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REVIEWS AND DISCUSSION PAPERS

# The factors that act as barriers and enablers to the implementation of voluntary assisted dying services in acute care health settings: a systematic mixed studies review and secondary analysis

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## ABSTRACT

**Objective:** To explore the barriers to, and enablers of, implementation of voluntary assisted dying into acute care health settings and identify the strategies that contribute to successful implementation in these settings.

**Background:** In jurisdictions where voluntary assisted dying is legal, some people choose to end their lives in acute care health settings. How voluntary assisted dying is integrated as an end-of-life option for patients in these settings is an emerging area for implementation research.

**Study Design and Methods:** A two-phase process was adopted. First, a systematic mixed studies review was undertaken to identify themes associated with the provision of voluntary assisted dying. The electronic databases ProQuest Central, Embase, and CINAHL including Medline were searched in June and July 2019. For inclusion, a study must have been published between 1997-2019 and undertaken in an acute care health setting in a jurisdiction where voluntary assisted dying is legally permitted. Study participants were those involved, directly or indirectly, with voluntary assisted dying. All studies were assessed for the risk of bias using the Mixed Methods Assessment Appraisal Tool. Data from the included articles were synthesised into descriptive themes. Themes were then deductively analysed using the Consolidated Framework for Implementation Research to identify possible barriers and enablers and generate strategies that support the implementation of voluntary assisted dying in acute care health settings.

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**Results:** Nine articles were included in the review. Seven articles were quantitative studies that collected cross-sectional survey data. There were two qualitative studies. Four themes were identified: 1) putting the law into practice requires knowledge and understanding gained through education, 2) helping people die using VAD is complex, 3) the how of enacting VAD, and 4) participating in voluntary assisted dying is deeply personal for clinicians. Barriers to implementation included: a lack of understanding of legal obligations associated with voluntary assisted dying and poorly defined roles. Enablers to implementation included: open and inclusive conversations about the process and building social capital through communities of practice.

**Discussion:** The provision of voluntary assisted dying is multifactorial and complex. Its implementation in the acute care setting requires strategies built on an understanding of the enabling legislation and recognition of contextual and individual characteristics that contribute to its complexity.

**What is already known about the topic?**

- Increasing numbers of jurisdictions worldwide are legalising voluntary assisted dying (VAD)
- Some patients have a preference to be supported in VAD in an acute care health setting
- In jurisdictions where VAD is permitted, some acute care health settings have implemented structured programs to guide the practice of healthcare professionals
- There is limited research exploring how VAD is implemented in acute care health settings

**What this paper adds:**

- Clinicians' understanding of their legal and operational responsibilities is critical to addressing barriers to the implementation of VAD
- Education, policies, and procedures around VAD should be collaboratively developed by clinicians and legal-ethical experts
- Building social capital through a robust system of clinician support and reflection is required to continually improve the processes associated with VAD

**Keywords:** Voluntary assisted dying, implementation, acute care, hospital, mixed studies review, end-of-life care.

## BACKGROUND

The process of dying is an inevitable part of life. As people seek greater involvement with their care and treatment decisions, how people die is changing.[1] In some jurisdictions voluntary assisted dying (VAD) has emerged as a legal option permitting people who are suffering at the end of their life control over the time and to some extent, the place and manner of their death. Terms used to describe this option include voluntary euthanasia, physician-assisted suicide,[2] physician-assisted dying,[3] death with dignity,[4] medical assistance in dying (MAiD),[5] and voluntary assisted dying.[6] For clarity and consistency, in this article the term voluntary assisted dying (VAD) encompasses all of the above. VAD involves assisting a person to end their life by self-administering a lethal dose of a prescribed medication or permitting a healthcare practitioner to administer a lethal medication.[7]

While most people prefer to die at home,[8] people frequently die in a hospital where the resources needed to manage distressing symptoms such as shortness of breath or pain that may present near the end of life are accessible.[9] It is likely, therefore, that in those jurisdictions where new laws permitting VAD are passed, acute care health settings will be tasked with implementing VAD services and developing the resources needed to operationalise the legal framework.

Five Australian states have now passed voluntary assisted dying legislation. In each, there has been a designated period between enacting the law and its commencement, to enable the implementation into healthcare practice. The factors relevant to implementing a law are generally more heterogeneous and broader in scope than those typically associated with implementing the findings of biomedical or health research.[10] As the public debate has consistently shown, VAD is divisive and contested. Healthcare practitioners also have personal views about the law, so how they engage with the legal processes will affect implementation.[11-13]

While previous reviews have explored healthcare providers' experiences consideration must also be given to the intensity of required resources and education of those involved in VAD, to more fully guide health service managers and others responsible for implementing VAD.[14-17] Through a systematic review of this research literature, followed by a secondary analysis using a theoretical implementation framework, insights into potential factors that may act as barriers and enablers to VAD practice may be identified, and strategies to support implementation recommended.

## STUDY DESIGN

This study aimed to explore the factors that may act as barriers and enablers to the implementation of VAD in acute care health settings. A two-phase process was adopted. In Phase 1, a systematic mixed studies review using the steps described by Pluye and Hong was undertaken to identify themes associated with the provision of VAD.[18] The study protocol was registered with PROSPERO (Registration Number CRD42020155526) and reported following the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) statement.[19]

In Phase 2, the inductively developed themes from Phase 1 were subjected to deductive analysis using the Consolidated Framework for Implementation Research (CFIR) implementation science framework to identify factors that may act as barriers and enablers to suggest strategies to support the implementation of voluntary assisted dying in acute care health settings.[20]

## OBJECTIVE

To explore the factors that act as barriers to and enablers of, the implementation of voluntary assisted dying into acute care health settings, and to identify strategies that facilitate implementation in these settings.

## METHODS

### PHASE 1: FORMULATE THE REVIEW QUESTIONS

The research questions were:

(i) What are the factors that act as barriers and enablers to the implementation of VAD services in an acute care health setting?

(ii) What implementation strategies contribute to the integration of VAD practice in an acute care health setting?

### PHASE 1: DEFINE THE ELIGIBILITY CRITERIA

The review included primary research studies that used qualitative, quantitative, and mixed methods designs. Studies were included when VAD was implemented or undertaken in an acute care health setting which included hospitals, hospices, and palliative care services. Included studies were those where the participants were healthcare practitioners who may be involved either directly, or indirectly with VAD. The US state of Oregon has permitted VAD since October 1997.[21] Therefore, studies published after its *Death with Dignity Act* commenced operation were eligible. Included studies were published in English. Those published in grey literature were excluded. The Netherlands and Belgium are the only jurisdictions in the world that permit children to access VAD, and only in specific circumstances.[22] Because of their limited application, studies relating to children and VAD were excluded.

### PHASE 1: APPLY AN EXTENSIVE SEARCH STRATEGY IN MULTIPLE INFORMATION SOURCES

A systematic database search strategy was designed and employed. Based upon their expertise in healthcare and law, the research team collectively decided upon relevant key search terms and alternatives. Under the guidance of a specialist health librarian, comprehensive search terms were generated (see Table 1. A reproducible search strategy for each database has been included in the supplementary file for this article). Acknowledging that the factors that affect the implementation of a law are more heterogeneous than those associated with the implementation of research evidence,[10] the terms barrier and enabler were not included as specific search terms. This was to ensure that a broader range of primary research articles where the factors affecting implementation were highlighted could be captured. The searches included subject headings and related keywords that were joined using Boolean operators AND, OR and NOT. Limiters reflecting the inclusion criteria were applied to ensure that irrelevant studies were not captured. The electronic databases ProQuest Central, Embase, and CINAHL including Medline were searched in June and July 2019. As a combination of electronic and manual searching is the most comprehensive method for retrieving relevant studies,[23] reference lists of included articles were manually screened to identify additional studies.

