Identifying Client and Market Need for Alternative HMDCB Certification Pathway

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Meet the Team

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Layla Profeta is a first-year Sloan Program in Health Administration candidate at Cornell, with a concentration in Consulting and Operations Management. Passionate about population health and healthcare equity, Layla aims to pursue a career in healthcare operations, specifically aiding underserved communities. She currently leads two nonprofits focusing on environmental sustainability and fundraising for pediatric and geriatric oncology. Layla's expertise lies in rewriting medical and nutritional data for inclusive health education. Her experience includes working with a Ghanaian nonprofit, gaining hospice insights and conducting translational research on health inequities.

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I. About HMDCB

The Hospice Medical Director Certification Board (HMDCB) is a not-for-profit organization responsible for the development, execution and assessment of the Hospice Medical Director Certification Examination (HMDCB, 2023). The Hospice Medical Director Examination allows physicians to demonstrate their expertise in the multidisciplinary competencies required of hospice care delivery. Hospice care entails palliative and end-of-life support services provided to terminal patients with a typical prognosis of six months or less (American Cancer Society, 2019). The HMDCB examination not only requires physicians to demonstrate their knowledge regarding the clinical management of hospice patients, but also the ethical and regulatory implications of hospice care delivery (HMDCB, 2023). The examination encompasses the following competence areas:

- Patient and Family Care
- Medical Knowledge
- Medical Leadership and Communication
- Professionalism
- Regulatory, Compliance and Quality Improvement

On a foundational level, eligibility for the examination requires that Physicians hold a medical license within the U.S, U.S. territories or Canada, adhere to HMDCB code of conduct, and have accumulated at least 400 hours of hospice experience during the last 5 years **(**HMDCB, 2023). Physicians must also qualify for one of three eligibility pathways: Practice, Certification or Training. The Practice pathway necessitates that physicians have 2 years of practice experience within the past 5 years. The Training pathway ecompasses completion of a year-long ACGME or AOA accredited Hospice and Palliative Medicine (HPM) training program. ABMS or AOA board certified HPM physicians may qualify for the exam through the Certification pathway.

In accordance with the eligibility criteria, the HMDCB examination contains multiple choice questions that are both recall , application and analysis based (HMDCB, 2023). It is tailored to physicians who have 2 years of experience in the delivery of hospice care or as a Hospice Medical Director. The breadth of the examination points to the organization's mission to certify well-qualified individuals to provide holistic care and reduce suffering at the end of life.

II. Problem Statement

The Hospice Medical Director Certification Board currently only certifies physicians with previous hospice experience. Physicians without hospice experience have expressed interest in taking the examination. HMDCB would like to gauge the demand for creating an alternative certification program.

III. Project Scope

The demand for this program will be characterized by a literature review addressing the current state of the HPM market and training as well as analysis of survey and interview feedback from HMDCB physician clientele. Based on these findings, initial recommendations regarding the viability and future directions for the program will be provided; HMDCB will assess the analysis to determine whether or not to move forward with pathway development and implementation.

IV. Current State of The Hospice Market : HPM Specialist Training and Market Demand

Both hospice and palliative services are provisions of end-of-life care. Palliative care can be provided to enhance the quality of life at any stage of chronic illness with or without curative treatment (National Institute on Aging, 2021). Hospice care lacks curative intent and is solely provided to patients during the end stages of a terminal illness (American Cancer Society, 2019). Both hospice and palliative care are person and family-centered; clinicians prioritize the needs of the patient while providing support and engaging in collaborative decision making with loved-ones (American Cancer Society, 2019).

Hospice and Palliative Medicine Specialists in the United States are currently trained through completion of a 12-month fellowship accredited by the Accreditation Council for Graduate Medical Education (ACGME) post residency (ACGME, 2022). Within the fellowship, clinicians receive exposure to treating patients across a range of ages, conditions, socioeconomic and cultural backgrounds. Competencies assessed include: Professionalism, Patient Care and Procedural Skills, Medical Knowledge, Practice-based learning and improvement, Interpersonal and Communication Skills, Systems-Based Practice, Recognition and Management of Pain and Substance Use Disorders.

Lupu et al. (2018) assessed the current supply and projected future demand of HPM specialists in Hospital Referral Regions (HRR). Hospital Referral Regions are geographical areas in which a high population of hospital utilizers in the area are Medicare patients aged 65 and older (Lupu et al., 2018). They projected future demand for HPM specialists in 4 quartiles of HRRs, classified by lowest to highest level of current supply of HPM specialists (Lupu et al., 2018). The authors calculated an average supply of 13.35 HPM specialists per 100,000 individuals aged 65 and older. With respect to HRRs maintaining current average supply, the authors project a need for 6391 to 10,604 specialists in the year 2040. In HRRs with a much lower than average supply of HPM specialists, Lupu et al. 2018 project a 2040 need for 23,916 HPM specialists. To solely meet the rate of population growth amongst the elderly, Lupu et. al 2018 project that the number of trained specialists per year would need to increase from 325 to 595.

Evidently, the current rate of HPM specialists training does not meet hospice market growth, projected at 8% by 2030 ("U.S. hospice market size, share and growth report", 2021). This gap in HPM supply indicates the utility of a potential alternative certification pathway that would certify physicians across various specialities in the competencies of hospice care delivery. In a study of 280 respondents across 5 hospitals of a large New York Health System, 88% of physicians identified hospice care as an important competency, yet nearly a quarter were unaware of the hospice criteria,and more than half deferred questions about advance directives to emergency room physicians (Litauska et al., 2013). Expounding on this lack of knowledge, a 2015 study found that “referral fear” can cause physicians to delay the onset of hospice care, with an average patient referral time period of 22-54 days before passing (Phillips and Collins, 2015).

V. Gaps in Resident and Medical Student Training

The lack of familiarity in hospice care competencies among physicians outside of HPM specialists can be partly attributed to gaps in medical school and residency training curriculum. In particular, Hospice Care competencies can be integral to physician training within the internal medicine and emergency medicine specialties; Internal Medicine physicians are increasingly responsible for an elderly population with multiple comorbidities (Cegelka, 2017) and 75% of older adults visiting the emergency department at the end of life (Kraus et al, 2016).

Cegelka et al. (2017) assessed end-of-life care education in 403 Internal Medicine programs in May 2015 within 5 competency areas: communication, ethical issues, socio-cultural aspects, patient care and professionalism via survey of program directors. Cegelka et. al 2017 found that 63% of programs surveyed lacked a formal end-of-life training program or had recently started one, while 34% of programs did not offer a hospice rotation. With respect to competencies, on average 0-9 hours were spent teaching residents Communication Topics and Skills and Medical ethics topics related to end-of-life (Cegelka et. al, 2017).

With respect to Emergency Medicine (EM) resident training, Kraus et. al. (2016) surveyed 45 AOA and 155 ACGME EM residencies, along with five dual AOA-ACGME accredited programs regarding the importance of hospice and palliative care, as well as competencies taught in their respective residency programs (Kraus et al., 2016). Kraus et. al 2018 found residents rated crucial conversations, management of the imminently dying and pain management as crucial competencies, and 64% of programs identified PC competencies as critical for resident learning. Yet, only 59% of programs reported teaching PC competencies and only 1 program had implemented a formal NIH End of Life educational program (Kraus et al., 2016).

Evidently, there is a lack of HPM education for physicians that are prone to seeing a larger proportion of end of life patients. This gap in training undoubtedly spans to residencies outside of internal and emergency medicine. In a survey of residents spanning multiple specialties (Urology, Orthopedic surgery, EM, Neurology, Dermatology, Otolaryngology) at an

academic institution, Schmit et al, 2016 found that 88% of residents reported receiving little to no classroom EOL training and undergoing unsupervised EOL conversations (Schmit et al., 2016).

For physicians interested in assuming a Hospice Medical Director role that do not have previous hospice experience there is an evident gap in their exposure to and development of end of life care competencies that starts at the foundational level of medical school and resident training.. Certifying physicians outside of the field will require a substantive program that will have to overcome this lack of knowledge in medical and resident training.

VI. Previously Conducted Hospice Educational Programs

The feasibility of a hospice training program for physicians outside of the field is evidenced by studies examining the utility of both online and simulation education. With regard to online education, modules from the Australia End-of-life Essentials training program provided general EOL education to physicians, nurses and allied health professionals (Morgan et. al., 2021). The videos included subjects such as: understanding the context of death and dying, Patient States of Mind, Clinical skills in end-of-life care, Accreditation and Management (End-Of-Life Essentials, 2023). Participants rated clinical skills content and simulations comparing novice and experienced hospice care professionals highly (Morgan et. al., 2021). Yet, they also expressed a desire to have in-person discussions and a remaining discomfort with end-of-life communication despite module education.

The utility of simulation education was further expounded upon by emergency medicine residents in a 2018 study in which the EM residents were taught EOL and PC competencies through 8 sessions involving a simulation in which the patient had an EOL trajectory (Goldonowicz et al., 2018). The patient presented with dementia, lack of decision making capacity, COPD, and pancreatic cancer (Goldonowicz et al., 2018). Residents rated simulation and bedside teaching highly, with increased confidence in ability to determine patient decision making capacity and initiating palliative care discussions (Goldonowicz et al., 2018).

