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COST ESTIMATE FOR BILL C-7 "MEDICAL ASSISTANCE IN DYING"

OFFICE OF THE PARLIAMENTARY BUDGET OFFICER
BUREAU DU DIRECTEUR PARLEMENTAIRE DU BUDGET

The Parliamentary Budget Officer (PBO) supports Parliament by providing economic and financial analysis for the purposes of raising the quality of parliamentary debate and promoting greater budget transparency and accountability.

This report responds to a request from a Senator to estimate the financial cost of Bill C-7, which broadens eligibility for medical assistance in dying.

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Executive Summary

Bill C-7 aims to expand access to Medical Assistance in Dying (MAID) for patients whose death is not expected in the relative near term. At the request of a Senator, this report presents an independent cost estimate of Bill C-7 for 2021 by providing a breakdown between the baseline costs under the current legislation (Bill C-14) and the incremental costs from expanding eligibility in the proposed legislation (Bill C-7).

Note that while the criminal code is under the jurisdiction of Parliament, health care delivery is a provincial responsibility. Therefore, most of the financial impacts of providing MAID are borne by provincial governments.

Summary table 1 presents the net financial impact of providing MAID in 2021, under the current legislation as set out in bill C-14, which is used as a baseline for the cost estimate. The predicted gross reduction in health care costs amounts to $109.2 million while the cost of administering MAID is estimated at $22.3 million. Thus, the difference between the two represents a net cost reduction for provincial governments of $86.9 million.

Summary table 1 Net financial impact of providing MAID under the current legislation (Bill C-14) in 2021

Number of MAID deaths	6,465
Gross reduction in health care costs	**($ millions)**
Mean end-of-life costs	182.1
Adjustment for palliative care	-72.8
Total gross reduction in costs	**109.2**
Cost of administering MAID	
Physician billing	8.9
Drugs	8.6
Oversight bodies	4.9
Total cost of administering MAID	**22.3**
Net reduction in health care costs under Bill C-14	**86.9**

Summary table 2 presents the incremental financial impact of expanding MAID as proposed in Bill C-7. The gross reduction in health care costs is estimated at $66.5 million. As can be seen, even though the number of incremental MAID deaths is 82% smaller than the number of MAID deaths under the current legislation (Bill C-14), the gross reduction in costs is only

24% smaller since newly eligible patients under Bill C-7 are expected to initiate MAID earlier. The cost of administering MAID is estimated at $4.4 million, and thus, the net reduction in health care costs for provincial governments will amount to $62.0 million.

Summary table 2

Incremental net financial impact of expanding MAID eligibility as proposed in Bill C-7 in 2021

Incremental MAID deaths	1,164
Incremental financial impact	**($ millions)**
Gross reduction in health care costs	66.5
Minus: Cost of administering MAID	-4.4
Subtotal – Incremental net reduction in health care costs under Bill C-7	**62.0**
Total net reduction in health care costs (C-14 baseline + C-7 incremental)	**149.0**
Total net reduction in health care costs as a share of health care budgets	**0.08%**

Summary table 2 also shows the total net reduction in costs from current legislation plus the incremental savings from bill C-7 will add up to $149.0 million. While this amount may appear significant, it only represents 0.08% of total provincial health care budgets for 2021.[1]

Expanding access to MAID will result in a net reduction in health care costs for the provincial governments. However, this reduction represents a negligible portion of the health care budgets of provinces. To better assess the financial impact of providing MAID, additional data on the patients requesting MAID is needed. For example, the expected time remaining before natural death would occur is only compiled in Quebec but is an important factor in determining the extent MAID may impact end-of-life care.

