AHRQ Healthcare Horizon Scanning System – Potential High-Impact Interventions Report

Priority Area 14: Substance Abuse

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Statement of Funding and Purpose

This report incorporates data collected during implementation of the Agency for Healthcare Research and Quality (AHRQ) Healthcare Horizon Scanning System by ECRI Institute under contract to AHRQ, Rockville, MD (Contract No. HHSA290-2010-00006-C). The findings and conclusions in this document are those of the authors, who are responsible for its content, and do not necessarily represent the views of AHRQ. No statement in this report should be construed as an official position of AHRQ or of the U.S. Department of Health and Human Services.

This report's content should not be construed as either endorsements or rejections of specific interventions. As topics are entered into the System, individual topic profiles are developed for technologies and programs that appear to be close to diffusion into practice in the United States. Those reports are sent to various experts with clinical, health systems, health administration, and/or research backgrounds for comment and opinions about potential for impact. The comments and opinions received are then considered and synthesized by ECRI Institute to identify interventions that experts deemed, through the comment process, to have potential for high impact. Please see the methods section for more details about this process. This report is produced twice annually and topics included may change depending on expert comments received on interventions issued for comment during the preceding 6 months.

A representative from AHRQ served as a Contracting Officer's Technical Representative and provided input during the implementation of the horizon scanning system. AHRQ did not directly participate in horizon scanning, assessing the leads for topics, or providing opinions regarding potential impact of interventions.

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Financial Disclosure Statement

None of the individuals compiling this information has any affiliations or financial involvement that conflicts with the material presented in this report.

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Preface

The purpose of the AHRQ Healthcare Horizon Scanning System is to conduct horizon scanning of emerging health care technologies and innovations to better inform patient-centered outcomes research investments at AHRQ through the Effective Health Care Program. The Healthcare Horizon Scanning System provides AHRQ a systematic process to identify and monitor emerging technologies and innovations in health care and to create an inventory of interventions that have the highest potential for impact on clinical care, the health care system, patient outcomes, and costs. It will also be a tool for the public to identify and find information on new health care technologies and interventions. Any investigator or funder of research will be able to use the AHRQ Healthcare Horizon Scanning System to select potential topics for research.

The health care technologies and innovations of interest for horizon scanning are those that have yet to diffuse into or become part of established health care practice. These health care interventions are still in the early stages of development or adoption, except in the case of new applications of already-diffused technologies. Consistent with the definitions of health care interventions provided by the National Academy of Medicine (formerly the Institute of Medicine) and the Federal Coordinating Council for Comparative Effectiveness Research, AHRQ is interested in innovations in drugs and biologics, medical devices, screening and diagnostic tests, procedures, services and programs, and care delivery.

Horizon scanning involves two processes. The first is identifying and monitoring new and evolving health care interventions that are purported to or may hold potential to diagnose, treat, or otherwise manage a particular condition or to improve care delivery for a variety of conditions. The second is analyzing the relevant health care context in which these new and evolving interventions exist to understand their potential impact on clinical care, the health care system, patient outcomes, and costs. It is NOT the goal of the AHRQ Healthcare Horizon Scanning System to make predictions on the future use and costs of any health care technology. Rather, the reports will help to inform and guide the planning and prioritization of research resources.

We welcome comments on this Potential High-Impact Interventions report. Send comments by mail to the Task Order Officer named in this report to: Agency for Healthcare Research and Quality, 5600 Fishers Lane, Rockville, MD 20857, or by email to: effectivehealthcare@ahrq.hhs.gov.

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Contents

Figures

Executive Summary

Background

Horizon scanning is an activity undertaken to identify technological and system innovations that could have important impacts or bring about paradigm shifts. In the health care sector, horizon scanning pertains to identification of new (and new uses of existing) pharmaceuticals, medical devices, diagnostic tests and procedures, therapeutic interventions, rehabilitative interventions, behavioral health interventions, and public health and health promotion activities. In early 2010, the Agency for Healthcare Research and Quality (AHRQ) identified the need to establish a national Healthcare Horizon Scanning System to generate information to inform comparative-effectiveness research investments by AHRQ and other interested entities. AHRQ makes those investments in 14 priority areas. For purposes of horizon scanning, AHRQ's interests are broad and encompass drugs, devices, procedures, treatments, screening and diagnostics, therapeutics, surgery, programs, and care delivery innovations that address unmet needs. Thus, we refer to topics identified and tracked in the AHRQ Healthcare Horizon Scanning System generically as "interventions." The AHRQ Healthcare Horizon Scanning System implementation of a systematic horizon scanning protocol (developed between September 1 and November 30, 2010) began on December 1, 2010. The system is intended to identify interventions that purport to address an unmet need and are up to 3 years out on the horizon and then to follow them up to 2 years after initial entry into the health care system. Since that implementation, review of more than 24,500 leads about potential topics has resulted in identification and tracking of about 2,400 topics across the 14 AHRQ priority areas and 1 cross-cutting area; more than 750 topics are being actively tracked in the system.