Looking further into studies conducted abroad, Taiwan's approach to training hospice physicians was especially notable. The Taipei City hospital included a 13-hour educational course and a 4-hour practical course to ensure physicians have extensive knowledge on palliative and hospice care (Chuang, 2021). The 13-hour course covers topics such as assessing and managing symptoms in advanced-stage disease patients, addressing their psychological, spiritual, and religious needs, preparing them for discharge and home care, and discussing end-of-life ethical considerations. It also involves bereavement counseling and offers assistance to family members following the patient's death. This study revealed that hospice and palliative education are associated with a patient’s end of life care (Chuang, 2021).

Evidently, a combination of online and simulation based learning may be the ideal format for the alternative hospice certification pathway. Online modules could communicate the breadth of knowledge required for the HMDCB examination. Simulation based learning may be of utility to help physicians put hospice care competencies into practice (Goldonowicz et al., 2018).

VII. Methods

To gauge client need for the alternative certification pathway, a survey and interviews were created in collaboration with Cornell University and HMDCB. The following breaks down the participants, materials and procedures for collecting the qualitative and quantitative data.

Participants

Three target groups were selected, because after conducting research there was a general consensus and understanding of the experience illustrated in the hospice field.

- Physicians with hospice experience and the HMDCB certification (Group 1)
- Physicians with hospice experience who lack the HMDCB certification (Group 2)
- Physicians without both hospice experience and HMDCB certification (Group 3).

Materials

Survey

The survey was created using a software called Qualtrics. Survey content for both of these groups included demographic data collection to understand physician specialty and location. Surveys for physicians with HMDCB certification inquires about physician preparation for the examination and utility of their experiential knowledge. The survey for physicians without hospice experience is aimed at understanding their interest in transitioning into the field and the types of educational offerings they would be interested in with respect to the format of the potential certification program.

The questions were created in collaboration with staff from HMDCB where the survey was geared to each of the three sample groups listed above. The initial questions about having an HMDCB certification would determine what sort of questions the participants would answer. A mix of multiple choice, short answer, ranking, and likert-scale questions were used (See Appendix for Survey Questions).

Interviews

To create the most effective and useful interview questions, each group member individually came up with 10/15 questions that we thought would encompass and provide recommendations for a potential future HMDCB certification program. Collectively it was determined which questions were most valuable, narrowing down the questions to 10 for each participant group. To ensure bias was minimized, an outside source from HMDCB reviewed our questions and provided feedback regarding phrasing and the length of the questions proposed as the focus group lasted around 30 minutes (See Appendix B).

Procedures

Survey

The survey was sent out using Qualtrics on October 3rd and received 406 responses by its closing on December 4th; 28 of the responses were deleted due to incompleteness, leaving a sample of 378 responses. The survey was sent to all currently certified physicians and HMDCB's physician prospect list via email. In total, the survey was sent to approximately 3,500 physicians. A total of 5 follow up emails were sent across the 2 month period to help gauge interests in filling out the survey.

Interviews

Nine interviews were conducted between November 1st and December 1st. The interviews were set up by a staff member from HMDCB where only the representatives of Cornell University were present to control for anonymity. Each focus group lasted around 30 minutes and were conducted via zoom. The interviews were recorded and transcribed for the purpose of analyzing the data in this report. Codes were determined by overall trends conducted across all nine interviews (See Appendix D) .

VIII. Survey Results

The respondent profile included 293 in Group 1, 85 across Group 2 and 3. With regard to state demographics, the majority of respondents across both certified and noncertified physicians reside in California. Specifically for certified physicians, majority responses were also received from Texas (9%), Pennsylvania (7%) and Florida (6%). The majority of non-certified physicians also reside in Texas (12%), North Carolina (8%) and Wisconsin (7%). Qualitative Analysis of the survey feedback is broken down as follows across physicians with HMDCB certification and those without:

HMDCB Certified Physicians (Group 1)

Sample Overview

Practice Experience

- 170 respondents cited practicing for 20+ years
- 38 respondents cited 15-20 years of experience
- 36 respondents reported 10-15 years of experience,
- 39 respondents had 5-10 years of experience
- 10 respondents had 0-5 years of experience

Training and Specialty Breakdown

- 77 respondents practice Family Medicine
- 75 respondents practice Hospice and Palliative Medicine
- 52 respondents practice Internal Medicine
- 205 respondents completed an HPM fellowship

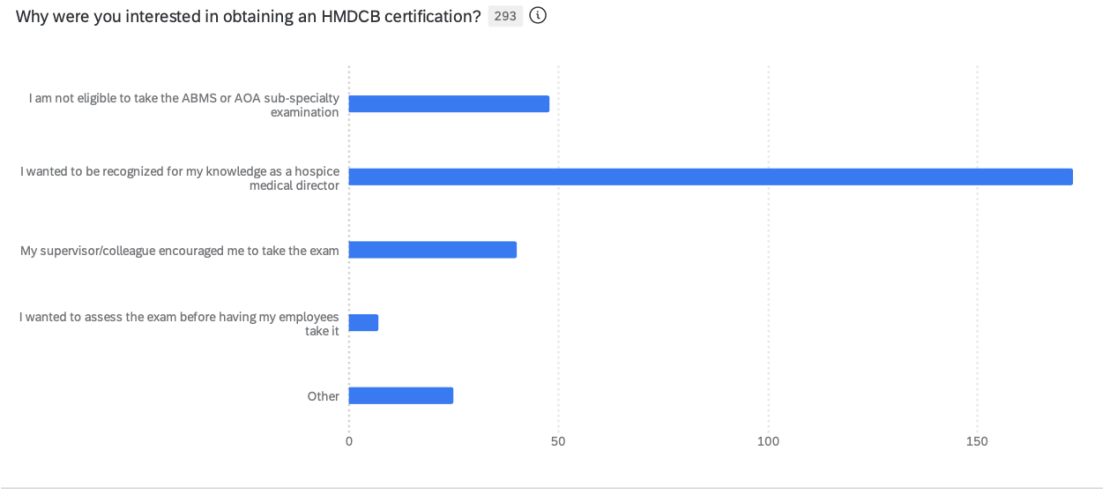
Hospice Experience

- The majority of respondents reported practicing for 2 years before taking the exam
- The average duration of practicing hospice medicine before certification was 7.6 years
- The minimum was cited as 3 months for respondents who took the exam during their fellowship.

HMDCB Examination Questions

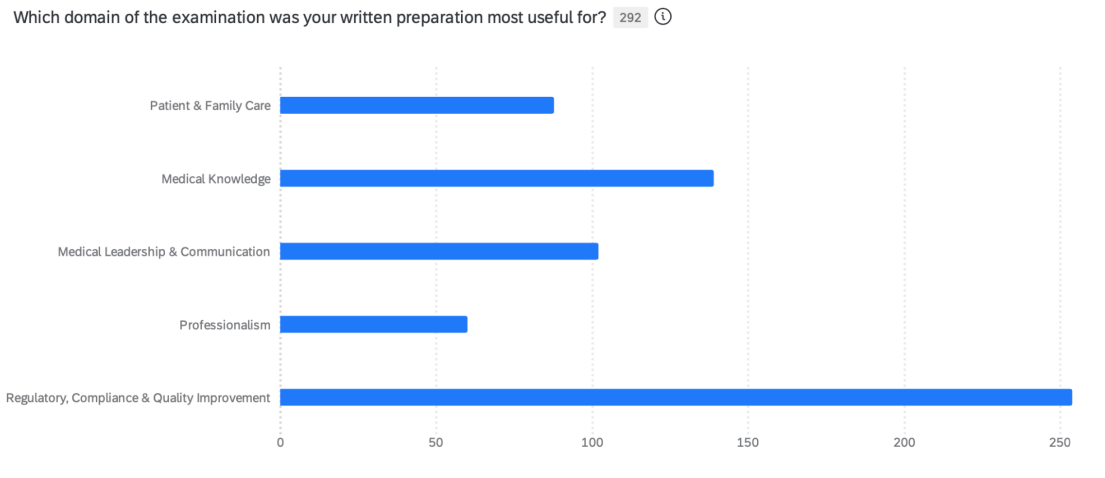
Recognition for knowledge gained to become a hospice medical director was the most cited motivation for obtaining the HMDB certification (173 respondents), followed by professional constraints due to ineligibility with the AOA subspeciality examination (48 respondents) and encouragement from a supervisor to take the exam (40 respondents) (See Figure 1) . Twenty five respondents indicated that they pursued the certification for other reasons, namely mentioning that the certification would create employment and leadership opportunities, was a requirement from an employer or was a resource to stay current with regulatory trends.

Figure 1. Interest in obtaining HMDCB Certification



With regard to written preparation for the examination, the majority (247) respondents reported utilizing AAHPM books or practice tests, 168 respondents used AAHPM courses and 55 respondents cited NHPO resources (webinars, conferences etc). Other material referenced included: HMDCB resources, FAST facts, and Weatherbee. These resources were reported as useful for the following domains by majority: Regulatory Compliance and Quality Improvement (254 respondents), Medical Knowledge (139), Patient and Family Care (88), and Professionalism (60) (See Figure 2). Outside of written resources, the participants reported the following exam domains as requiring the most experiential knowledge: Patient and Family Care (162 responses), Regulatory Compliance and Quality Improvement (149), Medical Knowledge (145), Medical Leadership and Communication (142) and Professionalism (93). Additional resources mentioned that would have helped physicians prepare for the examination included: more practice questions and tests, regulatory review resources, virtual courses. Ultimately, the following levels of interest were expressed with respect to maintaining HMDCB certification: extremely interested (129), very interested (85), moderately interested (59), slightly interested (14), not at all interested (6).