1. Introduction

In June 2016, Bill C-14, *An Act to amend the Criminal Code and to make related amendments to other Acts (medical assistance in dying)* received Royal Assent. This bill lifted the prohibition on providing medical assistance in dying (MAID) under certain strict conditions and was presented by the government in response to the *Carter* decision.[2]

In September 2019, in Truchon and Gladu v. Canada (Attorney General) and Quebec (Attorney General), the Superior Court of Quebec found in favour of the plaintiffs that the requirements in the federal legislation that a person's natural death has become "reasonably foreseeable" and that a person be at the "end of life" in the Quebec legislation violated the Canadian Charter of Rights and Freedoms.[3] Both levels of governments decided not to challenge this decision and in response the federal government introduced, Bill C-7, *An Act to amend the Criminal Code (medical assistance in dying)*, in February 2020.[4]

Bill C-7 aims to expand access to MAID for patients whose death is not expected in the relative near term. However, the bill also states that mental illness as the sole underlying condition is not sufficient to access MAID. Finally, the bill also introduces the possibility of waiving final consent just before receiving MAID for patients where natural death is reasonably foreseeable and where there is a risk that they will lose their ability to consent.[5]

This report presents an independent cost estimate of Bill C-7 for 2021 by providing a breakdown between the baseline costs under the current legislation (Bill C-14) and the incremental costs from expanding eligibility in the proposed legislation (Bill C-7). While the criminal code is under the jurisdiction of Parliament, because health care delivery is a provincial responsibility, most of the financial impacts of providing MAID are borne by provincial governments.

Many studies have shown that health care costs in the last year of life (and especially in the last month of life) are disproportionately high, representing between 10% and 20% of total health care costs despite these patients representing about 1% of the population.[6] Nevertheless, this report should in no way be interpreted as suggesting that MAID be used to reduce health care costs.

2. Methodology

Baseline costs under Bill C-14

To estimate the baseline costs of the current legislation (Bill C-14), we used the same methodology as in Trachtenberg and Manns (2017).[7] After the Carter decision was rendered, these authors estimated the potential costs and savings of providing MAID in Canada, based on data from other countries (mostly Belgium and the Netherlands) where MAID was already legal.

Gross reduction in health care costs

End-of-life costs

Trachtenberg and Manns presented four scenarios where MAID deaths represented 1%, 2%, 3% and 4% of all deaths. They assumed 55% of patients receiving MAID would be male, 30% would be between 18 and 59 years old, 50% between 60 and 79, 20% would be 80 years old or more and 80% would have cancer. Lastly, 40% would have their life shortened by a week and 60% by a month.

Since their study was published, Canadian data has been collected on patients requesting MAID.[8] Using this data, we updated the assumptions used by Trachtenberg and Manns to forecast the expected cost in 2021. More specifically, we used the following assumptions regarding patients receiving MAID in 2021:

- Medically assisted deaths will represent 2.2% of all deaths;
- 51% of patients will be male;
- 13% will be between 18 and 59 years old, 50% between 60 and 79, and 37% 80 years old and over;
- 66% will have cancer as the main underlying condition;
- 14% will see their life shortened by 2 weeks, 25% by one month, 45% by three months, 13% by six months and 3% by a year.[9]

Each of these combinations of sex, age, underlying condition and remaining life expectancy gives us a total number of 60 subgroups of patients. We obtained the same data on mean end-of-life costs that Trachtenberg and Manns used in their study, which came from a previously published study by Tanuseputro et al. (2015).[10] These costs were all expressed in 2013 dollars and therefore we grew them to 2021 dollars using the health care component of the consumer price index (CPI).[11]

The mean end-of-life cost of each of these subgroups was then multiplied by the corresponding number of MAID recipients in each group to obtain the total gross reduction in health care costs of allowing MAID. The number of recipients in each group was obtained by first predicting the total number of MAID deaths as 2.2% of the projected deaths in 2021 under the medium population growth scenario from Statistics Canada. This total number of MAID deaths (6,465) was then multiplied by the percentage of patients corresponding to each subgroup based on the assumptions presented above. Table A-1 in the appendix presents the breakdown of patients in each subgroup and their respective mean end-of-life costs.

Palliative care

As Trachtenberg and Manns mention in their paper, the end-of-life costs used to estimate gross reduction in health care costs are the mean costs for decedents in each subgroup, which represent costs of a variety of scenarios and patient wishes. It is reasonable to believe that patients requesting MAID might choose a less aggressive care approach, such as using palliative care. Indeed, Quebec statistics show that 80% of patients requesting MAID were already receiving palliative care at the time of the request and Canadian statistics for 2019 show that 82% of patients who were administered MAID had received palliative care in the preceding weeks.

