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## **Authors**

Anderson, Wendy G Cimino, Jenica W Lo, Bernard

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# Seriously III Hospitalized Patients' Perspectives on the Benefits and Harms of Two Models of Hospital CPR Discussions

Wendy G. Anderson, MD, MS<sup>1,2,3</sup>, Jenica W. Cimino, BA<sup>1,3</sup>, and Bernard Lo, MD<sup>3,4</sup>

- <sup>1</sup> Division of Hospital Medicine, University of California, San Francisco, CA USA
- <sup>2</sup> Palliative Care Program, University of California, San Francisco, CA USA
- <sup>3</sup> Department of Medicine, University of California, San Francisco, CA USA
- <sup>4</sup> The Greenwall Foundation, New York, NY USA

#### **Abstract**

**Objective**—To describe seriously ill patients' perspectives on expert-endorsed approaches for hospital cardiopulmonary resuscitation (CPR) discussions.

**Methods**—We created two videos depicting a hospital doctor discussing CPR with a seriously ill patient. One depicted a values-based approach with a doctor's recommendation, and one an information-focused approach without a recommendation. During semi-structured interviews, 20 seriously ill hospitalized patients viewed and commented on both videos. We conducted a thematic analysis to describe benefits and harms of specific discussion components.

**Results**—Half of participants reported no preference between the videos; 35% preferred the information-focused, and 15% the values-based. Participants' reactions to the discussion components varied. They identified both benefits and harms with components in both videos, though most felt comfortable with all components (range, 60-65%) except for the doctor's recommendation in the values-based video. Only 40% would feel comfortable receiving a recommendation, while 65% would feel comfortable with the doctor eliciting their CPR preference as in the information-focused video, p=0.03.

**Conclusion**—Participants' reactions to expert-endorsed discussion components varied. Most would feel uncomfortable receiving a doctor's recommendation about CPR.

**Practice Implications**—Participants' varied reactions suggest the need to tailor CPR discussions to individual patients. Many patients may find doctor's recommendations to be problematic.

## **Keywords**

Communi	cation; Decision	Making; Ethics;	Hospital Medic	cine	

Corresponding Author: Wendy G. Anderson, MD, MS University of California, San Francisco 521 Parnassus Avenue, Box 0131 San Francisco, CA 94143-0131 USA Tel: 415-502-2399 / Fax: 415-476-5020 Wendy. Anderson@ucsf.edu.

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#### 1. Introduction

Improving cardiopulmonary resuscitation (CPR) discussions is a national priority [1,2]. Many patients are unfamiliar with CPR and overestimate its effectiveness [3,4]. Yet CPR discussions are often brief and do not address risks, benefits and outcomes [5-7]. Doctors rarely address patients' prognosis, elicit goals and values, or provide a recommendation about CPR [5-8]. Patients report that CPR discussions confuse them and that doctors do not understand their wishes [8-10].

Interventions and recommendations to improve CPR discussions have taken two general approaches. One gives patients clear information about CPR outcomes to inform their decisions [11]. A second approach aims to facilitate preference-sensitive decision-making through a collaborative, values-based approach. In the latter model, clinicians frame discussions within patient prognosis, goals, and values and tailor a recommendation about CPR [7,12-15].

This study addresses two key gaps in the literature. First, although most patients want to share CPR decisions with their doctors [3,9,16], patients' perspectives on expert-endorsed discussion models have not been described. Second, we do not understand the risks and benefits of employing these CPR discussion models in the hospital, where patients often first meet their doctor at admission [17]. Many patients prefer to discuss sensitive topics, such as a cancer diagnosis, with a doctor with whom they have an established relationship [18]. Before widely disseminating expert-endorsed discussion models, we need to understand whether they may have adverse consequences.

## 2. Methods

## 2.1 Design

In this qualitative study, we created two videos depicting a hospital doctor discussing CPR with a seriously ill patient. One used an information-focused approach and the other a collaborative, values-based approach that included a doctor's recommendation. Seriously ill hospitalized patients viewed the videos and commented on the overall approaches and specific discussion components during semi-structured interviews.

