Influence of Institutional Culture and Policies on Do-Not-Resuscitate Decision Making at the End of Life

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IMPORTANCE Controversy exists regarding whether the decision to pursue a do-not-resuscitate (DNR) order should be grounded in an ethic of patient autonomy or in the obligation to act in the patient’s best interest (beneficence).

OBJECTIVE To explore how physicians' approaches to DNR decision making at the end of life are shaped by institutional cultures and policies surrounding patient autonomy.

DESIGN, SETTING, AND PARTICIPANTS We performed semistructured in-depth qualitative interviews of 58 internal medicine physicians from 4 academic medical centers (3 in the United States and 1 in the United Kingdom) by years of experience and medical subspecialty from March 7, 2013, through January 8, 2014. Hospitals were selected based on expected differences in hospital culture and variations in hospital policies regarding prioritization of autonomy vs best interest.

MAIN OUTCOMES AND MEASURES This study identified the key influences of institutional culture and policies on physicians' attitudes toward patient autonomy in DNR decision making at the end of life.

RESULTS A hospital's prioritization of autonomy vs best interest as reflected in institutional culture and policy appeared to influence the way that physician trainees conceptualized patient autonomy. This finding may have influenced the degree of choice and recommendations physician trainees were willing to offer regarding DNR decision making. Trainees at hospitals where policies and culture prioritized autonomy-focused approaches appeared to have an unreflective deference to autonomy and felt compelled to offer the choice of resuscitation neutrally in all situations regardless of whether they believed resuscitation to be clinically appropriate. In contrast, trainees at hospitals where policies and culture prioritized best-interest-focused approaches appeared to be more comfortable recommending against resuscitation in situations where survival was unlikely. Experienced physicians at all sites similarly did not exclusively allow their actions to be defined by policies and institutional culture and were willing to make recommendations against resuscitation if they believed it would be futile.

CONCLUSIONS AND RELEVANCE Institutional cultures and policies might influence how physician trainees develop their professional attitudes toward autonomy and their willingness to make recommendations regarding the decision to implement a DNR order. A singular focus on autonomy might inadvertently undermine patient care by depriving patients and surrogates of the professional guidance needed to make critical end of life decisions.

Published online April 6, 2015. Corrected on May 6, 2015.

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Although beneficence, the obligation to act in the patient’s best interest, traditionally embodied the primary obligation of health care professionals, this approach has given way in recent decades to the primacy of patient autonomy. Some worry that the pendulum has swung too far by replacing concerns of paternalism, in which a person’s preferences are intentionally overridden, with simplistic understandings of autonomy that “abandon patients to their autonomy.” This attitude is problematic in situations in which patients are overwhelmed by, do not want to, or are not able to choose from the menu of different options. These situations result in patients choosing treatments that are neither in their best interest nor consistent with their goals and values.

Some health care professionals believe that to respect autonomy, they must present patients with all possible options and refrain from expressing recommendations. This belief stands in contrast to the guidance of most professional organizations, which state that futile therapies should not be offered and recommendations consistent with the patient’s goals and values should be addressed in a resuscitation status discussion to honor patient autonomy. Futility is typically defined as an inability to regain consciousness or survive outside the intensive care unit (ICU) setting. Navigating the balance between beneficence and autonomy can be especially fraught at the end of life and in particular regarding resuscitation decisions.

Studies have found that survival to discharge after cardiopulmonary resuscitation (CPR) is highly unlikely in certain conditions, such as sepsis or metastatic cancer, and is near zero when irreversible dying is imminent. Offering CPR when not clinically indicated can cause harm. On the other hand, leaving such decisions completely in the hands of physicians may lead to biased decision making partially based on unconscious factors (eg, patient race, age, and socioeconomic status). Some have argued that do-not-resuscitate (DNR) decisions should be tailored to 3 distinct patient populations: (1) those whom CPR should be considered a plausible option, (2) those whom CPR should be recommended against, or (3) those whom CPR should not be offered (ie, those imminent dying or who have no chance of surviving to discharge). This framework embraces the notion that providing clear recommendations is a part of a physician’s duty to act with beneficence and thereby empowers rather than hinders the patient’s ability to make an informed, autonomous decision.