Figure 2. Most Useful Domains



Non-HMDCB Certified Physicians (Group 2 and 3)

Sample Overview

Practice Experience

- 57 respondents reported 20+ years of experience
- 10 respondents reported 15-20 years of experience
- 10 respondents reported 10-15 years of experience
- 4 respondents reported 5-10 years of experience
- 4 respondents reported 0-5 years of experience.

Speciality Breakdown

- 77 respondents practice Family Medicine,
- 75 respondents practice Hospice and Palliative Medicine
- 52 respondents practice Internal Medicine
- 205 respondents reported completing an HPM training program.
- Minority specialities cited included: Geriatrics, Neurology, and Psychiatry, and Internal Medicine.

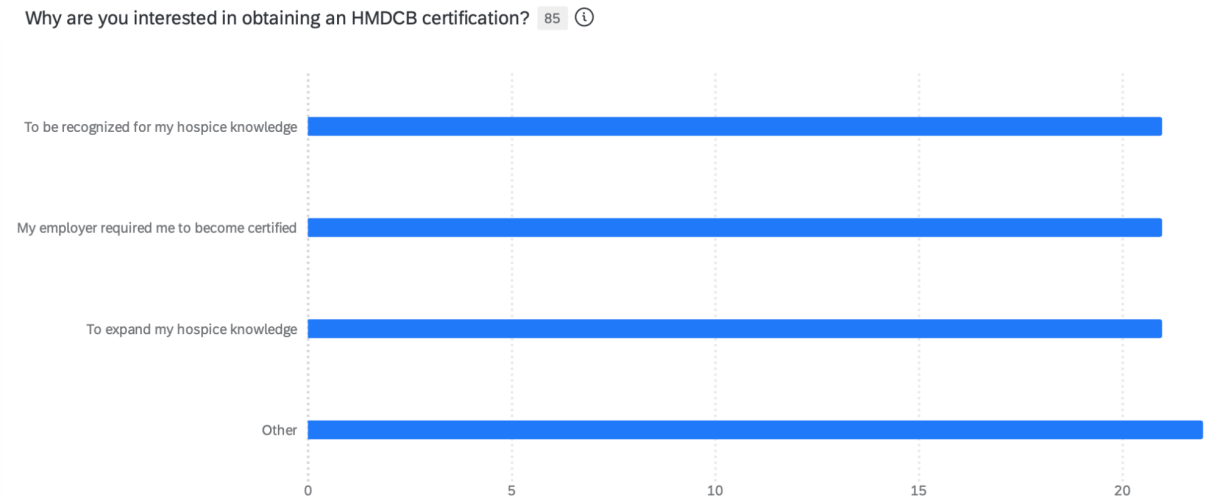
Hospice Experience

- Respondents described a high level of familiarity or experience with hospice and palliative medicine in the form of: hospice medical director positions or by ABMS or AOA board certification and fellowship
- Respondents also gained experience through specializations such as geriatrics, skilled nursing and hospital medicine.

HMCB Examination Questions

Out of the 85 respondents, 53 respondents expressed interest in obtaining an HMDCB certification. Regarding motivation for obtaining the certification, responses were evenly distributed with 21 responses each for recognition for hospice knowledge, employer requirements to become certified and expansion of hospice knowledge (See Figure 3) . Other reasons of interest cited were increase in compensation and employment prospects.Thirteen respondents reported no interest in HMDCB certification due to having board certification.

Figure 3. Interests in obtaining HMDCB certification



With specific reference to the HMDCB examination content blueprint, respondents ranked their expertise level from 0 (beginner) to 5 (expert) for each domain (See Figure 4). The domains are part of the 5 competencies tested by the HMDCB certification (See Appendix C) . Within each domain, majority respondents expressed an advanced (3) or expert (5) level of understanding. Specifically, these rankings (3 and 5) were the most cited for the Professionalism, Medical Knowledge, Patient and Family Care domains.

Figure 4. Expertise Level based on HMDCB Content Blueprint

After reviewing the content blueprint for the HMDCB examination, please rate your expertise level with the following areas: (0: beginner 1: advanced beginner 3: competent 4. P... 85

After reviewing the content blueprint for the HMDCB examination, please rat... ↑	Advanced	Beginner	Expert	Intermediate	Novice
Patient & Family Care	35	4	25	20	1
Medical Knowledge	35	4	26	17	2
Medical Leadership & Communication	34	4	20	22	5
Professionalism	41	1	28	15	0
Regulatory, Compliance & Quality Improvement	24	4	12	34	11

Additionally, respondents ranked their interest in hospice educational offerings (See Figure 5). In terms of mentorship programs, the majority of respondents (29) were not interested. Majority expressed the highest level of interest (very interested) was hospice workshops (30), eLearning Courses (33), hospice pocket guide (25). Twenty eight respondents expressed a moderate and high level of interest for HMDCB web resources.

Figure 5. Interests in the Hospice Educational Offerings

Please rank your interest in the following Hospice educational offerings: (0: Not interested 1: Slightly interested 2:Moderately interested 3: Moderately interested 4. Very interested 5. Extremely interested) 85

Please rank your interest in the following Hospice educational offerings:...	Moderately Interested	Neutral	Not Interested	Slightly Interested	Very Interested
Hospice Workshop	23	13	15	4	30
Mentorship Program	16	19	29	7	13
eLearning Courses	21	15	8	7	33
Hospice Pocket Guide	23	17	12	7	25
Hospice Resources Available on HMDCB Website	28	19	7	3	28
Sum	111	83	71	28	129

IX. Interview Analysis

The respondent profile included 9 interviews with 7 from Group 1, 1 from Group 2 and 1 from Group 3. Focusgroups were conducted with physician clientele to gain an in-depth understanding of their journeys within hospice care and barriers within the field, utility of the certification in day-to-day practice, interest in the certification program, and transferable skills gained towards hospice care delivery. Out of the 9 physicians interviewed: 7 had an HMDCB certification, 1 physician without HMDCB certification but has hospice experience, and one had neither HMDCB certification or hospice experience.

Using qualitative coding, we categorized the responses of physicians with hospice experience and HMDCB certification as well as physicians without hospice experience. By creating codes and categorizing the data, we were able to gain a better understanding of motivations for taking the HMDCB exam and valuable resources useful to prepare for it. Using this method, we are able to better understand future recommendations and resources for future HMDCB certifications. Almost all the physicians we interviewed that had hospice experience admitted that they obtained the certification as a means to validate their hospice care knowledge and work. One physician confessed that the HMDCB certification gives “authentication and validity… It's like grandfathering a subject.” While most physicians seeked recognition and

affirmation many also thought of this certification as a “bonus” demonstrating a standard recognition.

Furthermore, a major trend that was apparent throughout the interviews was commenting on the accessibility aspect of the HMDCB certification and the possibility of a new exam. Physicians highlighted the obstacles within the HMDCB certification and illustrated the lack of “hospice based medicine” within the HMDCB certification. While many physicians make the transition into hospice later in their career, they seek formal training that HMDCB tries to fill. Although there are resources to help achieve this certification, physicians admitted that it is difficult to connect with mentors and resources in the middle of your career without a formal training program. It is not ideal nor accessible for physicians to take an entire year off, but rather a “self-based curriculum based on lectures and things that are available online” could help make the HMDCB certification more accessible. While physicians said that initially “it was a lack of information that was available, especially on the internet”.

Physicians pointed out that financial accessibility is also a major consideration when deciding whether to take the HMDCB exam. Physicians highlighted the financial privilege that comes when considering shifting into the hospice field. One physician mentioned that hospitals want the “slave labor of a fellow in the hospital” insinuating that you are basically delegated what to do during your internship experience even though you are an already established physician. The majority of respondents admitted that transitioning into hospice took a toll on the physician's family’s financial security while the physician was the “breadwinner” of the family. Physicians revealed that their job as a high paid physician was more valuable than the time they could attribute as a hospice medical director.

Furthermore, guiding and regulatory resources were noticed as a common thread when considering working in the hospice care unit. In order to take the exam, an individual needs 400 hours of hospice experience. One individual confessed that “400 hours of experience requirement [should not be a requirement] to take the exam. But you do have to have a certain amount of hours.” There are frameworks for training and resources to accomplish this training. It is notable to acknowledge that “the people who serve you aren't the same people educating you” therefore it is valuable to understand nuances when working as a hospice medical director. Understanding the HMDCB blueprint and website is especially important when dealing with hospice regulations. HMDCB guides lectures and knowledge to follow through the HMDCB blueprint. Moreover, “the American Academy of Hospice and Palliative Care Medicine website has great material and being able to attend the CMEs conducted by them is also helpful.” Moreover, educational seminars hosted by the hospice medical director board and the Journal of Pain and Simple Management includes an abundance of articles to manage communication to guide the palliative fellowship. The physicians admitted that “longitudinal experience is necessary” and understanding the regulations around hospice care needs to be addressed in developing another certification process.