TABLE 1: KEY TERMS USED TO SEARCH THE DATABASES

| Key terms for search | Alternative key terms for search |
|---|---|
| Assisted suicide | medically assisted suicide; voluntary assisted death; voluntary assisted dying; physician assisted suicide; physician assisted death; medical assistance in dying; voluntary euthanasia; right to die; voluntary active euthanasia; aid in dying. |
| Hospital | health services; acute care; tertiary care; hospice; healthcare. |

### PHASE 1: IDENTIFY AND SELECT RELEVANT STUDIES

The records were imported to an Excel database and duplicates were removed. Two researchers (JH, JD) independently screened the titles and abstracts according to the review inclusion and exclusion criteria and then met to compare the results and finalise the list of articles for full-text screening. At this point, articles were excluded if they did not relate to how VAD is implemented or undertaken if VAD was not legal at the time data were collected, or if VAD was not conducted in an acute care health setting. Where there was uncertainty regarding inclusion, this was resolved by mutual agreement. A third researcher (SL) reviewed the selected articles to confirm their suitability for inclusion.

### PHASE 1: APPRAISE THE STUDY QUALITY USING THE MMAT

The Mixed Methods Assessment Tool (MMAT) was chosen to appraise the articles because it enables evaluation of the quality of various methodologies and has established validity and reliability.[24] The MMAT includes two generic screening questions and an additional five assessment criteria that are applied to the specific study design. Two researchers independently appraised the quality of each included article. The research team then met to discuss the outcomes and resolve any discrepancies.

### PHASE 1: EXTRACTING DATA AND SYNTHESISING THEMES FROM THE STUDIES

To extract the data needed to inform our results, the research team developed a data extraction tool in an Excel spreadsheet. The data that were extracted included the country and setting where the study took place, the study approach and design, study participants and its key findings related to the implementation or operation of VAD. After pilot testing the tool, two researchers (JH, JD) each extracted the data from the nine articles and then met with the research team to discuss the results and settle any discrepancies.

Pluye and Hong describe three methods for synthesising research findings from the included studies.[18] This review followed a process of convergent qualitative design where results from studies that included qualitative, quantitative, and mixed methods are transformed into qualitative findings and then into themes.[18] To synthesise themes from the data, study findings or results of each study were entered verbatim into an Excel spreadsheet. Each line in the sheet represented one sentence of text from these findings. This allowed researchers to become immersed in the data and capture the meaning and context of each sentence to generate codes. These inductive codes were then compared and contrasted so that those including similar concepts could be grouped and organised into sub-themes and higher-order descriptive themes. Because we did not impose *a priori* framework implied by the research questions, this produced an authentic synthesis of the articles' findings. To move beyond the descriptive themes, the synthesised data were deductively analysed using the CFIR domains to generate propositions about the barriers, enablers, and potential strategies to support the implementation of VAD services and the subsequent practice.

### PHASE 2: GENERATE POTENTIAL BARRIERS AND ENABLERS

Four of the CFIR domains were used as a framework in Phase 2. They were the characteristics of the intervention, the inner context, the outer context, and the individual. The fifth domain describes processes that are common across organisational change models.[20] Its focus is on implementation efforts, and as our review sought to identify factors affecting implementation rather than implementation itself, this domain was excluded from the analysis. Rather, by analysing the descriptive themes through the modified framework, researchers could identify potential barriers and enablers to the integration of VAD into an acute care health setting and recommend implementation strategies.

## RESULTS

The search yielded 1,796 articles, with 1,729 after duplicates were removed. The process of selection is outlined in Figure 1 (PRISMA flow diagram). Nine articles were identified for inclusion in the review. Seven of these articles were quantitative studies that collected cross-sectional survey data.[2,16,25-29] There were two qualitative studies.[30,31] For most studies it was possible to answer the MMAT quality criteria affirmatively (Yes (Y) 82%; Cannot Tell (CT) 13%; No (N) 5%). The methodological quality of the studies was generally high. The two qualitative studies clearly described the process used to recruit study participants and used grounded theory approaches appropriate to answer the research questions.[30,31] Coherence between the data, analysis and interpretation was apparent. The seven quantitative studies collected data using cross-sectional surveys which are suitable for generating descriptive statements about a phenomenon such as exploring attitudes or experiences of voluntary assisted dying. Hogg et al. recruited participants from a single site, but all other studies recruited nationally.[16] While all reported descriptive statistics, their exploratory design limited the need for further statistical analysis. A detailed presentation of the criteria ratings is provided in the Supplementary file for this article.

Studies were conducted in the US state of Vermont,[30] Canada,[16,26] Belgium,[27,28,31] and the Netherlands.[2,25,29] VAD has been legal in Belgium and the Netherlands for nearly 20 years which may explain why more research has emanated from these countries. The samples included physicians, nurses, and pharmacy staff, which are the professions most likely to have direct contact with people requesting VAD. Two studies also included allied health professionals – social workers,[30] and physiotherapists, occupational therapists and other allied health professionals,[16] reflecting the multidisciplinary nature of VAD in some settings.

The studies included explicitly addressed the experiences,[2,30] attitudes,[2,25-27] involvement,[25,28-30] knowledge,[16,26] and perceptions,[16,29] of clinicians who experienced caring for patients seeking VAD. A descriptive summary of the studies is presented in Table 2.

Five of the studies explored the experiences of nurses with VAD.[25,27-29,31] These studies demonstrate that nurses find participating in VAD or VAD preparations emotionally challenging. Also, that balancing the dense procedural