The concept of informed assent operationalizes this best-interest framework, in which the health care professional does not insist that the decision ultimately be made by the patient or family member and explicitly recommends against CPR when it is clearly not indicated. National and local policies differ between and within the United States and the United Kingdom. Whereas US institutions tend to prioritize autonomy and individual choice, UK institutions promote best-interest decision making guided primarily by the physician, who has the unilateral authority to withhold CPR when deemed appropriate. Studies have found that institutional cultures surrounding advanced care planning contribute to variation in care provided by hospitals in end-of-life ICU care. Others have found considerable variation in use of DNR orders and withdrawal of life-sustaining therapies, even after accounting for variations in patient characteristics. The aim of this qualitative study was to explore how institutional cultures and policies surrounding patient autonomy influence physicians’ clinical approaches to DNR decision making at the end of life.

Methods

Design

Semistructured in-depth interviews performed from March 7, 2013, through January 8, 2014, investigated physicians’ views regarding the influence of institutional culture and policies on physicians’ attitudes toward choice and autonomy in the DNR decision-making process. This qualitative study was exploratory in nature, intended to deepen conceptual understanding of underlying phenomena that drive physician attitudes and behavior. The theories developed emerged from initial interviews and analysis and were refined and validated in subsequent interviews.

Hospital Sample

We purposively sampled 3 large academic medical centers with well-established residency and fellowship teaching programs in urban cities in the United States (hospitals A, B, and C) and 1 in the United Kingdom (hospital D) based on expected differences in hospital culture and variations in hospital policies (Table 1). The policies and culture of hospitals A and B reflect prioritization of patient autonomy, whereas the policies and culture of hospitals C and D prioritized best-interest decision making. The initial intention of the first 2 hospitals selected (hospitals B and D) was to explore differences between the United States and the United Kingdom and to contrast autonomy vs best-interest-focused policies. Subsequently, 2 additional hospitals were added in the United States to gain further insight into this evolving theoretical framework. These hospitals were chosen based on variations on end-of-life care. In addition, the prior work experience of one of the authors (E.D.) in hospitals A and B, the observation of differing policies and cultures, and known differences in norms regarding the end of life, such as the Death with Dignity movement in the Pacific Northwest, informed the selection of hospitals.

Physician Sample

During a 9-month period, one investigator (E.D.) recruited and interviewed 58 internal medicine physicians (including internal medicine subspecialists) in person, with the exception of 2 interviews that were conducted via Skype. Participants were eligible if they were full-time physicians at the selected institutions who were routinely involved in DNR conversations with patients at the end of life. They were purposively sampled by stage of training, years of experience, and medical subspecialty to provide a wide range of perspectives and contribute to the understanding of emerging patterns and themes. Phys-
The study was approved by the Johns Hopkins University Institutional Review Board and the UK National Health Service National Research Ethics Service.

An interview guide used across all sites provided thematic continuity (the eAppendix in the Supplement lists the sample interview guide questions). However, the interview format was open-ended, thereby encouraging participants to explore those aspects they considered most relevant. Interviews lasted 45 to 120 minutes and were audiotaped and transcribed verbatim. Data collection concluded when we reached theoretical saturation, a point where no new themes arised from the interviews.

Analysis
Our qualitative approach is grounded in a framework that acknowledges that multiple perspectives are intrinsic to the research process and the particular importance of the perspective that the researchers bring to the fieldwork and analysis.37-39 Throughout the analyses, the researchers drew on their own clinical experiences in a reflexive manner, understanding how these experiences would inform and potentially bias their interpretation of the interview data. Data were analyzed and theories developed as more interviews were conducted and coded. Developed hypotheses and themes became the subject of questions in subsequent interviews to further confirm the trustworthiness of the data. Disconfirming cases were recognized and analyzed in light of their effect on the emerging theory.

