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"No Escalation of Treatment" Designations

A Multi-institutional Exploratory Qualitative Study

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BACKGROUND: No Escalation of Treatment (NoET) designations are used in ICUs internationally to limit treatment for critically ill patients. However, they are the subject of debate in the literature and have not been qualitatively studied.

RESEARCH QUESTION: How do physicians understand and perceive NoET designations, especially regarding their usefulness and associated challenges? What mechanisms do hospitals provide to facilitate the use of NoET designations?

STUDY DESIGN AND METHODS: Qualitative study at seven US hospitals, employing semi-structured interviews with 30 physicians and review of relevant institutional records (eg, hospital policies, screenshots of ordering menus in the electronic health record).

RESULTS: At all hospitals, participants reported the use of NoET designations, which were understood to mean that providers should withhold new or higher-intensity interventions ("escalations") but not withdraw ongoing interventions. Three hospitals provided a specific mechanism for designating a patient as NoET (eg, a DNR/Do Not Escalate code status order); at the remaining hospitals, a variety of informal methods (eg, verbal hand-offs) were used. We identified five functions of NoET designations: (1) Defining an intermediate point of treatment limitation, (2) helping physicians navigate prearrest clinical decompensations, (3) helping surrogate decision-makers transition toward comfort care, (4) preventing patient harm from invasive measures, and (5) conserving critical care resources. Across hospitals, participants reported implementation challenges related to the ambiguity in meaning of NoET designations.

INTERPRETATION: Despite ongoing debate, NoET designations are used in a varied sample of hospitals and are perceived as having multiple functions, suggesting they may fulfill an important need in the care of critically ill patients, especially at the end of life. The use of NoET designations can be improved through the implementation of a formal mechanism that encourages consistency across providers and clarifies the meaning of "escalation" for each patient.

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KEY WORDS: critical care; end-of-life care; ethics; ICU; patient comfort; resuscitation orders; withholding treatment

FOR EDITORIAL COMMENT, SEE PAGE 18

ABBREVIATIONS: DNR = Do Not Resuscitate; NoET = No Escalation of Treatment

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Take-home Points

Study Question: In a varied sample of US hospitals, how do physicians understand and perceive "No Escalation of Treatment" (NoET) designations, especially regarding their usefulness and associated challenges?

Results: At all hospitals in our sample, physicians reported that NoET designations were used, served several important functions in the care of critically ill patients, and were associated with challenges related to their ambiguity in meaning.

Interpretation: NoET designations may fulfill an important need in the care of critically ill patients, especially at the end of life; their use may be improved through interventions that clarify the meaning of "escalation" for each patient.

"No Escalation of Treatment" (NoET), also known as "No Escalation of Care" or "Do Not Escalate," is a designation used in the care of critically ill patients.[1] When a patient is designated as NoET, it is commonly understood to mean that existing life-sustaining treatments will be continued but that escalations will be avoided.[1-4] NoET designations are used in ICUs internationally, especially at the end of life.[1,5,6] In addition, NoET designations have been incorporated into the code status orders at some US hospitals (eg, DNR/Do Not Escalate orders).[7,8]

However, NoET designations are a source of controversy in the critical and palliative care literature. At stake is whether NoET designations ought to be used routinely in the care of critically ill patients. Some argue *for* the use of NoET designations because they (1) ease the burden on surrogate decision-makers by allowing them to limit invasive measures without withdrawing life-sustaining treatments, (2) provide additional time for families to grieve, and (3) state a guiding principle that allows physicians to flexibly direct clinical management.[2,9,10] Others argue against the use of NoET designations because they (1) provide neither optimal treatment nor patient comfort, (2) needlessly prolong the dying process, and (3) are ambiguous, which is especially problematic in the setting of the clinical complexity and frequent hand-offs of the ICU.[3,11] It is worth noting that proponents and critics acknowledge the same characteristics of NoET designations, but evaluate them in opposite fashions.

To date, no empirical work has evaluated how these arguments are borne out in the experience of physicians and how this varies across institutional contexts. Thus, we sought to explore physician perceptions of NoET designations across a varied sample of US hospitals. An empirically based understanding of NoET designations can improve the care of critically ill patients in at least two ways. First, it can provide insight into the advantages and disadvantages of NoET designations, allowing physicians to judge whether and how to use them most effectively. Second, it can guide hospital leaders in the design of policies and mechanisms for designating patients as NoET (eg, orders in the electronic health record).