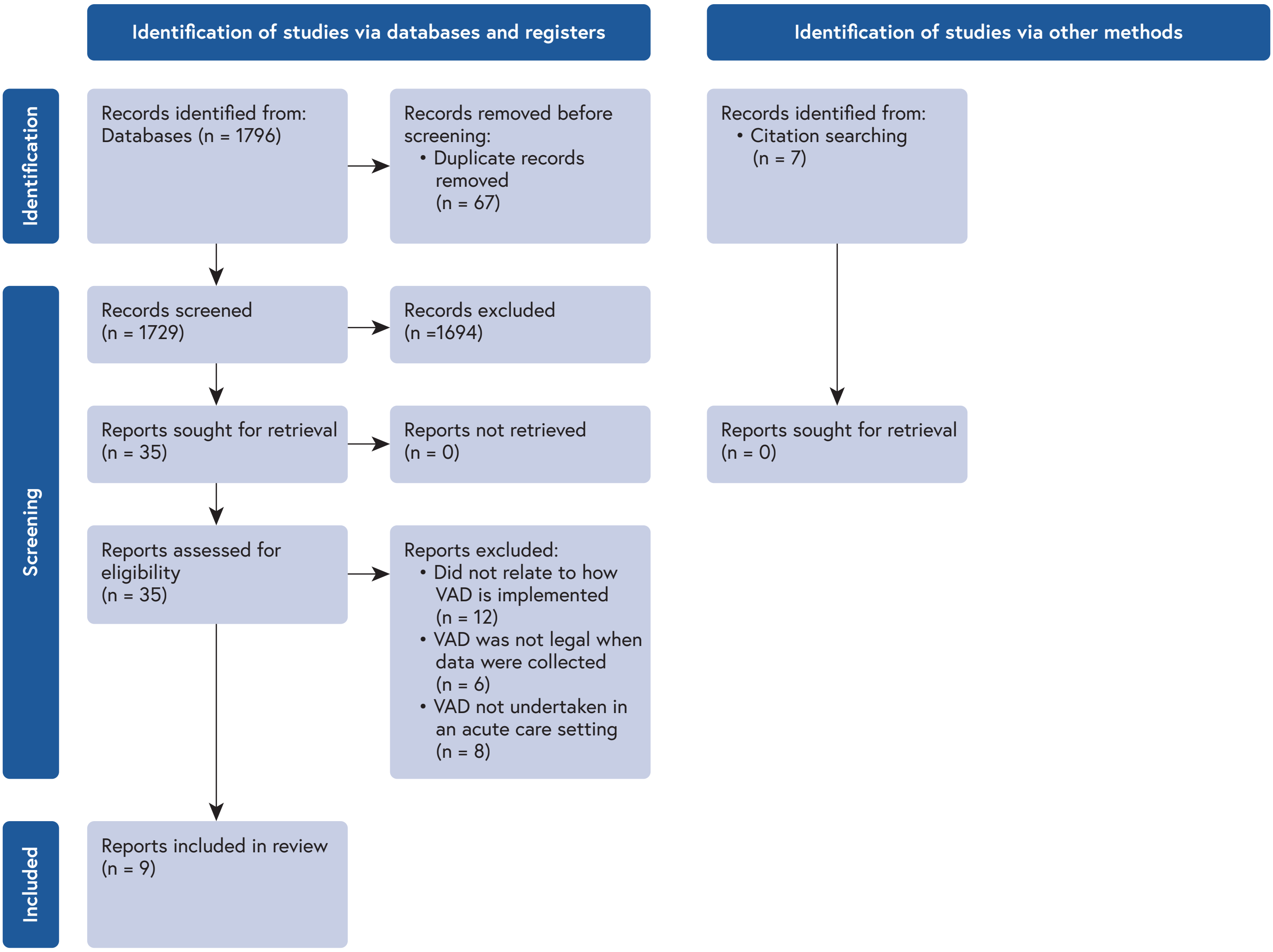

FIGURE 1: PRISMA FLOW DIAGRAM MODIFIED FROM: PAGE MJ, MCKENZIE JE, BOSSUYT PM, BOUTRON I, HOFFMANN TC, MULROW CD, ET AL. THE PRISMA 2020 STATEMENT: AN UPDATED GUIDELINE FOR REPORTING SYSTEMATIC REVIEWS. *BMJ* 2021;372:N71

aspects of the practice, with providing patient-centred care is difficult.[31] The extent to which nurses can communicate openly with physicians responsible for prescribing or administering a VAD substance influences their experience of the process.[28] Importantly, researchers also highlighted that nurses were often unfamiliar with the legal requirements of VAD.[25,27,28]

These findings were not confined to nurses. Physicians and pharmacists similarly found the process complex and time-consuming.[2] Knowledge of the law relieved some of this burden, but conversations with patients and their families about voluntary assisted dying were frequently perceived as difficult.[16,26] Understanding the individual's motivation for seeking VAD made this easier.[2,26]

Nine sub-themes and four descriptive themes emerged from the synthesis: 1) putting the law into practice requires knowledge and understanding gained through education, 2) helping people die using VAD is complex, 3) the how of enacting VAD, and 4) participating in VAD is deeply personal for clinicians. Examples of the codes and the associated text that informed the genesis sub-theme and descriptive themes are set out in Table 3.

Four descriptive interconnected themes were synthesised from the literature. Central to the implementation of a new VAD service is knowledge and understanding of the law and its requirements. Acknowledging the range of people involved in VAD and how VAD practices fit with their usual work, contributes to complexity. Enacting VAD, therefore, requires role clarification and unambiguous communication. Finally, the nature of VAD challenges deeply held beliefs and values about the world, for patients, families, and staff. Clinicians need opportunities to reflect on what VAD means to them at a personal, as well as professional level.

## THEME 1: PUTTING THE LAW INTO PRACTICE REQUIRES KNOWLEDGE AND UNDERSTANDING GAINED THROUGH EDUCATION

All jurisdictions have strict eligibility criteria that limit who can access VAD. Authority to assess whether a person meets the eligibility criteria usually rests with physicians, although in Canada nurse practitioners can also conduct eligibility assessments. To undertake this important gate-keeping function, these clinicians must have sound knowledge and

## TABLE 2: DESCRIPTIVE SUMMARY OF THE STUDIES INCLUDED IN THE REVIEW

| **Study & geographic location** | **Approach** | **Sample & context** | **Key findings** | **Answers to the RQ – what factors may act as barriers and enablers** |
|---|---|---|---|---|
| Buchbinder et al. (2019)<br>Vermont, USA | Data collection: Qualitative semi-structured interviews<br>Method of analysis: Grounded theory | 37 physicians, nurses and social workers who had clinical experience with VAD in Vermont | There are five domains where clinicians engaged with VAD: clinical communication; Act 39 protocol; prescribing medication; planning for death; professional education | Provider's communication with patients – need to understand reasons for seeking voluntary assisted dying<br>Important to understand the requirements of the law, but this was complex and time-consuming<br>Support with prescribing is often required, including how to source the medication once prescribed.<br>Support for patients on the day – additional challenges associated with self-administration<br>The need for support from colleagues |
| Denier et al. (2009)<br>Flanders, Belgium | Data collection: Qualitative semi-structured interviews<br>Method of analysis: Grounded theory | 82 nurses with experience caring for patients requesting VAD | Nurses' involvement in VAD depends on whether they assume a procedural, action-focussed, or existential-interpretive perspective | Nurses participate in voluntary assisted dying in different ways<br>• Organising the process. Reliance on checklists needed detailed protocols<br>• Others focussed on ensuring they had the right attitude to support the patient.<br>The two perspectives are not mutually exclusive (complementary dimensions of care)<br>Phases associated with voluntary assisted dying are interrelated, not necessarily linear and/or distinct.<br>Communication about the process, also communication about how patients and their families are experiencing the process<br>Processes underpin the overall experience of voluntary assisted dying. It permits the existential-interpretive perspective to flourish. |
| Francke et al. (2016)<br>Netherlands | Data collection: Questionnaire<br>Method of analysis: Quantitative descriptive analysis and multivariate logistic regression analysis | 587 nurses who worked in general or academic hospitals, home care, nursing homes or elderly care homes | Nurses want to be involved in VAD decision-making. Some nurses are not aware that they are not legally permitted to administer VAD drugs | Nursing staff believe that there are gaps in legal knowledge<br>One-third of respondents would not administer voluntary assisted dying<br>Nursing roles are restricted to caring for the patient and family<br>Few nurses in the study had actively participated in voluntary assisted dying or been present<br>Professional guidelines set out nurses legal obligations |
| Gallagher et al. (2018)<br>Canada | Data collection: Web-based survey<br>Method of analysis: descriptive and inferential statistics | 1,040 hospital pharmacy staff | The majority of respondents, particularly technicians and assistants, were supportive of VAD, but most lacked education about the topic | Pharmacists need additional education around Medical Assistance in Dying (MAiD), and this should start in entry to practice programs<br>Knowledge of the law was a predictor of support<br>Important to the pharmacist that people seeking MAiD consented – i.e. voluntary, no coercion |
| Hogg et al. (2018)<br>Canada | Data collection: Survey<br>Method of analysis: Quantitative descriptive analysis | 125 nurses and allied health professionals working in a large urban multi-site rehabilitation centre | Education for healthcare providers is critical to ensure they understand the relevant hospital policy and guidelines and improve compliance with VAD implementation | Lack of knowledge about MAiD leaves clinicians unprepared to handle conversations relating to MAiD – eager for more education<br>Education about policies and guidelines, but also about difficult conversations with patients.<br>Clinicians are generally supportive, but intent and readiness to participate is less apparent<br>Clinicians don't know where additional help/support can be accessed<br>MAiD generates intense emotions and conflicting personal opinions. |

