



Delphi-endorsed Communication Skills Clinicians Need to Care for Hospitalized Incapacitated Patients

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ABSTRACT

Background: The National Academy of Medicine recently identified improving clinicians' serious illness communication skills as a necessary step in improving patient and family outcomes near the end of life, but there is not an accepted set of core communication skills for engaging with surrogate decision makers.

Objective: To determine the core serious illness communication skills clinicians should acquire to care for incapacitated, hospitalized patients with acute, life-threatening illness, including patients with Alzheimer's disease and related dementias.

Methods: From January 2019 to July 2020, we conducted a modified Delphi study with a panel of 79 experts in the field of serious illness communication. We developed a preliminary list of candidate communication skills through a structured literature review. We presented the candidate skills to the panelists in the context of three prototypical serious illness conversations. Over three rounds, panelists first augmented the list of candidate skills, then voted on the skills. The final set included skills deemed "very important" or "essential" by 70% of panelists. For external validation, we engaged 11 practicing clinicians and 7 community stakeholders for their perspectives on the expert-endorsed list of skills.

Results: The panelists' ratings indicate the importance of a diverse set of communication skills related to providing clear information exchange as well as emotional and psychological support to surrogates. The final set included 33 skills, 12 of which were endorsed for all three prototypical serious illness conversations. Practicing clinicians and community stakeholders supported the expert-endorsed framework with only minor additions.

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Conclusion: We generated a stakeholder-endorsed list of skills that can inform the content of communication skills training programs for clinicians who care for incapacitated patients in the inpatient setting. The skills go beyond those required to provide traditional cognitive decision support and suggest the need for a paradigm shift in curricular content for communication training.

Keywords:

Delphi technique; communication; shared decision making; Alzheimer disease; dementia

The National Academy of Medicine recently identified improving clinicians' serious illness communication skills as a necessary step in improving patient and family outcomes near the end of life (1). Clinician-family communication breakdowns are associated with worse patient and family outcomes: patients often

receive treatment inconsistent with their preferences and values, and family members who serve as surrogate decision makers for incapacitated patients frequently experience high rates of lasting psychological sequelae, such as depression, anxiety, and post-traumatic stress disorder (2, 3). Evidence suggests that training can

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improve clinicians' communication behaviors (4–8). To do so, a definitive set of skills must be identified.

Despite this priority, there is not an accepted core set of communication skills for engaging with surrogate decision makers of patients unable to make decisions for themselves. Although well-respected communication skills training programs for clinicians currently exist, the communication skills that constitute the curricula have been selected for specific populations (9–14) and do not address the unique challenges of navigating communication with surrogate decision makers for incapacitated, hospitalized patients across the spectrum of serious illness (not just at the end of life). Furthermore, current programs that do address decision-making capacity have focused on patients incapacitated by acute illness and do not address incapacity resulting from Alzheimer's disease and related dementias (ADRD), although ADRD are a strong contributor to incapacity among older hospitalized patients (15, 16). Seriously ill, hospitalized patients with ADRD may be conversant yet unable to independently make medical decisions, and it is unclear which skills clinicians should possess to navigate conversations with such patients and their surrogates. To address this gap, we designed a study to empirically identify a set of core communication skills that included skills considered to be important when patients have moderate to severe ADRD.

In this paper, we describe an international Delphi study to develop a stakeholder-endorsed set of serious illness communication skills for clinicians caring for incapacitated, hospitalized patients with acute, life-threatening illness, some of whom have ADRD.

METHODS

This study was approved by the University of Pittsburgh Institutional Review Board (STUDY19080146). We conducted the study between January 2019 and July 2020. The Delphi technique is a multistage survey design used to achieve consensus on an important issue (17). Figure 1 illustrates the five phases of the study, which we describe in detail below.

