

Supplemental Digital Content

“Speaking Up about Care Concerns in the ICU: Patient and Family Experiences, Attitudes, and Perceived Barriers”

Appendix A. Survey Instrument

Appendix A. Relevant Portions of Survey Instrument*

	Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable	
<p>How comfortable would you be asking a member of the medical team:</p> <p>To review with you the name, dose, or reason for medications when they are administered (to be sure they are correct)?</p>					
Whether he/she has cleaned his/her hands?					
For a meeting with the health care team to review your loved one’s health status?					
About concerns you may have regarding your loved one’s medical care?					
To discuss a disagreement where you want less aggressive medical care than the team is proposing?					
To discuss a disagreement where you want more aggressive medical care than the team is proposing?					
About a possible mistake in your loved one’s medical care?					
To clarify if he/she gives you confusing information?					
	1 Not confident at all	2	3 Somewhat confident	4	5 Extremely confident
How confident are you in your ability to get a doctor to listen to what you have to say?					

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How confident are you in your ability to know what questions to ask a doctor?						
How confident are you in your ability to get a doctor to answer all of your questions?						
What is your age?						
What gender do you identify yourself as?	Male			Female		
What is your ethnicity?	White/ Caucasian	Black/African American	Latino/ Hispanic	Asian	Other	
If Other:	<i>[free text]</i>					
What is the highest grade of school you have completed, or the highest degree you have received?	No schooling completed or less than 1 year	High school graduate (or equivalent)	Some college (1-4 years, no degree)	Associate’s degree (including occupational or academic degrees)	Bachelor’s degree (BA, BS, AB, etc.)	Master’s, Doctorate or other professional degrees (MA, MD, DDS, PhD, etc.)
Do you work in healthcare?	Yes			No		
Do you have any close friends or family who work in healthcare?	Yes			No		
*These are the questions answered by cohort C (current ICU family members). Question wording differed slightly for cohorts A and B to either reflect the past nature of their ICU experience (cohort A) or to make the question hypothetical, given their lack of ICU experience (cohort B).						

Supplemental Methods

For the Principal Component Analysis (PCA), PROC FACTOR was used in SAS 9.3. The principal axis method was used for initial extraction, with the program retaining any component whose eigenvalue was 1.00 or larger. An item was considered to load on a given component if the factor loading was greater than or equal to 0.35. Visual inspection of a scree plot was also conducted to see where components with relatively large eigenvalues separated from those

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with smaller eigenvalues. Components appearing before the break are assumed to be meaningful.³

Supplemental Results

As shown in Appendix B below, all 8 Speaking Up items loaded on the first component. The scree plot (not shown) displayed a large break after the first component, indicating that only the first component was meaningful.

Appendix B. Factor loadings on first principal component for the 8 Speaking Up items

Variable	Factor Loading
Medication review	0.66
Hand hygiene	0.62
Meeting request	0.78
Concerns	0.78
Less aggressive care	0.81
More aggressive care	0.80
Mistake	0.77
Clarification	0.72

Appendix C. Regression analysis of Speaking Up score¹

Parameter	β	Std. Error ²	95% Confidence Interval	P
Intercept	26.03	0.77	24.52 – 27.54	<0.00005
Age (per year)	0.03	0.009	0.004 – 0.04	0.004
Sex (female vs. male)	0.58	0.28	0.04 – 1.13	0.04
Education	-0.46	0.17	-0.79 – -0.13	0.006
Works in healthcare (yes vs. no)	1.09	0.49	0.15 – 2.04	0.02

¹Adjusted R²=0.02

²Huber-White estimates

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Appendix D. Mean Speaking Up score by subgroup

Participant Group	n	Mean Speaking Up Score (SD)
Sex		
Males	360	26.8 (4.3)
Females	785	27.5 (4.4)
Healthcare Worker		
Yes	87	28.2 (4.3)
No	1055	27.2 (4.4)
Age (years)		
18-29	163	26.7 (4.1)
30-49	413	27.3 (4.5)
50-69	517	27.5 (4.2)
70-89	45	28.0 (4.2)