## TABLE 2: DESCRIPTIVE SUMMARY OF THE STUDIES INCLUDED IN THE REVIEW CONTINUED

| Study & geographic location | Approach | Sample & context | Key findings | Answers to the RQ – what factors may act as barriers and enablers |
|---|---|---|---|---|
| Inghelbrecht et al. (2009)<br>Flanders, Belgium | Data collection: Questionnaire<br>Method of analysis: Quantitative descriptive analysis and logistic regression analysis | 3,321 nurses who had clinical experience caring for patients | Nurses are generally supportive of voluntary assisted dying for terminally ill patients, however, there is uncertainty about their role in its performance<br>The separated attitudes and roles<br>Support for VAD is higher than the agreement to administer | The sample was a general population of nurses rather than those with experience of EoL care<br>The majority of nurses accepted VAD for people with a terminal illness with extreme uncontrollable pain<br>Two-thirds disagreed that administering the drugs was a nursing role. Rather their tasks were restricted to patient and family care<br>A substantial number (43%) said they would administer – but this is prohibited by law.<br>Nurses should not be required to participate. Conscientious objection is permissible<br>Positive attitude associated with personal and direct confrontation with pain and suffering of their patients.<br>Uncertainty about roles. |
| Inghelbrecht et al. (2010)<br>Flanders, Belgium | Data collection: Survey<br>Method of analysis: Quantitative descriptive analysis and logistic regression analysis | 1,678 nurses who had cared for patients for whom a life-ending decision may be required | Over half of the nurses surveyed had been involved in a VAD decision. Some nurses administered medications beyond the legal boundaries of their profession | More than two-thirds of nurses reported that the patient expressed their wish about VAD to them.<br>Nearly two-thirds were involved in the decision-making process<br>40% of nurses were involved in the preparation, and one third were present.<br>Consultation between physicians and nurses was important, however, not much actual shared decision-making.<br>Seemed to be a lack of clarity in relation to the purpose of some medication prescriptions – nurses may have overestimated the actual life shortening effect of the drug they administered. |
| Kouwenhouven et al. (2014)<br>Netherlands | Data collection: Questionnaire<br>Method of analysis: Quantitative descriptive analysis and qualitative content analysis | 793 physicians who were likely to be involved in end of life decision-making. | Dutch physicians perceive a difference between VAD that is self-administered by patients and practitioner administration. The choice of method is predominantly the physicians. | How voluntary assisted dying is completed is frequently not discussed with patients if they were unfamiliar with the process.<br>Assumptions about patients' wishes and whether it was too burdensome<br>Understanding of suffering |
| Van Bruchem-van de Scheur et al. (2008)<br>Netherlands | Data collection: Questionnaire<br>Method of analysis: Quantitative descriptive analysis and qualitative content analysis. | 1,509 nurses employed in hospitals, home care organisations and nursing homes who had experienced a request for VAD in the past two years. | The majority of nurses stated that obtaining intravenous access and preparing VAD medications are not accepted as nursing tasks. | Nurses' understanding of the broader legal framework, including reporting obligations, was limited.<br>Different views about whether preparing voluntary assisted dying medications is a nursing role<br>Nurses in this study were reluctant to participate in voluntary assisted dying decision-making<br>Lack of clarity about nursing roles – inserting an intravenous cannula may or may not be a nursing task. |

## TABLE 3: OVERVIEW OF THEMES, SUB-THEMES, AND CODES

| Theme | Sub-theme | Codes | Text examples |
|---|---|---|---|
| Putting the law into practice requires knowledge & understanding gained through education | Knowing and understanding the law | Nurses' knowledge of the law | Not all respondents are convinced that their colleagues are familiar with the relevant legal rules: less than half (43%) agree with the statement that most nurses know which actions they are allowed to perform in the case of euthanasia (Francke et al. 2016). |
| | | VAD law is complex | All providers emphasised that understanding the law is time-consuming and that it is difficult to grasp the details before beginning the process (Buchbinder et al. 2019). |
| | | Understanding eligibility criteria for VAD | Clinicians achieved the highest average scores (84%) on survey questions relating to eligibility criteria (Hogg et al. 2018). |
| | | Pharmacy staff knowledge of the law | Pharmacists and pharmacy technicians obtained similar results for their knowledge of provincial legislation (for pharmacists, mean 2.7 [SD 1.1], median 3 [IQR 2]; for technicians/assistants, mean 3.0 [SD1.2], median 3 [IQR 2]; t(1038) = 3.1, p = 0.002) (Gallagher et al. 2019). |
| | | Knowledge of the law | Average grade scores were consistent and showed minimal differences among nurses and allied health professionals when comparing grade scores with professional background and years of clinical experience (Hogg et al. 2018). |
| | | Familiarity with policy | When asked whether they knew of their hospitals' policies regarding MAiD, the majority of both pharmacists (460/595, 77%) and technicians/ assistants (266/423, 63%) reported working at hospitals that permitted MAiD (Gallagher et al. 2018). |
| | Translation to practice depends on education | Opportunities for education are limited | Providers lamented the lack of formal education, training, and institutional support around Act 39, and reported seeking out information through informal professional networks and advocacy organisations, such as Compassion and Choices' 'Doc2Doc' program (Buchbinder et al. 2019). |
| | | Willingness to participate in VAD education | All responses shared a common theme that was related to education. Specifically, all sixteen participants expressed interest in further education on MAiD. Examples of comments included 'staff in service would be a great idea', 'need a pamphlet on all units …', '[n]eed more training regarding MAiD – scenario training/practice", etc. (Hogg et al. 2018). |
| Helping people die using VAD is complex | Clarifying responsibility for VAD processes | VAD processes are complex | Nurses are aware that VAD affects many people, including the patient and their family, grandchildren, children, and staff. The needs of all hospital staff, not just clinicians must be considered (Denier et al. 2009). |
| | | VAD processes are multidisciplinary | While the burdens of prescribing fell primarily to physicians, nurses, and social workers, when available, occasionally helped to identify pharmacies and determine insurance coverage (Buchbinder et al. 2019). |
| | | VAD tasks undertaken by nurses | In addition, respondents were asked about involvement in the preparations for euthanasia. Very few (3% or less) say that they have ever brought the lethal drugs from the pharmacy, connected the infusion line, dissolved the drugs and/or prepared the syringe (Francke et al. 2016). |
| | | VAD tasks undertaken by physicians | While physicians prescribe life-ending medications they may not always administer them or be present when a nurse administers them (Inghelbrecht et al. 2010). |
| | | Pharmacy staff may not know if they're dispensing VAD medications | When asked if they had ever dispensed a prescription for MAiD after it became legal, 18% (n = 107) of pharmacists were sure they had, and 78% (n = 471) were sure they had not, whereas 15% (n = 63) of technicians/ assistants were sure they had, and 58% (n = 249) were sure they had not. The remaining respondents were unsure (Gallagher et al. 2018). |
| | Keeping patients as the focus of care | Understanding what VAD care involves | Participants emphasised that reassuring patients that they would be there for them and exploring their reasons for requesting AID were important first steps (Buchbinder et al. 2019). |
| | | Nurses' primary role is to care for patients | The nurse guides, counsels, and supports the patient and the family rather than organising the care process (Denier et al. 2009). |
| | | Reasons for choosing VAD | When physicians were confronted with several statements and asked, which statement(s) could be a reason for them to choose for physician administration of VAD medication (physician-assisted suicide) over self-administration by the patient, 67 – 69% agreed with the statements 'PAS underlines the patient's autonomy, free choice and/or own responsibility (Kouwenhoven et al. 2014). |