Phase 1: Structured Literature Review, Candidate Skills Identification, and Panelist Identification

First, we conducted a structured literature review to identify candidate communication skills and to identify experts in the field. We focused the review on skills and behaviors used by clinicians when discussing serious illness among hospitalized patients experiencing life-threatening illness. Hypothesizing that communication behaviors may need to be tailored when patients have underlying ADRD, we included search terms specific to ADRD. We specified inclusion and exclusion criteria to target the search (*see* Table E1 in the data supplement). Authors M.K.-F. and J.B.S. defined a broad set of search terms aimed to be inclusive of relevant publications in the PubMed, Cumulative Index to Nursing and Allied Health Literature, and Educational Resources Information Center (both EBSCOhost) databases, published from 2000 to June 15, 2019 (*see* Figure E1). Using the initial search terms, the results yielded little information pertaining to individuals with ADRD in the hospital setting, so we expanded the search to include nonhospital settings. All citations were downloaded in EndNote (Thomson Reuters) for duplicate removal. We uploaded the remaining citations and abstracts to DistillerSR (Evidence Partners) for review.

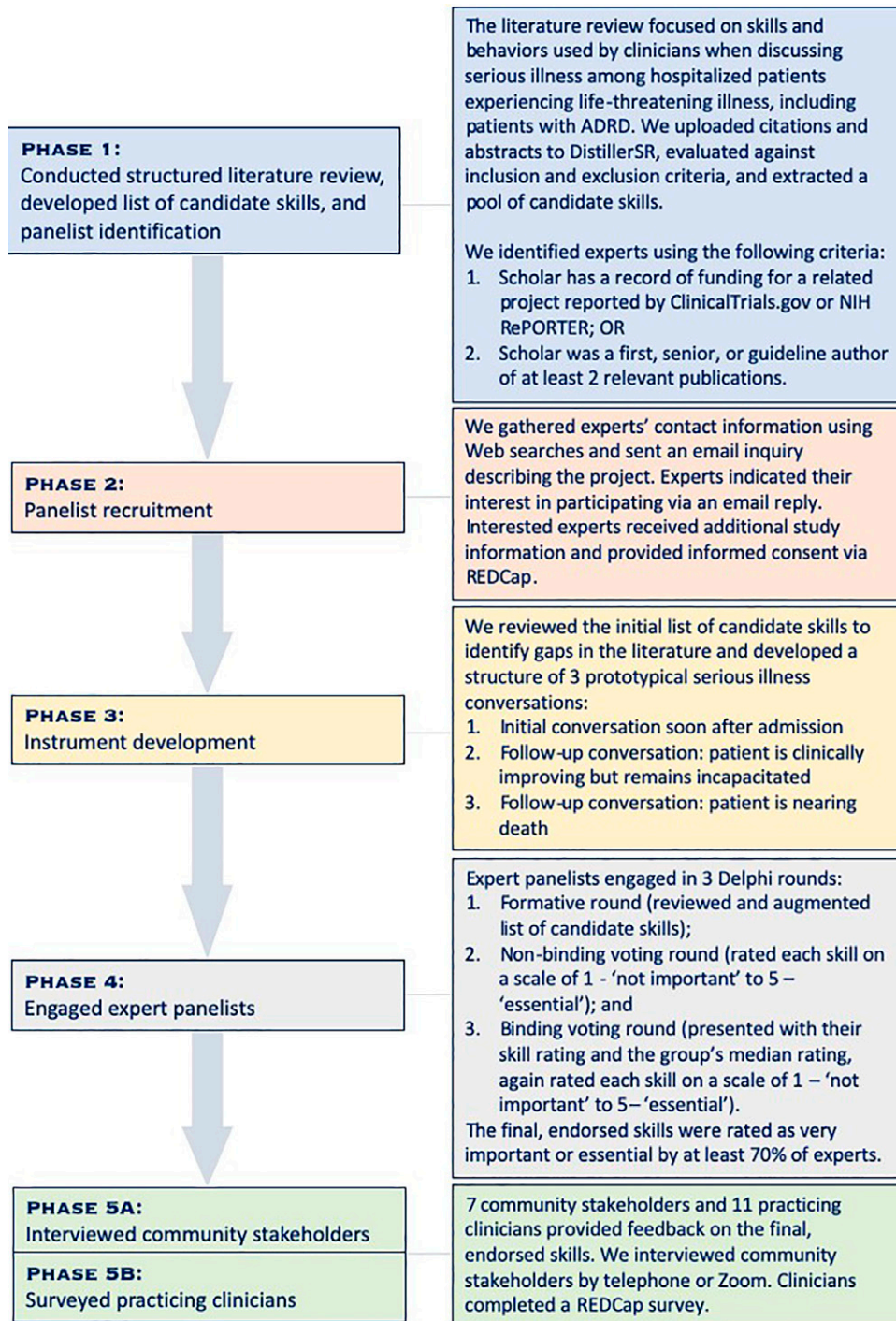


Figure 1. Our methods consisted of five distinct phases, with phases 5A and 5B happening concurrently. ADRD = Alzheimer's disease and related dementias; NIH = National Institutes of Health; REDCap = Research Electronic Data Capture; RePORTER = Research Portfolio Online Reporting Tools Expenditures and Results.

