Supplemental Appendix:

Modified System Usability Scale: Patient Portal ACP Tools Outcomes

I would like to start by asking you your opinion on 10 brief statements. When we ask about "tools" or "features," we mean anything you interacted with on the page, which could include: the initial webpage, sending online messages, filling out questionnaires, full MDPOA form, etc.

I will read each statement, and then I will ask you how much you agree with the statement based on a 1-5 scale, 1 being "strongly disagree" and 5 being "strongly agree" (raw score). Here is the first statement…

Modified SYSTEM USABILITY SCALE: Patient Portal ACP Tools Questions		
	Raw score	Adjusted score
1. I think that I would like to use these tools/features again as needed		
2. I found these tools/features unnecessarily complex		
3. I thought these tools/features were easy to use		
4. I think that I would need the support of a technical person or healthcare professional to be able to use these tools/features		
5. I found the various functions of these tools were well integrated *(the MDPOA legal document, healthcare decision maker questionnaire, readiness questionnaire, online messaging, links to websites, etc.)*		
6. I thought there was too much inconsistency in the format of these tools *(the MDPOA legal document, healthcare decision maker questionnaire, readiness questionnaire, online messaging, links to websites, etc.)*		
7. I would imagine that most people would learn to use these tools on the ACP page very quickly		
8. I found these tools/features very cumbersome to use		
9. I felt very confident using this these tools/features		
10. I needed to learn a lot of things before I could get going with these tools/features		

System Usability Scale Scoring:

Raw score:

1= strongly disagree

2= disagree

3= neutral

4= agree

5= strongly agree

Adjusted score:

For odd rows (questions 1, 3, 5, 7, 9) = raw score – 1

For even rows (questions 2, 4, 6, 8, 10) = 5 – raw score
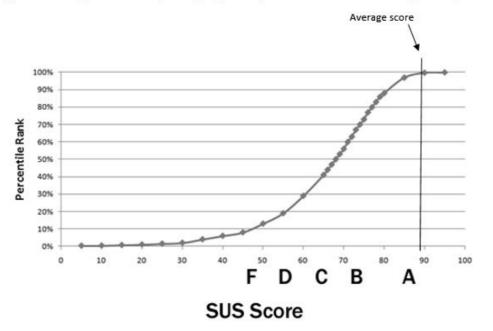
To produce final usability scores: sum the total adjusted scores. Then multiply this number by

2.5. This new score value is out of 100 (but is not a percentage).

Scores are represented by letter grades. The average SUS score is 68 (C). A score of 80.3 or

higher (A) denotes likelihood to recommend the tools to someone else.

Supplemental Figure Legend:

Online Supplement Figure: Usability rating of portal-based advance care planning tools (n=11).

Mean System Usability Scale average score of patient users (n=11) is 89 (solid line). This line is shown on a published curve that shows how percentile ranks associate with System Usability Scale scores and letter grades. Letter grades show percentiles in which a score receives a grade of A through F.

Supplemental Figure. Usability rating of patient portal-based advance care planning tools (n=11)