Study Design and Methods

We conducted a qualitative multi-institutional study exploring variation in the design of code status orders and other designations (eg, DNR orders, NoET designations).[7] This article presents results specific to NoET designations. Our interdisciplinary research team[12,13] included intensivists, hospitalists, palliative care consultants, bioethicists, a sociologist, people with experience in the design of hospital code status policies, and people with training and experience in qualitative research. The study was approved by the Stanford University Institutional Review Board.

We purposively sampled hospitals[14,15] to achieve variation in geographic location (western, central, and eastern United States) and type of institution (academic, community, and government). We also included hospitals that provided a NoET code status order (eg, a DNR/Do Not Escalate order) and those that did not. Our research team included at least one person who trained and/or practiced at each hospital (an "institutional lead"). At each hospital, we collected institutional records relevant to NoET designations (eg, hospital policies, screenshots of ordering menus in the electronic health record) as these are known to impact communication and decision-making practices.[16,17]

At each hospital we recruited participants, using lists of names and emails provided by institutional leads. We purposively sampled physicians,[14,15,18] recruiting attending physicians from three services that interact with NoET designations (one each from critical care, hospital medicine, and palliative care consultation). At academic institutions, we additionally recruited one trainee physician from each service as trainees are often responsible for placing orders regarding

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treatment limitations. We attempted to achieve variation in sex and years of clinical practice and to include at least one person from each hospital who had practiced there for a significant length of time. Wherever possible, we prioritized physicians who were involved in the design of code status orders at their institution.

The lead investigator conducted in-depth semistructured interviews[19] that lasted 60 to 120 min with all participants. Interviews were conducted with an interview guide, which was iteratively drafted with input from members of the research team. Although the initial interview guide explored NoET designations as they are relevant to code status orders (eg, DNR/Do Not Escalate orders), NoET emerged as an important designation separate from code status orders in early interviews. Thus, the interview guide was revised, and subsequent interviews explored (1) whether and how NoET designations were used at the hospital, (2) the relationship of NoET designations to other designations (eg, DNR orders, comfort measures only designations), (3) the usefulness of NoET designations, and (4) challenges associated with NoET designations. Representative prompts are available in e-Appendix 1. As interviews progressed, emerging themes were captured in theoretical memos[20] and discussed with the entire research team, which further impacted how themes were explored in later interviews. Verbatim interview transcripts were de-identified before analysis.

As this was the first study to qualitatively explore NoET designations, we used an inductive analytic approach in which themes are identified as insights emerge from data.[21-24] Three investigators used subsets of transcripts to develop, test, and finalize a codebook. Subsequently, all transcripts were coded independently by two investigators who met periodically to adjudicate all coding to consensus, supervised by the lead investigator. Lastly, research team members read and discussed all coded excerpts, in conjunction with review of institutional records, to generate the results presented in this article. After initial formulation, results were refined through iterative drafting and discussion with the entire research team.

Results

We included seven hospitals and 30 physicians whose characteristics are shown in Tables 1 and 2, respectively. For all sampling characteristics, we achieved the intended variation. At each hospital, at least one recruited physician had practiced at the institution for 6 years or more. Physician demographics were reflective of national averages in terms of sex, race/ethnicity, and age.[25]

General Findings

NoET designations were reported by participants at every hospital in our sample. They were described as a treatment-limiting designation presented by a physician and assented to by a surrogate, most frequently in an end-of-life scenario. Participants generally referred to NoET designations as reflecting a "*choice*" or an "*agreement*." For some patients, participants described NoET designations as reflecting the patient's "*goals*," "*philosophy*," or "*wish*."

TABLE 1] Hospital Characteristics

Characteristic	Frequency
Type	
Academic	28.6% (n = 2)
Government	28.6% (n = 2)
Community	42.9% (n = 3)
Geographic location	
Western United States	57.1% (n = 4)
Central United States	14.3% (n = 1)
Eastern United States	28.6% (n = 2)
NoET code status order	
Present	42.9% (n = 3)
Absent	57.1% (n = 4)

NoET = no escalation of treatment.

While participants used a variety of language to refer to NoET designations (eg, "*Do Not Escalate order*," "*DNE*," a decision to "*avoid escalations*," etc.), all descriptions of these designations appeared to share a common meaning: that new or higher-intensity interventions ("*escalations*") should be withheld, but that ongoing interventions should be continued without withdrawal. Regarding the withholding aspect of NoET, participants used a variety of related concepts, explaining that NoET entailed withholding "*aggressive*," "*invasive*," "*burdensome*," or "*more intense*" interventions. Regarding not withdrawing, participants described NoET as meaning that "*we're continuing everything we are doing now*" or "*we're not going to pull anything back*."

