

## Supplemental Information

### Power Analysis

Data used for testing the association between the intervention and control groups and the 3-level overall congruence was tested using a 3 × 2 contingency table. One member of a dyad had missing data, leaving us with 115 dyads for

analysis. Our sample size of 115 dyads would achieve 83% power to detect a medium-effect size (Cohen's *W*) of 0.30. A 2 × 2 contingency table was used for testing the association between the intervention and control groups and the congruence (yes versus no)

for each specific situation. For each of such tests, our sample size would achieve 90% to detect a medium-effect size (Cohen's *W*) of 0.30. Cohen's *W* is equivalent to Cramér's *V* in our study with 3 × 2 and 2 × 2 contingency tables.

**SUPPLEMENTAL TABLE 5** Description of Family-Centered Pediatric Advance Care Planning Intervention for Teens with Cancer (FACE-TC)

	Session Foundation	Session Goals	Session Process <sup>a</sup>
Session 1	Lyon FACE ACP Survey adolescent and surrogate versions to set stage for EOL conversations	(1) To assess the adolescent's values, spiritual and other beliefs, and life experiences with illness and EOL care, and (2) to assess when to initiate ACP.	(1) Orient family to study and issues, (2) survey adolescent privately, and (3) survey surrogate privately with regard to what the surrogate believes the adolescent prefers.
Session 2	Next Steps: Respecting Choices ACP conversation	(1) To facilitate conversations and share decision-making between the adolescent and surrogate about palliative care, providing an opportunity to express fears, values, spiritual and other beliefs, and goals with regard to death and dying, and (2) to prepare the guardian or surrogate to be able to fully represent the adolescent's wishes.	In stage 1, the teenager's understanding of the condition is assessed. In stage 2, the teenager's philosophy about EOL decision-making is explored. In stage 3, the rationale for future decisions the teenager would want the surrogate to act on is reviewed. In stage 4, the SoTP is used to describe scenarios and choices. In stage 5, the need for future conversations is summarized and referrals are made.
Session 3	The Five Wishes is a legal document that helps a person express how he/she wants to be treated if he/she is seriously ill and unable to speak for him/herself. Unique among living will and health agent forms, it looks to all a person's needs: medical, personal, emotional, and spiritual.	(1) Which person the teenager wants to make health care decisions for him or her, (2) the kind of medical treatment the teenager wants, (3) how comfortable the teenager wants to be, (4) how the teenager wants people to treat him or her, (5) what the teenager wants loved ones to know, and (6) any spiritual or religious concerns the teenager may have.	For adolescents aged <18 y, the Five Wishes directive must be signed by their legal guardian. Processes, such as labeling feelings and concerns, as well as finding solutions to any identified problems, are facilitated (with appropriate referrals, eg, hospital chaplain or ethicist).

Source: National Cancer Institute; National Institutes of Health. Research to Research-Intervention-Tested Program (R-TIPS) by NIH. Available at: <https://rtips.cancer.gov/rtips/programDetails.do?programId=17054015>. Accessed June 5, 2018.

<sup>a</sup> These sessions may include other family members or loved ones.

**SUPPLEMENTAL TABLE 6** Relationship of Family Member to Adolescent (*N* = 126)

Relationship of Family Member With Adolescent	<i>n</i> (%)
Biological mother	94 (75)
Biological father	19 (15)
Adoptive mother	5 (4)
Biological grandmother	1 (0.8)
Step-grandmother	1 (0.8)
Aunt	1 (0.8)
Uncle	1 (0.8)
Boy/girlfriend	3 (2)
Legal guardian	1 (0.8)
Relationship after regrouping	
Biological	116 (92)
Nonbiological	10 (8)

**SUPPLEMENTAL TABLE 7** Relationship of Family Member to Overall Congruence in Treatment Preferences ( $N = 115$ )

Relationship of Family Member to Adolescent With cancer	3 Levels of Overall Agreement <sup>a</sup>			Total
	Low <sup>b</sup> Agreement on 0–1 Situation Frequency (%)	Moderate Agreement on 2–3 Situations Frequency (%)	High Agreement on All 4 Situations Frequency (%)	
Biological mother	26 (30)	39 (45)	22 (25)	87 (76)
Biological father	1 (6)	13 (81)	2 (13)	16 (14)
Other	5 (42)	5 (42)	2 (17)	12 (10)
Total	32	57	26	115

Two-sided Fisher's exact test,  $P = .07$ . The sample size was 115 dyads; 1 dyad had missing data.

<sup>a</sup> Rationale for recoding the data at 3 levels of agreement to generate a new variable is illustrated by the small number of cells for each situation.

<sup>b</sup> Dyadic congruence with do not know responses were treated as no agreement/no agreement, that is, low agreement, as the purpose of the intervention was to agree to make a choice.

**SUPPLEMENTAL TABLE 8** Congruence Frequency in the 4 Cancer-Related Situations

Adolescent/Family Responses	Face-TC pACP ( $n = 73$ ) Frequency (%)	TAU Control ( $n = 42$ ) Frequency (%)
Situation 1: long hospital stay, low chance of survival		
To continue/to continue	39 (53)	16 (38)
To continue/to stop	4 (5)	8 (19)
To continue/do not know	1 (1)	6 (14)
To stop/to continue	3 (4)	4 (10)
To stop/to stop	18 (25)	3 (7)
To stop/do not know	2 (3)	2 (5)
Do not know/to continue	2 (3)	1 (2)
Do not know/to stop	2 (3)	1 (2)
Do not know/do not know	2 (3)	1 (2)
Situation 2: only 3 more months to live and side effects of treatments are serious		
To continue/to continue	15 (20)	6 (14)
To continue/to stop	7 (10)	8 (19)
To continue/do not know	1 (1)	2 (5)
To stop/to continue	3 (4)	5 (12)
To stop/to stop	41 (56)	9 (21)
To stop/do not know	2 (3)	4 (10)
Do not know/to continue	1 (1)	3 (7)
Do not know/to stop	3 (4)	4 (10)
Do not know/do not know	0 (0)	1 (2)
Situation 3: physical disability, that is, cannot walk or talk and need 24- hour nursing care		
To continue/to continue	33 (45)	9 (21)
To continue/to stop	0 (0)	4 (10)
To continue/do not know	5 (7)	6 (14)
To stop/to continue	6 (8)	7 (17)
To stop/to stop	13 (18)	5 (12)
To stop/do not know	2 (3)	2 (5)
Do not know/to continue	4 (5)	0 (0)
Do not know/to stop	5 (7)	4 (10)
Do not know/do not know	5 (7)	5 (12)
Situation 4: cognitive disability, that is, do not know who you are, where you are, or who you are with and need 24-h nursing care		
To continue/to continue	10 (14)	7 (17)
To continue/to stop	2 (3)	4 (10)
To continue/do not know	4 (5)	2 (5)
To stop/to continue	3 (4)	2 (5)
To stop/to stop	38 (52)	11 (26)
To stop/do not know	7 (10)	4 (10)
Do not know/to continue	3 (4)	2 (5)
Do not know/to stop	3 (4)	7 (17)
Do not know/do not know	3 (4)	3 (7)