This leads to challenges as a hospice medical director/ physician, more specifically the regulatory challenges hospice physicians face. The regulatory administrative aspect of hospice

medicine is new to most physicians. One of the major challenges is understanding that the field is not easy and requires an immense amount of interdisciplinary training. Taking and studying for an exam is a problem that physicians face. One physician revealed that it's about "a continuous learning process as opposed to really studying for one big exam." Understanding Medicare guidelines is a main regulatory challenge that hospice physicians do not have previous exposure to. Physicians admit that a larger explanation of Medicare practices is "probably due for a large update under the regulatory and compliance section" on the HMDCB blueprint domain. Consequently, the majority of physicians thought the regulatory and compliance section was the most valuable for physicians making the transition into hospice. Physicians determined that managing pain and illness through consultation is difficult in a hospice setting when there is not any overall management of patients.

Therefore, understanding the current state of the hospice care systems and trends in the hospice field holds value. Physicians said that "the certification helps because you have more people who are certified but also certified and are up to date with what's happening in the industry from a regulatory standpoint and a practice pattern standpoint." By encouraging more people to take the certification hospice care provided within medical centers is enhanced. Physicians also commended HMDCB for providing incentive to the operations side of hospice care. While it may seem obvious that patient experience should be personalized. Physicians confessed that there is much more to learn and understand regarding hard conversations when it comes to caring for individuals in hospice care.

In order to better understand the intricacies of hospice care, mentorship is significant. Physicians were curious about the potential to include a sort of professional mentorship program within the new certification process. Physicians acknowledged that they would "want to be a role model for others in this field" especially because physicians in the hospice field foster a sense of community. Physicians said that their experience transitioning has been positive, admitting that "there is a group of people who you can talk about and really understand your experience doing this job to, again, help fill some knowledge gaps, get a second opinion and just talk through some patient challenges." While we did not interview enough physicians without hospice experience to draw major conclusions, the physician we interviewed determined the need for courses as resources in understanding the hospice field. With this, the Physician also noticed the need for more physicians in the hospice field to be trained. It is well understood by the majority of physicians that the role of a physician requires an individualized approach to patient communication. In conclusion, through qualitative coding and analysis, our exploration of physicians' perspectives on HMDCB certification revealed motivations rooted in validation of hospice care knowledge, accessibility challenges, financial considerations, and the crucial need for mentorship. Addressing these aspects can contribute to a more comprehensive and supportive framework for physicians navigating the intricacies of hospice medicine and, in turn, enhance the quality of care within this vital healthcare domain.

X. Future Directions of HMDCB Certification Program: Discussion and Final Recommendation

This consulting engagement aimed to evaluate the utility of an alternative certification pathway that allows physicians without previous hospice experience to be eligible to sit for the HMDCB certification examination. A recommendation is provided regarding the future state of this program with consideration to findings gathered from interviews with certified and non-certified physicians as well as surveys administered to both of these groups.

Based on insights gained from interviews and surveys, the HMDCB certification is viewed as a means to affirm and validate physicians' knowledge of hospice care. The motivation behind seeking HMDCB certification was not just to fulfill a procedural requirement or employer recommendation, but also served the larger purpose of gaining a formal recognition of their specialized knowledge and skills in hospice care. While perceptions of the certification are majorly positive, it is important to note that those who completed an HPM fellowship had differing opinions regarding the validity of the program. Non-certified physicians expressed that their board certification was all encompassing as an indicator of hospice knowledge, while other interviewees cited that the HMDCB certification offered a more targeted, niche scope of knowledge. Still, certified physicians pointed to regulatory gaps in the current content blueprint with respect to a lack of updated information on Medicare policy as well as logistical issues with having to take the time out to sit for the exam. Ultimately, an alternative certification program could be a guiding resource for physicians that are not certified and do not have prior hospice experience, yet modifications would need to be made to ensure the curriculum is comprehensive and certification is accessible.

Outside of the curriculum component, other benefits reported encompassed the network of colleagues gained from pursuing the HMDCB certification program. Certified physicians in group one who obtained the certification after entering the field reported utility in learning from their colleagues during the early phases of their transition. Group 1 physicians placed a strong emphasis on professional networks and mentorship programs, viewing them as integral to their development within the hospice field.They saw mentorship as a means to address knowledge gaps, seek second opinions and navigate challenges within the hospice field. Yet, physicians in groups 2 and 3 exhibited different preferences. They were less inclined towards formal mentorship programs and sought alternative educational materials. This included hospice workshops, e-learning modules, and the wealth of the materials available on the HMDCB website. These physicians wanted to enhance their knowledge and skills in hospice care.

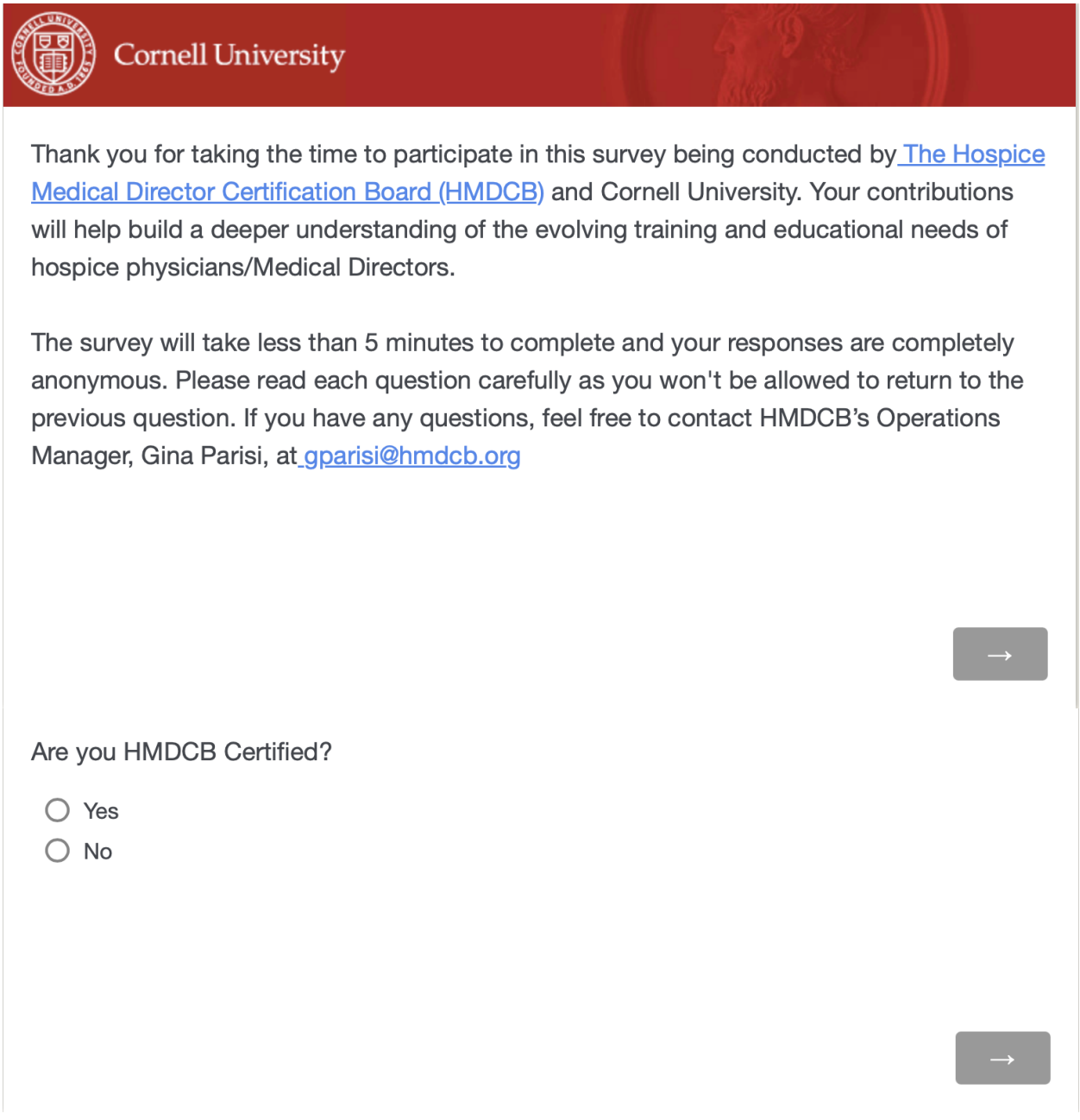
The future HMDCB certification program should focus on a balanced approach that combines theoretical and practical knowledge with experiential learning. Insights from our research suggest there is a need for a more inclusive and flexible pathway to achieve the HMDCB certification, especially for those without hospice training. An alternative certification route could include mentorship programs, shadowing experiences or practical rotations along with theoretical learning. Consensus was not achieved regarding the length of the experiential

learning requirement for the exam. Based on interview responses, adapting the 400- hours hospice experience requirement could allow for more physicians to qualify for the certification. Yet physicians also expressed a definite need for substantial longitudinal experience within the field before qualifying for the exam. Said physicians that were HMDCB certified and were actively working as hospice directors, expressed a major concern for building a strong regulatory understanding of the hospice program without experiential knowledge. A revised program should include robust written preparatory materials regarding regulatory domains while including a practical exposure to these areas. Such a program will ensure a holistic approach to comprehensive hospice education and patient experience.