Trachtenberg and Manns cite one study that reviewed the literature and found that palliative care could reduce the end-of-life health care costs by 40% to 70% compared with standard care.[12] Since the data on mean end-of-life costs also include patients that have chosen palliative care, we factored in an adjustment to decrease the estimated gross reduction in costs by 50% (closer to the lower bound of the studies) for 80% of the patients predicted to use MAID in 2021.

Cost of administering MAID

The cost of providing MAID consists of three separate elements. The first is the time billed by physicians to do the first and second assessments (which must be by two distinct physicians), to administer MAID and to fill-out the paperwork (required forms and documents, death certificate, etc.). The second is the cost of drugs used to cause death. The last component is the cost of the oversight as some provinces, such as Quebec and Alberta, have created oversight bodies that make sure MAID is provided according to the rules. Table 2-1 provides the breakdown of these costs for a completed case and an assessed (but not completed) case.

Physicians billing

To estimate physicians billing, we found MAID-specific billing codes physicians can use in the provinces of British-Columbia, Alberta and Quebec and used the average of the corresponding amount.[13] Some provinces cap the amount of time a physician can bill under some of these codes. We

assumed physicians would bill the maximum amount allowable in these situations.

Thus, we assumed each completed case of MAID would consist of 135 minutes for the initial assessment, 105 minutes for the second assessment by another physician, the cost of administering MAID (fixed amount in BC) and 120 minutes of care after death (completing required forms and the death certificate).

The Canadian data suggest that for every two patients receiving MAID, one patient requested MAID and did not receive it (the patient either withdrew the request, was found not eligible, or died before MAID could be administered). Thus, we estimated the cost of an uncompleted case as consisting of 135 minutes of physician billing for the initial assessment and 105 minutes for the second assessment.

Finally, we multiplied the cost of physician billing for a completed case by the number of projected MAID deaths and the cost for an uncompleted case by half the number of projected deaths to obtain the total cost of physician billing.

Cost of drugs

The cost of the drug regimen administered to MAID patients was obtained for the province of Ontario.[14] There is a lower cost and a higher cost package. We used the average price between the two packages and included a back-up kit in each case. We multiplied this cost by the number of projected MAID deaths to obtain the total cost of drugs.

Table 2-1 Cost of administering MAID

Cost of a completed case	**($)**
Primary physician assessment	412.80
Second physician assessment	321.07
Physician administering MAID	269.45
Cost of drugs	662.00
Backup kit	662.00
Total cost - completed case	**2,327.32**
Cost of an assessed case	
Primary physician assessment	412.80
Second physician assessment	321.07
Total cost - assessed case	**733.87**

Sources: Physicians billings are from British Columbia, Alberta and Quebec payment schedules; Cost of drugs are from Ontario Ministry of Health.

Cost of oversight bodies

Lastly, in terms of oversight bodies, Quebec's *Commission sur les soins de fin de vie* produces annual reports which include its financial statements. We computed the average cost per medically assisted death by dividing the total expenditures of the commission from the 2017, 2018 and 2019 reports by the number of MAID deaths in Quebec during the same time period. We then multiplied this average cost ($758) by the number of projected MAID deaths for 2021.

The cost of oversight bodies is possibly slightly overestimated, since there could be economies of scale: an increase in the number of patients receiving MAID might not require an increase in the size of the oversight bodies. Furthermore, Quebec's commission also produces reports on the state of palliative care. Thus, our average cost per medically assisted death includes some costs that are not relative to MAID. For these reasons, we have not inflated the average cost to 2021 dollars.

Net reduction in health care costs

By subtracting the cost of administering MAID from the gross reduction in costs we arrived at the net financial impact of providing MAID under the current legislation (Bill C-14).

