Patients and surrogates completed separate closed-ended interviews conducted by telephone between April 2014 and February 2016. To assess goals, patients were asked to rate 3 health states that could result from treatment of serious illness (Box) as acceptable or unacceptable. Surrogates were asked to rate as they thought the patient would. Surrogate knowledge was assessed as agreement between surrogate and patient ratings for each state individually and for all 3. Surrogate confidence was assessed with a single item (Box). Confidence level responses ranged from 1 (not at all confident) to 5 (extremely confident).

Agreement between patient and surrogate ratings was examined using the $\kappa$ statistic. The association between surrogate confidence and knowledge was analyzed using the $\chi^2$ statistic, with confidence categorized as extremely confident vs less than extremely confident, based on the distribution of the responses.

### Results
The 349 patient participants had a mean (SD) age of 66 (9) years; 68% were men ($n = 237$); and 36% were nonwhite ($n = 126$). Of the 349 surrogates 78% were women ($n = 272$); 66% were white ($n = 231$); and 52% were the patient’s spouse or partner ($n = 182$). While 75% of surrogates rated themselves extremely confident ($n = 261$), only 21% of surrogates ($n = 72$) knew the patients’ ratings for all health states: 23% ($n = 60$) among those extremely confident vs 14% ($n = 12$) among those less confident ($P = .07$). Agreement between surrogate and patient ratings for each health state ranged from 54% ($k = 0.08$) to 59% ($k = 0.15$) and did not differ according to confidence level (Figure).

### Discussion
Surrogates’ confidence in their ability to make treatment decisions based on knowledge of patients’ ratings of the acceptability of health states resulting from treatment of serious illness far exceeded and was not associated with their actual knowledge of these ratings. This study adds to a small evidence base consistently demonstrating high confidence among surrogates in their ability to make end-of-life decisions. In a...
study comparing surrogate confidence with knowledge, 79% of surrogates rated themselves as confident or very confident, but only 35% knew patients’ goals.4

Surrogates may be overestimating their confidence in advance of facing an actual decision. Substantial proportions of surrogate decision makers who have made end-of-life decisions experience burden, expressing stress, guilt, and doubts about having made the right decision.2 An intervention involving facilitated discussions between patients and families regarding the patient’s goals was shown to reduce symptoms of posttraumatic stress, depression, and anxiety among family members of patients who died.6 However, these conversations can be difficult, and they may be less likely to occur with surrogates who are highly confident and think the conversation unnecessary. Confidence requires consideration as a barrier to ACP, with surrogates requiring greater understanding of what they need to know to lessen the burdens of surrogate decision making.

Terri R. Fried, MD
Maria Zenoni, MS
Lynne Iannone, MS
John R. O’Leary, MA

Author Affiliations: Clinical Epidemiology Research Center, VA Connecticut Healthcare System, West Haven (Fried, Zenoni, Iannone, O’Leary); Department of Medicine, Yale School of Medicine, New Haven, Connecticut (Fried); Program on Aging, Yale School of Medicine, New Haven, Connecticut (Iannone, O’Leary).

Corresponding Author: Terri R. Fried, MD, CERC 151B, VA Connecticut Healthcare System, 950 Campbell Ave, West Haven, CT 06516 (terri.fried@yale.edu).

Published Online: November 26, 2018. doi:10.1001/jamainternmed.2018.5299

Author Contributions: Dr Fried had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

Concept and design: Fried.

Acquisition, analysis, or interpretation of data: All authors.

Drafting of the manuscript: Fried, O’Leary.

Critical revision of the manuscript for important intellectual content: Fried, Zenoni, Iannone.

Statistical analysis: Fried, O’Leary.

Obtained funding: Fried.

Administrative, technical, or material support: Zenoni, Iannone.

Conflict of Interest Disclosures: None reported.

Disclaimer: The authors are solely responsible for the contents of this article, which do not necessarily represent the views of the US Department of Veterans Affairs or the US Government.


Invited Commentary
Preparing Surrogates for Complex Decision Making: The Often Neglected Piece of the Advance Care Planning Equation

Advance care planning (ACP) has been defined as a process that supports individuals and patients in defining their values, goals, and preferences for future medical care and sharing that information with others.1 The main goals of ACP include preparing patients for complex medical decision making and ensuring that they receive medical care aligned with their goals in case of decisional incapacity. If patients lose decision-making capacity, surrogate decision making often falls to close family members or friends. However, in many instances, these family members and friends do not know that they were named on advance directive forms or that they may be thrust into complex surrogate decision making.2

Many studies have demonstrated the negative psychological impact of surrogate decision making, especially during serious illness.3 These negative effects are likely the result of many factors including fear of losing a loved one, miscommunication with the medical team, and nonpatient and surrogate-centered health care. Part of the experiential stress is also likely the result of poor preparation for surrogates during the ACP process.2 However, studies have shown that surrogate preparation and quality ACP communication can decrease stress and depression and increase satisfaction with care among surrogate decision makers.4

Fried and colleagues5 provide strong evidence for including surrogate decision makers in the ACP process. The authors present data from telephone interviews with 349 adult

Figure. Proportion of Surrogates Agreeing With Patient Health State Rating

The dark blue columns represent the proportion of extremely confident surrogates who agreed with the patient on each health state rating. The light blue columns represent the proportion of less than extremely confident surrogates who agreed with the patient on each health state rating.