Two independent readers (E.D., a physician and sociologist, and A.C., a medical student with experience in bioethics) identified initial key themes and words that occurred through a subset of the interviews and developed a codebook through an iterative process. They subsequently coded 20% of the interviews after meeting to discuss emerging themes and patterns. There was rarely disagreement among coders. One researcher (E.D.) then analyzed and coded the remaining interviews using the codebook and added additional themes and adapting categories as needed.

Results
A total of 13 to 16 physicians participated at each site, with approximately equal numbers of attending physicians, fellows, and residents (or UK equivalent) at each site interviewed. Years of experience ranged from 1 to 45 years (Table 2).

Institutions’ Attitudes Toward Patient Autonomy or Patients’ Best Interest
At each hospital, physicians’ ethical attitudes toward DNR decision making reflected its hospital’s policy position regarding its prioritization of autonomy vs best interest. In general, physicians at the 2 hospitals (A and B) whose policies prioritized autonomy believed that patient autonomy was more important than other ethical principles (Table 3). In contrast, at hospitals whose policies emphasized best-interest decision making (hospitals C and D), physicians were more likely to be-

Table 1. Hospital Characteristics and Do-Not-Resuscitate Policies

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<thead>
<tr>
<th>Hospital</th>
<th>Geographic Location</th>
<th>Ethical Basis of Decision Making</th>
<th>Policy</th>
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<tr>
<td>A Northeast, United States</td>
<td>Autonomy focused</td>
<td>“Consistent with the Hospital’s mission, ‘We Put Patients First,’ [hospital A] protects patients’ rights, and the rights of those authorized to make health care decisions on behalf of the patients, to be fully informed about their health care in order to make treatment decisions.” (hospital policy) Physicians must obtain consent from patient or surrogate before entering a DNR order “even if the physician concludes that administration of cardiopulmonary resuscitation would be ‘medically futile.’” (New York State policy)</td>
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<tr>
<td>B Mid-Atlantic, United States</td>
<td>Autonomy focused</td>
<td>DNR orders are implemented with consent of the patient or surrogate. “It is the attending’s responsibility to advise the patient or family that considerations can be given to withholding resuscitation. The patient or surrogate shall be assured that the choice to provide, limit, or withhold resuscitation is free from coercion.” When a DNR order is in effect and the patient or surrogate raises new concerns about the existing DNR order, it shall be rescinded by the attending physician until steps can be taken to resolve the problem. Physicians are not obligated to provide treatment that is considered medically ineffective or futile” but an ethics consult must be called ...(hospital policy)</td>
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<td>C Pacific Northwest, United States</td>
<td>Best-interest focused</td>
<td>“A DNAR order may be written for a patient when the patient has expressed her preference that resuscitation not be attempted, or the attending physician has made a determination of futility according to the procedures described below … The attending physician bears ultimate responsibility for a DNAR order, although in most cases the decision represents a consensus of all those involved in the patient’s care.” (hospital policy)</td>
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<td>D East of England, United Kingdom</td>
<td>Best-interest focused</td>
<td>“A DNACPR decision should only be made after appropriate consultation and consideration of all aspects of the patient’s condition. Decisions must be taken in the best interests of the patient, following assessment that should include likely clinical outcome and the patient’s known or ascertainable wishes … The overall decision for a patient’s resuscitation status rests with the consultant in charge of the patient.” (hospital policy)</td>
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Abbreviations: DNACPR, do not attempt cardiopulmonary resuscitation; DNAR, do not attempt resuscitation; DNR, do not resuscitate.
believe that they had the ability to make clinical recommendations that respected both autonomy and the patient’s best interest or prioritized best interest as a whole. Most physicians at hospital C were comfortable using the informed assent approach when appropriate.

Notably, hospital C's DNR policy begins with a determination of futility before the section on eliciting patient preferences. In this section, the policy lists that likelihood of successful resuscitation is extremely low with preexisting conditions, such as metastatic cancer and sepsis, and emphasizes that “there is consensus that CPR would not be effective or even if successful would not be beneficial to the patient. There are some patients in whom CPR should not be attempted.”