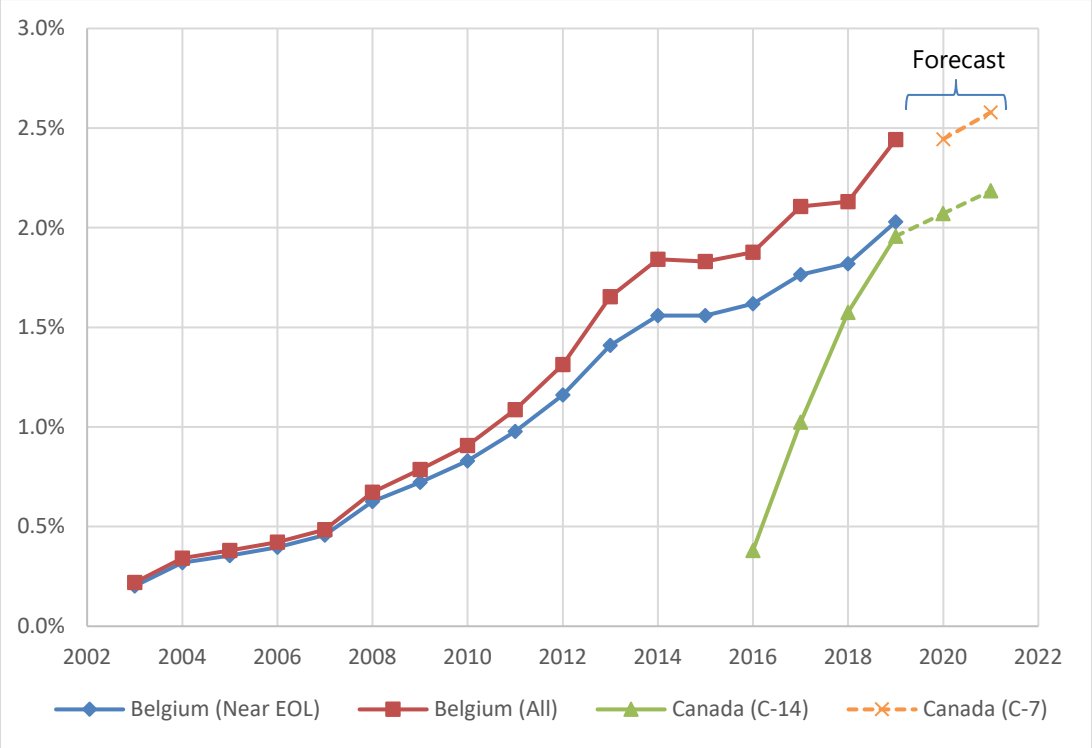
Incremental financial impact of Bill C-7

As mentioned in the introduction, Bill C-7 aims to expand eligibility of MAID to patients whose death is not expected in the relative near term. We turned to other jurisdictions where medically assisted dying is already legal for patients not near the end of their life to predict the incremental number of MAID requests which may result from C-7.

In Europe, both Belgium and the Netherlands have allowed, since the early 2000s[15], euthanasia and assisted suicide[16] for patients not nearing the end-of-life. The latest statistics from these countries show that in 2019 euthanasia and assisted suicide represented 2.4% of all deaths in Belgium and 4.2% of all deaths in the Netherlands.[17]

Belgium provides a breakdown between MAID deaths from patients near the end-of-life (EOL) vs not near the end-of-life. As can be seen on figure 2-1, both categories have steadily increased since 2003. Since 2013, the number of MAID recipients not near the end-of-life (the difference between the two lines) has somewhat stabilized and represent each year between 17% and 20% of the number of MAID recipients near the end-of-life (the average is 18% over that period). Therefore, we assumed MAID deaths from patients with a non-foreseeable death in Canada in 2021 would be equal to 18% of our baseline predicted number of MAID deaths. This gives us an incremental number of MAID deaths of 1,164, or 0.4% of all projected deaths in 2021.

Figure 2-1 MAID deaths in Belgium and Canada as a percentage of all deaths



Sources: Belgium's *Commission fédérale de Contrôle et d'Évaluation de l'Euthanasie*, StatBEL, Health Canada and PBO's calculations

Gross reduction in end-of-life costs

It is difficult to predict the demographics of the patients who may request MAID under Bill C-7. It is even more difficult to determine the estimated remaining life expectancy for these patients. For the purposes of the cost estimate, we assumed all these patients would see their life shortened by a full year. To calculate the end-of-life cost of these patients, we took the average mean end-of-life cost of all non-cancer patients (men and women across all age groups). This average cost for the last year of life was multiplied by the number of predicted incremental MAID deaths to obtain the gross reduction in health care costs. The gross reduction in costs is likely underestimated, but it is not possible to know the magnitude of the underestimation.

