Physicians' Attitudes, Concerns, and Procedural Understanding of Medical Aid-in-Dying in Vermont

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The general purpose of the current study was to collect data on physicians’ attitudes towards Act 39, the medical aid-in-dying act that was legislatively approved in 2013. Given the recent nature of the implementation of Act 39, this is the first such study to be conducted in the State of Vermont. The survey was quantitative in nature and addressed three distinct aspects of legalized prescribing of life-ending medication, these being physicians’: (I) attitudes regarding ethics and legality of Act 39, (II) understandings of the policies and procedural requirements under the law, including their belief in legal immunity from penalty, and (III) level of support for certain provisions under the law, such as patient-terminality requirements, verification of terminal diagnosis by a second physician, and whether a psychiatric evaluation ought to be required prior to prescription. In general, the physicians surveyed support medical aid-in-dying, agree with the terminality and second-opinion provisions of Act 39, but are divided about whether a mental health professional should be involved in capacity evaluations. Furthermore, religious identification and ethical orientation, but not percent-terminal patient workload, were found to be significant covariates in statistical analyses of physicians’ support for Act 39. The respondents agreed that medical aid-in-dying is a valuable treatment option in the realm of palliative care, but expressed that other palliative care treatments should be explored prior to a patient’s pursuit of medication to hasten death. Physicians’ concerns about legal liability, and their lack of accurate and confident knowledge of the policies and procedures of Act 39, may limit the availability of medical aid-in-dying to interested terminally-ill patients.

L’objectif général de la présente étude était de recueillir des données sur l’attitude des médecins à l’égard de la loi 39, la loi sur l’aide médicale à la mort qui a été approuvée par la loi en 2013. Étant donné la nature récente de la mise en œuvre de la Loi 39, il s’agit de la première étude de ce genre à être menée dans l’État du Vermont. L’enquête était de nature quantitative et portait sur trois aspects distincts de la prescription légalisée de médicaments en fin de vie, à savoir les médecins : (I) les attitudes à l’égard de l’éthique et de la légalité de la Loi 39, (II) la compréhension des politiques et des exigences procédurales en vertu de la loi, y compris leur croyance en l’immunité légale contre la pénalité, et (III) le niveau de soutien de certaines dispositions de la loi, comme les exigences relatives à la terminaison du patient, la vérification du diagnostic terminal par un deuxième médecin et la nécessité de demander une évaluation psychiatrique avant la prescription. En général, les médecins interrogés sont en faveur de l’aide médicale à la mort, sont d’accord avec les dispositions de la Loi 39 sur la terminalité et le deuxième avis, mais sont divisés quant à savoir si un professionnel de la santé mentale devrait être impliqué dans les évaluations de capacité. De plus, l’identification religieuse et l’orientation éthique, mais non le pourcentage de la charge de travail du patient en fin de traitement, se sont révélées être des covariables importantes dans les analyses statistiques du soutien des médecins à la Loi 39. Les répondants ont convenu que l’aide médicale à la mort est une option de traitement valable dans le domaine des soins palliatifs, mais ils ont indiqué que d’autres traitements de soins palliatifs devraient être explorés avant que le patient ne prenne des médicaments pour accélérer sa mort. Les préoccupations des médecins au sujet de la responsabilité légale et leur manque de connaissance précise et confiante des politiques et des procédures de la Loi 39 peuvent limiter la disponibilité de l’aide médicale à la mort pour les patients en phase terminale intéressés.

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Introduction

Physician-assisted aid-in-dying, or more generally, medical aid-in-dying (MAiD), is arguably one of the most challenging ethical issues within the realm of end-of-life care, and for many reasons, this issue lies on the forefront of legislative (e.g. Vermont’s Patient Choice and Control at End-of-Life Act) and judicial (e.g. Carter v. Canada 2015) analyses. Implementation of MAiD is complicated by ethical, socioeconomic, demographic, psychological, legal, and cultural factors. In the United States, MAiD refers to the practice in which lethal drugs are prescribed by a licensed medical professional for the explicit purposes of hastening

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death, where the patient must self-administer the drug to end their life; this self-administration requirement distinguishes MAiD from euthanasia. In Vermont and some other jurisdictions, regulatory conditions for MAiD include that the patient requesting it is above the age of 18 with less than six months to live, and has the capacity to make informed decisions; however, the policies surrounding MAiD are variable such that satisfying all of the aforementioned requirements is not necessary in all locations where the practice is legalized. For instance, for the medication to be prescribed in Canada, death needs to be “reasonably foreseeable,” but there is no threshold criteria of less than six months.

I. General findings regarding physicians' expressed support

In those countries surveyed about MAiD, research findings unanimously suggest that the general public is more supportive than physicians, even when there is high physician support for the practice. This discrepancy between physician and public support is ubiquitous, and exists regardless of the local legal status of the practice. Among the many factors that may limit the availability of the medication in MAiD-permitted countries, physicians’ attitudes regarding its ethics may be critically important. In these countries, physicians generally support the right of patients to end their own life using medication; for instance, surveys of physicians in both Switzerland and Belgium show ethical agreements with the practice of greater than 75%.

Among those nations with a large degree of physician support, there exists a significant divide regarding whether MAiD should be offered to patients who suffer from refractory but non-terminal illness. In the Netherlands, 71% of physicians surveyed believed that MAiD should not be restricted to only those who have a limited life expectancy, and 28-36% believe it is acceptable for patients suffering from a mental illness such as depression.