This research presents limitations that should be addressed in the future to gain an understanding about the need for the alternative certification program but also its implementation. It was difficult to recruit participants for group 2 and 3 for both the survey and interviews as the majority of the participants were from group 1; physicians with HMDCB certification. Initially participants for this research were recruited via email as they were direct contacts of HMDCB staff. Due to the limited access of participants our data was not representative of the target group needed for the creation of the HMDCB certification program. The limitation can be highlighted by the fact that only 53 respondents expressed interest in becoming HMDCB certified, while 32 respondents believed that the certification was not needed due to reporting high level of domain expertise in HMDCB examination blueprint. Therefore, this finding demonstrates that participants in Group 2 and 3 have hospice experience and are not representative of the target sample needed to set a recommendation for the implementation of the alternative certification program. However, based on the literature review and interview/survey data the growing need of hospice physicians is extremely relevant and prominent. Thus, it is still important to explore the possibility of a new program while considering the data presented within this report.

XI. Appendix

a. Survey sent to Physicians



Cornell University

Thank you for taking the time to participate in this survey being conducted by The Hospice Medical Director Certification Board (HMDCB) and Cornell University. Your contributions will help build a deeper understanding of the evolving training and educational needs of hospice physicians/Medical Directors.

The survey will take less than 5 minutes to complete and your responses are completely anonymous. Please read each question carefully as you won't be allowed to return to the previous question. If you have any questions, feel free to contact HMDCB's Operations Manager, Gina Parisi, at gparisi@hmdcb.org

→

Are you HMDCB Certified?

- ○ Yes
- ○ No

→

Block 1: Survey for Physicians who are HMDCB Certified

Where do you currently reside?

Why were you interested in becoming HMDCB Certified?

- ○ I am not eligible to take the ABMS or AOA sub-specialty examination
- ○ I wanted to be recognized for my knowledge as a hospice medical director
- ○ My supervisor/colleague encouraged me to take the exam
- ○ I wanted to assess the exam before having my employees take it
- ○ Other

What type of additional resources would have helped you prepare for the examination?

Did you complete an HPM Fellowship?

- ○ Yes
- ○ No

How long did you practice Hospice Medicine, at least part-time, before seeking the HMDCB certification?

- ○ Enter in Months and Years: _____

Please describe your written preparation for the HMDCB examination: (Check all that apply)

- ☐ AAHPM Courses
- ☐ AAHPM Books or Practice Tests
- ☐ NHPCO Resources (webinars, conference, etc.)
- ☐ CMS Resources
- ☐ State Organization Resources
- ☐ Other: _____

Which domain(s) of the examination was your written preparation most useful for? Please select all that apply.

- ☐ Patient & Family Care
- ☐ Medical Knowledge
- ☐ Medical Leadership & Communication
- ☐ Professionalism
- ☐ Regulatory, Compliance & Quality Improvement

Of the following domain(s) on the examination, which do you feel required a substantial amount of experiential knowledge? Please select all that apply.

- [ ] Patient & Family Care
- [ ] Medical Knowledge
- [ ] Medical Leadership & Communication
- [ ] Professionalism
- [ ] Regulatory, Compliance & Quality Improvement

What type of additional resources would have helped you prepare for the examination?

Rate your interest in maintaining HMDCB certification?

- ○ Not at all interested
- ○ Slightly interested
- ○ Moderately interested
- ○ Very interested
- ○ Extremely interested

Block 2: Survey for Physicians who are not HMDCB Certified

What would motivate you to become HMDCB Certified?

- ○ To be recognized for my hospice knowledge
- ○ My employer required me to become certified
- ○ To expand my hospice knowledge
- ○ Other

How long have you been a practicing physician?

- ○ 0-5 years
- ○ 5-10 years
- ○ 10-15 years
- ○ 15-20 years
- ○ 20+ years

What is your speciality?

Please describe your previous familiarity, training (could be resident or medical student training), or practice experience with hospice care:

After reviewing the content blueprint for the HMDCB examination, please rate your expertise level in each content domain.

	Beginner	Novice	Intermediate	Advanced	Expert
Patient & Family Care	○	○	○	○	○
Medical Knowledge	○	○	○	○	○
Medical Leadership & Communication	○	○	○	○	○
Professionalism	○	○	○	○	○
Regulatory, Compliance & Quality Improvement	○	○	○	○	○

Please rank your interest in the following Hospice educational offerings.

	Not Interested	Slightly Interested	Neutral	Moderately Interested	Very Interested
Hospice Workshop	○	○	○	○	○
Mentorship Program	○	○	○	○	○
eLearning Courses	○	○	○	○	○
Hospice Pocket Guide	○	○	○	○	○
Hospice Resources Available on HMDCB Website	○	○	○	○	○

Are you interested in becoming HMDCB certified?

- ○ Yes
- ○ No

b. Interview Questions for interviews (30 minutes)

Physicians with HMDCB certification

1. What were your personal motives in obtaining HMDCB certification?
2. What obstacles do you believe physicians currently face in obtaining the necessary knowledge to serve as a Hospice Medical Director or hospice physician?
3. How do you think HMDCB certification helps navigate these challenges?
4. Can you provide further detail on what kinds of resources were most helpful or lacking in helping you prepare to serve as a hospice physician or Medical Director?
5. In your opinion, what kinds of resources would be essential to a physician transitioning into the hospice field?
6. Show Content Blueprint - Which domain on the blueprint do you think requires a substantial amount of experiential knowledge and why?
7. Did you complete an HPM fellowship? If so, do you feel the HMDCB certification enhanced or supplemented your previous training? How so?
8. What are the current greatest challenges in hospice care that an alternative HMDCB certification pathway could help resolve?
9. Are there colleagues or mentors who have successfully transitioned from your current medical specialty to hospice care, and have their experiences influenced your perspective?
10. What are the benefits of HMDCB certification to your current role?

Physicians without HMDCB certification and Hospice Experience

1. Have you ever thought about becoming HMDCB-certified??
    a. What factors or barriers have prevented you from pursuing HMDCB certification?
    b. If interested, why would you be interested in becoming certified?
2. How did you prepare to serve as a hospice physician/Medical Director? Did you complete an HPM fellowship?
3. What resources would have been helpful in becoming a hospice physician? What tools/experiences do you wish you would have had in the process?
4. What are the greatest challenges you have encountered practicing hospice medicine?
5. Within your practice experience, have there been certain patient encounters in which you felt obtaining further education or certification could have been helpful?

6. What are the biggest obstacles physicians encounter when they transition into a hospice physician or Hospice Medical Director role? How can these obstacles be addressed?
7. Are there colleagues or mentors who have successfully transitioned from your current medical specialty to hospice care, and have their experiences influenced your perspective?

Physicians without Hospice Experience

1. What has sparked your interest in exploring a career in hospice care, despite your current lack of experience in the field?
2. Have you taken any initial steps, such as attending workshops or seeking information, to learn more about hospice care?
3. Have you ever thought about becoming HMDCB-certified?
4. What tools or resources would aid in preparing you to serve as hospice physician or Hospice Medical Director?
5. What aspects of your current medical practice or training do you believe could be relevant or transferable to hospice care?
6. What types of Hospice educational resources or support do you feel would be essential for you to successfully transition into hospice care?
    a. follow up question: Which domain on the HMDCB Content Blueprint do you feel you are lacking the most knowledge or expertise within? What kind of educational offerings would be beneficial to you to build this competency?
7. Do you have any mentors or colleagues who have encouraged or discouraged your interest in hospice care, and how have their experiences influenced you?

C. 5 Domains included in HMDCB Content Blueprint

Patient and Family Care	In the medical field, providing comprehensive support involves actively engaging in family meetings to discuss care goals and advance care planning, including decisions on DNR orders and selecting a surrogate decision-maker. It also entails guiding medical choices and deprescribing. Addressing cultural diversities, emotional needs, and psychosocial aspects is crucial. Educating on the disease trajectory and assessing decision-making capacity are key responsibilities. Collaboration with an interdisciplinary team is necessary to recognize and manage social determinants of health. Understanding family dynamics, including coping styles and developmental stages, is essential for effective support.
Medical Knowledge	In hospice and palliative care, healthcare professionals adeptly assess and manage pain, distinguishing between types and employing opioids, non-opioids, and non-pharmacologic measures. They also address non-pain symptoms and navigate complications of medications. Proficiency extends to managing conditions like delirium, dementia, and substance use disorders. Additionally, they handle withdrawal of life-sustaining therapies, use prognostic tools, and consider factors for medication selection and deprescribing based on disease trajectory. The management spectrum includes recognizing signs of impending death, pediatric conditions, and alternative routes of medication delivery. Interventions such as palliative sedation and interventional symptom management are part of their skill set.
Medical Leadership and Communication	In the realm of hospice management, professionals play a pivotal role in facilitating empathic communication by acknowledging others' experiences. They adeptly handle conflict resolution and 'service recovery,'

	ensuring effective communication between hospice staff and community providers. Ongoing education for hospice staff encompasses certification, recertification, plan of care development, symptom management, clinical assessments, face-to-face encounters, pharmacy management, and documentation of care. These experts offer crucial support around difficult decisions and care scenarios, fostering a collaborative and cohesive interdisciplinary group process.
Professionalism	Professionals must recognize and manage fatigue and burnout, utilizing knowledge of self-care strategies to maintain well-being. They demonstrate an understanding of healthy boundaries with colleagues, patients, and families, fostering a balanced and supportive work environment. Adherence to institutional policies and professional ethics is crucial when disclosing medical errors. Collaborating seamlessly with physicians and other health professionals, they coordinate comprehensive plans of care. Upholding patient privacy and confidentiality, they apply the principles of medical ethics to various situations, including informed consent, truth-telling, withholding/withdrawing life-sustaining therapies, medical futility, voluntary stopping of eating and drinking (VSED), requests for medical aid in dying, euthanasia, the principle of double effect, and conflicts of interest.
Regulatory, Compliance and Quality Improvement	Understand how to navigate hospice services according to Conditions of Participation (CoPs), professionals understand access to core services, including allied health professionals, and various levels of care. They manage medical responsibilities when the attending is unavailable and prioritize continuous quality assessment and performance improvement, patient safety, and emergency preparedness. Familiarity with modifiers for community and hospice providers, billing practices, Notice of