Methods

As part of the Healthcare Horizon Scanning System activity, a report on interventions deemed as having potential for high impact on some aspect of health care or the health care system (e.g., patient outcomes, utilization, infrastructure, costs) is aggregated twice a year. Topics eligible for inclusion are those interventions expected to be within 0–3 years of potential diffusion (e.g., in phase III trials or for which some preliminary efficacy data in the target population are available) in the United States or that have just begun diffusing and that have completed an expert feedback loop.

The determination of impact is made using a systematic process that involves compiling information on topics and issuing topic drafts to a small group of various experts (selected topic by topic) to gather their opinions and impressions about potential impact. Those impressions are used to determine potential impact. Information is compiled for expert comment on topics at a granular level (i.e., similar drugs in the same class are read separately), and then topics in the same class of a device, drug, or biologic are aggregated for discussion and impact assessment at a class level for this report. The process uses a topic-specific structured form with text boxes for comments and a scoring system (1 minimal to 4 high) for potential impact in seven parameters. Participants are required to respond to all parameters.

The scores and opinions are then synthesized to discern those topics deemed by experts to have potential for high impact in one or more of the parameters. Experts are drawn from an expanding database ECRI Institute maintains of approximately 195 experts nationwide who were invited and agreed to participate. The experts comprise a range of generalists and specialists in the health care sector whose experience reflects clinical practice, clinical research, health care delivery, health business, health technology assessment, or health facility administration perspectives. Each expert uses the structured form to also disclose any potential intellectual or financial conflicts of interest

(COIs). Perspectives of an expert with a COI are balanced by perspectives of experts without COIs. No more than two experts with a possible COI are considered out of a total of the five to eight experts who are sought to provide comment for each topic. Experts are identified in the system by the perspective they bring (e.g., clinical, research, health systems, health business, health administration, health policy).

The topics included in this report had scores *and/or* supporting rationales at or above the overall average for all topics in this priority area that received comments by experts. Of key importance is that topic scores alone are not the sole criterion for inclusion—experts' rationales are the main drivers for the designation of potentially high impact. We then associated topics that emerged as having potentially high impact with a further subcategorization of "lower," "moderate," or "higher" within the high-impact-potential range. As the Healthcare Horizon Scanning System grows in number of topics on which expert opinions are received and as the development status of the interventions changes, the list of topics designated as having potentially high impact is expected to change over time. This report is being generated twice a year.

For additional details on methods, please refer to the full AHRQ Healthcare Horizon Scanning System Protocol and Operations Manual published on AHRQ's Effective Health Care Web site.

Results

The table below lists the four topics for which (1) preliminary phase III data for drugs or programs were available; (2) information was compiled and sent for expert comment before November 6, 2015, in this priority area; and (3) we received six to eight sets of comments from experts between January 1, 2015, and November 16, 2015. (Fifteen topics in this priority area were being tracked in the system as of November 6, 2015). One topic was designated as having high-impact potential (indicated below with an asterisk) based on experts' comments and their assessment of potential impact. The material on interventions in this Executive Summary and report is organized alphabetically. Readers are encouraged to read the detailed information on these interventions that follows the Executive Summary.