Attitudes Toward CPR When Resuscitation Is Unlikely to Work
Experienced physicians at all sites generally were comfortable engaging in best-interest decision making and, when clinically appropriate, not offering or making explicit recommendations against offering resuscitation (Table 3). Respondents stated that they would discuss the situation with the patient or surrogate from a goal of care perspective and recommend against resuscitation or focus on comfort care without explicitly mentioning resuscitation. Many of them expressed the belief that failure to give recommendations should be seen as a derogation of responsibility. As one attending physician at hospital B stated, “I would recommend the following and the patient decides. I think that’s autonomy. I think to say, ‘You should not be resuscitated or not, what would you like to do?’ seems to me to be an abdication of responsibility to the patient in the name of autonomy. As the patient reminds me often, ‘You’re the doctor, how do I know?’”

Experienced physicians at hospitals that prioritized autonomy recognized the primacy of autonomy at their institution but did not believe autonomy meant they should offer futile treatments that would not serve the best interest of their patients. These physicians remained committed to what they believed was ethically the right thing to do by finding ways to balance autonomy and the law and making unilateral clinical decisions when they thought they were appropriate. This statement from a senior physician at hospital A demonstrated this balance: “I have to do it because I cannot break the law. You do your best and try to minimize the amount of ethical or moral compromise by limiting the attempted resuscitation as much as possible … When it comes to a procedure that I know far better than the patient or the family, to question whether it is appropriate for me not to exercise my judgment, I think would be wrong. It is just the opposite. I would call it being a responsible doctor and exercising good judgment … My primary responsibility is to the patient, and if a family is asking me to do something that clearly is harmful to the patient, I will explain to them patiently why I don’t think [it’s right.] I am not going to let somebody suffer because of it.”

Several respondents acknowledged a great degree of variation among physicians in terms of skill, attitudes, and practices, although many also expressed that their own views were relatively mainstream.

Choice of CPR at Autonomy-Focused Hospitals
Although hospital policies primarily dictated whether patient preferences should be honored and none of the hospitals required physicians to offer the choice of resuscitation if it were unlikely to work, trainees at hospitals where policies reflected autonomy-focused approaches often interpreted policies to mean that they were obligated to offer a choice of resuscitation in all cases regardless of the patient's likelihood of survival and that they should not provide clinical recommendations (Table 3).

Trainees were less comfortable recommending that resuscitation be withheld even if the chance of successful resuscitation were negligible. One resident at hospital A thought it was inappropriate to “inject your own personal opinions of life and death.” To another resident, respecting autonomy meant providing information without biasing the patient with a recommendation and that “it’s my responsibility to do every-

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<th>Table 2. Demographic Characteristics of Study Participants*</th>
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<tr>
<td>Characteristic</td>
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<td>Days of experience, mean (range)</td>
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<td>Ratio of males to females</td>
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<td>Professional status</td>
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<tr>
<td>Attending or consultant</td>
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<tr>
<td>Fellow or SpR</td>
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<td>Resident, foundation physician, or CMT</td>
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<td>Internal medicine subspecialty</td>
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<td>General internal medicine</td>
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<td>Pulmonary or critical care</td>
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<td>Palliative care</td>
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<td>Geriatrics</td>
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<td>Oncology</td>
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<td>Cardiology</td>
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* Data are presented as number (percentage) of study participants unless otherwise indicated.
Table 3. Selected Illustrative Quotations