## 2.2 Setting and participants

We conducted the study on the general medical service at a U.S. academic medical center between August 2011 and August 2012. We designed eligibility criteria to identify patients with advanced illness with whom hospital clinicians would discuss CPR in practice. We included patients whose doctor "would not be surprised by their death or ICU admission within the next year" [19,20]. The study coordinator identified patients through hospital attendings. The coordinator evaluated patients to exclude those who did not speak English or had altered mental status that would prevent them from providing informed consent or commenting thoughtfully on the videos. Patients were identified soon after admission but could complete the interview later in the hospitalization so long as they met eligibility criteria. The Institutional Review Board at the University of California, San Francisco approved the study. Participants gave written informed consent.

## 2.3 Video design and production

Figure 1 shows the components and script excerpts for the two videos. The scripts and videos are included online in Appendices A-C. Both videos used the same patient, doctor, and clinical scenario, which were based on previously audio-recorded discussions between seriously ill patients and hospital doctors [5,21,22]. We showed a male patient— with

metastatic cancer, admitted with failure to thrive—in his first meeting and admission discussion with a female attending doctor. A CPR discussion commenced at the end of the history and physical examination. We selected the two CPR discussion models based on literature review [11-15,23-43]. To depict these models, we varied how the doctor described her role in the patient's decision about CPR and which components were included.

In one video, which we term "values-based," the doctor emphasized collaboration in the decision-making process: "I want us to think about it together." In this video, the doctor began the CPR discussion by eliciting the patient's understanding of his illness. The patient acknowledged that his cancer was not curable. The doctor then asked about the patient's concerns and what in his life was most important to him. He expressed wishes to attend his daughter's wedding and avoid pain. The doctor then introduced CPR. After receiving the patient's permission, she gave a recommendation not to attempt CPR. She addressed the risks, benefits, and outcomes of CPR within the context of the patient's prognosis and goals: CPR was unlikely to help him get to his daughter's wedding and likely to cause pain. She then asked for the patient's thoughts on the recommendation.

In the other video, which we term "information-focused," the doctor indicated wanting the patient to own the decision-making process through language such as "It's your decision." The doctor took the role of providing information about CPR. The doctor began this discussion by introducing CPR and asking what the patient knew about it. The patient responded that he only knew of CPR from television. The doctor asked what he had seen on television, and then provided information about the risks, benefits, and outcomes of CPR to correct and supplement his understanding. Finally, the doctor elicited questions about the information she had presented and asked the patient whether or not he would want CPR.

We carefully balanced other aspects of the videos, including length (6:50 minutes each), literacy level, ratio of patient to doctor speech time, and the doctor's use of patient-centered communication skills such as open-ended questions and empathy. Both videos presented the same information about CPR outcomes: CPR usually does not work and is less likely to work in patients with serious illness, patients who survive CPR often have prolonged intensive care unit (ICU) stays, and those who survive to hospital discharge often require nursing home care. In both videos, the patient deferred making a decision until he had talked with his wife.

To ensure that the videos represented distinct and expert-endorsed models and seemed realistic and otherwise balanced, we incorporated feedback on draft scripts from six national experts in bioethics, communication, and hospital medicine and two seriously ill hospitalized patients. We developed and produced the videos with a production company. Professional actors with experience as standardized patients portrayed the doctor and patient. Both appeared to be of White race. The doctor appeared to be in her early 40s and the patient in his early 60s. We set the videos in a patient room at the study hospital.

#### 2.4 Data collection and measures

We showed both videos to each participant using a semi-structured interview protocol, alternating which video was presented first. A single interviewer (JWC) conducted all interviews in the participants' hospital rooms. Interviews lasted 30-60 minutes. After viewing each video, participants responded to two questions on a 4-point Likert-type scale:

1. "In making a decision about CPR, how helpful would you find having a discussion like this with a doctor in the hospital?" (very helpful, somewhat helpful, a little helpful, not helpful)

2. "How comfortable would you feel having a discussion like this with a doctor in the hospital?" (very comfortable, somewhat comfortable, somewhat uncomfortable, very uncomfortable) After viewing both videos, participants were asked which model they would prefer for discussing CPR with a hospital doctor. Finally, we showed clips from both videos to elicit participants' perspectives on usefulness and comfort for five discussion components listed in Table 2.