Authors J.B.S. and R.A.B. served as the primary reviewers, and two undergraduate nursing students (mentored by J.B.S.) served as secondary reviewers. Each team

(one primary and one secondary reviewer) reviewed half of the abstracts against pre-specified inclusion criteria. In the event of disagreement between the primary and

secondary reviewers about whether the article met eligibility criteria, we included articles identified by the primary reviewer.

From the retained publications, we extracted a pool of candidate skills to serve as a starting point for the formative round survey. Because of the heterogeneous nature of the publications, the skills we extracted varied greatly in their degree of granularity or specificity and had considerable overlap.

We identified experts in the field of serious illness communication in two ways: 1) they were first, senior, or guideline authors of at least two of the retained publications identified in the literature search; or 2) they had records of funding for related projects reported at clinicaltrials.gov or NIH (National Institutes of Health) RePORTER (Research Portfolio Online Reporting Tools Expenditures and Results).

Phase 2: Panelist Recruitment

We abstracted experts' contact information from recent publications, clinicaltrials.gov, NIH RePORTER, or Web searches and sent an e-mail to each expert that included a brief project description and an invitation to participate. Experts indicated their interest by responding directly to the e-mail. Experts indicating interest received a personalized Research Electronic Data Capture (REDCap) link to an informed consent form. Expert panelists were offered a \$50 gift card for complete participation (completion of all rounds).

Phase 3: Instrument Development

We (J.B.S., R.M.A., D.B.W.) distilled the skills to a parsimonious list (*see* Table E2 [items in black text]), then considered ways to group the skills to present them coherently to the expert panelists.

Ultimately, we chose to group the skills according to key conversations experienced across common hospitalization trajectories. We believe this approach provided maximal context to the panelists for the formative round.

The hypothetical conversations we created were grounded in prior work about surrogates' communication needs across the hospital stay (18–21). The conversations were as follows: 1) the first conversation with a patient's family soon after hospital admission; 2) a follow-up conversation with the family, when the patient is improving and may be discharged but still lacks decision-making capacity; and 3) a later conversation with the family, when the patient is deteriorating and might not survive. We repeated a number of skills across the conversations, recognizing that discussions often play out iteratively, over multiple encounters. We included a subset of skills within each conversation to assess whether a patient's underlying ADRD diagnosis changes essential communication skills.

Phase 4: Expert Panelist Formative and Voting Rounds

We asked expert panelists to engage in three Delphi rounds (formative, nonbinding voting, and binding voting) using a REDCap survey. Approximately two days before each round, we sent a priming e-mail, reminding panelists of the study's goal and the task for the respective round.

Formative round. The objective of the formative round was to develop a comprehensive list of skills believed to be essential for conducting each serious illness conversation. During the formative round (December 2019), we asked panelists to review the candidate skills in the context of the prototypical

conversations and recommend additional skills they believed were missing and essential to effectively conduct each conversation, with a subset focused specifically on ADRD. We asked panelists to describe skills in general terms rather than providing a specific technique to accomplish the skill (e.g., “discuss prognosis” is a skill, whereas a specific technique might be “give numeric estimates of predicted functional outcomes”). We synthesized these additional skills and added them to the initial list of candidate skills to create a “comprehensive” list of skills for each conversation (*see* Table E2 [items in boldface blue text]).

Round 1: nonbinding vote. In round 1 (January 2020), we presented panelists with the comprehensive list of skills for each conversation and instructed them to rate the importance of the skills (on a scale ranging from 1 [“not important”] to 5 [“essential”]) in the context of each conversation with a nonbinding vote. It is important to note that we asked panelists to rate rather than rank skills, to avoid a restriction of range that might exclude valuable skills from the final set.