Methods for Designating a Patient as No Escalation of Treatment

We observed a range of methods for designating a patient as NoET. Three hospitals in our sample provided a code status order used to designate patients as NoET (eg, a DNR/Do Not Escalate order). The code status orders at these hospitals and the relevant institutional definitions are shown in Table 3. At the remaining four hospitals, we did not identify any explicit NoET orders.

Participants at hospitals without a NoET order described a wide array of informal methods for designating a patient as NoET, including the following: verbal communication during hand-offs or clinical rounds; special verbal communications (eg, a phone call to all attending physicians); written documentation on hand-off forms, daily progress notes, or advanced care planning notes; clarifications in the "comments" section of a code status order; or, a written nursing communication.

TABLE 2] Physician Characteristics

Characteristic	Frequency
Specialty	
Hospital medicine	33.3% (n = 10)
Critical care	33.3% (n = 10)
Palliative care	33.3% (n = 10)
Training level	
Attending physician	70.0% (n = 21)
Trainee physician	30.0% (n = 9)
Sex	
Male	56.7% (n = 17)
Female	43.3% (n = 13)
Years of clinical practice	
0-4	10.0% (n = 3)
5-9	36.7% (n = 11)
10-19	40.0% (n = 12)
20-29	10.0% (n = 3)
30-39	3.3% (n = 1)
Age, y[a]	
≤ 29	6.7% (n = 2)
30-39	46.7% (n = 14)
40-49	26.7% (n = 8)
50-59	13.3% (n = 4)
≥ 60	3.3% (n = 1)
Decline to state	3.3% (n = 1)
Race/ethnicity[a]	
White	66.7% (n = 20)
Asian	16.7% (n = 5)
Hispanic or Latino	6.7% (n = 2)
Mixed/Other	10.0% (n = 3)

[a]These characteristics were not known before recruitment and thus were not used for sampling purposes.

Functions of No Escalation of Treatment Designations

Across hospitals, some participants described NoET designations as "*useful*" or "*helpful*." In our analysis of excerpts discussing the usefulness of NoET designations, we identified five functions discussed by participants. Each function is explained below with illustrative participant quotations shown in Table 4.

1. *Defining an Intermediate Point of Treatment Limitation:* Participants frequently framed NoET designations as being "*about limitations on care*" or "*the things that your care would not include.*" Relative to other treatment-limiting designations (eg, a DNR order, a comfort measures only order), a NoET designation was seen as a "*middle-of-the-road*" designation, reflecting treatment limitations beyond a DNR order, but not yet reflecting a full transition to comfort measures only. As one participant stated: "*some limitations have been put on their care but they're not comfort measures only yet.*" At the three hospitals with NoET code status orders, the intermediate nature of NoET was reflected in the design of the code status orders: the NoET code status order occupied a middle position, reflecting an intermediate degree of treatment limitation (Table 3).
2. *Helping Physicians Navigate Prearrest Clinical Decompensations:* Many participants discussed NoET designations in the context of clinical decompensations before a cardiac arrest, when a patient might require life-sustaining treatments (eg, ventilatory support, vasoactive medications, dialysis, antibiotics, IV fluids). NoET was described as providing "*a sense of what the overall treatment goals [are]*" or "*context*" to help clinicians navigate these treatment decisions. As one participant stated: "*I know what DNR means, but DNR alone doesn't tell me if the patient has any other limits on their care…I think that's where the [NoET] comes from.*"
3. *Helping Surrogate Decision-Makers Transition Toward Comfort Measures Only:* Nearly all participants explained that some surrogates struggled to accept a patient's poor prognosis at the end of life and transition to comfort measures only. In this setting, NoET served as a "*middle ground*" or "*compromise*" with surrogates that was "*guilt-alleviating*" and "*easier to accept.*" Thus, many participants described NoET as a "*bridge to getting somebody to palliative care or to comfort measures or to hospice.*" In explaining why NoET was easier to accept, participants sometimes made statements like: "*you're not actively withdrawing care and that's helpful…we can say to the family, we're doing everything we can do and we're going to continue to do that.*" In certain cases, NoET was described as "*comfort care lite*": "*there were certainly many families that we knew could never agree to comfort care and so we would just get a [NoET] knowing that the natural progression of the disease would be that they would worsen and then without escalation would die.*"
4. *Preventing Patient Harm From Invasive Measures:* Many participants explained that critically ill patients tended to receive all life-sustaining treatments by default and that this could be a source of "*suffering*," "*harm*," or "*burden*" to patients without providing substantial benefit. A DNR order that only limited