	Election, and its addendum is essential. Professionals adhere to regulations concerning certification of terminal illness, addressing local coverage determinations, related secondary conditions, physician narratives, face-to-face encounters, and documentation of noncovered items with Advance Beneficiary Notice (ABN). They comprehend the audit process, encompassing additional development requests (ADR), Targeted Probe and Education (TPE), redetermination, appeals, and testifying to Administrative Law Judges, as well as managing technical and medical denials. They are well-versed in the survey processes conducted by CMS, State Department of Health, and other accrediting organizations.

D. Code Summaries for interviews

Code	Definition	Physicians with Hospice Experience Summary	Physicians without Hospice Experience Summary
Validation	Quotes about physicians referring to the HMDCB certification as a protocol or a means to validate the work they do in the hospice care unit.	"I owe it to myself to be able to show that I have a specialty. That's beyond just what the training of hospice and palliative medicine doctors are, that I really know hospice super well... There's also a little bit of a pride thing because as part of the group that HPM asked to be on at the very start to see if we even should do this. And I've been involved ever since. So it kinda feels like a personal ownership to it. So even if I didn't feel like I needed it, there's like no way I can walk away from something that you helped birth, you know, yourself." "It's like getting authentication. I did not do the fellowship in palliative care medicine but I did practice hospice and palliative care for 3 years in the veterans hospital….But having that degree gives you authentication and validity. That's the main reason and I'm glad to find HMDCB encourages that, like grandfathering the subject, you know. That's the main reason I got the certification." "But having this certification gives me validity like I said. So I see a number of people like me, they do practice palliative care not only me like my senior attendees and everyone. I told many people they need to take this boat and get validation of the certification because it's not possible when you are like 10 years in the practice and you're failing to get as a part of oncology and going back to one year fellowship." " I wanted recognition and affirmation that I was qualified to do the work that I was doing, not having followed a traditional path to get there… I wanted some way	

		again to affirm my credentials and be recognized as a qualified provider." "I think just to have, that's kind of standardized recognition of achieving a certain level of competency as a hospice medical director." "There was a move by the corporation to have everyone. That was the primary directive. My own training. I mean, I mean, internal medicine." "It is a bonus to have that certification that you're recognized as an expert in the field." "So I think in my case that was important: experience to have and a credential to have. To be able to kinda provides this ACGME requirement as external faculty director for the Palliative hospice Program" " I thought it was important for me as the hospice medical director to kind of demonstrate that in a tangible way to patients and families who might be deciding which hospice to choose for their care."	
Accessibility	Quotes about the accessibility of the HMDCB certification/ exam and the possibility of a new exam.	"Many of the fellowships are much more heavily balanced towards palliative training, which sounds like the same thing. And it involves the same skill set. Many aspects of the same skill set, but there's some additional skills and some nuances that you need to be able to do in hospice. Most of the programs are very heavy on hospital based medicine. And so you don't necessarily get good hospice based medicine and so that's one of the, that's one of the big obstacles." "A lot of the doctors that are jumping in are older doctors like myself. I jumped in a little bit younger, but there's doctors my age and say, Hey, I think I want to do hospice but I can't go back and do a fellowship. So how do I get involved with the office now	

		when I haven't done the formal training? HDCB tries to fill up a gap…There's a lot of webinars, a lot of mentors, a lot of people like that. But, how do you get connected to them when you don't have a formal training program? Or your, or your mid career. That is an obstacle." " I feel like there's more resources, but I felt like the time there just wasn't a lot. Now there's more doctors certified, so there's more of a network. In addition to the certification manual, there's Just a lot more training programs that are out there from different people that do it. They're kind of developing around the field as we go" "We do allow fellows to go straight to taking this exam, but it's why all the other clinicians say you have to have so much medical practice hours first and we do feel like they're getting that, hopefully they're getting some of that experience while they're doing that part. But I'd say if there was a training program. That was still allowed so if you said okay well we want some training because I hear I think I hear what you're saying in that answer is okay, well, gosh, if this is. Something that they don't need a fellowship for, what do they need if they want to have ideal training? Because it's not necessarily ideal to take a whole year off your career just to go back to but could in the middle of your career I think going back to since medical knowledge and patient and family care and all those are could be curriculum-based. You could do a self-paced curriculum based care district based on lectures and things that are available online." "To get a hospice fellowship, we have very limited spots."	

		“Not having spots like the palliative care spots so you get fellowship spots and not enough and it's not proportionately meeting that need. So it kind of gives you more to the community, more hospitals, board certifications. Validation is like it's a part like integrated but not that's not the main reason. To get like more qualified physicians to the community.” “Initially, it was a kind of lack of information that was available. Especially on the internet. And a lot of what I tried to obtain was through our national organization in hospice and palliative care, they just didn't have a lot of stuff geared specifically for hospice medical directors.” “Clinical practice is based on education, optimizing best practices. So that's probably one of the, I think the biggest differences and perhaps the drawbacks if you will be in a community base, Hospice settings.” “The other physicians are all community doctors and most of them still have not got and I think the obstacle is they don't want to go through another training. But they don't want to go through another test. Even though they've had the hours. For the requirements for HMDBC certification, they don't want to go through another testing.” “The 400 hours of experience requirement.That you have to have to take the exam because I don't think you have to do the fellowship to take the exam.But you do have to have a certain amount of hours.”	
Financial	Quotes about physicians referring to the financial accessibility when	“ And that's hard and part of this, I used to be in charge of a training program and part of the reason why it's hard to get more hospice time is the hospice doesn't fund your training. The hospital funds you're training for your training most of the	

	considering taking the HMDCB exam and transitioning into the hospice care unit.	time…They want slave labor of a fellow in the hospital. Kind of like, I don't know if other training is similar, but if you're doing an internship, someone wants to own your time and you can't really go up on your own side project. Because funding mainly comes from the hospital, they want to see the fellows presence be very present in the hospital… They want the doctors to come from but they don't wanna lay out the money to train those doctors." "Financially that would be very challenging because I have brought my family to a standard of living that was based on my being private practice neurosurgeon for a decade and so that would be a very challenging thing to put my family through particularly since I am the breadwinner for the family so my income would have substantially dropped for that just for a year." "It had less to do with the speciality at the time there were personal matters and family matters that I felt needed more of my time and attention than I could afford from being a practicing neurosurgeon." "The majority of the Obstacles really rely on the commitment to the organization based on your, I guess, financial interest or stability. It's how you own your private practice.Versus, your practice that has to do with hospice care." "And issues around cost are usually an afterthought for most physicians. Most physicians don't really think about insurance and medicine costs. Especially if they've been in large academic centers. And so having to think about formulary and maximizing sort of efficiency and reducing waste, I think that sort of Cost-effectiveness is is not something that comes easy to a lot	

		of docs. And part and parcel and that is sort of the kind of the treatment train so many.”	

Resources	Quotes about guiding and regulatory resources when working/ considering to work in the hospice care unit	“We provide opportunities and resources, but we can't provide direct education. And so they provide a framework that we're hoping to partner more with but I think some of the fellowship records are using our blueprint as a framework for their training, so we can provide resources. We provide a framework, but we can't fill the gap as much as we like. We provide a certification pathway, but we also have to kind of stay in our lane. Because we are the people that you know there's kind of a conflict of interest to the person creating the certification exam and then charging to educate for the what's on the certification.I think the same separation is always there in academics. The people who serve you aren't the same people educating you.” “Being able to know nuances. I keep using that word in our blueprint a lot, but I feel like the blueprint has it. It has down there a list of things that these are the unique roles that a hospital should know how to do and those weren't just kind of thought up in people's brains, those those have been vetted now twice where they were. It started with a list that was sent out in an email form to as many doctors in the field as they could back in 2,000 and like 11 or something, 12 and those doctors, all the doctors got to weigh in and actually was surprised at some of the things that they said were important.” "you have to take those individual blueprint items and train on them. And that's kind of scattered out there where they're found. There's a group like whether you're really good at teaching the regulation piece.” “You still need guidance on what to do, how to do it. So the material we have in the HMDCB website, those lectures and everything kind of guide us. How to	“I know like two years ago took this class I don't know what it was called but they had actors and so you got to practice sort of like delivering the bad news but I want you know I've been doing this for 25 years and it wasn't until then that kind of did it with an actor and you got like to say like what you wanted to say over over until kind of it felt comfortable but unfortunately we didn't get much training.” “I took one class and it was something that our hospital was offering to anyone that deals with difficult news for families. I feel like one of the organizations I'm in, I think the Fatal Heart Society has had some webinars giving hard Bad news. There's really not that much out there, like I've actually even tried to YouTube for modeling purposes to see how other people deliver bad news. One thing that I actually have had that is helpful, cause when I give bad news, it's usually me and the team.” “We definitely need more people trained. You know, It's probably one of those things that maybe people might wanna add