The interviewer asked participants to explain their responses in an open-ended format [44]. We conducted analysis concurrently with data collection and clarified key themes in ongoing interviews. Interviews were audio-recorded, professionally transcribed, and edited by the interviewer for accuracy. At the end of the interview, participants reported demographics, self-evaluated health [45], history of advance care planning and CPR discussions, decision-making role preference for CPR [46-48], and CPR preference. We surveyed participants' hospital attending doctors to obtain life-limiting and admission diagnoses.

## 2.5 Analysis

We report the percentage of participants who would find the model depicted in each video at least somewhat helpful and would feel at least somewhat comfortable with a similar discussion. We compared participants' responses between the two videos and specific discussion component clips with McNemar's test in Stata 11 (StataCorp LP, College Station, TX).

We performed a thematic analysis of the audio-recorded interview transcripts [49]. First, two authors (WGA and JWC) performed line-by-line open coding on the first five transcripts to develop a list of attributes. We used these to create a codebook, which we iteratively modified by applying it to 10 additional transcripts. As data collection continued, we observed recurrence in themes and did not identify new themes in the last five interviews, indicating a degree of thematic saturation [44]. A single coder (JWC) performed final coding on all transcripts, which was reviewed by another author (WGA). The two resolved discrepancies though discussion. Codes described participants' general comments about CPR discussions and reactions to the videos and specific components: providing information about CPR outcomes (both videos); framing discussions in the patient's overall prognosis, goals, and values (values-based video); and a doctor's recommendation (values-based video).

#### 3. Results

Of 31 eligible patients, 23 (74%) consented and 20 completed interviews. Table 1 shows participants' characteristics.

#### 3.1 Participants' general reactions to hospital CPR discussions

Participants valued hospital doctors discussing CPR honestly and directly so that patients knew their options and could make an informed choice. They also noted that CPR discussions could cause distress by portending that the patient was dying. These conversations dealt with deep and personal issues, as a 42-year-old man with HIV and end-stage liver disease described, "You're asking questions that get to the core of my being...this is more than just talking about CPR. This is talking about how you see the world, what makes me up."

A strong doctor-patient relationship was an essential context for CPR discussions. Participants acknowledged that a long-standing relationship could facilitate CPR discussions, but also valued relationships with hospital doctors. A 43-year-old woman with

end-stage renal disease and HIV described the role a hospital doctor could serve: "[They're] kind of like friends...You know? 'I'm your friend, here in the hospital to help make you get better'....Like a consultant. Like I could go to him and tell him some intimate things that I can't tell nobody else." Participants identified rapport building and respect as key aspects of hospital CPR discussions. A 56-year-old woman with cancer explained,

You have to build a little bit of a rapport and really acknowledge and respect the patient, like who are they as a person...some kind of acknowledgment of them as a person and not just a patient...really trying to make a connection with the person. It's not just [about] the information that you need to impart.

## 3.2 Participants' reactions to the videos and their components

Of the 20 participants, most felt the discussions in both videos would be at least somewhat helpful in deciding about CPR (n=16 for values-based, n=15 for information-focused). Most reported that they would feel at least somewhat comfortable having a similar discussion with a hospital doctor (n=12 for values-based, n=13 for information-focused). Half reported no preference between the videos; 35% preferred the information-focused, and 15% the values-based video. Participants who preferred the information-focused video said it provided more in-depth coverage of issues and a better model for patients to evaluate the decision. Those who preferred the values-based video felt it showed the doctor as more compassionate and interested in the patient. Some noted that different approaches might be better at different points in patients' decision-making process: the values-based model might be more appropriate for patients unfamiliar with CPR, whereas the information-focused approach might suit those who had already considered the decision.

Table 2 shows participants' reactions to the components of the two videos. Most (range, 55-85%) believed that each discussion component would help them to make a decision about CPR, while a substantial minority did not. Similarly, for all components except the doctor's recommendation, a slight majority (range, 60-65%) reported that they would feel comfortable with a hospital doctor discussing each component. However, only 40% reported that they would feel comfortable receiving a doctor's recommendation about CPR, as depicted in the values-based video. In comparison, 65% responded that they would feel comfortable with a doctor asking for their CPR preference, as depicted in the information-focused video, p=0.03.

For each component of the discussion, respondents perceived both benefits and harms (summarized in Table 3). The following sections describe their perceptions.