TABLE 3] NoET Code Status Orders

Hospital With NoET Code Status Order	All Code Status Orders Provided by Hospital	NoET Code Status Order
Hospital 1	Full code Partial code DNR/Do Not Intubate DNR/Do Not Escalate DNR/Comfort	DNR/Do Not Escalate: "Do not escalate care. Continue current level of care. If patient is not in the ICU, do not transfer to a higher level of care for the purpose of administering life-prolonging therapies."
Hospital 2	Full code DNR-A DNR-B DNR-C	DNR-B (Limited Therapy, But Do Not Attempt Resuscitation): "Therapy already initiated will be continued as medically indicated by the patient's condition. No additional treatments will be initiated."
Hospital 3	Full code DNAR-Full Intervention DNAR-Limited Intervention DNAR-Comfort Measures Only	DNAR-Limited Intervention: "Attempt to restore patient function with treatments on the hospital floor level of care, without escalation to an ICU setting."

Three hospitals provided a specific code status order to designate a patient as NoET. Each hospital's code status orders are shown in here. The specific code status order used to designate a patient as NoET is shown in the last column, included with a relevant excerpt from policy or educational documents. DNAR = do not attempt resuscitation; DNR = do not resuscitate; NoET = no escalation of treatment.

resuscitation during cardiac arrest was not seen as sufficient to prevent this. By setting treatment limitations before cardiac arrest, NoET was generally seen as preventing invasive measures and their associated burdens: "*we're not going to escalate care which means…we're going to let him be;*" "*[NoET] was a way of saying…we are not going to engage in futile care or care that wouldn't benefit them.*"

5. *Conserving Critical Care Resources:* Some participants explained that, by preventing transfer to the ICU, NoET designations can help with "*resource allocation*" or "*bed strain.*" At two hospitals, NoET code status orders were explicitly defined to prevent transfer to the ICU (Table 3, hospitals 1 and 3). Physicians at these hospitals discussed using the NoET code status designation to "*triage*" when deciding whether to transfer a decompensating patient to the ICU. Some described having a NoET designation as a "*nudge*" to guide patient-provider discussions toward the appropriateness of ICU-level care before such decompensations.

Most participants described implementation challenges associated with NoET designations (Table 5). Participants connected these challenges to their perception that NoET designations were "*level-of-care specific*" or "*defined at what level of care the patient is already receiving.*" Thus, the precise meaning of NoET was said to be "*case-dependent*" or "*unique*" to each patient. Many participants used potentially negative terms to refer to this aspect of NoET designations, such as "*vague*," "*nebulous*," "*ambiguous*," "*gray*," "*murky*," "*confusing*," or "*unclear.*"

Because of this ambiguity in meaning, participants reported that NoET "*requires further explanation.*" As one stated: "*you always had to clarify in a way that was pertinent to the case.*" In our analysis of these excerpts, we found that the meaning of NoET designations can be specified in two ways:

1. *Withhold Prespecified Life-Sustaining Treatments:* Most frequently, participants reported that NoET meant that certain prespecified interventions should be withheld. For example, as one participant from a hospital with a NoET code status order explained: "*You click [NoET] and then with it you can write things out: patient does not want to be intubated, no dialysis, no blood transfusions.*"
2. *Prevent Transfer to Higher-Acuity Units (eg, the ICU):* Some participants reported that NoET meant that a patient should not be escalated to a higher level of care. As one participant noted, "*One of the most common [meanings of NoET] is 'doesn't go the ICU,' so I can do everything that this unit does, but I'm not going to take you to the ICU.*" One participant summarized this with the phrase "*treat in place.*"

Participants at every hospital explained that the intended meaning of a NoET designation was not always specified in advance. This created challenges for physicians and staff in determining which clinical interventions constituted an escalation: "*what does 'no*