Cost of administering MAID

The cost of administering MAID is calculated in the same way as under the baseline for C-14. The only exception is the number of patients assessed but not receiving MAID is slightly higher. Indeed, data from Belgium and the Netherland shows that one out of two MAID requests is not completed. Thus,

for each completed case of MAID, we also included the costs of one assessed case.

Caveats

Out-of-pocket costs

Our estimates have only taken into consideration the health care costs from the perspective of provincial governments. Therefore, out-of-pocket costs paid by patients or their relatives have not been considered. For example, palliative care is usually free of charge when provided in a hospital or a government funded hospice, but there could be costs billed to patients in nursing homes or wanting to receive palliative care at home.

Covid-19 pandemic

These results do not take into consideration the potential effects of the Covid-19 pandemic. Indeed, most of the Covid-19 deaths are among patients with underlying medical conditions. Therefore, it is possible that patients who would have requested MAID in 2021 might have already died because of Covid-19. Thus, the actual number of patients receiving MAID in 2021 could be lower than anticipated.

However, a recent study from the United Kingdom predicts that the number of deaths from cancer will increase because of the pandemic.[18] Their data shows there has been a reduction of 45-66% in admissions for chemotherapy and a 70-89% fall in urgent referrals for early cancer diagnosis. These results might come from a reduction in resources (which are redirected to care for infected patients) or patients deciding not to seek care due to perceived risk of Covid-19 infection. In either case, it is likely to impact on cancer patient survival. Some patients that could have otherwise survived cancer might find themselves in unbearable pain near the end of their life and request MAID. Thus, there could be an increase in the number of patients requesting MAID in 2021.

Furthermore, our predicted number of MAID requests is calculated as a percentage of projected deaths in 2021 by Statistics Canada. These projections of deaths have been made before the pandemic and it is not clear for now whether, or how, the pandemic will materially affect the number of deaths in 2021. To summarize, we do not know yet if the pandemic will have a positive or negative impact on the predicted number of patients receiving MAID in 2021.

Lastly, the estimated net reduction in health care costs as a share of provinces' health care budgets was based on data presented in provincial budgets tabled before the pandemic. It is possible that provinces will increase their health care budgets in response to the pandemic.

3. Results

Table 3-1 presents the results for 2021 under the current legislation as set out in Bill C-14, which is used as a baseline for the cost estimate. As illustrated in the table, the projected gross reduction in health care costs amounts to $109.2 million while the cost of administering MAID is estimated at $22.3 million. Thus, the difference between the two represents a net reduction in cost of $86.9 million. As was mentioned previously, health care is a provincial responsibility and therefore the financial impact will be at the provincial level.

Table 3-1 Net financial impact of providing MAID under the current legislation (Bill C-14) in 2021

Number of MAID deaths	6,465
Gross reduction in health care costs	**($ millions)**
Mean end-of-life costs	182.1
Adjustment for palliative care	-72.8
Total gross reduction in costs	**109.2**
Cost of administering MAID	
Physician billing	8.9
Drugs	8.6
Oversight bodies	4.2
Total cost of administering MAID	**22.3**
Net reduction in health care cost under Bill C-14	**86.9**

Source: PBO's calculations

Table 3-2 presents the incremental financial impact of expanding MAID as proposed in Bill C-7. The gross reduction in cost is estimated at $66.5 million. As can be seen, even though the number of incremental MAID deaths is 82% smaller than the number of MAID deaths under the current legislation (Bill C-14), the gross reduction in costs is only 24% lower since newly-eligible patients under Bill C-7 are expected to initiate MAID sooner. The cost of administering MAID is estimated at $4.4 million and thus, the net reduction in health care costs will amount to $62.0 million.

Table 3-2 **Incremental net financial impact of expanding MAID eligibility as proposed in Bill C-7 in 2021**

Incremental MAID deaths	1,164
Incremental financial impact	**($ millions)**
Gross reduction in health care costs	66.5
Minus: Cost of administering MAID	-4.4
Subtotal – Incremental net reduction in costs under Bill C-7	**62.0**
Total net reduction in health care costs (C-14 baseline + C-7 incremental)	**149.0**
Total net reduction in costs as a share of health care budgets	**0.08%**

Source: PBO's calculations

Table 3-2 also shows the total net reduction in costs under the baseline (current legislation) plus the incremental savings from Bill C-7 will add up to $149.0 million. While this amount may appear significant, it only represents 0.08% of total provincial health care budgets for 2021.

