APPENDIX

Interview Questions

*********** TREATMENT **********

[*Ask about major, year, etc. - icebreaker questions*]
1. Did you do anything to stay healthy before you started ThreeTwoMe (TTM)?
2. What motivated you to be part of this study?
3. What has being in the study been like for you?
    a. What do you use ThreeTwoMe for?
4. What kind of health-related activities are you engaged in currently?

App use/Website
5. Which apps are you currently using?
    a. Why do you use or not use the TTM apps (or other apps)?
    b. **If app user**, do you share your info with others? Why/why not?
6. If you use ThreeTwoMe.com what do you use from it? (Blog? Library?)

Facebook use
7. Do you use the Facebook component of TTM?
    a. Do you see it in your news feed or go to the page?
    b. Have you ever hidden any of the TTM posts? If so, why?
    c. Would you prefer a private page only visible to others in the study?
8. What do you like about the Facebook component? What do you not like about it?
9. What is it like seeing other participants in the study on Facebook?
    a. Do you notice them/their posts?
10. There are Facebook campaigns/themes where participants are asked to pledge to participate (e.g., Eat more mindfully during Thanksgiving; The Pedometer Challenge)
    a. Have you ever participated? Why or why not?
11. What does it mean when you 'like' something on Facebook?
    a. When do you decide to comment?
12. Why do you post?
13. How does using Facebook make you feel?
14. Do you talk about your health on Facebook? (Physical activity, food, weight loss)

SMS Use
15. The SMS component of TTM was recently updated, and you are probably getting more texts.
    a. What was it like before versus how it is now? Is it different? Better or worse?
    b. What do you like about the new texts and what do you dislike?

Seeking health information:
16. Do you search for information about your health? If so, when? Where? On your laptop, phone,

desktop?
17. Can you tell me about times you've wished you had information related to what's going on at the moment?

Social support:
18. How would you describe your relationship with the TTM health coach?
19. Do you talk about your weight-loss/lifestyle-change goals with your friends and/or family?
20. What sorts of things do your friends and family do to help? What do they not do?
    a. How do you connect with them about health stuff? (Phone, in person, casually, planned)
21. Do you know anyone else in the study?
    a. How would you feel about that?

Ideas for the future:
22. What are the top 3 things that have worked for you that you would say should definitely exist in a future version of TTM?
23. What kind of support do you wish you had to help you meet your weight-loss and/or lifestyle-change goals?

********* **CONTROL** *********

[*Ask about major, year, etc. - icebreaker questions*]
1. Did you do anything to stay healthy before you started SMART?
2. What motivated you to be part of this study?
3. What has being in the study been like for you?
4. What kind of health-related activities are you engaged in currently?
5. Are there things you've done in the past that have helped you lose weight?
6. Do you do health-related things on your own or as part of a group?
7. Do you talk about your weight-loss/lifestyle-change goals with your friends and/or family?
    a. What sorts of things do your friends and family do to help? What do they not do?
    b. How do you connect with them about health stuff? (Phone, in person, casually, planned, etc.)
8. Do you know anyone else in the study?
    a. How would you feel about that?
9. Do you search for information about your health? If so, when? Where?
10. Do you share health/lifestyle information online?
    a. What about on Facebook? Why or why not?
    b. Have you ever been part of an online weight-loss or fitness group?
11. Do you currently use or have you ever used apps for weight loss or related health activitites?
12. What kind of support do you wish you had to help you meet your weight-loss and/or lifestyle-change goals?

Coding Framework Used to Analyze the Interview Transcripts (N=20 Codes)