TABLE 4] Functions of NoET Designations

Function	Illustrative Participant Statement
Defining an intermediate point of treatment limitation	"[NoET] is not comfort care, but it's suggesting the patient's halfway between comfort care and DNR in terms of where they're at with their goals." (Interview 1, Hospital Medicine Attending Physician)
Helping physicians navigate prearrest clinical decompensations	"[NoET] is a hard stop against the spillover, right?…Just a DNR is this more distant line you're not going to cross and do cardiopulmonary resuscitation…but right up to that line from wherever that patient is clinically, you may have a huge amount of territory you could go through and maybe part of that is a central line, and maybe part of that is a vasopressor, and so…having that [NoET designation] might make the difference between lots of other decisions." (Interview 2, Critical Care Attending Physician)
Helping surrogate decision-makers transition toward comfort measures only	"We have some patients where it's very hard for the patient's family to go to a purely comfort-oriented plan of care…so if the patient and family are having a hard time accepting that…[then] let's not escalate care…this family is going through that journey, they're having a hard time, but now we've moved one step closer to comfort-oriented care." (Interview 5, Palliative Care Attending Physician)
Preventing patient harm from invasive measures	"Often you'll get into situations where you don't feel like it's going very well, the patient's family feels the same way, but they want to limit the amount of potential suffering a patient might have. In these types of settings, especially, [NoET] is sometimes helpful…to limit the amount of things that happen from a medical perspective in terms of invasive procedures or diagnostic tests." (Interview 25, Critical Care Attending Physician)
Conserving critical care resources	"I think that, in our institution, probably the most pragmatic use is delineating resource allocation, you know, because it's very clear if someone's [NoET], they're not coming to the ICU—we are going to provide them with the care that can be provided on the floor, but we are not going to take the bed and we're not going to take the expense of the ICU transfer…So I would say the use of resources." (Interview 4, Critical Care Trainee Physician)

DNR = do not resuscitate; NoET = no escalation of treatment.

further escalation' mean?" In some cases, participants felt they could "*extrapolate*" from NoET designations to individual clinical decisions. In other cases, participants felt that, without explicit guidance, the NoET designation would not be effective in limiting treatment.

Discussion

Although treatment limitation practices are known to vary internationally,[26] prior literature has documented that NoET designations are used commonly in ICUs in multiple countries.[1,5,6] In this multi-institutional qualitative study, we explored how physicians from a varied sample of US hospitals understand and perceive NoET designations, helping to better characterize their use, functions, and associated implementation challenges, to inform the ongoing debate regarding whether and how they should be used.

At every hospital in our sample, participants reported that NoET designations were sometimes used. At three hospitals, NoET designations occurred using a code status order supported by hospital policy (Table 3); however, at the other four hospitals, participants reported NoET designations occurring without any specific mechanisms provided by the hospital. The presence of NoET designations across our varied hospital sample, in addition to the perception that NoET designations perform several important functions (Table 4), suggests that NoET designations have arisen organically to meet an important need in the care of critically ill patients, especially at the end of life.

NoET designations have been criticized for being "ethically confusing" because they aim "neither to return [the patient] to a quality of life they would find acceptable nor to focus on comfort."[3] Although our results confirm this criticism, they also reframe it, suggesting that the ambivalent nature of NoET designations may be an advantage in the context of end-of-life care for critically ill patients. In these situations, surrogates may find it difficult to withdraw life-

sustaining treatments.[27-30] In agreement with prior opinion pieces,[2,9,10] our results suggest that NoET designations provide an intermediate degree of treatment limitation that may remove some of the burden on surrogates. Thus, it may represent an achievable compromise with surrogates that also accomplishes a number of physician goals, such as conserving critical care resources and limiting interventions that physicians perceive to be inappropriate or nonbeneficial (Table 4).

Our results also suggest that, rather than representing a compromise, NoET designations may be, for some patients, the clinical strategy that best represents their goals and values. Because of clinical momentum[31] and the default of aggressive care for seriously ill patients,[32] patients and surrogates in the ICU are typically not involved in decision-making about treatment limitations until available treatments fail to meet physiologic goals.[33] For patients who desire to limit invasive treatments before this point, NoET can be a useful designation, functioning similarly to Treatment Escalation Plans and other advance care planning interventions designed to prevent unwanted escalations during clinical decompensations before cardiac arrest.[34-36]

NoET designations may be considered in the same class of decision-making strategies as time-limited trials.[37-44] Our results suggest that NoET designations differ from time-limited trials in an important manner: by preventing escalations, NoET designations entail a greater degree of treatment limitation than time-limited trials, which typically entail a full trial of intensive care. In fact, depending on how NoET designations are used, they may prevent admission to the ICU entirely. This