Priority Area 14: Substance Abuse

Topic	High-Impact Potential
1. Evzio for emergency treatment of opioid overdose by nonclinicians	Prior high impact topic; archived due to poor diffusion after FDA approval
2. * Interactive text-messaging program for prevention of hazardous alcohol use	Lower end of the high-impact-potential range
3. Off-label topiramate (Topamax) for treatment of alcohol use disorder	No high-impact potential at this time
4. Off-label zonisamide for treatment of alcohol use disorder	No high-impact potential at this time

FDA: U.S. Food and Drug Administration

Discussion

Topics within the Substance Abuse priority area cover interventions for diagnosis, prevention, and treatment of harmful use and abuse of legal and illicit drugs. Although standards of care for these indications remain constant, investigators continue to develop new interventions in this area, with a focus on repurposing existing therapies and technologies to increase patients' treatment options and chances of successful care. This calendar year, newly tracked topics within the AHRQ Healthcare Horizon Scanning System include two intranasal naloxone spray products for treating opioid overdose and multiple off-label drug studies intended to reduce craving and consumption behaviors in patients with alcohol use disorders. One tracked intranasal naloxone product, Narcan

Nasal Spray, was granted U.S. Food and Drug Administration (FDA) approval in late November 2015, but did not receive sufficient expert comments in time for consideration during this reporting period.

During this reporting period, experts judged a single topic as having high-impact potential. This intervention uses interactive text messaging for reducing or preventing hazardous alcohol use—including binge drinking, drunk driving, and engaging in other dangerous activities while intoxicated—and encouraging responsible alcohol consumption, principally among at-risk young adults. Hazardous alcohol use is a paramount public health concern; annually, 1 in 10 adult American deaths are attributed to this behavior. Accordingly, educational institutions and government agencies such as the U.S. Centers for Disease Control and Prevention have made hazardous alcohol use a key component of broad harm reduction efforts in an attempt to curb associated adverse health and economic impacts.

Prior High Impact Topic Archived Since the June 2015 Report

One potential high-impact topic from the June 2015 report has been archived:

- **Evzio for emergency treatment of opioid overdose by nonclinicians:** Opioid overdoses are a potentially fatal consequence of prescription or illicit opioid abuse. Naloxone is a long-standing gold standard medication for rapid reversal of acute opioid overdose symptoms, but it is primarily available as an injectable solution that is widely underutilized by nonclinicians who might otherwise provide lifesaving care. Evzio® is an FDA-approved naloxone auto-injector designed for layperson use. Each auto-injector includes an electronic voice instruction system and instructions printed on the device to facilitate emergency overdose reversal. Devices deliver a single 0.4 mg naloxone dose, equal to a typical dose administered by medical professionals to treat opioid overdoses.

  Evzio has been sold commercially since August 2014, with an average national price near $600 per retail carton (two injectors). Recent marketing data collected by the FDA's Center for Drug Evaluation and Research indicates that, outside of charitable donations to higher education facilities and first-responder organizations, Evzio is diffusing poorly; fewer than 10,000 cartons have been sold since its commercial launch in August 2014. Evaluating Evzio in light of this limited diffusion, its high cost compared with naloxone products used by trained emergency responders, and pending competition from two intranasal naloxone formulations being tracked in the Horizon Scanning System and intended for laypersons to administer, analysts concluded that this intervention should be archived in the System. For a more detailed discussion of Evzio, including a brief review of available pharmacokinetic and user experience data supporting the device's approval, please refer to the June 2015 Potential High-Impact Interventions report.

Eligible Topics Not Deemed High Impact

Two eligible topics, briefly discussed below, were deemed by experts to lack potential for high impact, based on their opinions about available data.

- **Off-label topiramate (Topamax®) for treatment of alcohol use disorder:** Topiramate is a widely used anticonvulsant demonstrated to effectively treat alcohol use disorder (AUD) and hazardous alcohol use; clinical evidence also provides some support for both generic and branded topiramate's (Topamax) utility as a daily treatment for patients with AUD and comorbid mental health disorders. Researchers also hypothesize that topiramate's efficacy may be genotype-mediated, although this association and its implications have not been clarified. Based on available efficacy and diffusion data, experts' comments indicated that

off-label use of topiramate did not have potential for high impact for this indication. This topic has been archived.

- **Off-label zonisamide for treatment of AUD:** Zonisamide is also an FDA-approved anticonvulsant used off-label for treating symptoms of AUD. Recently completed unphased, phase II, and phase IV clinical studies reported that daily oral zonisamide administration reduced alcohol consumption and cravings in patients who had either alcohol dependence or AUD. The drug potentially holds additional promise as an AUD therapy because its safety profile is better than some approved and off-label medications for AUD. Experts commenting on this intervention acknowledged an unmet need for additional effective pharmacotherapies to treat AUD, but considered available evidence insufficient to suggest that off-label zonisamide use would have potential for high impact. This topic has been archived.