## TABLE 3: OVERVIEW OF THEMES, SUB-THEMES, AND CODES CONTINUED

| Theme | Sub-theme | Codes | Text examples |
|---|---|---|---|
| The how of enacting VAD | Developing sound therapeutic communication | Patients discuss VAD with nurses | Of the nurses whose patients received euthanasia, 69% (84/122) reported that the patient had expressed his or her wishes about euthanasia to them (Inglhelbrecht et al. 2010). |
| | | Understanding requests for VAD | Providers were particularly attuned to probing for concerns about finances or being a burden on others due to terminal illness and often framed Act 39 as a last-resort option (Buchbinder et al.2019). |
| | | Clinical communication is important but challenging | Most respondents are in support of MAiD and respondents expressed mixed feelings when it comes to ease of having MAiD related conversations (Hogg et al. 2018). |
| | Promoting interdisciplinary communication | Nurses' involvement in VAD discussions | Almost a quarter (22.6%) of the nurses approved of the proposal to regulate physicians' obligation to consult a nurse before making their decisions about situations where a nurse is involved in the daily care of the patient (Van Bruchem-van de Scheur et al. 2008). |
| | | Good interdisciplinary communication is important | Respondents were asked whether they wished to be told if a prescription they were dispensing would be used for MAiD: 87% (n = 531/607) of pharmacists and 54% (n = 233/430) of technicians/assistants said yes (Gallagher et al. 2018). |
| Participating in VAD is deeply personal for clinicians | Attitudes and beliefs influence clinician's participation in VAD | Willingness to participate in VAD | Religious nurses – of any denomination – and nurses who rated their religion as important in their professional attitudes towards euthanasia and other end-of-life decisions were more opposed to euthanasia than nonreligious nurses and those nurses who rated their religion as not important (Inghelbrecht et al. 2009). |
| | | Pharmacy staff are generally supportive of VAD | Both groups were very supportive of MAiD in terms of values (Figure 2). One-sample t-tests showed that means were significantly different from the neutral response on the scale, in the direction indicating that respondents were supportive of MAiD (Gallagher et al. 2018). |
| | Limiting moral distress | Participating in VAD has an emotional toll | Eighteen per cent (n = 33) had moral considerations for not discussing the option of PAS, for example, 'to burden the patient in this phase with the responsibility for physician-assisted suicide felt like walking away from my own responsibility.' Another 15% (n = 28) stated that the (presumed) patient's wish was euthanasia (Kouwenhoven et al. 2014) |
| | | Getting it right | Closure for these nurses is a very personal process; it happens on its own terms and may involve continuous contact with the patient's family. [Attending the funeral] "it is also important for me, for coming to terms with it and for knowing "Did I do this right" ' (Denier et al. 2009) |
| | Fulfilling professional roles | Nurses' views on non-clinical VAD related roles | The nurses held diverging opinions about membership of regional euthanasia review committees: 45% out of the 1172 nurses supported membership of nurses on these committees, 8.9% were against, and 41.6% had no opinion about the issue (Van Bruchem-van de Scheur et al. 2008) |
| | | Physicians assume different VAD related roles | Several physicians expressed a commitment to educating colleagues about the process, both formally and informally, illustrating that the provider's role in VAD does not necessarily end with a patient's death (Buchbinder et al. 2018) |
| | | Participation in VAD is influenced by professional experience | Moreover, being a registered nurse, working in an academic or general hospital or in a nursing home, having cared for terminally ill patients in the previous two years, and working in a specialised palliative care team/department is associated with having been actually involved in decisions concerning euthanasia (Francke et al. 2016) |

understanding of the law. Knowing the law is not the same as knowing how it should be applied and assessing eligibility criteria may extend beyond the clinicians' areas of clinical expertise. Buchbinder et al, for example, found that in Vermont physicians are required 'to determine who counts as a state resident, which sometimes put physicians in an uncomfortable position because determining residency lay outside the scope of their professional judgement' (p. 638).[30]

To varying degrees, laws also prescribe processes and procedures for undertaking VAD so all those who participate must have this legal knowledge. Importantly, the law will prescribe who is authorised to administer VAD medications. Inghelbrecht et al. found that in Belgium nurses occasionally administered VAD medications to patients who lacked decision-making capacity.[28] The Belgium law, however, requires a patient to have decision-making capacity at the time they request VAD and authorises physicians, but not nurses, to administer the VAD medication. Similarly, a quarter of nurses (n=587) surveyed in the Netherlands did not know if they were permitted to administer VAD medications,[25] suggesting a lack of awareness of the restrictions VAD laws place on their practice. Gaps in legal knowledge may be addressed with more or better education.

The need for education that focuses on improving clinicians' knowledge of VAD law, policies and guidelines was evident in four studies.[16,25,26,30] This is particularly important because more knowledge about VAD law and policy increased clinicians' support for the practice and patient requests.[16,26] The type and format of VAD educational resources will depend on the particular needs of the health service, clinicians, and patients, and are essential for supporting those involved to understand how the law works in practice.

## THEME 2: HELPING PEOPLE DIE USING VAD IS COMPLEX

This theme highlights that VAD laws, and their associated processes, are perceived as complex, consequently how VAD-related roles and tasks are allocated is uncertain. In the US state of Vermont, physicians reported finding it difficult to 'grasp the details before beginning the process' (p. 638).[30] This included identifying the necessary administrative forms, prescribing the correct type and dose of medication, and where it might be dispensed. As complying with procedural requirements was time-consuming, nurses or social workers often assisted by finding eligible witnesses or completing VAD-related paperwork.[30] In these circumstances being able to access detailed policies or guidelines can serve as a procedural checklist and provide reassurance that all requirements have been met.[31]

After the VAD procedural processes have been completed, planning for the death was also perceived as a time-consuming and challenging task.[30] Even if not required to administer VAD medication, a physician or nurse may be asked to be present when the medication is taken, or be available to coordinate and provide after-death care.[30] Kouwenhoven et al. found that physicians in the Netherlands preferred to administer the VAD medication themselves which, to some extent, avoids this issue.[2] The research highlights that participating in VAD requires a collaborative multidisciplinary team from the first patient request to after the patient has died, but there are many points where this can be challenging. At each step in the process, however, the needs of the patient must be forefront.