To conclude, expanding access to MAID will result in a net reduction in health care costs for the provincial governments. However, this reduction represents a negligible portion of the health care budgets of provinces. To better assess the financial impact of providing MAID, additional data on the patients requesting MAID is needed. For example, the expected time remaining before natural death would occur is only compiled in Quebec but is an important factor in determining the extent MAID may impact of end-of-life care.

Lastly, as mentioned in Quebec's *Commission sur les soins de fin de vie* last report, data is only collected on the number of patients receiving palliative care at the time of the MAID request. However, there is no information on the quality of palliative care received and on whether it meets the patient's needs. On this matter, Dr Tanuseputro wrote in 2017: "We should strive to save on suffering and to invest more in its reduction, which may in turn reduce requests for medical aid in dying."[19]

Appendix A: Mean end-of-life costs

Table A-1 Predicted number of MAID and associated health care spending in the expected remaining life

	Expected death within 2 weeks				Expected death within 1 month			
	Men		Women		Men		Women	
Age (years)	**No.**	**Mean Cost ($)**	**No.**	**Mean Cost ($)**	**No.**	**Mean Cost ($)**	**No.**	**Mean Cost ($)**
With Cancer								
18–59	38	13,465	37	13,561	70	21,993	67	21,064
60-79	149	12,325	144	11,889	272	19,830	263	19,404
≥ 80	110	10,258	106	7,075	200	16,359	193	14,586
Without Cancer								
18–59	20	11,382	19	12,659	36	16,169	35	19,905
60-79	77	12,058	74	11,718	141	18,149	136	18,127
≥ 80	57	9,116	55	8,994	104	14,172	100	11,298

	Expected death within 3 months				Expected death within 6 months			
	Men		Women		Men		Women	
Age (years)	**No.**	**Mean Cost ($)**	**No.**	**Mean Cost ($)**	**No.**	**Mean Cost ($)**	**No.**	**Mean Cost ($)**
With Cancer								
18–59	125	40,616	121	40,572	36	57,301	35	57,596
60-79	489	35,735	472	35,964	140	49,502	136	49,910
≥ 80	360	29,660	348	27,317	103	41,760	100	39,038
Without Cancer								
18–59	65	24,761	63	33,139	19	32,845	18	45,104
60-79	254	30,717	245	31,622	73	42,189	70	44,993
≥ 80	187	26,045	181	22,182	54	38,434	52	34,570

	Expected death within 12 months			
	Men		Women	
Age (years)	**No.**	**Mean Cost ($)**	**No.**	**Mean Cost ($)**
With Cancer				
18–59	9	78,469	9	79,763
60-79	36	67,131	35	67,792
≥ 80	27	58,793	26	55,835
Without Cancer				
18–59	5	44,829	5	62,861
60-79	19	59,226	18	64,805
≥ 80	14	57,627	13	55,100

Notes

[1] The total health care spending by the provinces in 2021 is estimated at $187,144 million. It was obtained by examining the latest budget documentation or economic update released by each province before the beginning of the Covid-19 pandemic. Some provinces did not publish a specific breakdown for health care spending for 2021 but did provide total spending. In these cases, we used the average share of health care spending on total spending of the last five years to estimate the amount of health care spending in 2021.

[2] *Carter v. Canada (Attorney General)*, 2015 SCC 5. For more information on *Carter v. Canada*, see Martha Butler and Marlisa Tiedemann, Carter v. Canada: *The Supreme Court of Canada's Decision on Assisted Dying*, Publication no. 2015-47-E, Parliamentary Information and Research Service, Library of Parliament, Ottawa, 29 December 2015.

[3] Truchon c. Procureur Général du Canada, 2019, QCCS 3792.

[4] On August 18, 2020, the Prime Minister asked for a prorogation of Parliament until September 23, 2020. Consequently, since Bill C-7 had not yet received Royal Assent, it "died" on the *Order Paper*. The bill was reintroduced on October 5, 2020 and happened to be numbered C-7 again. Note that in June 2020, Quebec Superior Court granted the Government another extension until December 18, 2020 to conform to the Truchon ruling.