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<th>Topic</th>
<th>Autonomy-Focused Approach</th>
<th>Best-Interest-Focused Approach</th>
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<td></td>
<td>Hospital A</td>
<td>Hospital B</td>
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<td>Institutional prioritization of autonomy or best interest</td>
<td>“I think we face [futile CPR] a lot. I think if that’s what they want, that’s what they want. I think it’s a fair thing ... if they want it after understanding all of those things, then that’s what they want. I think to some extent, that’s not our job to dictate what exactly what you should do ... it’s their decision. It’s their life, their body, they should choose whatever they want to be done with it.” (resident)</td>
<td>“I’m afraid autonomy pretty much drives the system, whether or not we think it should or not. Hospital policy says the patient is in the driver’s seat. Autonomy is the principle that rises to the top.” (senior attending physician)</td>
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<td>Experienced physicians’ willingness to make recommendations</td>
<td>“If the patient gets worse, you’re going to hear me recommend DNR because I’m not too sure that doing chest compressions will actually save this person’s life.” (attending physician)</td>
<td>“I will tell the family that there is nothing more to offer and when they die we’re not going to do CPR to bring them back to a condition that is worse than they were moments ago.” (attending physician)</td>
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<td>Inexperienced physicians’ willingness to make recommendations</td>
<td>“I feel it’s more of moral burden for me to say this person needs to be a DNR and I’m going to make them a DNR. I don’t necessarily know if I have the right to make that decision for that patient. Again, I’m torn. I know that these decisions often mean that, yes, we’re going to spend x, y, and z time doing a potentially useless thing on this person and causing pain. I just don’t know. With my level of training and where I am, I don’t think I’ll feel comfortable doing that.” (fellow)</td>
<td>“There was family discord … that wanted to do everything and it doesn’t seem like the patient’s wishes, but I think in those circumstances that I wish I could just say, you know: I think it’s not really medically indicated and we’ll make sure that she’s comfortable.” (residency)</td>
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<td>Abbreviations: CPR, cardiopulmonary resuscitation; DNR, do not resuscitate; SpR, specialist registrar.</td>
<td>“The idea is not transfer of the right to make medical decisions to me, it’s to their loved one. And the reason for that is because they presumably know them better than I do, so you know, I try to give you as much information to make an informed decision, but it’s still [their decision]. So I do still subscribe to autonomy. I think more than perhaps [even if] I really don’t think this is in the patient’s best interests.” (fellow)</td>
<td>“The mental Capacity Act of 2005 is a law that mandates best-interest decision making in patients who lack capacity.” (resident)</td>
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 thing as they say” (Hospital B). Less experienced physicians at autonomy-focused hospitals expressed their responsibility for decision making up to a certain point but appeared to be more hesitant to take on that responsibility.
In contrast, trainees at hospitals with policies that encouraged a best-interest decision-making approach (hospitals C and D) were more comfortable expressing clinical judgment against resuscitation when appropriate. Many of the trainees at hospital C were willing to use informed assent and strongly recommended against resuscitation or did not offer resuscitation if it was unlikely to work. One resident said, “I can think of a few times per rotation where informed assent was done. I did it at least a few times in the ICU, where if things head towards CPR, then I’d say, ‘It wouldn’t be something that we think would be appropriate for you and here is why.’”

Discussion

A hospital’s culture and policies’ prioritization of autonomy vs best interest appears to influence the way in which physician trainees conceptualize patient autonomy. This finding may subsequently influence the degree of choice and recommendations physician trainees are willing to offer regarding DNR decision making. There is a complex interplay between institutional cultures and policies; the ability to parse out the exact interaction is beyond the scope of this article. Policies and cultures complement and drive each other.

Although experienced physicians in this study acknowledged institutional culture and policies, it appears they did not exclusively allow their actions to be defined by policies and were willing to make recommendations against resuscitation if they believed this procedure would be futile. Although variation existed among respondents, in general, experienced physicians at all sites understood and acted on their ethical obligations to recommend and offer treatments responsibly.

Although hospital policies, even at the most autonomy-focused institutions, do not require physicians to offer futile resuscitation or to withhold recommendations, we found that less experienced physicians at autonomy-focused hospitals tended to overinterpret hospital policies and embrace a reductionist, limited understanding of autonomy. Ethics and communications at the end of life are generally present in the medical school and residency didactic curricula, but lack of time and space on the wards for reflection might promote an excessive, unreflexive deference to patient autonomy that risks placing unwanted and unreasonable responsibility for medical decision making onto the patient or surrogate.6,38,39

Unlike more senior physicians, trainees have not yet developed the experience or professional confidence to advocate for their patient’s best interest by making explicit recommendations regardless of their institution’s policy or cultural constraints. Trainees at autonomy-focused hospitals appeared compelled to remain neutral when offering the choice of resuscitation without providing a specific recommendation regardless of whether they believed it to be clinically appropriate. Their attitudes might reflect perceived constraints because of policies and expectations, which focus on patient autonomy. This finding suggests that the ethical principles embraced by experienced physicians were not transmitted to learners at autonomy-focused institutions.