Round 2: binding vote. In round 2 (February 2020), we again presented panelists with the comprehensive list of skills for each conversation, this time displaying both their own round 1 ratings and the overall group median. They rated the importance of the skills using the same scale in round 1 with a binding vote. We set the criteria for inclusion as achieving a rating of either 4 (“very important”) or 5 (“essential”) by at least 70% of panelists.

Phase 5: Community Stakeholder Interviews and Practicing Clinician Surveys

For external face validation and to ensure the comprehensiveness of the list, we engaged community stakeholders and practicing clinicians for their perspectives on the expert-endorsed list of skills. This step in the Delphi process evaluates the trustworthiness of the findings as assessed by their credibility, dependability, confirmability, and transferability in relation to real-world situations (17).

Community Stakeholder Interviews

With the assistance of the University of Pittsburgh Alzheimer’s Disease Research Center (of which J.B.S. is a faculty member) and the Clinical Research, Investigation, and Systems Modeling of Acute Illness Center, we identified community stakeholders (caregivers, surrogate decision makers, local agency leaders) with involvement in ADRD or serious illness research. We obtained informed consent and scheduled a one-hour phone or videoconference call. Stakeholders were asked to review a simplified version of the expert-endorsed communication skills (*see* Figure E2) before the call. Using a semistructured interview guide (*see* Figure E3), J.B.S. and R.A.B. conducted the interviews, which were audio recorded with the stakeholders’ permission. Community stakeholders were offered a \$50 gift card for participating.

Practicing Clinician Survey

We purposively sampled practicing clinicians at University of Pittsburgh Medical Center hospitals in Pittsburgh, Pennsylvania, to achieve representation of medical specialties that are typically involved in these serious illness conversations, (critical care medicine, geriatrics, family medicine, hospitalists),

underrepresented racial/ethnic minorities, and gender. Between April 2020 and June 2020, we e-mailed invitations with a REDCap link to the consent, survey, and demographic forms. Similar to the formative round, clinicians were asked to review the final, expert-endorsed skills in the context of the three prototypical serious illness conversations and recommend additional skills they believed were missing and essential to effectively conduct each conversation. Clinicians were offered a \$50 gift card for participating.

RESULTS

Instrument Development and Panelist Recruitment

The literature search yielded 2,208 articles, 323 of which met criteria. From the retained articles, we extracted a list of 36 serious illness communication skills (19 information delivery skills and 17 deliberation skills). We identified 155 individuals, spanning North America, Europe, Asia, and Australia who were 1) primary, senior, or guideline authors for two or more relevant articles; or 2) individuals with NIH-funded serious illness communication studies, as reported by NIH RePORTER and/or clinicaltrials.gov.

Of the experts we contacted, 52% (80 of 155) were agreeable to participation, 15% (24 of 155) declined (12 of whom believed they did not have the appropriate expertise), 2 indicated that they were undecided, and 30% (47 of 155) did not respond; two e-mail addresses were undeliverable and unable to be rerouted. Of the 80 experts who expressed interest, 79 consented to participate and completed a brief demographic survey (Table 1). Consented experts were clinician researchers (physicians, psychologists, and Ph.D. nurse

scientists), clinician educators (including physicians and advance practice nurses), and Ph.D. health services researchers, representing various clinical specialties and areas of expertise. One panelist withdrew because of workload. Overall, 73% of consented panelists engaged in all three rounds, and 89% engaged in at least two rounds.

The Endorsed Skills

Overall, experts endorsed 28 communication skills and 5 ADRD-specific skills across the three prototypical conversations (Table 2). Twelve of the endorsed skills were highly rated for all conversations (Figure 2). Of those skills highly rated for all conversations, (11 general skills and 1 ADRD-specific skill), 6 involved information exchange and 3 involved affective support. (The single ADRD-specific skill was triadic communication, which is a discussion involving the physician, the patient, and the patient's caregiver or surrogate decision maker.) Only one skill involved information delivery. Summary statistics for the voting rounds appear in Table E3.

