Supplementary Online Content

Gustafson DH, McTavish FM, Chih M-Y, et al. A smartphone application to support recovery from alcoholism: a randomized clinical trial. *JAMA Psychiatry*. Published online March 26, 2014. doi: 10.1001/jamapsychiatry.2013.4642.

eTable 1. A-CHESS Services
eTable 2. Description and Results of 6 Sensitivity Analyses

eTable 1. A-CHESS Services

A-CHESS Service	Description
Discussion Groups	Patients can anonymously exchange emotional support and information with other patients via online bulletin-board support groups.
Ask an Expert	Allows patients to receive personal responses to their questions from experts in addiction within 48 hours.
Open Expert	Responses to questions sent to Ask an Expert that are of general interest are rendered anonymous and made available for all users to view.
Personal Stories	Professionally produced text and video accounts of recovery experiences based on interviews of patients and family members. Stories focus on ways to manage addiction, make different choices, and cope with challenges.
Instant Library	Detailed summaries of articles, chapters, and manuals on addiction management.
Frequently Asked Questions	Brief answers to frequently asked questions about addiction, such as "Why do some people become addicted to drugs, while others don't?" and "How do I deal with cravings for alcohol?" Links to additional A-CHESS services offer more detailed information and support.
Web Links	Provide access for patients to approved addiction-related web sites (and specific pages within sites).
Easing Distress	A computerized cognitive-behavior therapy program designed to help people cope with harmful thoughts that can stymie efforts to prevent relapse. It helps assess logical errors, attributional style, and the tendency to exaggerate distress, and offers practical exercises to improve cognitive problem-solving skills.
Healthy Events	Alerts the patient about healthy drug- and alcohol-free events taking place in the city where they live.
High-Risk Locations	Global positioning system (GPS) technology tracks when patients approach an area where they traditionally obtained or consumed alcohol so they can receive "just-in-time" support for getting through the high-risk situation. To activate, individuals voluntarily register places where they regularly obtained or consumed alcohol in the past and now designate as high-risk locations for relapse.
Daily Thoughts	Motivational quotes (usually about sobriety) sent via text messaging each morning to A-CHESS patients.
Sobriety Counter	Appears on the home page of A-CHESS to remind patients of how many days they have been sober.
Panic Button	Provides immediate help to avoid an imminent relapse (e.g., if urges and cravings become severe and help is desired). Pressing the Panic Button starts an intervention (set up during training) that includes automated reminders to the patient (personal motivations for not drinking); computer-generated alerts to key people (e.g., counselor, sponsor, family), who may reach out to the patient via phone or in person; and specific tools for dealing with urges.
Weekly Check-In	Brief survey (Brief Alcohol Monitoring Index) to obtain patient data on negative affect, lifestyle balance, and recent substance use. *Check-in* information is used by A-CHESS for triage and feedback. Patients' counselors are automatically notified if a patient score exceeds a predetermined threshold. The counselor can view a summary report of check-in data.

eTable 2. Description and Results of 6 Sensitivity Analyses

	Explanation of Value(s) Used to Replace Missing Data[a]	Replacement Value(s)	Summary of Changes in Pattern of Results
1.	Minimum possible value, overall and at each month	0	None
2.	Maximum possible value, overall and at each month	30	Effect no longer significant overall ($P = .092$) or at month 12 ($P = .428$)
3.	Mean reported value overall	1.99	None
4.	Mean reported values at months 4, 8, and 12, respectively	2.16, 2.01, or 1.78	None
5.	Mean reported value overall from only patients who reported having any drinks in the past 30 days	7.16	None
6.	Mean reported values at months 4, 8, and 12, respectively, from only patients who reported having any drinks in the past 30 days	7.70, 7.29, or 6.50	None

[a] Missing data were replaced for all patients, including those who had no survey responses.