Munn, Z., Peters, M. D. J., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Medical Research Methodology*, 18(1), 143. https://doi.org/10.1186/s12874-018-0611-x
- Northcott, H. C., & Wilson, D. M. (2021). *Dying and death in Canada* (4th edition). University of Toronto Press.
- Pati, D., & Lorusso, L. N. (2018). How to write a systematic review of the literature. *Health Environments Research and Design Journal*, 11(1), 15–30. https://doi.org/10.1177/1937586717747384
- Pham, M. T., Rajic, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A., & McEwan, S. A. (2014). A scoping review of scoping reviews: Advancing the approach and enhancing the consistency. *Research Synthesis Methods*, 5(4), 371–385. https://doi.org/10.1002/jrsm.1123
- Reich, O., Signorell, A., & Busato, A. (2013). Place of death and health care utilization for people in the last 6 months of life in Switzerland: A retrospective analysis using administrative data. BMC Health Services Research, 13(1), 116. https://doi.org/10.1186/1472-6963-13-116
- Roser, M., Ortiz-Ospina, E., & Ritchie, H. (2019). *Life expectancy*. https://ourworldindata.org/life-expectancy
- Sibbald, R., Downar, J., & Hawryluck, L. (2007). Perceptions of "futile care" among caregivers in intensive care units. *Canadian Medical Association Journal*, 177(10), 1201–1208. https://doi.org/10.1503/cmaj.070144
- United Nations Development Programme. (2020). Human development report. Table 1. Human development index and its components. https://hdr.undp.org/sites/default/files/hdr2020.pdf
- Wall, B. M. (n.d.). *History of hospitals*. https://www.nursing.upenn.edu/nhhc/nurses-institutions-caring/history-of-hospitals/
- Wilson, D. M., Anafi, F., Roh, S., & Errasti-Ibarrondo, B. (2020). A scoping research literature review to identify contemporary evidence on the incidence, causes, and impacts of end-oflife intra-family conflict. *Health Communication*, 36(13), 1616–1622. https://doi.org/10. 1080/10410236.2020.1775448

- Wilson, D. M., & Chan, S. (2022). Nursing the dying in Canada: A COVID wake up call for all of us. *Canadian Nurse* (online).
- Wilson, D. M., Hewitt, J. A., Thomas, R. E., & Woytowich, B. (2014). Why did an out-of-hospital shift of death and dying occur in Canada after 1994? *International Journal of Palliative Care*, 2014(2014), 1–11. https://search.emarefa.net/detail/BIM-450393
- Wilson, D. M., Northcott, H. C., Truman, C. D., Smith, S. L., Anderson, M. C., Fainsinger, R. L., & Stingl, M. J. (2001). Location of death in Canada: A comparison of 20th-century hospital and nonhospital locations of death and corresponding population trends. *Evaluation & the Health Professions*, 24(4), 385–403. https://doi.org/10.1177/01632780122034975
- Wilson, D. M., Shen, Y., & Birch, S. (2017). New evidence on end-of-life hospital utilization for enhanced health policy and services planning. *Journal of Palliative Medicine*, 20(7), 752–758. https://doi.org/10.1089/jpm.2016.0490
- Wilson, D. M., Shen, Y., Errasti-Ibarrondo, B., & Birch, S. (2018). The location of death and dying across Canada: A study illustrating the socio-political context of death and dying. *Societies*, 8(4), 112. https://doi.org/10.3390/soc8040112
- Wilson, D. M., Truman, C., Thomas, R., Fainsinger, R., Kovacs-Burns, K., & Justice, C. (2009).
 The rapidly changing location of death in Canada, 1994-2004. Social Science & Medicine, 68(10), 1752–1758. https://doi.org/10.1016/j.socscimed.2009.03.006
- World Health Organization. (2016). *Planning and implementing palliative care services*. https://apps.who.int/iris/bitstream/handle/10665/250584/9789241565417-eng.pdf
- World Health Organization. (2020, April 20). Coronavirus disease (COVID-19): Ethics, resource allocation and priority setting. World Health Organization. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/coronavirus-disease-covid-19-ethics-resource-allocation-and-priority-setting
- World Health Organization. (2022). WHO coronavirus (COVID-19) dashboard. https://covid10.who.int/
- Xiao, Y., & Watson, M. (2019). Guidance on conducting a systematic literature review. *Journal of Planning Education and Research*, 39(1), 93–116. https://doi.org/10.1177/0739456X17723971

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