The culture and policies at hospitals C and D actively encouraged best-interest decision making. Although some of the physicians at hospital C had never heard of the term informed assent, the cultural norm at that institution—similar to the hospital in the United Kingdom—was not only that it was appropriate to discourage ineffective CPR but also that it would be ethically suspect to offer CPR in futile situations. These trainees appeared to have the time and space within their workflow and culture to develop similar attitudes as experienced physicians. Even though interns and residents come from medical schools across the country, they seemed to adopt similar attitudes as their peers in residency training.

Studies40,41 have found that, in practice, physicians and residents do not provide adequate information during conversations regarding resuscitation. Most omit critical information on prognosis, goals of care, or explanations of the processes involved in various interventions. Although medical residents in these interviews generally had a great respect for autonomy, omission of these critical elements may deprive patients of the very autonomy that physicians strive to respect.38,39

Interventions to improve end-of-life communication skills have focused on formal curricula and increasing opportunities for house staff to practice these skills.42 Several studies43-46 have explored the effects of a hidden curriculum on the development of medical trainees and its effect on their ethical beliefs and communication strategies. This hidden curriculum captures the inadvertent transmission of attitudes and behaviors to trainees through everyday interactions during their training that are in conflict with the normative ideals and official policies of the medical profession.47 Because much of residency training involves apprenticeship-based peer learning, the influence of the cultural milieu cannot be overemphasized.

It is often perceived that the United States and the United Kingdom are on opposite ends of the autonomy and best-interest spectrum, with the greater focus in the United States on individual choice and patient rights and the culture in the United Kingdom reflecting a greater acceptance of more paternalistic practices.48 This study suggests that there may be important differences in approaches not only between the United States and the United Kingdom but within the United States itself. Trainees at the US hospital that encouraged best-interest decision making had attitudes and beliefs about DNR decisions that appeared more similar to UK physicians than physicians at the other US sites. In contrast to trainees at the autonomy-focused hospitals, they seemed more willing to not offer resuscitation if they did not think it was indicated.

This study has several limitations. Interviews with physicians do not reflect actual practices but instead reflect physicians’ opinions, attitudes, and perceptions of clinical practice. Social desirability bias may have influenced answers. There are many internal and external factors that influence physician attitudes and communication practices regarding end-of-life decision making. For example, it is possible that the backgrounds of patients and the cultural milieu in which these hospitals are located influence aggressiveness of care, attitudes toward death, and degree of deference to authority. Furthermore, institutional interest and leadership in palliative care...
also influences hospital culture surrounding end-of-life issues. These issues emerged in our interviews and will be explored in future articles. Although the difference between more and less experienced physicians’ willingness to offer clinical recommendation could reflect more traditional paternalistic attitudes among older respondents, our study suggests a different explanation because trainees at the best-interest-focused hospital had similar attitudes to experienced physicians in those hospitals.

Conclusions

Inadequacies exist in physician communication at the end of life, especially among medical trainees.49 Prior studies20,21 have found that advanced care norms affect end-of-life ICU use, but, to our knowledge, this is the first study to explore the influence of a hospital’s policy or culture on physicians’ understanding of autonomy and willingness to recommend resuscitation decisions. This study hypothesizes that culture and policies oriented toward autonomy may have unintended consequences of constraining a physician’s willingness to make recommendations, especially that of trainees.

It is ironic that the very policies that seek to empower patients might inadvertently deprive them of their autonomy through an overemphasis on a reductionist checklist approach to autonomy. Perhaps policies more oriented toward best-interest decision making might allow physicians the leeway to shift their focus from a discourse of choice to one of care and compassion.
Understanding How Institutional Culture Affects Attending Physicians’ and Trainees’ Resuscitation Discussions

Lynnea Mills, MD; Wendy Anderson, MD, MS

Prior work has indicated that institutional cultural, political, and policy-driven factors affect physicians’ decisions and recommendations surrounding end-of-life care. However, until now, to our knowledge, no published study has aimed to verify this effect specifically on discussions of resuscitation status and to understand cultural effects on trainees’ development of their own skills in addressing resuscitation with patients.