TABLE 5] Implementation Challenges Associated With NoET Designations

Challenge	Participant Description of Challenge
The meaning of NoET designations is case-dependent	"[NoET] did not in and of itself have a specific definition other than maintain current level of care…You have to know a lot about the patient to know what the current level of treatment is, and that's not a self-explanatory thing." (Interview 24, Palliative Care Trainee Physician)
The meaning of NoET designations must be specified in advance	"I think the challenge in making [NoET] an order is that it can be unclear…so if someone is going to be putting in a [NoET] order, then…there just needs to be a higher level of communication in terms of hand-offs and sign-outs and things like that between the treating physicians." (Interview 18, Palliative Care Trainee Physician)
Without relevant specification, NoET designations may not effectively limit treatment	"If I don't spell [the meaning of NoET] out, then people are going to wonder…I don't want to leave that open to interpretation by somebody else. I'm worried that care will be escalated and that's not in line with the patient's wishes." (Interview 30, Palliative Care Attending Physician)
The ambiguity of NoET designations may require physicians to determine what constitutes an escalation	"I've heard: well, this person's [NoET], are antibiotics really within their goals of care? You could consider that escalation of care…there's this range of what we think is aggressive…antibiotics on the wards might be oral…then we can go up to IV [intravenous antibiotics] which I think most people would interpret as being a little bit more invasive but not terribly burdensome, and then you go to noninvasive ventilation, that's a little bit more burdensome, and then you escalate to are we placing central lines, are we doing things that are more ICU-level of care…In that gray area, the [NoET] order can be interpreted in different ways." (Interview 11, Palliative Care Trainee Physician)
The ambiguity of NoET designations creates challenges for nonphysician staff.	"[NoET] confused a lot of nurses, in particular, because it left them very unsure of what they should or should not be doing and it created some interprofessional conflict about what constituted escalation of care vs not, and did we have to talk to the family about specific treatments and intervention, and was that an escalation or was it not." (Interview 22, Critical Care Attending Physician)

NoET = no escalation of treatment.

greater degree of treatment limitation may be an advantage in terms of minimizing harms to the patient and conserving resources such as ICU beds. However, it may conversely be a disadvantage when the risk-to-benefit ratio of intensive care is uncertain and needs to be tested. In this way, time-limited trials and NoET designations may have different utilities in different scenarios. Significantly, whereas the tradeoffs inherent to time-limited trials have been empirically studied in a variety of qualitative and prospective studies,[38,42-44] the tradeoffs inherent to NoET designations have only been empirically explored in this and one retrospective study,[1] marking an important opportunity for future research.

NoET designations may also be considered by hospital leaders who design policies, orders, and other systems for coordinating end-of-life practices. This study highlights that NoET designations are associated with a variety of implementation challenges related to their ambiguity (Table 5). Our results suggest that a systems-level intervention (eg, implementing a NoET order in the electronic health record) that encourages physicians to preemptively specify the intended meaning of NoET designations may be helpful in ameliorating these challenges. We propose that a NoET ordering mechanism should clarify the following: (1) which interventions should be withheld or maintained at their current intensity, (2) whether ICU transfer should be withheld, (3) whether physicians should interpret the NoET designation according to their own clinical judgment, and (4) whether any specific interventions should be allowed, or were not discussed. Without specification, NoET designations may be ineffective in limiting treatment as intended by the ordering physician.

This study has limitations. First, as an interview study, our results are rooted in the perceptions of physicians and may not reflect actual clinical practices. Second, our analytic approach grouped a variety of reported decision-making practices under the single rubric of NoET designations; although this appeared to be justified by participant descriptions, it is possible that some of these practices might be better described as separate entities. Third, as this was an exploratory study, we did not examine the perspectives of patients, surrogates, or nonphysician clinicians, all of whose perspectives should be explored in future work. Fourth, we did not make comparisons among physician subgroups, although it is possible that different groups of physicians have differing perspectives on NoET designations.

Interpretation

Despite ongoing debate, NoET designations are used in a varied sample of hospitals and are perceived as having multiple functions, suggesting they may fulfill an important need in the care of critically ill patients, especially at the end of life. The use of NoET designations may be improved through the implementation of a formal mechanism that encourages consistency across providers and clarifies the meaning of "escalation" for each patient.

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Additional information: The e-Appendix is available online under "Supplementary Data."

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