#### 3.2.1 Giving information about CPR outcomes (depicted in both videos)—

Although we did not present a clip to elicit participants' perspectives on the doctor presenting information about CPR outcomes, participants reacted to this component in both videos. Many found this information new and felt they needed it to make a good decision. Yet others noted potential harms in that the information was too grim, certain, and difficult to accept. Bleak information could lead patients to distrust the doctor presenting it. A 76-year-old woman with metastatic cancer questioned the doctor's agenda:

Her statements just didn't ring true. I don't know a lot that I ought about CPR, but the boldface statement that one doesn't recover from CPR and if one does, one can't resume any kind of treatment, like chemotherapy because the body would be too debilitated. I've never heard anything like that before. I'm just not sure what she was selling.

Others found the outcome information pointless and even harmful. A 52-year-old man with cancer wanted to discuss his prognosis, but found all the details of the potential consequences of CPR to only cause distress.

If you continue with what-if scenarios on and on and on and on it's like dying repeatedly. So I don't feel it's necessary. Once you know that the inevitable has come, there's no other alternatives. To have to go through those....It's like punishment—unnecessary pain.

## 3.2.2 Framing discussion in the prognosis, goals, and values (values-based

**video)**—Participants who favored the prognosis, goals, and values components in the values-based video said doctors need to discuss these issues to provide the best care for patients. They conceded that although prognosis was uncomfortable to discuss, they wanted to know if their illness was incurable. They perceived the doctor as caring when she tried to find out what was right for the patient. A 48-year-old woman with Wegener's granulomatosis said, "The doctor seems to be caring about his future and what's going on with the rest of his life and trying to help him make the most of it." Talking about prognosis, goals, and values with hospital doctors could facilitate patients' thought-process about CPR. As a 62-year-old woman with autoimmune disease stated, "The doctor was trying to evaluate his treatment and his goals and I think that's helpful to the patient, to clarify for themself what their expectations are."

Other participants identified harms with discussing prognosis, goals, and values in a hospital CPR discussion. It was not clear to some how these topics related to CPR. As a 70-year-old woman with idiopathic lung disease described, "They just don't seem to tie together...The CPR and the [patient's diagnosis of] cancer." Others commented that prognosis, goals and values were too intimate to discuss with a hospital doctor. The 76-year-old woman with metastatic cancer found the doctor's inquiries into the patient's understanding of his illness and concerns "very personal." She felt the patient and doctor "hadn't established a very personal relationship" nor "achieved a closeness that comes with being able to talk about one's life and one's death." Even participants who supported these discussion components emphasized that doctors should introduce these topics carefully to make sure, as an 82-year-old woman with end stage renal disease said, that talk of death and dying wasn't "dropped" on them.

**3.2.3 Doctor's recommendation about CPR (values-based video)**—Participants who valued a recommendation about CPR said it showed that the doctor understood the patient's perspective and might help a patient who had trouble deciding. They appreciated the doctor giving her opinion in a straightforward way and found the rationale for the recommendation a useful means of conveying information. An 81-year-old man with metastatic prostate cancer noted, "I liked the [values-based video] better where...she made the recommendation. Because [it] looked a little more detailed. She made a recommendation then said why." Some saw the recommendation as a valuable perspective to consider. A 41-year-old man with cancer explained:

Sometimes, we have that "I'm gonna live forever," or, you know, the little Peter Pan syndrome, you don't want to get older. [The doctor] just telling you, 'Okay, we'll fill your needs but if we're just going to let you stay on a machine there's costs.' So, I think that is very helpful in just giving another perspective on the subject.

Participants who supported the doctor giving a recommendation felt the CPR decision was still up to them; they did not have to accept the recommendation.

Participants who felt a recommendation would not be helpful emphasized that the decision to undergo CPR was the patient's. As such, a doctor's recommendation was inappropriate. Some worried that patients would have trouble saying "no" to a doctor, or that the doctor's opinion would make them doubt their own. The 42-year-old man with HIV and end stage liver disease said, "[The recommendation] is going complicate matters because the patient is going to go, 'Whoa! This is a cardiologist,' She knows a helluva lot more than I do.""