Letters

268 JAMA Internal Medicine February 2019 Volume 179, Number 2

jamainternalmedicine.com

© 2018 American Medical Association. All rights reserved.
patients, 55 years or older, receiving primary care from the VA Connecticut Healthcare System and the patients’ chosen surrogates decision makers. Fried et al found that only 21% of surrogates overall knew the patients’ ratings of acceptable or unacceptable health states due to severe physical disability, cognitive disability, or pain. Although the overall agreement between patients and surrogates was less than 60%, 75% of surrogates rated themselves as “extremely confident” in their knowledge of patients’ wishes.

One reason for these findings may be that patients and surrogates are not talking. In a 2017 study of the same cohort, Fried et al demonstrated that only 23% of patients and surrogates agreed that conversations about health states took place. Although 53% of patients and surrogates agreed that they had discussed life-sustaining treatment, it is the outcome of treatment and the resultant health states that form the foundation for patients’ preferences, as the authors have shown in their earlier work. As they discuss, this may be why agreement about advance directive completion in the 2017 study was not associated with improved surrogate knowledge of patients’ preferences, while discussions about patients’ valuation of quality vs quantity of life was associated.

Another reason for the present findings of Fried et al may be the well-known psychological phenomenon of overconfidence bias, often seen for tasks that are difficult and for which individuals lack prior experience. As Fried and colleagues point out, overconfidence of potential surrogates may be an important barrier to ACP engagement. Future studies should explore whether surrogates’ prior experience with medical decision making may mitigate overconfidence bias. For example, surrogates who have cared for seriously ill or dying patients and have experience making medical decisions for others overwhelmingly agree that ACP is needed. However, because lack of confidence may also be a barrier to ACP, especially among populations with limited health literacy, providing easy-to-understand health information will be important in addition to providing messages tailored to surrogates’ readiness to engage in the ACP process.

Preparation of surrogates is needed to prevent stress and distrust of the health care system that can have long-lasting effects for that person and their family. In fact, decreasing burden on loved ones can be a strong motivator of patient engagement in ACP. To improve awareness of surrogates’ needs, ACP definitions may need to be updated to not only include patient preparation, but also preparation of surrogates for communication and decision making. Furthermore, as many health care organizations and health plans are increasing ACP efforts for patients, many could consider formal inclusion of surrogate preparation in that process. In addition to asking patients about whether they have completed advance directives or named a surrogate decision maker, clinicians can also ask and document whether patients have had discussions with the surrogate about their role and the patient’s preferences. Furthermore, several evidenced-based, patient-centered ACP tools and clinician-centered programs, including those recently published in JAMA Internal Medicine and elsewhere, have been designed to help prepare the surrogate decision maker and can be incorporated into ACP initiatives. As Fried and colleagues demonstrate, now is the time to include surrogate preparation as part of the ACP equation.

Rebecca L. Sudore, MD

Author Affiliations: Division of Geriatrics, Department of Medicine, University of California, San Francisco, San Francisco Veterans Affairs Health Care System, San Francisco, California; Innovation and Implementation Center for Aging and Palliative Care (I-CAP), Division of Geriatrics, Department of Medicine, University of California, San Francisco.

Corresponding Author: Rebecca L. Sudore, MD, University of California, San Francisco School of Medicine, San Francisco VA Medical Center, 4150 Clement St, Ste 155R, San Francisco, CA 94112 (rebecca.sudore@ucsf.edu).

Published Online: November 26, 2018. doi:10.1001/jamainternmed.2018.5280

Conflict of Interest Disclosures: None reported.


LESS IS MORE

Assessment of Self-monitoring of Blood Glucose in Individuals With Type 2 Diabetes Not Using Insulin

Low-value care worsens patient-centered outcomes and impacts a negative economic effect, which has prompted the Choosing Wisely campaign to promote a national dialogue on the judicious use of services that are deemed to be nonbeneficial. One recommendation is “avoid routine multiple daily self-glucose monitoring in adults with stable type 2 diabetes on agents that do not cause hypoglycemia.” This recommendation is based on robust evidence, including a Cochrane review of 12 randomized clinical trials with more than 3000 patients, showing no statistical difference between patients who do not self-monitor their blood glucose multiple times per day and those who do self-monitor their blood glucose multiple...