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5. See, Criminal Code, RSC 1985, c C-46, s 227 and s 241-241.31 as amended by SC 2016, c 3.
as chronic depression.8 In a Swiss survey, 60% of physicians felt MAiD would be acceptable for patients who are suffering from serious muscular or neurological disease, or have intense pain because of chronic illness, despite the non-terminality of their illness. 30% agreed MAiD would be acceptable in cases of dementia or severe mental illness.9

The most recent national change in MAiD legalization has occurred in Canada, where Parliament passed laws making MAiD legal in June of 2016.10 This legislation extends the constitutional right of autonomy to patients by ruling that the “criminal code has no force to prohibit [MAiD] for a competent adult person who clearly consents to it and has a grievous and irremediable medical condition...that causes enduring suffering.”11 One of the first studies to research the attitudes of treatment-providing professionals towards MAiD legalization in Canada was Karesa and McBride (2016).12 Through an electronic survey of registered psychologists, the researchers found that 92.9% (n = 80) support the practice. In addition, when responding to a hypothetical vignette about a person requesting assistance in dying due to a terminal illness, 52.5% of surveyed psychologists said they would support this person’s request for MAiD (n = 44). However, if the vignettes included descriptions of younger patients (i.e. 30 years of age) or indications that the patient’s condition could improve, support was significantly lower. Additionally, the surveyed psychologists indicated that they felt unprepared to assess competency at the end of life and 45% stated that they felt they did not have enough training to participate in MAiD.13

MAiD is now currently legal in six US states, but prior to legalization, early surveys in the US revealed mixed physician support for the prospect of legalization. For instance, in Schmidt et al (1996), 69% of physicians in Oregon agreed that MAiD should be a legal end-of-life option. However, at the time, only 11% of physicians across the nation said they would be willing to hasten a patient’s death.14 This difference in support for the legalization of MAiD and willingness to participate in MAiD continues to the current time. Surprisingly, 6.4% admitted to having complied with at least one patient request for help in dying, despite the practice being illegal.

8. Kouwenhoven, supra note 6 at 276.
10. Emanuel, supra note 7 at 80.
11. Radbruch, supra note 4 at 107.
13. Ibid at 189-190.
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Of those 6.4%, 47% wrote prescriptions to hasten a patient’s death and 53% administered lethal injections themselves in an act of euthanasia.\textsuperscript{15} Terminal illness with less than six months to live is a required condition in all jurisdictions in which MAiD is legal in the United States.\textsuperscript{16} A recent U.S. national survey found that 54% of physicians support MAiD, 18% have received a request for MAiD, and 3% have complied.\textsuperscript{17} Oncologists are the most heavily represented medical specialty in this statistic as 56% of all oncologists have received a request and 11% have complied.\textsuperscript{18} Although there has been almost twenty years of the legal practice of MAiD in the US, the only states that have comprehensive quantitative reports on the practice are Oregon and Washington. The Oregon Public Health Division has created annual reports since the Death With Dignity Act went into effect in 1997. Between 1998 and 2017, 1,967 residents of Oregon have received prescriptions to hasten their deaths and 1,275 (64.8%) of those have used their prescription.\textsuperscript{19} In 2017 alone, 218 Oregonians received prescriptions, 130 (59.6%) residents ingested the medication, and 129 residents died from ingesting the medication.\textsuperscript{20} In the state of Oregon in 2017, the estimated rates of death through use of the Death with Dignity Act\textsuperscript{21} was 39.9 per 10,000 total deaths.

In terms of physician support in Oregon, shortly after the Death with Dignity Act was passed, it was found that 51% of physicians supported the legalization of the Act, but, many stated ethical support for the Act did not necessarily translate into readiness for participation by the supportive physician.\textsuperscript{22} For instance, physicians were concerned that writing a prescription might violate federal Drug Enforcement Agency law. Furthermore, many were worried about potential sanctions by the hospital administrations in which they worked. Other concerns expressed by the physicians surveyed regarded the procedure and specifically noted a lack of confidence in determining if their requesting patient indeed had six months or less to live.\textsuperscript{23} The legalization also prompted physicians to improve their quality of palliative care, specifically by building their

\textsuperscript{15} Ibid.
\textsuperscript{16} Emanuel, supra note 7 at 80.
\textsuperscript{17} Ibid at 81-83.
\textsuperscript{18} Ibid.
\textsuperscript{19} US, Oregon Health Authority—Public Health Division, Oregon Death with Dignity Act: 2017 Annual Report (February 2018) at 5.
\textsuperscript{20} Ibid.
\textsuperscript{21} Supra note 19 at 5.
\textsuperscript{23} Ibid at 2366.
knowledge of palliative treatments and increasing the frequency of conversations about MAiD with patients. Washington State’s 2015 annual report showed that 213 people received medication to hasten their lives, and 166 used that prescription. In both Oregon and Washington, most patients utilizing MAiD are white, college-educated, and dying of cancer. For those who champion MAiD as means of providing a more intimate, personal death compared to a hospital death, these state reports show that MAiD is a means of dying at home, such that 86 and 90% (Washington and Oregon, respectively) of those who participate in MAiD die at home. Among the patients’ top concerns that prompt a request for MAiD are the loss of autonomy and independence, loss of dignity, and being less able to engage in activities that make life enjoyable.