The ability to end the suffering that some patients experience at the end of life was very important to clinicians who participated in VAD.[2,16,27,30] How this occurred was also important. Denier et al. found that for the 'patient's life … [to] end in a good way' it was imperative that all 'practical arrangements' were made (p.267).[31] Although the need to cover all steps in the process was important, for some, VAD entails much more than mechanically following procedures. A Belgium nurse summed it up by saying '[I would not need a protocol] because I believe that it is something that you cannot put down on paper. It is different for every patient. Every patient has different needs' (p.269).[31] So, while acute care health services must develop policies that make transparent the complexities of the relevant legal framework, how they are enacted will ultimately depend on those people who are caring for the patient.

## THEME 3: THE HOW OF ENACTING VAD

The third theme encompassed how VAD was enacted with a particular focus on communication between clinicians and patients considering VAD, and also between healthcare team members. Ways of talking about VAD, while infused with experience and expertise, require adaptation to attend to the patient's specific needs. Buchbinder et al. for example, reported that clinicians were attuned to exploring a person's reasons for requesting VAD.[30] Requests motivated by financial concerns, or fear of becoming a burden, prompt further exploration to ensure the person's request is voluntary and not coerced. Even if coercion is not a concern, requests for VAD can initiate broader end-of-life conversations. As one physician stated '[t]here are more people who can say… "[c]an I have that death pill?" than who can say, "[w]hat can you do for me while I'm dying that I'm not gonna suffer?"' (p.638).[30] Statements such as these, invite conversations about other unresolved issues, potential palliative care options, or eligibility for VAD.

In this context, having the correct information was important because ensuring that the patient 'received all the necessary information to make a good decision' (p.267) was central to good end-of-life care.[31] However, complex policies designed to enact the law can make it difficult for clinicians to know what to say. In the survey of Canadian clinicians, a lack of knowledge about VAD policies and procedures resulted in respondents expressing 'mixed feelings' about having VAD-related conversations with patients (p.45).[16] Mixed feelings may reflect concerns about possible misunderstandings about rules and regulations or miscommunication around expectations of the process. In these circumstances, clinicians may be hesitant to participate in VAD. Conversely, when they are comfortable with their knowledge of the law, and the associated VAD policies and procedures, clinicians felt better equipped to talk openly with patients about VAD and end-of-life choices.[2,26]

How VAD information, patient requests, and ways of participating, are communicated between clinicians was a notable concern. For example, in Belgium, interdisciplinary communication is underscored by the legislative requirement for an attending physician to discuss a patient's request for VAD with the nursing team. Even with this legal requirement, Belgium nurses generally would prefer that information about VAD processes was shared more frequently.[28] Although this point was reiterated by nurses in the Netherlands,[25] others felt that mandating this type of communication was not required.[29] The importance of accurate and open communication in healthcare is well recognised, as are the challenges around end-of-life communication.[32] The complexity of VAD law and its associated processes contributes an additional layer of intricacy. Enacting VAD involves navigating these challenges so that the process as a whole works well and the patient's life ends in a good way.[31]

## THEME 4: PARTICIPATING IN VAD IS DEEPLY PERSONAL FOR CLINICIANS

The fourth theme reminds us that clinicians bring a diverse array of attitudes, beliefs, and values to their role. Some, like compassion, empathy and caring are embedded in, and inseparable from quality healthcare directed at prolonging life and relieving suffering. VAD challenges this position by enabling people to intentionally hasten their death, and for some clinicians, this choice can conflict with their deeply held and personal beliefs. Inghelbrecht et al. found that nurses who rated their religion as important in their professional attitude were more opposed to VAD than those nurses for whom religion was not an important factor.[27] For these nurses access to good palliative care or sedation were seen as preferable to VAD. Religiosity also influenced the degree to which nurses sought to be involved in VAD requests. Francke et al. showed that nursing staff who have 'religious or other beliefs that they considered important for their attitude towards end-of-life decisions, were more likely to agree with the statement that a physician should discuss euthanasia requests with them' (p.787).[25]

Participating in VAD is deeply emotive and the need to limit moral distress requires strategies to help manage the desire to participate in VAD, with the need to shield those who were highly vulnerable. In the Netherlands, both self-administration by the patient and administration by a physician are permitted. Kouwenhoven et al. found that while self-administration was less psychologically burdensome for physicians, in the majority of cases this option was not discussed with the patient because physicians believed that assisting with a person's death was their responsibility.[2] In other cases, physicians delegated the task of administering life-ending medications to nurses.[28] Although this only occurred in a minority of cases, it is prohibited by law. The authors in this study surmised that nurses assumed this active role out of concern for their frailer patients who were suffering. However, it left them in a vulnerable position where complying with a physician's medication order is also an illegal act.[28] This also highlights the potential conflict between personal and professional interests.

How professional roles are cast impacts VAD participation. For example, van Bruchem-van der Scheur et al. found that the majority of nurses surveyed believed that inserting an infusion needle and preparing VAD medications were not nursing tasks.[29] Positing that preparing for VAD may be 'too emotionally draining' (p.195) and that the 'extraordinary moral character' of VAD places it outside the professional domain of nurses (p.196). Professional attitudes to VAD, however, have evolved. Seventy-four per cent of Canadian pharmacists surveyed by Gallagher et al. accepted VAD as a part of healthcare.[26] In this setting, those clinicians holding negative attitudes to VAD made efforts to ensure that this did not impact their professional work.[26] For example, a pharmacist who was not supportive of VAD might still dispense the medication or refer to another colleague who is less reluctant to participate.[26] Clinicians take their professional VAD responsibilities seriously as confirmed by Denier et al.'s findings that nurses expressed that having the 'right attitude' and knowing that the process was completed correctly were important features of participating in VAD (p.267).[31]

## SECONDARY ANALYSIS USING THE CONSOLIDATED FRAMEWORK FOR IMPLEMENTATION RESEARCH

The studies included in the review highlight the multifactorial and complex nature of VAD, but do not specifically address how this may affect implementation. Potential barriers and enablers to the implementation of VAD, therefore, were identified by deductively analysing the Phase 1 descriptive themes using four of the CFIR domains and are set out in Table 4.