Stakeholder Validation of the Endorsed Skills

Of the 14 community stakeholders we contacted, 50% ($n = 7$) consented to participate, and 50% did not respond. Community stakeholders provided critical external validation of the expert-endorsed communication skills. Table 1 summarizes community stakeholder demographics. All seven community stakeholders overwhelmingly supported the expert-endorsed framework, and they suggested only a few additions that were largely task oriented (i.e., providing a point of contact who can answer the family's questions, discussing the financial and insurance coverage limitations that families face when talking

Table 1. Panelist characteristics

Variable	Experts (n = 79)	Community Stakeholders (n = 7)	Clinicians (n = 12)*
Age, y, mean (SD)	54 (9.7) [†]	64.1 (16.4)	40.4 (12)
Female sex, n (%)	58 (73.4)	6 (85.7)	5 (41.7)
Race, n (%)			
White	74 (93.7)	6 (85.7)	7 (58.3)
Black/African American	0	1 (14.3)	1 (8.3)
Asian	5 (6.3)	0	1 (8.3)
Multiethnic/mixed race	0	0	3 (25)
Non-Hispanic ethnicity, n (%)	79 (100)	7 (100)	11 (91.7)
Professional role, n (%)			
Clinician or clinician administrator	4 (5)	—	—
Clinician educator or researcher	40 (50.6)	—	—
Nonclinician researcher	32 (40.5)	—	—
Other	3 (3.8)	—	—
Clinical expertise, n (%)	(n = 42)		
Critical care	8 (19)	—	5 (41.7)
Palliative care	16 (38.1)	—	0
Geriatrics	3 (7.1)	—	4 (33.3)
Internal medicine	3 (7.1)	—	2 (16.7)
Other [‡]	12 (28.6)	—	1 (8.3)
Research or policy expertise, n (%)	(n = 65) [§]		
Communication	16 (24.6)	—	—
Decision-making	8 (12.3)	—	—
Dementia	3 (4.6)	—	—
Gerontology	5 (7.7)	—	—
Health services	8 (12.3)	—	—
Palliative care	16 (24.6)*	—	—
Other	8 (12.3)	—	—
Missing	1 (1.5)	—	—
Educational expertise, n (%)	(n = 9)		
Communication skills	4 (44.4)	—	—

Table 1. Continued.

Variable	Experts (<i>n</i> = 79)	Community Stakeholders (<i>n</i> = 7)	Clinicians (<i>n</i> = 12)*
Other	5 (55.6)	–	–
Region where employed, <i>n</i> (%)			
United States	74 (93.7)	–	–
Canada	1 (1.3)	–	–
United Kingdom	2 (2.5)	–	–
China	1 (1.3)	–	–
Australia	1 (1.3)	–	–
Experience in field, <i>y</i> , mean (SD)	20.5 (10.1)	–	9.7 (11)

Definition of abbreviation: SD = standard deviation.

*Twelve clinicians completed the demographic survey, but 1 clinician did not complete the subsequent communication skills survey and was not included in the analysis.

†Age for one expert panelist was omitted because of an obvious data entry error.

‡Other includes specialties for which *n* < 3, including family medicine, medical ethics, oncology, hematology, psychology, emergency medicine, and surgery; we collapsed these specialties into an “other” category for succinctness.

§One expert panelist identified as a program or policy expert (palliative care); we included this identification in the palliative care research group for succinctness.

about future treatment options and referrals). Multiple stakeholders discussed the need for clinical teams to have strong intrateam communication, particularly related to making appropriate referrals (e.g., to support groups and post-acute care providers) and establishing a feedback loop to physicians so that they are aware of the outcomes of referrals.

Of the 23 practicing clinicians we contacted, 61% (*n* = 14) reviewed the study details, 57% (*n* = 13) consented to participate, and 48% (*n* = 11) completed the survey. Table 1 summarizes clinician demographics. Clinicians indicated whether they supported, supported with some changes, or rejected the expert-endorsed communication skills framework. Eight clinicians supported the framework as is, two clinicians supported the framework with some changes, and one

clinician rejected the framework. Of those who accepted the framework with some changes, one suggested minor changes to language (i.e., establishing a clear link between the patient’s values and preferences and available treatment options, clearly describing the treatment burden unique to patients with ADRD), and the other expressed concerns about the feasibility of clinicians’ learning and consistently implementing the relatively large number of skills. The rejecting clinician believed the framework was incomplete for patients with ADRD; however, additional skills this clinician listed were representative of techniques in service of achieving triadic communication (if the patient is able to participate in conversations, communicating simultaneously with both the surrogate and the patient) and thus not congruent with our goal of eliciting broad skills.