		enhance your experiences, how to enhance the communication, how this hospice and Medicare like, you know, everything works. It gives you more knowledge and the structure to follow." "The AAHPM website is like the American Academy of Hospice and Palliative care medicine have wonderful material to read on like you know those are very helpful and attending the CMEs conducted by them is also helpful." "You got to know how Medicare works. How, the insurance ins and outs. So those are all like and taking the test and preparing for the test, I learned a lot. Because when we are in a career like no one will taught us like how other things works you know other than the clinical knowledge so those materials and videos and the lecture series and I also got it from AAHPM website apart from the CME hours." "An alternate path to be recognized is an important issue the blueprint gives an outline of what is felt to be really important in the world of a Hospice physician Hospice medical director so while they don't give you the training right it's a certification board they do provide resources to point you in the direction of training and gaining that education to be able to sit for the exam initially anyway." "Living resources like membership in HPM which is the American Academy of Hospice and palliative medicine which can be individual membership or membership in an organization like NHPC oh which is a member organization in other words your organization your company needs to be a member for you to be a member they're not private individual memberships exist to be able to provide ongoing education and resources to Hospice positions particularly	on to their training if they're like in hematology or cardiology or something where love folks end up passing away or having a fatal diagnosis or like. So it seems like it could be something that's folded into many other specialties by a lot of people who don't choose it right out of the gate when you're training, but it seems like it could be an add-on for specialties again." "I'm taking a class that is taught at Stanford. It's actually on Thursdays from 6 to 9. There's 200 of us taking the classness. Actually throughout the world, I think mostly US doctors, but. So I think if there was something like that, people could do it…I think that that would be something that could be, you know, easily accessible to train a whole bunch of people and you know on a global scale."

		regulatory round which is one of the most important realms that we do.” “I say academic resources. I do mean the webinars and the chats HMDCB actually puts out a very helpful for that as well webinars lectures, conferences and reading materials which are also available through those two organizations and images. I'm sorry there's one book, it's the Hospice medical director guide or it's the standard what you need to know as a Hospice medical director.” “It definitely gives you a network of folks. With similar backgrounds. That I can help guide you through some of these obstacles.” “One of the things that's really helpful are having these kinda periodic Zoom sessions where we can gather and really just bounce ideas off of one another and discuss challenges we're having and see how others in our specialty and as a Hospice medical director are navigating those. I think that's been one of the most helpful things.” “Showing some of the financial and legal aspects through hospice care.So it's more than. The clinical aspects that you would perhaps get if you were Hospice through a fellowship program.” “There was a number of online resources that were available. Which I believe I took and then secondly, there were you know, these seminars that, educational seminars that you were, you could opt to take” “AHPM certification does not delve into the depth of the organizational and the operational requirements of a hospital's medical director. So HMDCB is much better. So the fellows who are hired and recruited as the medical directors.”	

		"That medical director, Handbook. Which is what even the current medical directors are giving the fellows when they come in... We do journal clubs and we also do preparation for both the Academy exam and HMDCB exams. So a lot of the questions pulled that are available not from the source but the doctors remember after the exams as to what the questions were and they're noted down and we've kind of formed our own teaching, like modules. I think besides the hospitals, medical, director, journal and the 9 book, I would say the internal resources within vita to kind of upgrade our knowledge helps are unique." "You have a journal of pain and simple management and in that there's a lot of articles that come. And there's a lot more hospice articles now than there used to be. So I think referring to them, you're doing them and during palliative fellowship, of course, this is unique because of people who go into the hospitals and palliative medicine fellowship. There are more resources available between the hospital training. Now we do 3 months of rotation for hospitals at our hospice, usually only 2 months are required. But they loved what the experiences were of the previous fellows so we are doing 3 months that are also as an orange county that again adds to the value of more hospitals training for the books." "I think by creating a kind of scope of information that hospice physicians should know that in and of itself is helpful and then looking at both sides of that. So again, the clinical piece in the administrative or regulatory piece." "But I think having some kind of longitudinal experience is necessary, not just the way the program requirements read is to sort of have a certain number of weeks	

		in hospice. And I think just sort of saying, okay, I did a month of hostess, I'm done, check. I don't think that's really gonna give Physicians what they need. I think things that potentially are missing or things I wish I had a deeper dive into the benefit and the regulations around hospice and sort of how that plays out in the day to day.'' "Eligibility and ongoing eligibility is documented. I think that that would certainly be something that folks would learn through this kind of training. I think the other thing that was really high opening for me was. The amount of deprescribing of sort of rational, the prescribing of thoughtful. The prescribing, not just brainless stops everything, but really intentional and thoughtful. Based on where people are at and their disease. How to, how to think about their, their medicine, their medical regimen. I think it's something that would be picked up in this kind of credentialing training."	
Regulatory Challenges	Quotes about legalities associated with being a hospice medical director/ physician	"The challenge is there's some big challenges for hospice care in general and one of them is the uneasiness and unevenness of hospice practice because nothing regulated at the doctor has to be certified right now. You could if one of your family members was in a hospice in your community. They could be with the hospice that has someone like me that's really trained and thoughtful and trying to do it right." "Interpretations of the regulatory pieces but the season alternated continuing certification pathway does it necessarily address… I think I don't like high stakes exams alright I'm on the exam committee cause I want to understand exams. For me	

		it's about a continuous learning process as opposed to really studying for one big exam but that's not. I don't tie it to the challenges in being a Hospice medical director, just another piece of being hospitals." "One of the things that comes up often is regulatory challenges with caring for patients at the end of life. And some of the maybe restrictions related to Medicare guidelines and how to navigate those to still provide good care to the patient or care that we'd like to to provide to the patient while still staying within regulatory compliance." "The current Hospice benefits mainly as it's kind of explained under Medicare is probably due for a large update and most of that is things that are like regulatory and compliance" "Showing some of the financial and legal aspects through hospice care.So it's more than. The clinical aspects that you would perhaps get if you were. Hospice through a fellowship program." "The other physicians are all community doctors and most of them still have not got and I think the obstacle is they don't want to go through another training. But they don't want to go through another test. Even though they've had the hours. For the requirements for HMDBC certification, they don't want to go through another testing." "I think the administrative or regulatory piece of hospice is new to lots of physicians. And so that's the piece that It can be harder to obtain over time. There is a piece of that that ended up being learning by doing, which I'm not, which has some pros and cons as a strategy, but I think it happens with folks in this field."	

		"Sort of regulatory administrative medicine.And so for again, sort of regulatory administrative medicine. And so for again, sort of regulatory administrative pieces, that's my go to. There's some kind of flip books or sort of up to date for hospice kinds of things." "There's a lot of medical management that's happening and, and I think sort of experiencing that again in the hospice setting, whereas in the palliative care world. Oftentimes, palliative care is consulted for a very specific reason. So there is a consult question. It's like I need help with pain. I need help with refractory nausea. I need you to help us think through prognosis and goals of care, but it's a very specific question. And there really isn't any sort of an overall management of patients. Like there is an hospice setting. I think that's the overall isolation and then the. The kind of primary management of illness I think has been challenging."	
Current	Quotes about the current state of the hospice care system and updated trends in the hospice field	"I think it certification helps because you have more people who are certified but also by virtual being certified are up to date with what's happening in the industry again from regulatory standpoint from a practice pattern standpoint right so the more people we have in medicine who have that certification that recognition that dedication to and commitment to the field and to staying again up to date if you will in that field those things. They enhance the care that we provide..so being well versed in education not only to enhance in the word care but also to do it our proprietary in at the right time is critical to again having that be meaningful time for people who are facing hospice."	