II. Factors that temper physician support
Legalization of MAiD substantively correlates to physicians’ expressed ethical support. In Denmark, Germany, and Greece where MAiD practices are not legal, physicians’ support is low. For instance, 15% of Danish geriatricians believed MAiD should be an option in end-of-life care. In Germany, 13% of the respondents said they would be willing to participate in MAiD. In Greece, physician’s general attitude toward MAiD is also negative, with 56% of physicians stating they would never agree to participate in MAiD for any reason. In addition, when asked if a death has resulted from administration of a drug that was prescribed by them or another physician to hasten a patient’s end-of-life, only 2.1% confirmed. MAiD can be prosecuted under criminal law in England, Wales, and Northern Ireland, and doctors within the United Kingdom do not support the legalization of either MAiD or euthanasia. Much like the trend seen elsewhere, Seale (2009) found that the general public favors MAiD despite opposition by their nation’s physicians.

Religious affiliation substantively mediates physicians’ ethical support for MAiD, such that self-identification as being “religious” positively and

24. Ibid at 2365-2366.
27. Ilvemark, supra note 6.
29. Parpa, supra note 3.
30. Radbruch, supra note 4 at 107.
31. Ibid.
strongly correlates with opposition. Specifically, religious identification is a predictor determining the perceived ethical appropriateness for any health-care professional to hasten death. MAiD, among religious bodies, can be interpreted as a form of suicide, to which western religious traditions are vehemently opposed.

Whether or not the physician has specialization in palliative care also moderates expressed support for MAiD. The data are mixed, and confounded by the legal status of MAiD, but surveys have revealed that palliative care specialists are less supportive than doctors without that specialty. This finding could be attributable to the pragmatic use of palliative sedation and the adoption of a particular brand of palliative care philosophy that involves a critical focus on a patient’s autonomy and ability to “preserve his or her self-determination regarding the power of decision.” Therefore, MAiD practice can be viewed as a contrast to that ideal because once the medication is self-administered any further decision-making becomes impossible. It is important to note that the World Health Organization has stated that palliative care is neither meant to hasten or postpone death; thus, under the principle that all palliative care—including palliative sedation—is not meant to hasten death, MAiD can be determined to be outside the realm of palliative care.

III. Justification for the current study

Many obstacles limit the availability of MAiD in those locations which permit its practice, and given that physicians are at the forefront of delivering these medications, it is plausible that their level of ethical support may be a primary roadblock. Furthermore, physicians’ comfort with MAiD may be determined by their level of knowledge about, and agreement with the procedural requirements, such as the necessity for a second physician to verify the terminal diagnosis (e.g. Vermont, Act 39: Patient Choices at the End-of-Life). In addition, immunity to lawsuit may also be an important mediating factor such that if a physician feels vulnerable to either criminal or financial penalty, they may be unsupportive of MAiD.

34. Peretti-Watel, ibid.
35. Parpa, supra note 3 at 297.
37. Radbruch, supra note 4 at 110.
38. Ibid.
39. Supra note 1.
Vermont’s law legalizing Aid in Dying *(Act 39)* went into effect in 2013 and four years later there are no available data on how local physicians view MAiD and how they see its role in palliative care. This survey was designed to address three key aspects of MAiD in Vermont. (I) To what extent are doctors in ethical support of the right of patients to access life-ending medication, and whether variables such as age, percent of terminal-patient load, and religious identification mediate their support for MAiD. (II) To assess how well-informed doctors are regarding the policies and procedures regarding MAiD, and to what degree do they feel sheltered from lawsuit. (III) To evaluate the attitudes of physicians regarding specific aspects of policies required by Vermont Law such as the necessary second-physician opinion of terminality, and whether psychological/psychiatric evaluation ought to be adopted into the practice to determine a patient’s capacity to make life-ending decisions. Additional questions were included in the survey to assess whether physicians see MAiD as a valuable option in the realm of palliative care, and whether they would like continuing medical education credits to become available specifically designed to provide information on MAiD policy and practice.

IV. Study methodology
All participants in this research study were physicians (MDs) currently licensed and practicing within the state of Vermont. Emails requesting participation in the study were sent to 434 physicians, all working within the University of Vermont Health Care Network, which is an extensive patient-medical care system of doctors, both affiliated with the University hospital and not. Physicians’ emails were obtained from the Health Care Network’s listserver, which is a publicly available source. The tool used to collect data within the study was an anonymous, electronic questionnaire developed through Google Docs and although the questionnaire included questions on demographics, survey responses were anonymous and it would be impossible for the researchers to accurately identify any respondent based upon a profile of answers to the demographic questions. Furthermore, the software program prevented the computer user from entering data into the survey on more than one occasion because of IP-address recognition, but IP addresses for each survey recipient were not available to the researchers. Although this feature does not resolve entirely the problem of double entry, it significantly reduces that likelihood.

V. General respondent demographics
Of the 434 emails sent to different physicians, 62 complete responses were received, thus yielding a 14.3% response rate. Of the respondents, 57% identified as male, 43% as female. All but two respondents practiced in
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Chittenden County, which includes the Burlington metropolitan area. Two identified as “palliative-care doctors” but when asked if they have “special qualifications” in palliative care, 12% agreed that they either did have special training or may have (9%) special training in the area of palliative care. The age range of the participants was 33 to 77 years old with a mean age of 52.5 years old (median 54). In response to the question: “In regard to religion, would you describe yourself as: Religious (35%), neither religious nor non-religious (13%), or non-religious (52%), can’t choose (0%), refuse to answer (0%).” Thus, the majority described themselves as either neutral or non-religious, but there were sufficient percentages in each of the three categories to use this variable categorically in statistical analyses. Furthermore, 76% stated that their patient load involved less than 10% terminally-ill patients, with 24% having greater than 10% terminally-ill patients; terminal illness was described as having less than six months to live.