Though we endeavored to show that the doctor based her recommendation on the patient's stated goals, this was not clear to all participants. Additionally, some articulated that even if a doctor tried to base a recommendation on the patient's stated goals, the doctor still could arrive at the wrong decision for the patient. The process of translating a patient's goals and values into a treatment decision is not simple and straightforward. For example, a 69-year-old man with end-stage liver disease explained that, based on the goals stated by the patient in the video, he would make a different decision than the doctor recommended:

I don't agree with [the recommendation. The doctor in the values-based video] suggested that he just die rather than try to survive for the wedding is essentially the way I got it. We don't know the particulars of what's going on, but just based on those factors I'd be inclined to go for the wedding.

A 45-year-old man with cirrhosis explained that though CPR might not be successful, attempting it might help the daughter of the patient in the video. "But you know, if [he] didn't do it, his daughter might always regret that he didn't...try."

Furthermore, participants felt a recommendation changed the dynamics of the discussion and could take the decision away from the patient. The 43-year-old woman with HIV and end-stage renal disease said, "She already made the decision for him. [She] didn't give any options. Basically, they just made the decision for him." Giving a recommendation could prevent patients from having time to reach a good decision. The 56-year-old woman with cancer said,

He's not really had time to think about it or absorb the information, and she's making a recommendation. And then going into all the bad things that could happen, that just seemed inappropriate. You don't just spring something like that on someone, when they haven't thought about it.

## 4. Discussion and conclusion

## 4.1 Discussion

In this qualitative study we elicited seriously ill hospitalized patients' perspectives on two videos of hospital CPR discussions: one using a values-based approach including a recommendation and the other an information-focused approach. Participants' reactions to discussion components in both videos varied. They articulated benefits and harms associated with providing information about CPR outcomes; framing discussions in patients' prognosis, goals and values; and providing recommendations. Most participants found both discussions helpful and would feel comfortable with all components except the doctor's recommendation.

Similar to past work [3,9,16], most participants in our study reported that both they and the doctor should have a role in CPR decisions. Yet few preferred the values-based discussion that included a doctor's recommendation. Patients, clinicians, and experts may have different definitions of what sharing in a decision means in hospital CPR discussions.

Previous work indicates that hospitalized patients find receiving information about CPR outcomes acceptable [11]. In contrast, some of our participants felt this information could

cause distress and damage the doctor-patient relationship. Patients who understand CPR outcomes are less likely to want it [4]. Yet, within a nascent doctor-patient relationship, simply stating this information may have unintended adverse consequences. Still, most seriously ill patients want clinicians to be honest with them, even about bad news [32,50-54], a sentiment our participants echoed. More research is needed on how doctors can discuss CPR outcomes honestly without causing undue distress or impairing rapport. Communication skills, such as the "Ask-Tell-Ask" technique, that keep clinicians in touch with patients' desire for information and emotional reactions may minimize distress [21,55].

Although hospital clinicians may worry about addressing sensitive topics such as prognosis, goals, and values [21,56], our results reinforce previous research indicating that most patients support hospital doctors discussing advance care planning [57,58]. Introducing prognosis, goals, and values in an open-ended and patient-centered manner may build rapport. That a significant minority of participants felt uncomfortable talking about these topics underscores the importance of not forcing discussions [59]. Asking open-ended questions and responding to patients' cues allow doctors to convey their willingness to discuss these topics while letting patients lead [21].

That most participants in our study would feel uncomfortable receiving a recommendation about CPR from a hospital doctor raises questions about this expert-endorsed practice. Other research identifies difficulty saying "no" to a doctor's recommendation [60-62]. Multiple factors likely influence how a recommendation is received: the relationship with the clinician, whether permission is asked, whether the patient requests it, how the clinician explains it, whether it represents the patient's goals, and how it is phrased. Future work should clarify when recommendations may be beneficial and how they should be conveyed. Of note, our participants raised concern not only with how the recommendation was given but that it was given at all. In a similarly designed study, surrogates of ICU patients were shown videos of doctor-family discussions about limiting life support; many preferred not to receive a recommendation even after viewing a video in which a surrogate asked for the doctor's opinion [60]. Some patients and families may find any opinion expressed by the doctor to be problematic.