		“Now, even though they got the American Academy of Boston, the Palliative Medicine Certification after their fellowship they all went and got HMDC also.They feel they can better teach the hospital's requirements through the HMDCB. So I think HMDCB plays a big part in that operational side and all the organizational responsibilities of becoming a hospital's medical director.”	
Patient Experience	Quotes relating to encounter of family and parent experience	“You should be comfortable enough bringing up a death topic, you're not doing well, you know, those are the things. If you're not comfortable talking, you're not getting it.” “My interpersonal communications with patients and their families and also I was having a lot of goals of care conversations and end of life conversations with patients who had no metastatic brain cancers or would have amorist rupture talk to the family cause the outcome was bad after the rupture. So I found that it was a natural transition for me because I was also highly referred to Hospice as a private practitioner, but there was much more to understand you know, which is where I got the mentorship and then worked in learning in peace.”	“Conversations is the most important one you know they don't only teach you in at least they didn't teach me my residency like how to have logical conversations about end of life or when you have a diagnosis that's not really compatible with life and the parents… I would say you definitely get some training just by watching it but I've never really had any formal training and honestly it wasn't until last year.” “Every family is different and how they receive the news is different. So it's not like you master one patient and you're good forever. Everyone is patient. Everyone. Especially with language barriers. Every situation is totally different.”
Non-Traditional Path	Quotes about physicians that did not carry out a normal path to become a hospice	“Today there are less Hospice and palliative medicine fellowships available however again if you're not taking the straight path for instance I have a colleague who just came on after her fellowship and she did Med school and internal medicine residency. Did two years as a hospitalist and was still in the early aspects of her career	

	medical director	and took a year off and did the year fellowship training. “	
Mentoring	Quotes about physicians that had an individualized experience due to a trusted advisor	“But to your point, the communication and that really need some mentoring. And so you could refer to mentoring periods, where a person didn't have to take off the whole year if you had the infrastructure. They have clinicians that are certified. Allowing clinicians to be mentored either based on reviewing of cases that they've had where they were having to, you know, teach some of the communication pieces versus.Then spending time in the world of one of the ones. I wonder if you could do something like that.” “Where they invited doctors like myself, I was one of the ones who did it, where they say, okay, hey, we're trying to identify people that we think will be leaders and palliative of care later, specifically palliative and they wanted to kind of normalize the training and so they invited us to go to. This intensive for a month. Harvard and so I spent 2 separate or 2 week periods. Where I had this intensive course where they kind of stretched it and it was both structured on some lectures as well as some small groups as well as going into the hospital with some mentoring doctors and doing some encounters that way. So that's because like I think the point of your question kind of leads to an appropriately, well some of this can be done without formal training but some of it needs some type of formal mentoring or or people doing like I did and just winging it. And at the end testing and finding out that I could do it okay after making a lot of mistakes. That's the benefit my fellows got for me if they didn't have to make my mistakes.And I made plenty of mistakes so I figured out how to talk to people right. But if you look at PCEP, Power Care Education Project at Harvard, you'll see that they did something. It's a	

		different bill, but that was a project that was done for a while. I think it's still being done." "So there's not a benefit to me now for the certification except for going back to what it needs, what it designates…But I want others to see it and I want to be the role model for others to say this is the place for people that know their stuff should be at." "So for folks looking for maybe like professional mentoring, like one on one mentoring, it may pose a challenge."	
Community	Quotes about building a community amongst colleagues within the field	"Community is number one and two are the for lack of a better word the academic resources right the places where you learn which opioids are best for what illness something that you don't get as part of your General Medical education through Med school I had a window into it because of my specialty and I had to deal with patients who are pain but if you're doing a family medicine residency to get to become a Hospice position." "It's been a positive experience and so I guess it's encouraging to me that more physicians are coming into this specialty. Because of interest and because of that I guess positive transition." "I think just having that community of colleagues who share the same. Interest is helpful." "The communication with the team as well as the patient's family. And another portion of that 40% has to do with clinical care.So a lot of that administrative aspect is sort of built in with private practice itself." "There is a group of people who you can talk about and really understand your experience doing this job to, again, help fill some knowledge gaps, get a second opinion	

		and just talk through some patient challenges. I think it's really kind of a side benefit to having a certification is this a group of people who share your experience and in a lot of cases, you know, real excitement for this work.”	
Patient and Family Care	Quotes about HMDCB content blueprint domain regarding value and emphasis on Patient and Family Care	“I guess the experiential once it's stuff most to like day to day as far as kind of day-to-day medical practice would be the patient and family care.”	
Medical Leadership and Communication	Quotes about HMDCB content blueprint domain regarding value and emphasis on Medical Leadership and Communication	“Though experiential knowledge for me comes from leadership and professionalism I would say primarily are experiential. Patient and family care may sound like it's experiential and you do learn by doing in those areas but there are specific techniques and tactics that you use in order to promote sensible and in these interactions that are covered in to patient and family care which is why I think it's you still need book knowledge to enhance your experiential knowledge so those are the top three with the patient family care being the third one for me in terms of experiential.”	
Professionalism	Quotes about HMDCB content blueprint domain regarding value and emphasis on Professionalism	“ So you kind of get your education on symptoms from these resources and regulations on these resources. And the one that's really tough is like professionalism. We all know about it. We all talk about it. But you don't have a manual for professionals in hospice. It's like there's more gestalt and expert opinion. It's not like a central repository of professionalism. And same thing kind of with the leadership and communication that the medical record has a lot more on leadership and communication but I say those are probably	

		the 2 artist areas to find a central place. You can find medical knowledge real easy. You can find family, how to do family focused care real easy, you can find regulations.Professionalism is out there but it's really scattered and not specific to our field and we don't have medical leadership and communication is out there but kind of more scattered also in our field." "There's a lot of guidelines on professionalism, but also experience, You almost, you feel tempted to put next on the list of the. Regulation piece. What's interesting about that is even though you think you need experience because that's changing all the time. So what you really need is just to stay up to date. That and actual experience can lead some people astray on regulations because they might still try to be doing things based on old regulations. And then once you get down to patient family care and medical, I mean, there's always experience builds all of them but once you get down there you have so much more to find like I know how to use the opioids." "Though experiential knowledge for me comes from leadership and professionalism I would say primarily are experiential. Patient and family care may sound like it's experiential and you do learn by doing in those areas but there are specific techniques and tactics that you use in order to promote sensible and in these interactions that are covered in to patient and family care which is why I think it's you still need book knowledge to enhance your experiential knowledge so those are the top three with the patient family care being the third one for me in terms of experiential."	

	Quotes about HMDCB content blueprint domain regarding value and emphasis on Regulatory, Compliance & Quality Improvement	“ The whole regulatory compliance stuff is not something that is not something that is really a strong focus and fellowship.” “Medicare operates under the conditions of participation. This has a lot to do with compliance, meeting eligibility. So just a mix of administrative and clinical know-how and so in terms of the outline, it would be that system based practice.” “I would say probably regulatory compliance and quality improvement. Which kind of goes, I guess, back to one of the answers I had earlier, which are what are the things that a lot of doctors have some sort of base knowledge in and what are the things that are just very particular to hospice which you just wouldn't know or have learned somewhere else unless you do the work.”	

XII. References

Accreditation Council for Graduate Medical Education. (2022). (rep.). *ACGME Program Requirements for Graduate Medical Education in Hospice and Palliative Medicine* . ACGME. Retrieved from https://www.acgme.org/globalassets/pfassets/programrequirements/540_hospicepalliativemedicine_2022.pdf.

Cegelka, D., Khan, Z., and Assaly, R. (2019). The uphill task of improving end-of-life training in U.S. Internal Medicine Residency Programs. *Academic Medicine*, *94*(10), 1405–1406. https://doi.org/10.1097/acm.0000000000002875

Chuang, Mei-Hsing et al. "Physician Palliative Education Associated With High Use of Hospice Care Service." The American journal of hospice and palliative care, vol. 39,2 (2022): 237-242. doi:10.1177/10499091211014160, Accessed 29 Aug, 2023.

Get the only certification specifically for hospice physicians. HMDCB. (n.d.). https://hmdcb.org/

Goldonowicz, J. M., Runyon, M. S., and Bullard, M. J. (2018). Palliative care in the emergency department: An educational investigation and intervention. *BMC Palliative Care*, *17*(1). https://doi.org/10.1186/s12904-018-0293-5

Kraus, C. K., Greenberg, M. R., Ray, D. E., and Dy, S. M. (2016). Palliative Care Education in emergency medicine residency training: A survey of program directors, Associate Program Directors, and assistant program directors. *Journal of Pain and Symptom Management*, *51*(5), 898–906. https://doi.org/10.1016/j.jpainsymman.2015.12.334

Litauska, A. M., Kozikowski, A., Nouryan, C. N., Kline, M., Pekmezaris, R., and Wolf-Klein, G. (2013). Do residents need end-of-life care training? *Palliative and Supportive Care*, *12*(3), 195–201. https://doi.org/10.1017/s1478951512001101

Lupu, D., Quigley, L., Mehfoud, N., and Salsberg, E. S. (2018). The growing demand for hospice and palliative medicine physicians: Will the supply keep up? *Journal of Pain and Symptom Management*, *55*(4), 1216–1223. https://doi.org/10.1016/j.jpainsymman.2018.01.011

Morgan, D. D., Litster, C., Winsall, M., Devery, K., and Rawlings, D. (2021). "it's given me confidence": A pragmatic qualitative evaluation exploring the perceived benefits of online end‐of‐life education on clinical care. *BMC Palliative Care*, *20*(1). https://doi.org/10.1186/s12904-021-00753-y

Our new education platform is now available!. End. (n.d.). https://www.endoflifeessentials.com.au/

Philips, J., and Collins, A. (2015). Routine integration of palliative care: what will it take? The Medical journal of Australia.

Schmit, J. M., Meyer, L. E., Duff, J. M., Dai, Y., Zou, F., and Close, J. L. (2016). Perspectives on Death and Dying: A Study of resident comfort with end-of-life care. *BMC Medical Education*, *16*(1). https://doi.org/10.1186/s12909-016-0819-6

U.S. Department of Health and Human Services. (n.d.). *What are palliative care and Hospice Care?*. National Institute on Aging. https://www.nia.nih.gov/health/what-are-palliative-care-and-hospice-care

What is Hospice Care?: American Cancer Society. American Cancer Society | American Cancer Society. (n.d.). https://www.cancer.org/cancer/end-of-life-care/hospice-care/what-is-hospice-care.html