Table 2. Communication skills rated very important or essential by $\geq 70\%$ of panelists by conversation with mean ratings

Conversation 1	Conversation 2	Conversation 3
The first conversation with a patient's surrogate(s) shortly after the patient has been admitted to the hospital (e.g., patient with advanced COPD admitted to the hospital ward with pneumonia and delirium)	A follow-up conversation with a patient's surrogate(s) when a patient is improving and progressing toward being discharged from the hospital but remains incapacitated (e.g., a patient with end-stage CHF who was admitted to the hospital ward several days ago and whose pneumonia improved with antibiotics)	A follow-up conversation with a patient's surrogate(s) when a patient is clinically deteriorating (e.g., a patient with advanced cancer initially admitted with mild urosepsis who, several days into the admission, is developing hypotension, renal failure, and respiratory failure)
Build rapport (4.7)	Build rapport (4.4)	Build rapport (4.7)
Identify key decision makers for the patient (4.7)	Set agenda for the conversation (3.9)	Set agenda for the conversation (4.4)
Assess surrogate's preferences for receiving information (3.9)	Identify key decision makers for the patient (4.1)	Identify key decision makers for the patient (4.8)
Engage in active, reflective listening (4.6)	Engage in active, reflective listening (4.6)	Assess surrogate(s) preferences for receiving information (3.9)
Elicit surrogate(s) understanding of the present illness (4.5)	Elicit surrogate(s) understanding of the present illness (4.6)	Engage in active, reflective listening (4.8)
Explain patient's clinical condition (4.6)	Explain patient's clinical condition (4.6)	Elicit surrogate(s) understanding of the present illness (5.0)
Provide emotional support (4.3)	Provide emotional support (4.2)	Explain patient's clinical condition (4.9)
Check for understanding of key information (4.6)	Discuss prognosis (4.2)	Provide emotional support (4.7)
Learn about the patient as a person (4.3)	Check for understanding of key information (4.7)	Ask permission before discussing a potentially sensitive topic (3.9)
Elicit the patient's preferences and values (4.5)	Elicit the patient's preferences and values regarding future medical care (4.5)	Discuss prognosis (4.8)
Present treatment options (4.0)	Assess if patient is likely to have capacity for some decisions in the future (4.1)	Check for understanding of key information (4.9)
Elicit questions or concerns (4.8)	Discuss future medical options (4.1)	Learn about the patient as a person (4.1)

Table 2. Continued.

Conversation 1	Conversation 2	Conversation 3
Summarize next steps (4.7)	Assess caregiver's capacity to provide care (4.4)	Elicit the patient's preferences and values (4.7)
Plan for future communication (4.5)	Assess caregiver's stress (4.2)	Present treatment options (4.7)
Ensure ongoing support (nonabandonment) (4.4)	Offer a recommendation (4.1)	Deliberate with surrogate(s) (4.4)
—	Deliberate with surrogate(s) about future options (3.9)	Offer a recommendation (4.5)
—	Establish plans for future care (such as completing POLST or making plans for ongoing deliberation about advance care planning) (4.2)	Offer to discuss what might happen during the dying process (4.3)
—	Elicit questions and concerns (4.8)	Assess surrogate's need for psychological/social support during patient's hospitalization (4.2)
—	Summarize next steps (4.8)	Facilitate closure (e.g., encourage the family to help patient to complete unfinished business, create opportunity for the family to say goodbye) (4.3)
—	Plan for future communication (4.5)	Elicit questions and concerns (4.8)
—	Ensure ongoing support (nonabandonment) (4.2)	Plan for future communication (4.6)
—	—	Ensure ongoing support (nonabandonment) (4.6)
Conversation 1 (ADRD)	Conversation 2 (ADRD)	Conversation 3 (ADRD)
Now consider whether there are any additional skills in the context of the patient's having moderate to severe dementia (e.g., a patient with moderate to severe dementia admitted to the hospital ward from a nursing home with pneumonia and delirium).	Now consider whether there are any additional skills in the context of the patient's having moderate to severe dementia (e.g., a patient with moderate to severe dementia admitted to the hospital ward from a nursing home with pneumonia who has improved with antibiotics).	Now consider whether there are any additional skills in the context of the patient's having moderate to severe dementia (e.g., a patient with moderate to severe dementia admitted to the hospital ward from a nursing home with pneumonia several days ago, who now is developing hypotension, renal failure, and respiratory failure).