Code name	Definition
What SMART program was like to participant	How he/she felt about the program (used when other program codes did not apply).
What didn't work about the program	What he/she found to be unhelpful and/or frustrating about the SMART program.
Non-SMART weight loss help	Non-SMART apps/online tools and/or weight loss assistance (e.g., personal trainer).
Has friend in the study	He/she knows other(s) in the study.
Specifically about the health coach	Explicitly about the health coach.
Study Facebook page	About the study's Facebook page.
Study Facebook page campaigns	About the campaigns launched through the study's Facebook page.
Facebook interaction with other participants	Interaction with other participants on Facebook, wanting more interaction and/or discussing how they might feel about it.
Integrated	Tools link to one another; one tool reminds participant to use another tool and/or receive similar messages through multiple tools.
Timely feedback	Communication was timely. For example, a participant posts a question on Facebook and the health coach responds within a day.
Challenge/contest	Felt challenged via challenge/contest pushed out by the study (or other tool/program).
Face-to-face support	Friends, family and/or acquaintances provide encouragement face-to-face support.
Online and/or mobile weight loss help	The SMART program, and/or virtual friends provide encouragement online that the participant positively receives. May be online social support (e.g., emotional support).
Online network sharing/ norms	How online networks function, role they serve in his/her life, and/or how he/she uses them (including norms of online space and feelings about sharing/self-disclosure).
Lurking online	Reading online content but not visibly interacting.
On demand support	Support for weight loss can be accessed 24/7 and/or at his/her leisure.
Making goals public	Telling others online or face-to-face about behavioral goals and/or lose weight.

	May be broadcasted or told to specific individual(s). A verbal contract/social agreement.
Social accountability	Feels accountable to follow through on stated goals and other commitments shared with his/her network. Different from social support because no resources or materials are exchanged. May also talk about feelings of social shaming or guilt.
Making healthy choices with others	Doing healthy things and making healthy choices alongside others making healthy choices. Participant may also have described liking working out with others and/or wanting opportunity to be healthy with others more. Positive social influence.
Sense of community/group influences individual	His/her behavior helps others and/or others' behavior helps him/her. "We're all in it together" (i.e., shared identity). Could also be social comparison or observing/hearing about others success that motivates participant to strive for his/her goals (i.e., role models).

Recommendations for Future Research

Recommendation 1: Incorporate opportunities for virtual or face-to-face interactions of study participants. Participants emphasized the importance of social accountability in helping them meet their goals and many wanted the opportunity to interact with fellow participants. Approaches that encourage participant interaction via meet-ups on the study's Facebook page, or that challenge participants to be healthy and active with their friends, might be productive. Earlier work has shown that promoting, but not requiring, participants to work out together in a team-based weight-loss competition led to significant weight loss.

Recommendation 2: Develop fun challenges that can be incorporated into daily routines. Treatment group participants liked that the social and mobile technologies provided timely, on-demand support. In line with earlier work, individuals thought text messaging was useful for weight loss, as was the study's Facebook page. Participants emphasized that the challenges delivered through the study's Facebook page and other technologies were fun and helped them to challenge themselves. An example includes embedding challenges into long-term goals such as achieving 10,000 steps per day.

Recommendation 3: Measure passive participation in social network–based interventions. It is well established that lurking—passively consuming information but not visibly interacting with it or creating new content—is highly prevalent in online communities. Measuring lurking behavior objectively (e.g., through server logs or via self report) is important because without capturing it, metrics of user engagement will be underestimated. In addition, measuring lurking behavior will allow for testing whether lurking is negative for weight loss. Although individuals who lurk have reported receiving comparable amounts of social support for weight loss compared to those who contribute content, lurking may not be as productive for weight loss because the user is less engaged with the community.

Recommendation 4: Explore new research methods that acknowledge the quality and quantity of consumer-facing technologies for weight loss. The traditional approach of asking individuals to not enroll in outside weight-loss programs while participating in a weight-loss trial may be insufficient given the wide availability of online tools. Most participants reported using other social and mobile technologies such as apps and/or pursuing alternative means to help them lose weight. Instead of investing in internal app development, future work should consider encouraging participants to use existing direct-to-consumer technologies and measure their use. Similarly, researchers should collect self-report data on participants' involvement in other weight-loss activities. Individuals enrolling in weight-loss trials may be sensitive to control group assignment or frustrated by not losing weight using treatment tools and experiment with alternative means to achieve their goals. Future work may also consider alternative designs, which would minimize these social threats to internal validity.

Recommendation 5: Capture comprehensive data on participants' social networks so that analyses can take their effects into account. Many participants reported knowing one another, which exposed cross-contamination between the treatment and the control groups. We suspect that this happens in many RCTs, particularly of weight loss. Investigators should capture data on participants' networks (either online or face-to-face) so that cross- contamination can be

assessed and accounted for in the measurement of treatment effects. By having access to participants' Facebook data, the SMART project captured each participant's online friendship network, and the effect of cross-contamination will be assessed in future work (e.g., 30% of participants in the control group knew at least one other participant in the treatment group).