In this issue of JAMA Internal Medicine, Dzeng et al present a mixed methods study evaluating the role of institutional culture in forming physicians’ attitudes and practices regarding do-not-resuscitate (DNR) orders. The authors conducted semistructured, in-depth, qualitative interviews with residents and attending physicians at 4 institutions (1 in the United Kingdom and 3 in the United States). These institutions were selected based on variations in hospital DNR policies and culture. Two of the US institutions had policies and culture that emphasized that the patients’ or surrogates’ informed consent should guide decisions about cardiopulmonary resuscitation (CPR), termed by the authors as autonomy focused. The other 2 institutions (1 in the United States and 1 in the United Kingdom) had policies and culture that emphasized the physician’s assessment of the likelihood of success of CPR as a central factor in determining a patient’s resuscitation status, termed by the authors as best-interest or beneficence focused.

Physicians at each institution, ranging from first-year residents to experienced attending physicians, were asked multiple open-ended questions about their understanding of hospital policy, culture, and usual practice, as well as questions about their own attitudes and beliefs surrounding DNR orders. Results confirmed that the United States in general focuses more on autonomy in its institutional health care poli-

Original Investigation Research

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beneficence, but there was some variation within the United States. At all sites, despite knowledge of the local culture, experienced attending physicians were comfortable recommending DNR status to patients for whom they thought CPR was likely to be futile. However, there was a difference in trainee attitudes toward DNR discussions based on the prevailing culture of their hospitals: trainees at best-interest institutions were comfortable making DNR recommendations to patients and often expressed feelings of obligation to use their medical knowledge in this way, whereas trainees from autonomy-focused institutions were not comfortable making such recommendations and often thought it was not their place to do so. Thus, even though attending physicians at each site were comfortable using their own judgment in making DNR decisions, the trainees’ attitudes better reflected the hospitals’ overall cultures.

The study by Dzeng et al2 adds to our understanding of why trainees at many institutions may be uncomfortable conducting discussions and making decisions about code status3,4 and highlights the effect that hospital policy and culture have on trainee education about code status discussions. A striking aspect of this article is the suggestion that the trainees were more influenced by local culture and institutional policy than by their attending physicians’ practices. Although it is not surprising that culture influences trainee behavior, we now have evidence that this effect may at times be even stronger than that of role-modeling by more experienced physicians. This result gives compelling weight to the idea that we may find institutional policy an unexpected but successful source of direct education, giving us the potential to harness policy as a resource for education reform.

Of interest, this study of trainee behaviors’ mirrors recent work that indicates that patients and surrogate decision makers are more likely to choose DNR status if it is framed as the norm.5,6 These results highlight the importance of culture and social norms on CPR decision making and present hospital policies as an effective way to influence not only trainee education but also patient care. Given the influence of specific language on patient and family CPR preferences, hospital policies might provide further guidance to physicians about how to discuss CPR with patients and families, in addition to specifying the ethical principles that guide decisions. As we craft guidelines for CPR discussions, feedback from patients and families will be an important step in ensuring that those discussions do not cause undue harm7 or distress.

In summary, the article by Dzeng et al2 opens an important door for discussion on a topic with far-reaching effect. Given the high volume of code status discussions in which trainees engage on a daily basis, this area demands immediate attention. With the help of the research by Dzeng et al, we now see how strongly local culture and policy can influence trainees’ attitudes, and this knowledge can be leveraged to improve educational interventions. The work adds to our increasing understanding of best practices in the clinical and educational settings that surround code status decisions and guides our development of effective policy to help us move forward in offering the highest-quality end-of-life care.

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**Published Online:** April 6, 2015. doi:10.1001/jamainternmed.2015.0295.

**Conflict of Interest Disclosures:** None reported.

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