Table 2. Continued.

Conversation 1 (ADRD)	Conversation 2 (ADRD)	Conversation 3 (ADRD)
Use triadic communication (4.6)	Describe treatment options in terms of particular consequences for persons with dementia (burden of treatment) (4.7)	Describe treatment options in terms of particular consequences for persons with dementia (burden of treatment) (4.7)
Explore patient's past preferences and current preferences; explore any tension between them (4.4)	Use triadic communication (4.6)	Use triadic communication (4.4)
Assess caregiver's stress (3.9)	Explore patient's past preferences and current preferences; explore any tension between them (4.1)	Assess caregiver's stress (4.0)
—	—	Assess caregiver's capacity to provide future care (4.0)

Definition of abbreviations: ADRD = Alzheimer's disease and related dementias; CHF = congestive heart failure; COPD = chronic obstructive pulmonary disease; POLST = physician orders for life sustaining treatment. Values in parentheses are mean ratings (1 = unimportant to 5 = essential).

DISCUSSION

To our knowledge, this is the first study to apply a systematic, deductive methodology to produce an expert-endorsed set of core communication skills for conversations with surrogates of hospitalized, incapacitated patients, and it is the first to address skills pertinent to communication with the surrogates of hospitalized patients with ADRD. One other related Delphi study was recently conducted; however, its purpose was to identify a process (including content elements and timing) for decision making, and it was focused solely on life-sustaining treatment in the intensive care unit setting (22).

Our review of the literature revealed multiple communication skills training programs, together with the constituent skills those programs teach. However, the programs vary widely in the populations (e.g., surgery, oncology) and settings (outpatient, inpatient) they target and the clinicians they intend to

train (residents, fellows, attending physicians) (9–14).

In this international Delphi study, panelists endorsed many of the literature-derived skills, and they suggested multiple additional skills (4, 8, 10, 12, 13, 23). Panelists identified 33 core communication skills for engaging with surrogates that span providing cognitive, emotional, and psychological support. Some skills were endorsed more strongly than others, but skills addressing emotional and psychological support were consistently rated as strongly as skills addressing informational support (*see* Table E3). The final set of expert-endorsed communication skills underscores the overwhelming importance of interactive and affective skills, as opposed to solely information delivery skills. These findings suggest that decision support paradigms emphasizing information delivery and deliberation (22) must ensure that emotional and psychological support are integrated throughout the

Skills Endorsed for All Three Serious Illness Conversations

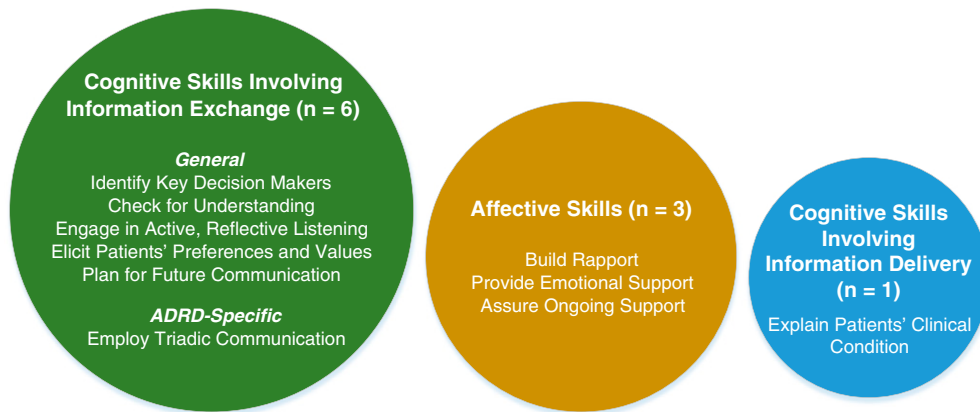


Figure 2. These skills were important across all three serious illness conversations. Conversation 1 is the first conversation with a patient's surrogate(s) shortly after the patient has been admitted to the hospital. Conversation 2 is a follow-up conversation with a patient's surrogate(s) when a patient is improving and progressing toward hospital discharge. Conversation 3 is a follow-up conversation with a patient's surrogate(s) when a patient is clinically deteriorating. ADRD = Alzheimer's disease and related dementias.

process of serious illness decision-making. Finally, our findings add to the published literature through the endorsement of skills that are specific to different conversation prototypes, rather than those focused exclusively on outpatient advance care planning or inpatient end-of-life conversations.