### Domain 1: The intervention

The first domain in the CFIR refers to the characteristics of the intervention being implemented and includes core elements, such as requirements of the law, and adaptable elements, such as VAD policy.[20] Knowing the law is a clear enabler for the implementation of VAD in acute care health settings. The legitimacy of the source of information is considered an enabler to implementation.[20] While clinicians

## TABLE 4: USING THE CFIR TO IDENTIFY POSSIBLE BARRIERS AND ENABLERS

| **Theme** | **Phase 1** | **Phase 2** | | | | |
|---|---|---|---|---|---|---|
| | **Subtheme** | **CFIR Domains** | | | | **Example of a barrier (B) and enabler (E)** |
| | | **1 Intervention** | **2 Outer Setting** | **3 Inner Setting** | **4 Individual** | |
| Putting the law into practice requires knowledge & understanding gained through education | Knowing and understanding the law | ✓ | | ✓ | ✓ | B: Not knowing what the law requires; perception that the law has been imposed on practice<br>E: Developing VAD policies that align with organisations values and clearly describe how to meet legislative requirements |
| | Translation to practice depends upon education | | | ✓ | ✓ | B: Inaccessible or poorly targeted educational resources<br>E: HCPs willingness to participate in VAD education |
| Helping people die using VAD is complex | Clarifying responsibility for VAD processes | ✓ | ✓ | ✓ | ✓ | B: Multiple procedural, clinical, technical, and legal steps<br>E: Well-structured and accessible checklists or protocols |
| | Keeping patients as the focus of care | | | ✓ | ✓ | B: Closely following procedures and tasks may limit ethical considerations of patient and family concerns<br>E: Open and inclusive conversations about the process, key decision points and associated requirements for each patient |
| The how of enacting VAD | Developing sound therapeutic communication | | | ✓ | ✓ | B: Identifying patient needs can be challenging<br>E: A belief that VAD is an appropriate option in the circumstances |
| | Promoting interdisciplinary communication | | | ✓ | ✓ | B: Poorly defined and developed intersubjective relationships<br>E: Acknowledging and using the skills and contribution of all members of the multidisciplinary team |
| Participating in VAD is deeply personal for clinicians | Attitudes and beliefs influence clinicians' participation in VAD | | | | ✓ | B: Limited experience providing end-of-life care in an acute care setting<br>E: Connections with external organisations that support VAD |
| | Limiting moral distress | | | ✓ | ✓ | B: Lack of support to conscientiously object<br>E: Feeling that the patient's life has ended in a good way |
| | Fulfilling professional roles | | ✓ | ✓ | ✓ | B: Limiting the roles of those who can participate in VAD<br>E: Building social capital in the organisation through communities of practice |

will acknowledge that the law is a legitimate foundation to inform their practice, its translation into local hospital policy and procedures will also require evidence of legitimacy. To address this potential barrier, the development of institution or service-specific policies that encapsulate the law, through active consultation with legal and clinical experts can create an 'adaptable periphery' (p.3)[20] which is critical to implementation.

### Domain 2: Outer setting

Implementing VAD services in an acute care health setting will be influenced by external economic, political, and social contexts – 'the outer setting'.[20] The decision to, and practice of, actively ending a life carries social and political meaning that is less evident in most other healthcare practices. For example, the legislative appointment of an external body with oversight of each VAD case demonstrates that the practice of VAD extends beyond the social context of the hospital and the therapeutic relationships between clinicians and patients.[33] Damschroder et al. observe that organisations that support staff to embrace 'external boundary-spanning roles' are more likely to quickly implement new practices (p.7).[20] Allocating a role focused on supporting the relationship between the internal hospital context and the external oversight body, to a senior clinician may enable implementation.

For clinicians involved in VAD, alignment of their practice with their disciplinary professional values and responsibilities will be critical to implementation. As VAD is gradually introduced to new jurisdictions, there is greater pressure for professional bodies that represent clinicians' interests to create overarching policy positions and statements that guide clinicians who choose to participate in VAD. In the absence of a professional voice in this legal-political space, clinicians draw upon their religious beliefs and values, confounding implementation. In these circumstances, peer learning and support can be implementation enablers.[30]

### Domain 3: Inner setting

The inner setting is influenced by how the actions of individual clinicians are differentiated and coordinated to produce holistic care that meets patients' needs.[20] While clinicians frequently work in multidisciplinary teams to ensure that patients receive the complex quality care they deserve, VAD encompasses unique procedural, clinical, technical, legal, and humanistic elements that must be effectively negotiated. Damschroder et al. describe the way that labour is divided among teams as 'functional differentiation' and note that 'the more stable teams are, the more likely implementation will be successful' (p.7).[20] Achieving functional differentiation in the provision of VAD must account for its emotive and contentious nature, which can result in clinicians feeling ambivalent about taking on roles they would usually see as routine.

A commitment to education, and being open to learning about VAD, is considered essential.[16,30] The resources available to support learning influence implementation,[20] therefore, investment in educational programs is an important enabler. Learning programs could focus on the law and how the law has been translated into the procedure; provide opportunities to discuss how the procedure aligns with professional policies and values; and offer simulated learning to multidisciplinary teams to develop the intersubjective communication skills required to negotiate the emerging contingencies associated with the VAD process and procedure.

### Domain 4: Individuals

In addition to their professional codes, the clinicians involved with VAD carry their own beliefs and values. As the provision of VAD requires a multidisciplinary team, implementation strategies need to account for the different stances, preferences, and abilities of all clinicians. Given the emotive nature of VAD, successful implementation will require clinicians who are open to learning about VAD and what it means to the patient. Initially, organisations may consider a process to select clinicians with a specific skill set to implement VAD or at least provide an option for clinicians to conscientiously object.

## DISCUSSION

How to implement VAD in an acute care health setting is a relatively new area of exploration. Using a two-phase approach where inductive themes in the literature were deductively analysed using the CFIR, potential barriers and enablers can be identified, and associated implementation strategies generated.

In regard to the intervention, clinicians must perceive VAD as an appropriate 'fit' for their practice. The challenge here is that in essence, VAD is a legal procedure that is situated in a healthcare setting, and laws are frequently perceived as not a good fit for healthcare.[34] Furthermore, VAD laws seek to balance eligibility for access with safeguards to ensure the law is not abused. In some instances, complying with the safeguards creates significant barriers.[35] If clinicians perceive that a law, or the systems that operationalise it, have been imposed on their practice, rather than being internally developed as a solution to a problem, implementation may be resisted.

To ensure that clinicians can meet their legal obligations, institution-specific policies and procedures should be developed collaboratively and use consistent language that aligns with the services underlying values.[36] This has been demonstrated in a community palliative care service in Victoria, Australia, that when reviewing their organisational policies to accommodate the requirements of their state's law, ensured that client-centred values remained central.[37] These strategies may be considered as changes to the inner context and will assist clinicians to make sense of the law and reassure them that they are protected if they comply with their prescribed legal obligations. In the Netherlands, for example, VAD is not punishable if physicians have met the requirements of due care. In contrast, while nurses might routinely administer medications to relieve a person's suffering at the end of life, VAD laws generally do not permit them to administer medication with the intention of ending a life. It is important, therefore, that procedural guidelines also describe the legal boundaries of practice for all members of the interdisciplinary team.

Once developed, VAD policies and procedures must be supported locally by a suite of educational resources and made available to those who may be either directly or indirectly involved in VAD. The type and format of VAD educational resources will depend on the needs of the health service, clinicians, and patients. O'Conner and Philips report the use of informal sessions (referred to as 'fireside chats') to support more formal educational resources provided to staff working in a community palliative care service.[37] Research to evaluate whether educational resources and innovative strategies such as 'fireside chats' that are designed to support clinicians' understanding of how the law works in practice is essential.