VI. Results: Ethical support for MAiD

1. Physicians’ expressed general support
A five item Likert-type scale was used to assess strong agreement, agreement, neutrality, disagreement, or strong disagreement with the survey questions, presented in Table 1. The questions are presented in the table in the order in which they were presented to the survey participants. When asked about a “suffering, competent patient who explicitly and repeatedly expresses a wish to be allowed to die” (question 2), 75.4% believed that MAiD is ethically justifiable. In addition, 59% of physicians supported a doctor’s “legal right” to hasten a patient’s end of life if he or she “has the capacity to make a major medical decision and has an incurable painful illness from which they will die from within six months” (question 1). However, when the question stipulated that the patient has an incurable illness that is “not terminal,” the support for MAiD dropped to 14.8% (question 1, Table 2). From this, it can be gathered that terminality and the corresponding requirement for MAiD in Vermont is strongly supported by physicians.

2. MAiD as an option in palliative care
The World Health Organization does not view MAiD as an option within the realm of palliative care, and physicians in Vermont were asked about this particular issue; see question 3, Table 1. The majority (79.9%) of physicians surveyed either agreed or were neutral regarding MAiD as a “valuable option” in palliative care, demonstrating either a known or unknown opposition to the WHO’s stance regarding MAiD as a palliative
care option. Furthermore, this finding is echoed in the response to question 7, Table 1; 88.4% of respondents were either in support for or neutral on whether a palliative care specialist should be involved in MAiD.

3. **Correlations: Age, percent-terminal patient load and ethical support for MAiD**

According to previous research, the older in age a physician is, the stronger their support is for MAiD. Pearson’s correlation coefficients were computed to determine whether this finding was true for Vermont physicians, and no linear correlation was discovered for age and any of the first three questions in Table 1 (all \( p > 0.05 \)). In addition, in order to understand whether daily experience working with terminally-ill patients governs support for MAiD, terminally-ill patient load (as a percentage: < 1, 1-10, 10-20, 20-40, > 40%) was factored into statistical analyses of survey items 1-3 presented in Table 1; no significant correlations were discovered for these three Likert-type questions and percent-terminal patient workload (all \( p > 0.05 \)).

4. **Religion and ethics as factors in support for MAiD**

Using the three religious categories described previously, a Pearson’s correlation coefficient was computed in order to determine if there was a correlation between religiosity and support for MAiD. A significant negative correlation between legal support (question 1, Table 1) for MAiD and religiosity was discovered \( (r = -0.20, \ p < 0.05) \). There was also a significant negative correlation between ethical support for MAiD (question 2, Table 1) and religiosity; \( r = -0.34, \ p < 0.01 \). Also, a negative correlation was found between religiosity and “MAiD as a valuable option in palliative care” (question 3); \( r = -0.33, \ p < 0.01 \). These results indicate that religion identification negatively correlates with support for MAiD. Furthermore, to determine whether religion, as a categorical variable, captured the variability in physicians’ support for MAiD, 3-group (religious, neutral, non-religious) one-way ANOVAs were performed on each of the questions 1-3 in Table 1 (using the 5-item Likert scale). The results of the ANOVAs revealed a main effect for religion on all three questions; (all \( F \)'s (2,61) > 3.50, all \( p \)'s < 0.05 partial-\( \eta^2 \)'s > 0.14). For each question, post-hoc multiple comparisons (LSD) were performed, and it was discovered that the self-identified religious group demonstrated less support compared to the non-religious group (all \( p \)'s < 0.05), but the neutral group failed to differ from the other two (all \( p \)'s > 0.05).

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40. Seale, supra note 32; Meier, supra note 14.
This pattern of results is consistent with previous research showing that religious identification predicts support for MAiD.

Ethics (as presented in question 2, Table 1), as a covariate with religion, could also be a mediator for a number of support-related items presented in the survey. For instance, agreeing that MAiD is ethically justifiable if certain criteria are met may be a predictor of both responses to (a) whether doctors should have the “legal right” to prescribe MAiD, and (b) whether MAiD is a “valuable option” within the general framework for palliative care (questions 1 & 3, respectively, Table 1). Although this might seem obvious at first, there is a crucial difference between ethically supporting a practice, and believing the practice should be available and legally protected. One might ethically support MAiD with certain restrictions, but also believe that no legal framework would be sufficient to ensure these restrictions are met. One might ethically support MAiD, but not find it a valuable option in light of alternatives like palliative sedation. The results of the analysis, however, suggest that those who ethically support MAiD tend to believe it should be legal, and that it is a valuable option in palliative care. When responses to question 2 (Table 1) regarding ethics were used as a covariate loaded into a MANCOVA, ethical support captured a high degree of variability in “legal right” question 1) and “MAiD as a valuable option” (question 3); \( F \)'s (1, 58) > 113.96, \( p \)'s < 0.001, partial-\( \eta \)'s > 0.68, respectively. The information provided by the covariate analysis supports the conclusion that ethics, as a variable separate from religion, is a key factor which captures a significant degree of variance in support for practical application of MAiD.