Skills that were largely considered important by panelists but did not reach the experts' endorsement threshold include those that address practical aspects of illness and caregiving, such as exploring the need for instrumental support or orienting the family to the hospital unit and its routines. Panelists suggested these issues are an important part of providing high-quality care to patients and their families that may be better addressed by other key members of the interprofessional team. Importantly, community stakeholders suggested skills that address practical aspects of illness and caregiving (e.g., financial and insurance considerations) are essential to providing high-quality, patient- and family-centered care. These findings

underscore the importance of interprofessional collaboration and mirror the World Health Organization's call for interprofessional education that equips members of the care team to be part of a "collaborative practice-ready workforce" (24).

Implications for Clinical Education and Practice

There are myriad communication skills training programs that may immediately benefit from adopting this expert-endorsed set of skills to ensure the comprehensiveness of their curricula. Our findings underscore the extent to which skillful integration of psychological and emotional support into information exchange is the dominant feature of serious illness communication and how important it is for communication training programs to teach clinicians to elicit, clarify, and confirm information, not merely deliver it. Our study results corroborate the findings of others regarding the importance of communication skills that support families emotionally and psychologically (25).

Strengths and Limitations

Our study had many strengths. First, we engaged a multidisciplinary panel of experts, which offered a breadth of expertise. Second, despite the unexpected challenges the coronavirus disease (COVID-19) pandemic imposed on our original research plan, we successfully completed the intended scope of our study by adapting our methods and timeline to accommodate remote interviews and surveys. Third, we used study design strategies to maximize content and face validity, two major components of a high-quality Delphi study. To achieve content validity, we incorporated a formative round to ensure experts evaluated the full range of aspects within the construct of interest (17). To achieve face validity, we engaged community and clinical stakeholders, who provided critical feedback about the relevance and comprehensiveness of the expert-endorsed communication skills framework.

This Delphi study has important limitations. First, we recognize that shared definitions for specific communication skills or behaviors do not necessarily exist. We worked to achieve fidelity in our qualitative synthesis of formative round skills through careful evaluation of experts' comments; however, our work did not extend to achieving consensus on language for each skill. Second, this study did not address the question of what techniques will be most effective to teach these skills to clinicians, which is an important area for future work. Third, we realized a fairly low response rate (52%). However, the overall number of panelists was well within the range deemed acceptable (16), and 73% of panelists engaged in all three rounds. Fourth, though we attempted to recruit a representative sample, most panelists live

and work in the United States and identify as female, White, and non-Hispanic. Although we sought a range of participant perspectives, including individuals with ADRD, caregivers and surrogate decision makers, leaders in ADRD-focused organizations, and physicians representing different specialties commonly involved in caring for individuals with ADRD and their families, our community and clinical stakeholders were all recruited from the southwestern Pennsylvania area. This limits the cultural lens through which we can investigate communication skills and behaviors and possibly resulted in only a few minor additions to the expert-endorsed framework. Despite the modest number of stakeholder participants compared with the robust expert panel, we did not pursue additional stakeholder participants, because of the overwhelming endorsement of the expert-generated set of communication skills. Future work is needed to tailor these recommendations to specific cultures and populations that are not well represented.

Unanswered Questions and Future Research

To make effective training programs widely scalable, dissemination may require innovative platforms. Our team will use these core skills to develop a scalable training method for serious illness communication skills that can reach clinicians in rural and geographically underserved areas.

Conclusions

The international Delphi panel generated a recommended set of serious illness communication skills for clinicians caring for incapacitated patients who are hospitalized with acute, life-threatening illnesses, including those with underlying

ADRD. The results underscore the need for rigorous skills training related to integrating emotional and psychological support into information exchange with surrogates facing high-stakes decisions in the inpatient setting.

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