Policies, recommendations, and guidelines such as those generated by professional associations or bodies form part of the outer setting. These statements are likely to resonate with some clinicians, and organisations that are aware of their stance can take steps to address potential areas of conflict that might act as a barrier. There is also a need for leadership within professional organisations; to begin professional debates about the merits and limitations of VAD in our society more broadly. For example, Palliative Care Australia has published guiding principles for those who provide care to those living with a life-limiting illness. These principles seek to ensure people have access to appropriate care at the end of life, and also to maintain appropriate, respectful, and cooperative relationships between healthcare professionals.[38] Contributions to professional debate are critical to informing the broader community's decisions about VAD legislation.

In regard to the individuals involved, effective collaboration is required to develop clear guidelines or protocols that set out how responsibility for VAD-related tasks or processes are allocated or delegated. While helping to achieve functional differentiation, they must also be flexible enough to accommodate different levels of participation as clinicians' attitudes to their involvement in VAD evolve. Mills et al. report that units or wards with a culture of open communication were more likely to be perceived as supportive of a range of different perspectives,[39] yet how clinicians develop the skills to work collaboratively, yet critically, in the highly contingent area of VAD requires further investigation.

Despite the importance of multidisciplinary care, the interaction between different disciplines may be fragmented. Entrenched cultural practices, such as views about the value of information to be communicated,[40] and organisation factors such as the physical layout of hospitals and staff scheduling that can result in physical and psychological segregation of different professions,[41] contribute to this fragmentation. Clear and timely interdisciplinary communication is pivotal for intersubjectivity and the provision of VAD. Although there have been concerted efforts to nudge the cultural change required to improve interdisciplinary communication,[42] additional strategies that are VAD-specific need to be considered. This might include structuring dedicated VAD teams. Collaborating on a team has been shown to relieve the tension that sometimes exists between providers as a result of the hierarchy and the conflicts that can arise across disciplines.[43] They also divide responsibilities among team members and alleviate the pressure experienced if one person feels as though they are responsible for doing it all.[44] Simulated learning is used to develop relational coordination in multidisciplinary emergency department teams and may also have value for VAD practice.[45]

When clinicians report that participating in VAD is deeply rewarding, this is likely because VAD aligns with deeply held values and beliefs.[46] For others, actively helping a person to end their life can generate substantial moral distress.[5] It is important, therefore, that clinicians are permitted and supported to choose their level of engagement with VAD. A recent literature review exploring the physician responses to participating in VAD found a universal lack of professional advice and support to help clinicians to deal with the emotional response generated by requests for VAD or coping with the impact.[47] Similarly, when nurses' perspectives are not respected or considered by other members of the multidisciplinary team, their experience of caring for patients seeking VAD is negatively affected.[47] Other contextual factors that support nurses to fulfil their caring responsibilities, and limit the moral distress associated with VAD include recognising the amount of time needed to effectively engage with patients.[48] Caring for patients who seek VAD involves significant emotional labour, and informal and formal support structures for all members of the team, as well as those who choose not to be involved, are necessary to foster sensitive and holistic care.[48]

Based on the preceding discussion we propose an implementation plan that recommends strategies to support the implementation of VAD in an acute care health setting (See Table 5). Further research will be undertaken to validate the plan.

## STUDY LIMITATIONS

This two-phase study has used a systematic, and largely inductive, process to identify the common themes found in a diverse group of research studies investigating VAD. Rather than limit our researcher gaze to studies informed by implementation theory and frameworks, we focused more broadly on reported experiences associated with the introduction of VAD into the health setting. This approach generated more evidence for review and subsequent secondary analysis. It is important to recognise that this method has identified potential barriers and enablers that can assist clinicians, managers, implementation scientists and others in their deliberations about the implementation of VAD in their respective workplaces. However, the

### TABLE 5: POSSIBLE VAD IMPLEMENTATION PLAN

| Theme | Intervention | Outer Setting | Inner Setting | Individual |
|---|---|---|---|---|
| Theme 1:<br>Putting the law into practice requires knowledge and understanding gained through education | Extract key clinical responsibilities (e.g. assessing eligibility for VAD) and procedural obligations (e.g. witnessing documents and reporting) from the enabling legislation. |  | Draft policies and procedures in consultation with legal experts and in collaboration with clinicians from a variety of disciplines.<br>Develop, promote and evaluate VAD education for clinicians, and other staff. | Held to account for understanding legal and clinical requirements – possibly a credential. |
| Theme 2:<br>Helping people die using VAD is complex | Identify roles that are specified in legal procedures. | Identify relevant professional position statements and guidelines. | Build a coalition of interested staff.<br>Roles for other staff are discussed and negotiated by the team.<br>Clearly articulated policies and guidance for conscientious objection to avoid requiring clinicians to comply with conflicting positions. | Commit to openness to other views and engage in discussion. |
| Theme 3:<br>The how of enacting VAD |  | Access to resources developed by external agencies.<br>Support compliance with legal reporting obligations. | Communication training to enhance staff intersubjectivity.<br>Audit VAD deaths and provide feedback.<br>Access to legal/ethical experts for consultation.<br>Update record systems to align with the procedure.<br>Include cases in morbidity & mortality meetings.<br>Provide clinical supervision. | Attend communication training.<br>Attend educational meetings with experienced providers when available. |
| Theme 4:<br>Participating in VAD is deeply personal for clinicians |  | Encourage engagement with communities of practice. | Identify and prepare champions/ advocates.<br>Make work-based psychologists and spiritual staff available for staff consultation.<br>Structured and transparent processes and support for those clinicians choosing to participate in VAD as well as though who have a conscientious objection. | Reflect on personal views.<br>Consult with workplace psychology or spiritual advisor.<br>Support peers. |

inductive nature of the methodology means that some implementation barriers, enablers and/or strategies may have been overlooked. As such, the recommendations of this study should be treated as tentative.

## CONCLUSION

The number of jurisdictions where VAD is legal has steadily increased. Acute care health settings and the clinicians who work within them play an essential role in facilitating access to voluntary assisted dying for eligible patients. This study sought to identify the factors that act as barriers and enablers to the implementation of voluntary assisted dying in acute care health settings.

Thematic analysis of the articles included in the review demonstrated the complexity associated with the provision of VAD. It highlighted that the dense procedural and technical requirements associated with VAD can expose the inherent vulnerability of caring clinicians. Furthermore, the importance of clear communication, between clinicians and patients, and also between members of interdisciplinary healthcare teams was emphasised. It also reminded us that clinicians bring a diverse array of attitudes, beliefs, and values to their roles. Consequently, while some clinicians find that participating in VAD can be rewarding, it can also take an emotional toll.

Viewing these results through the CFIR implementation framework lens, allowed for potential barriers and enablers to be seen and implementation strategies to be suggested. It is apparent that educational resources to enhance knowledge of the law are imperative, however, the most important strategies to enable the successful implementation are those that recognise that VAD is a deeply personal and relational practice. Consequently, there is a need to ensure institutional policies clearly articulate the legal obligations, and also align with the underlying values of the organisation. Successful implementation requires strategies that promote collaborative interdisciplinary teamwork and support individual clinicians to practice in a way that is congruent with their underlying beliefs and values. That is, supporting those who wish to participate in VAD, as well as those who have a conscientious objection to participating in any part or all of the process.

Experience has shown that participating in VAD is not likely to become a routine procedure in any acute care health setting. However, its impact on those who participate cannot be understated. By ensuring that clinicians are adequately supported, people seeking VAD can gain control over the timing and manner of their death.

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