Our study has the following limitations. First, participants' responses were hypothetical; they might have reacted differently to actual discussions. Second, though we excluded patients with altered mental status, participants may have been less able to give complete and thoughtful responses due to their advanced illnesses and the effect of sedating medications for pain or other symptoms. Third, different depictions of the models and discussion components might yield different results. White actors portrayed both the doctor and patient. Participants, the majority of whom were not of White race, might have reacted differently if they shared the same race as the doctor and patient. Fourth, participants also might have reacted differently if we depicted discussions occurring later in a hospitalization, as opposed to at admission. Although we tried to control for other factors that might influence participants' responses, the videos may have differed in ways we did not intend. Finally, in this small study at a single U.S. academic medical center, we could not explore differences in participants' reactions by subgroups such as demographics, previous advance care planning and CPR discussions, and decision-making role preference.

#### 4.2 Conclusion

Most participants felt that the discussions depicted in both the values-based and information-focused videos would help them make a decision about CPR. Participants' reactions to the videos varied significantly; they identified risks and benefits associated with discussion components in both. The doctor's recommendation was the only component with which most participants would feel uncomfortable.

## 4.3 Practice implications

Our results support hospital doctors discussing CPR with seriously ill patients, yet raise questions about the routine application of a values-based approach that includes a doctor's recommendation, especially when first meeting a patient. Many patients might prefer a hybrid approach of the two models we presented. For example, the doctor might offer to discuss prognosis, goals, and values; emphasize that the CPR decision is up to the patient; and not give a recommendation. Given the range of participants' reactions to the various discussion components, clinicians might consider tailoring discussions by asking patients which components they would find helpful.

## **Supplementary Material**

Refer to Web version on PubMed Central for supplementary material.

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#### Values-Based Video

Elicit Patient's Understanding of Prognosis DOCTOR: What has your oncologist told you about the status of the cancer?



Discuss Patient's Goals and Values DOCTOR: So the most important thing for you right now is getting to your daughter's wedding. I also hear you saying you don't want to suffer pain at the end of your life.



#### Introduce CPR

DOCTOR: Thanks for sharing that. It's useful as we think about which treatments will be best for you. One of those treatments is CPR or cardiopulmonary resuscitation.



Doctor's Recommendation about CPR DOCTOR: Based the status of your cancer,

and what you've told me about what's most important—getting to your daughter's wedding, could I give you a recommendation about CPR—for you to consider?

PATIENT: Sure.

DOCTOR: I recommend we continue all the care you're getting here in the hospital, and talk with your oncologist about more chemotherapy. However, if your heart stops, I'd recommend we allow you to die naturally—and not do CPR. [doctor goes on to explain CPR outcomes and how they seem inconsistent with patient's goals]



Check Recommendation with Patient DOCTOR: Does my recommendation make sense?

PATIENT: Yeah.

DOCTOR: What do you think of it?

CPR = Cardiopulmonary resuscitation

#### Information-Focused Video

Direct Introduction of CPR DOCTOR: I want to make sure that while you're in the hospital, we provide treatment that matches your wishes. In particular, I'd like to ask you if you'd want CPR or cardio-pulmonary resuscitation.



Indication for and Nature of CPR

DOCTOR: CPR's right for some patients, and not others. It's your choice whether you receive it. Have you heard of CPR?

PATIENT: Just what I've seen on TV. I don't know much about it.

DOCTOR: What did you see on TV? PATIENT: Oh you know—the patient

goes limp, and someone runs in and says "he's coding!". Then a bunch of doctors and nurses run around and someone says "everybody clear!" and gives him a shock.

DOCTOR: A lot of that's right. We do CPR to restart the heart—to stop the patient from dying.



Risks, Benefits and Outcomes of CPR DOCTOR: Most patients who have a serious illness such as cancer end up dying in the hospital [after receiving CPR]. And those who survive and are able to leave the hospital often need help with feeding, dressing, and bathing—and aren't aware of what's going on around them.



Ask Patient for CPR Preference DOCTOR: May I ask what your choice would be at this point—would you want CPR if your heart stopped?