VII. Results: Knowledge of policies and procedures involving MAiD

1. Liability concerns

If physicians follow the correct procedures stipulated in *Act 39*, they are immune from criminal and civil liability.\(^{41}\) When asked about their legal immunity (question 6, Table 1), roughly the same percentages of physicians were uncertain as were assured that *Act 39* fully covers their liability if they were to participate in MAiD. In order to further dissect how liability concerns relate to other aspects of MAiD, the 5-item Likert scale was consolidated to a 3-category scale of general agreement (41%), neutrality (49.1%), or disagreement (11.7%), see Table 1. Therefore, a 3 (group) one-way ANOVA was performed on the question regarding MAiD participation (question 2, Table 2). The results revealed by the ANOVA show that a physician’s feelings of preparedness to participate in

\(^{41}\) Vermont’s *Patient Choice and Control at End-of-Life Act*, supra note 1 at § 5283 & § 5290.
MAiD (question 2, Table 2) are strongly related to concerns about legal liability ($F(2,61) = 5.54, p < 0.01$) such that those physicians indicating disagreement or neutrality to question 6 (Table 1) were statistically more likely to report feeling ill-prepared to participate in MAiD compared to the group feeling assured that they are protected against liability; LSD post-hoc multiple comparisons, $p$’s $< 0.05$. The willingness of the physicians to prescribe medication was thereby associated with their concerns about legal repercussions, perhaps fueled by lack of knowledge about the legislation, which led to a decreased likelihood of participation in MAiD.

2. Knowledge, confidence and accuracy
Physicians’ general knowledge, confidence, or comfort with the procedures of Act 39 was assessed by the questions 4-8 in Table 1; 47.6% of physicians expressed confidence in their knowledge (question 4, Table 1), and 34.4% of physicians felt as if the state medical offices had adequately informed them of their rights and responsibilities in relation to Act 39 (question 5, Table 1).

Physicians being confident in their knowledge does not necessarily mean that their knowledge is accurate, and this is the reason why questions 6 and 7 (Table 2) were included. For question 6 (Table 2), a true/false question, was asked to determine whether physicians were aware that self-administration is the only permitted means through which the life-ending medication could be taken. Because MAiD and euthanasia are distinguishable almost exclusively based on this particular aspect, it was hypothesized that physicians would respond with a high degree of accuracy. The hypothesis was not supported in that only half of physicians surveyed responded in the affirmative (question 6, Table 2). Physicians were more accurate in their assessment of whether they were responsible for providing their patients with information about the risks of end-of-life medication (question 7, Table 2). Compared to physicians working with few terminally-ill patients, those physicians having greater than 10% terminal-patient workload felt more confident in their knowledge about MAiD ($t (58) = 4.34, p < 0.001$), believed that the state had adequately informed them ($t (58) = 2.47, p < 0.01$) and felt more freedom from legal liability ($t (57) = 2.23, p < 0.05$). These results likely reflect a necessary self-education process for physicians working more closely with terminally ill patients: as a portion of their practice, they have been required to seek out more information about MAiD than those not commonly working with terminal illness.
VIII. Results: Physicians’ procedural support

1. The second opinion
As stipulated in Act 39, it is required for the patient requesting MAiD to obtain a diagnosis and prognosis confirmation from a second physician, and 90% of participants support this procedural requirement (question 9, Table 1). The support for this aspect of the Act 39 requirements may reflect the awareness that pursuit and use of MAiD represent an irreversible step toward ending suffering, and as others have noted, physicians are unconfident in their ability to approximate the end of life. The rigid six-months-or-less requirement of Act 39 implicitly emphasizes that physicians are able to make this assessment accurately, and the second opinion may help to validate this conclusion.

2. Palliative specialist referral
Of the physicians surveyed, 63.8% would like to see a palliative care specialist involved in MAiD, which is a stipulation not currently required by Act 39 (see question 7, Table 1). Question 10 (Table 1) asks about the necessity for other palliative treatments to be utilized prior to the prescription for MAiD, and the vast majority support this as being important or very important (83.6%). There are many ways to interpret this level of support. One possibility is that patients with six months or fewer to live have likely explored and/or exhausted treatments to relieve suffering, and perhaps this speaks to the awareness of medical professionals of this likelihood. Alternatively, the physicians in this survey could be expressing their belief that MAiD ought to be the absolute last resort for terminally ill patients, and that they may be in support of making a contingency in the law that requires it to be so.

3. Psychological evaluation
Also not currently required by Act 39 is the involvement of a mental health professional in a capacity evaluation. Responses to question 5 (Table 2) demonstrates that 37.7% of physicians in Vermont are attracted to this idea, but 45.9% are opposed. A t-test using percent of terminal-patient workload as a categorical variable shows that this variable does not determine whether physicians feel the need for a psychological/psychiatric evaluation ($p > 0.05$). Thus, whether a physician’s daily routine involves working with terminally ill patients does not influence their belief that a mental-health professional ought to be involved in the procedure regarding

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42. Supra note 1 at § 5283(a)(7).
43. Ganzani, supra note 22.
MAiD. As described in Karesa and McBride (2016), psychologists are under-confident in their ability to make these necessary capacity evaluations. Furthermore, although psychiatrists and psychologists are trained to treat disorders that cause incapacity, there is no evidence to suggest that the physician providing primary care is less equipped to make an accurate capacity assessment. The results reported in the current survey may speak to a general awareness that solid conclusions regarding capacity are tenuous. This tenuous conclusion about capacity continues to present a dilemma because of the variety of definitions of “capacity” within different laws and statutes and its lack of operational definition. For example, Vermont’s Act 39 defines “capable” as the “ability to make and communicate health care decisions to a physician…” while Oregon’s legislation defines “capable” as the “ability to make and communicate health care decision to health care providers,” but this capability is in the “opinion of the court, attending physician or consulting physician, psychiatrist, or psychologist.”