[5] For the latest version of Bill C-7, see LEGISinfo. For a detailed explanation of the bill see Julia Nicol and Marlisa Tiedemann, *Legislative Summary of Bill C-7: An Act to Amend the Criminal Code (medical assistance in dying)*. Publication no. 43-1-C7-E, Parliamentary Information and Research Service, Library of Parliament, Ottawa, 27 March 2020.

[6] See: Menec V, Lix L, Steinbach C, et al. *Patterns of health care use and cost at the end of life.* Winnipeg: Manitoba Centre for Health Policy; 2004.

Tanuseputro P, Wodchis WP, Fowler R, et al. The health care cost of dying: a population-based retrospective cohort study of the last year of life in Ontario, Canada. *PLoS One* 2015; 10:e0121759.

Pham B, Krahn M. *End-of-life care interventions: an economic analysis*. Ontario Health Technology Assessment Serie. 2014 December;14(18):1–70.

[7] Aaron Trachtenberg and Braden Manns. Cost analysis of medical assistance in dying in Canada. *CMAJ* 2017 January 23; 189:E101-5. doi: 10.1503/cmaj.160650. Trachtenberg and Manns also built their model based on previous work from Ezekiel J. Emanuel and Margaret P. Battin What are the potential cost savings from legalizing physician-assisted suicide. *New England Journal of Medicine*. 1998; 339:167-72.

[8] See Health Canada's Fourth Interim Report on Medical Assistance in Dying in Canada as well as Health Canada's First Annual Report on Medical Assistance in Dying in Canada 2019 and the annual reports from the *Commission sur les soins de fin de vie* (for Quebec statistics – available in French only).

[9] These assumptions are all based on the Canadian data collected on patients receiving MAID since it became legal, except for the estimated life remaining where only Quebec reported this statistic.

[10] See the second paper cited in endnote 6.

[11] Statistics Canada Table: 18-10-0005-01. CPI is only available up to 2019 in this table. Thus, we used the average annual growth in health care CPI between 2013 and 2019 to grow the costs from 2019 to 2021.

[12] The Way Forward Integration Initiative. *Cost-effectiveness of palliative care: a review of the literature*. Ottawa: Canadian Hospice Palliative Care Association. See also Smith et al. (2014). Evidence on the cost and cost-effectiveness of palliative care: A literature review. *Palliative Care*, 28-2, pp. 130-150.

[13] The billing rates are for 2019. Physicians' billing rates are periodically renegotiated in each province. Therefore, these rates might be increased in some provinces by 2021.

[14] The cost of drugs is also for 2019. The cost of the drugs could change by 2021. However, the prescription drug component of the consumer price index has been declining from 2017 to 2019. Thus, it is not clear if the cost of drugs will increase or decrease by 2021.

[15] While the Netherlands passed a bill legalizing euthanasia in 2001, doctors were already conducting euthanasia since the early 1990s and were not prosecuted if they followed certain guidelines. For more information, see Julia Nicol, *Medical Assistance in Dying: The Law in Selected Jurisdictions Outside Canada*, Publication no. 2015-116-E, Parliamentary Information and Research Service, Library of Parliament, Ottawa, 23 October 2015 (Revised 29 November 2019).

[16] Euthanasia is used to describe a medically assisted death where the physician performs the act, while assisted suicide refers to the patient self-administering the life-ending drugs obtained through a physician.

[17] The data on medical assistance in dying for Belgium come from Commission fédérale de Contrôle et d'Évaluation de l'Euthanasie - Chiffres de l'année 2019 while the data on total deaths come from StatBEL. The data on medical assistance in dying as a percentage of all deaths for the Netherlands comes from the Regional Euthanasia Review Committees' 2019 Annual Report.

[18] Lai et al. *Estimating excess mortality in people with cancer and multimorbidity in the COVID-19 emergency*. Working paper. April 2020.

[19] Peter Tanuseputro. Medical aid in dying: What matters most? Commentary. *CMAJ* 2017 January 23;189:E99-100. doi: 10.1503/cmaj.161316