#### Figure 1.

Overview of videos depicting the values-based and information-focused models of hospital CPR discussions, including script excerpts

Table 1

# Participant Characteristics

Characteristic	n=20 (%)	
Age, mean (range)	59 (41-82)	
Gender,	1	
Male	11 (55%)	
Female	8 (40%)	
Transgender (Male to Female)	1 (5%)	
Ethnicity, Hispanic or Latino	3 (15%)	
Race		
White	9 (45%)	
Asian	3 (15%)	
Black or African American	3 (15%)	
American Indian or Alaska Native	3 (15%)	
Native Hawaiian or Other Pacific Islander	1 (5%)	
Other (Mixed Race)	1 (5%)	
Life-limiting diagnosis category $^a$		
Cancer	9 (45%)	
Liver disease	4 (20%)	
Renal disease	3 (15%)	
HIV	2 (10%)	
Cardiopulmonary	2 (10%)	
Autoimmune disease	2 (10%)	
Malnutrition	1 (5%)	
Self-evaluated health <sup>b</sup>		
Relatively healthy	6 (30%)	
Seriously but not terminally ill	10 (50%)	
Seriously and terminally ill	4 (20%)	
Had an advance directive <sup>b</sup>	11 (55%)	
Had discussed CPR with a health care provider b	8 (40%)	
CPR decision-making role preference b		
I prefer to make the decision about whether I will receive CPR.		
I prefer to make the final decision about CPR after seriously considering the doctor's opinion.		
I prefer that the doctor and I share responsibility for deciding whether CPR is best for me.	6 (30%) 5 (25%)	
I prefer that the doctor make the final decision about whether CPR will be used after seriously considering my opinion.	1 (5%)	
I prefer to leave the decision about CPR to the doctor.	2 (10%)	

Characteristic	
CPR preference <sup>b</sup>	
Would want CPR	8 (40%)
Would not want CPR	5 (25%)
Not sure	7 (35%)

 $<sup>^</sup>a\mathrm{By}$  survey of participants' hospital attending; some patients had multiple life-limiting diagnoses

 $<sup>{}^{</sup>b}\mathrm{By}$  question to participants after they had viewed both videos

Table 2
Participants' reactions to specific components of the values-based and information-focused videos

Discussion Component	Would find helpful n=20 (%)	Would feel comfortable with n=20 (%)
Values-based video		
Doctor eliciting of understanding of current health	13 (65%)	12 (60%)
Discussion of goals and values	12 (60%)	13 (65%)
Doctor giving a recommendation about CPR, based on prognosis, goals, and values	11 (55%)	8 (40%)*
Information-focused video		
CPR is patient's choice, doctor's role is to give information	17 (85%)	12 (60%)
Doctor eliciting CPR preference without giving a recommendation	14 (70%)	13 (65%)*

<sup>\*</sup> Difference between percentage of participants reporting comfort with the doctor eliciting CPR preference without giving a recommendation and the doctor giving a recommendation about CPR, based on prognosis, goals, and values statistically significant, exact McNemar p=0.03. Other differences not statistically significant.

 Table 3

 Participants' perceptions of benefits and harms of expert-endorsed CPR discussion components

<b>Discussion Component</b>	Benefits	Harms	
Providing information about CPR outcomes $^a$	Patients may not know this information     Patients need to know this information to make good decisions about CPR	Patients may be skeptical of bleak information     Bleak information may lead patients to distrust a doctor who presents it     Discussing all of the bad things that can happen is not necessary, and only causes distress	
Framing discussion in the patient's overall prognosis, goals, and values b	The doctor needs to know the patient's perspective Patients need to know their prognosis Framing helps to orient the patient, and clarify his or her thoughts Framing shows that the doctor wants to understand the patient	It may not be clear to patients how prognosis, goals, and values relate to the decision about CPR     Prognosis, goals, and values may be too intimate to discuss with a doctor with whom the patient is not close	
The doctor providing a recommendation about $\operatorname{CPR}^b$	A recommendation can show that the doctor understands the patient     The doctor is candid about his or her opinion when giving a recommendation     A recommendation might be helpful if the patient can't decide about CPR	Patients may find it hard to say "no" to a doctor     The doctor may get the recommendation wrong     The doctor giving a recommendation takes the decision away from the patient	

 $<sup>^{\</sup>it a}{\rm Depicted}$  in both the values-based and information-focused videos.

 $<sup>\</sup>ensuremath{^b}\xspace$  Depicted only in the values-based video.