4. The terminal requirement
Question 1 (Table 2) asks about the use of MAiD in non-terminal, but intractable cases of suffering. A majority (59%) of physicians surveyed believe that MAiD should remain an option only in the case of terminal illness. Interestingly, out of the 14.8% of respondents who supported the use of MAiD in non-terminal cases, there was no indication that medical specialty influenced this support; there were as many family medicine physicians as there were psychiatrists and oncologists represented in this category. Furthermore, neither religion (categorically) nor ethics (as a covariate) acted to capture variability in responses to question 1 (Table 2) all p’s > 0.05.

5. Study conclusions
The purpose of the current study was to provide data on physicians’ attitudes towards MAiD within the State of Vermont. The data analyses were trifurcated into the aforementioned categories and (I) ethics, (II) knowledgeability of the policies and procedures, and (III) attitudes regarding the policies and procedures. A majority of the physicians believe that they should have the legal right to help a terminally ill patient end their own life with medication (59%), and also that MAiD is ethically

44. Supra note 12.
46. Supra note 1; ORS ch 127:800 (1997).
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justifiable if a suffering patient “explicitly and repeatedly expresses a wish to be allowed to die” (75.4%). Interestingly, the latter question does not necessitate terminality, and the relatively stronger expressed support by physicians is unexpected, but this finding does not mean that physicians desire a change in the policy to include non-terminal, but refractory, illness. A question specifically relating to the terminality requirement revealed that few physicians would pursue MAiD in cases of non-terminal but intractable suffering. What can be taken from this finding is that physicians in Vermont would not be in favour of changing Act 39 to include patients who are not terminal. It is possible that some physicians believe that providing MAiD to some non-terminal suffering patients would be ethical while still believing this should not be legal, possibly because it would be too difficult to identify when a nonterminal patient’s suffering is actually irremediable. Our finding that the Vermont physicians would not be in support of changing the law to include nonterminal illnesses is in agreement with the other state legislation within the US, but in opposition to other countries, such as the Netherlands, Belgium, Switzerland, Luxembourg, and Canada, all places where there is not a required terminal diagnosis.\(^{47}\) One can also infer from these results that although physicians feel MAiD to be ethically justifiable, they may be less inclined to believe that doctors, either specifically or exclusively, should be the medical specialists who write the prescription.

Although not the focus of this study, the fact that some of our respondents might support extending MAiD to nonterminal patients, and the disparity between the legal approaches of the United States and Canada to terminality, warrant brief consideration. Vermont, the five other states which have legalized MAiD, and Washington DC, all require that the patient have a terminal diagnosis given by an attending physician and confirmed by a consulting physician. The Vermont law defines “terminal condition” as an incurable and irreversible disease which would, within reasonable medical judgment, result in death within six months.\(^{48}\) Contrast this with Canada’s Medical Assistance in Dying Act, which requires that death only be “reasonably foreseeable.”\(^{49}\) Limiting MAiD to patients who are approaching death is in part justified by the fact that facilitating death is the most drastic intervention possible for the relief of suffering. One risk of MAiD is that it could prematurely shorten the lives of individuals for whom alternative treatment could provide adequate relief. Although this

\(^{47}\) Emanuel, supra note 7.

\(^{48}\) Supra note 1.

\(^{49}\) Supra note 5 at s 241.2(2)(d).
is true for patients approaching death, premature termination is arguably worse for those who are not close to dying because they could live many more years.

Neither Canada nor the US permit MAiD strictly on the grounds of patient suffering without attention to expected remaining quantity of life (as do countries like Belgium), but there exists disparity in access based on the terminal versus reasonably foreseeable requirements. This disparity is increased by the fact that permissive states in the US require that the patient self-administer the treatment, whereas in Canada, the physician is allowed to perform euthanasia.

Canada’s reasonably foreseeable standard cognizes many scenarios in which a patient might not have received a prognosis of six months or less, but for whom control over the end of life might be the only adequate relief from suffering. One example would be a patient diagnosed with an aggressive form of Alzheimer’s but who has yet to lose medical decision making capacity. It might be argued that death is reasonably foreseeable for this patient, who decides that she does not want to go through the process of losing dignity often associated with this disease. Another example might be a patient diagnosed with Amyotrophic Lateral Sclerosis (ALS), a disease that affects the function of nerves and muscles. Patients diagnosed with ALS live on average two to five years.\(^\text{50}\) Newly diagnosed Alzheimer’s patients and ALS patients might have access to MAiD in Canada (assuming they meet all other criteria), but not in the US.

It is possible to assume that each legal regime is the product of similar cost benefit analyses leading to different determinations. The more permissive Canadian requirement might be more just because it expands access to more people, but is subject to greater ambiguity and has greater consequences for premature life terminations. The ambiguity of requiring death to be reasonably foreseeable might cause some physicians to avoid participating in MAiD for fear of legal repercussions for prescribing MAiD too early.\(^\text{51}\) The practical effect might be that physicians wait until death is more imminent, thus mirroring the US terminality requirement and undermining the greater access intended by the language of the law. On the other hand, Canadian physicians that are willing to prescribe MAiD or perform euthanasia for a non-terminal patient run the risk of facilitating death for a patient who has not adequately explored other relief-oriented

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\(^{50}\) ALS Association, “Who Gets ALS?,” online: <www.alsa.org/about-als/facts-you-should-know.html>.

treatment, and the consequence would be losing more life years than if the patient had been terminal. Although terminal diagnoses (six months or less) are notoriously inaccurate, requiring them for MAiD as US states do provides more clarity than Canada regarding who is eligible, and runs less risk of facilitating death for people who might have several quality life years left, but is also less just in terms of access for those who would benefit.

The physicians surveyed agreed with substantial uniformity with the required second terminality prognosis from an independent physician. In addition to verifying terminality, this second opinion may also serve as a means for the primary physician to share the legal or ethical burden of the prescription for MAiD with a peer. Physicians were split in their attitudes on whether a psychological/psychiatric evaluation should be a necessary requirement, but this is currently not required. The majority of physicians also supported a referral to a palliative-care specialist in the process toward MAiD; this particular finding may pertain to an assumption that palliative-care specialists may be able to manage pain effectively enough to reduce the patient’s desire for MAiD, although this assumption was not explicitly assessed in our survey.

The physicians surveyed believe that MAiD is a “valuable option within the general framework of palliative care” (see question 3, Table 1). Vermont physicians may be unique in viewing MAiD as an option within palliative treatment of the terminally ill given that the World Health Organization and the majority of the Board of Directors of the European Association for Palliative Care both state that the practice of palliative care should exclude MAiD. The vast majority of respondents also believe that MAiD should only be available after other palliative treatments have been explored, and this result may also lead physicians to seek out referral to palliative specialists. However, there is some evidence to suggest that some physicians not trained in palliative care have negative attitudes toward this kind of care and demonstrate low levels of referral. Perhaps there is reason for physicians to be skeptical that their knowledge of palliative treatments is thorough and complete, and this is a reason for them to seek out information from a specialist.

Ethical support for MAiD is mediated by religiosity but not by age according to the results of this study of attitudes in Vermont; therefore,
the more religious a participant reported to be, the less likely they were to support MAiD from an ethical standpoint. This finding that religion mediates support for MAiD is consistent with other research. Although religious identification served as a mediator for other questions such as support for the legal right of doctors to hasten a patient’s end-of-life death, and the belief that MAiD is a valuable option in the general framework of palliative care, this effect was statistically moderate-to-weak; a more profound statistical effect was revealed when ethical support as added as a covariate for these two questions. The conclusion from this particular finding is that ethical support for MAiD captures much of the variability in religiosity, legal right, and MAiD as an option in palliative care. Phrased differently, ethical support for MAiD helps to resolve loose associations between religiosity and these other attitudes pertaining to MAID.

In terms of the pragmatic implications of the results, perhaps the most important is that physicians in the survey felt poorly informed and were unconfident in their ability to participate in MAiD. This lack of confidence can be interpreted by the physicians’ lack of knowledge surrounding liability (49.1% neutral on question 6, Table 1) and perhaps their strong interest in attending a course on MAiD and Act 39 to learn more about the process (question 8, Table1). Furthermore, concerns about legal liability significantly tempered their feelings of preparedness-to-participate in MAiD. One concern stemming from these findings is that the availability of MAiD to interested patients may be hindered as a result of inaccurate information. Doctors were no more likely to be correct than uncertain or incorrect (question 6, Table 2) in their answer to a very basic question about whether self-administration is the only permitted manner in which the medication may be taken. An important caveat to this finding is that if a physician’s workload was currently occupied by more than 10% of terminally-ill patients, they were more accurate in their understanding of the law, more comfortable with the policies of Act 39 and MAiD, and also felt significantly more certain of their legal protection from lawsuit. The majority of survey respondents felt that the State had not adequately informed them about their rights and responsibilities in relation to Act 39; however, under the Act, the state does not have any obligation to do so. Perhaps important for the state’s department of health is the information that physicians would like the option of MAiD-specific continuing

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medical-education credits to become available (question 8, Table 1), and these credits could be used to maintaining medical licensing.

Although not a primary focus of the rationale for the survey, we asked doctors about their participation in MAiD since it was legislated in 2013, and 25% said that they have received a request for MAiD from at least one patient. Only 11.5% of physicians have actually written MAiD prescriptions, and 14% have referred the patient requesting the prescription to another physician (question 4, Table 2), but the reasons for these referrals are unclear. These results suggest that a small population of physicians within Vermont have actually engaged in MAiD as permitted by Act 39. The small population participating in MAiD is on par with physician involvement in Washington and Oregon; as of 2016, 0.6% of physicians in both Oregon and Washington prescribed medication under the Death With Dignity Acts. 56

IX. Study limitations and future directions

While these results offer insight into the attitudes of physicians in Vermont four years after legislation of MAiD, this was a small scale study. Nonetheless, the survey response frequency was high enough to arrive at statistically-supported conclusions regarding ethical and policy-related attitudes of practicing physicians. Respondents reported a lack of diversity of place of practice, in that an overwhelming majority practiced in the most urban region of the state where the largest hospital is located. In order to receive comprehensive data of physician’s attitudes toward MAiD in Vermont, a more diversified sample is required. Thus, the results may inaccurately represent rural-physicians attitudes, and the next step in our research is to target these rurally-practicing doctors to provide a comparison. There was also likely some degree of self-selection bias in the survey, such that only those physicians most interested in MAiD policy responded to the survey request; therefore, the survey may not suitably capture the attitudes of physicians who are marginally involved in palliative care practice. Future research may also include qualitative interviews to provide important information on whether medical-care specialists, other than medical doctors, could serve a significant role in MAiD as a palliative treatment.

Table 1. Likert-type scale answers to the following questions, by percentage

<table>
<thead>
<tr>
<th>Questions regarding ethical support of MAiD</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If a patient with capacity to make major medical decisions has an incurable painful illness from which they will die within 6 months, doctors should have the legal right to hasten that patient’s end of life if that is what the patient desires.</td>
<td>31.1%</td>
<td>27.9%</td>
<td>18.0%</td>
<td>16.4%</td>
<td>6.5%</td>
</tr>
<tr>
<td>2. Medical Aid in Dying (MAiD) is ethically justifiable if a suffering competent patient explicitly and repeatedly expresses a wish to be allowed to die.</td>
<td>32.8%</td>
<td>42.6%</td>
<td>11.5%</td>
<td>9.8%</td>
<td>3.3%</td>
</tr>
<tr>
<td>3. MAiD is a valuable option within the general framework within palliative-care treatment.</td>
<td>23.3%</td>
<td>43.3%</td>
<td>13.3%</td>
<td>15.0%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Questions regarding knowledge-confidence of MAiD and Act 39</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. I feel confident in my knowledge about Act 39.</td>
<td>14.8%</td>
<td>32.8%</td>
<td>24.6%</td>
<td>18.0%</td>
<td>9.8%</td>
</tr>
<tr>
<td>5. I feel that the state has adequately informed me of my rights and responsibilities in relation to Act 39.</td>
<td>04.9%</td>
<td>29.5%</td>
<td>27.9%</td>
<td>21.3%</td>
<td>16.4%</td>
</tr>
<tr>
<td>6. I feel as if Act 39 fully covers my legal liability if I were to participate in MAiD and hasten a patient’s death.</td>
<td>08.2%</td>
<td>32.8%</td>
<td>49.1%</td>
<td>04.9%</td>
<td>03.2%</td>
</tr>
<tr>
<td>7. A patient considering MAiD should be referred to a palliative-care specialist (MD) by their primary care provider.</td>
<td>32.7%</td>
<td>31.1%</td>
<td>24.6%</td>
<td>06.6%</td>
<td>04.9%</td>
</tr>
<tr>
<td>8. I would be interested in obtaining Continuing Medical Education credits for attending a course on MAiD and Act 39.</td>
<td>11.5%</td>
<td>34.4%</td>
<td>21.3%</td>
<td>22.9%</td>
<td>08.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Questions pertaining to the procedural requirement of Act 39</th>
<th>Very Important</th>
<th>Important</th>
<th>Neutral</th>
<th>Unimportant</th>
<th>Very Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. How important do you think it is to get diagnosis and prognosis confirmation from a second physician of a patient’s terminality prior to prescribing end-of-life medication?</td>
<td>55.7%</td>
<td>34.3%</td>
<td>03.2%</td>
<td>04.9%</td>
<td>01.6%</td>
</tr>
<tr>
<td>10. How important is it that a patient has received other forms of palliative care prior to receiving a prescription for MAiD.</td>
<td>63.9%</td>
<td>19.7%</td>
<td>09.8%</td>
<td>04.9%</td>
<td>01.6%</td>
</tr>
<tr>
<td>Question regarding MAiD willingness-to-participate</td>
<td>Yes</td>
<td>Maybe/prefer not to answer</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
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<td>---------------------------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. If a patient with the capacity to make major medical decisions has an incurable, painful illness which is not terminal, would you fulfill his or her desire to hasten their end of life using medication?</td>
<td>14.8%</td>
<td>26.2%</td>
<td>59.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Do you feel prepared to participate in MAiD if a patient requests a prescription?</td>
<td>27.9%</td>
<td>06.6%</td>
<td>65.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Have you ever written a prescription for medication for a patient to use with the primary intention of hastening his or her own end-of-life?</td>
<td>11.5%</td>
<td>0%</td>
<td>88.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Have you had a patient request a prescription under Act 39, but you referred the patient to another physician to write the prescription?</td>
<td>13.1%</td>
<td>0%</td>
<td>86.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Do you believe that every patient requesting a prescription for MAiD should have a psychological/psychiatric evaluation?</td>
<td>37.7%</td>
<td>16.4%</td>
<td>45.9%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Questions regarding knowledgeability of Act 39**

<table>
<thead>
<tr>
<th>True</th>
<th>Not sure</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. If a patient has received a prescription to end their life, self-administration of the medication is the only permitted manner in which the medication may be administered.</td>
<td>50.8%</td>
<td>39.3%</td>
</tr>
<tr>
<td>7. Act 39 requires physicians to provide information to their terminally ill patients about the risks of end-of-life medication.</td>
<td>63.9%</td>
<td>29.5%</td>
</tr>
</tbody>
</table>
Physicians' Attitudes, Concerns, and Procedural Understanding of Medical Aid-in-Dying in Vermont
Teresa Ditommaso, Ari P. Kirshenbaum and Brendan Parent

Foreseeably Unclear: The Meaning of the "Reasonably Foreseeable" Criterion for Access to Medical Assistance in Dying in Canada
Jocelyn Downie and Kate Scallion

Legalizing Assisted Dying: Cross Purposes and Unintended Consequences
Emily Jackson

Trying and Dying: Are Some Wishes at the End of Life Better Than Others?
Oliver J. Kim

A Comparative Analysis of Voluntariness Safeguards and Review Procedure under Oregon and the Netherlands' Physician Assisted Dying Laws
Michaela Estelle Okninski

Euthanasia by Organ Donation
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Questioning POLST: Practical and Religious Issues
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