Interactive Text-Messaging Program for Prevention of Hazardous Alcohol Use

- **Key Facts:** Nationwide, hazardous alcohol use is directly or indirectly implicated in more than 100,000 deaths per year, broadly burdening economic and health care resources across society. Hazardous and excessive alcohol consumption behaviors have several primary and secondary adverse health effects, such as increased risks of contracting sexually transmitted diseases and increased likelihood of becoming a victim of physical injury or violence. Locally and nationally, several preventive interventions are aimed at deterring hazardous alcohol use, yet rates remain high among young adult and older age groups. Accordingly, an unmet need exists for additional effective interventions that reduce hazardous alcohol-use frequency, particularly among younger patients.

  Interactive text messaging programs use behavior therapy techniques delivered through short messaging service applications to positively influence alcohol use behaviors among at-risk patients. In clinical trials, interactive text messaging programs have been well accepted among patients and have demonstrated some efficacy for self-reported reductions in hazardous alcohol use. These programs are relatively inexpensive, easily replicable, and well-tolerated by patients, indicating potential for broad diffusion.

  American-, Australian-, and European-based clinical trials have investigated variations of interactive text messaging interventions for reducing hazardous alcohol use. In a phase III trial sponsored by the University of Pittsburgh (Pittsburgh, PA) and its affiliated medical school, at-risk young adult patients admitted to emergency departments had reductions in binge drinking behaviors and alcohol-related hospital readmissions, after enrollment in a 12-week text-messaging intervention. A 2015 followup survey reported that these results were sustained 6 months after the intervention, although patient response rates were fairly low. In contrast, other smaller studies have found that text-messaging programs have had negligible or no impact on lowering hazardous alcohol use.

  A commercial version of the University of Pittsburgh intervention, branded as CaringTXT, has been marketed since February 2015. Commercial clients pay prorated annual licensing fees for CaringTXT; end-user patients incur no costs, aside from potential text messaging carrier charges. CaringTXT is used by multiple hospitals and universities nationwide.
- **Key Expert Comments:** Experts comments' on this intervention were based on available research and diffusion as of January 2015. Experts thought that interactive text messaging has some potential to contribute to reduced hazardous alcohol use, particularly among

technology-adept, mobile phone–using patients resistant to other intervention-delivery methods. However, experts' support was tempered by the perception that use of the intervention would be limited to those with mobile phones who are receptive to modifying their alcohol consumption and related behaviors. Although experts were encouraged by preliminary data, they questioned the intervention's long-term efficacy and ability to change behavior in populations other than young adults.

- **High-Impact Potential**: Lower end of the high-impact-potential range

Substance Abuse Intervention

Interactive Text Messaging Program for Prevention of Hazardous Alcohol Use

Unmet need: Hazardous alcohol use is a composite substance abuse indication that includes alcohol consumption during pregnancy, episodic binge drinking, excessive weekly alcohol consumption, and underage drinking.[1-3] These behaviors are especially prominent among adolescent and young adult Americans and are associated with severe adverse outcomes, including increased rates of alcohol dependence, morbidity, and mortality.[4-7]

Overall, hazardous alcohol use is a grave public health issue marked by both high patient and per-patient prevalence. Almost 1 in 5 adult Americans commit hazardous alcohol use behaviors, and most of these individuals report several hazardous alcohol use events yearly.[8,9] Experts estimate that annually, more than 1.2 billion binge-drinking incidents occur nationwide.[10] These incidents also represent a significant economic cost to the national economy, accounting for nearly $223.5 billion in combined annual criminal justice costs, lost productivity, and direct and indirect health care expenses.[11] An unmet need exists for effective, well-tolerated interventions that reduce hazardous alcohol use, particularly among younger patients. Interactive text messaging programs present an affordable, minimally intrusive, easily diffusible alternative to traditional interventions (e.g., in-person counseling) for decreasing hazardous alcohol use rates among adolescents, young adults, and other at-risk patients.

Intervention: Generally, interactive text-messaging programs deliver established, cognitive behavior therapy interventions via mobile phones. Clinicians initially identify patients as being at-risk or they diagnose hazardous alcohol use behavior after incidents such as disciplinary proceedings, hospital admission, or standardized screening tests. Patients then opt to receive text messages, delivered at regular intervals, to their mobile phones. Text messages may provide supportive motivational messages regarding healthy alcohol consumption and risk-reduction strategies; reinforce mindful behaviors by noting adverse consequences of hazardous alcohol use; or assess drinking behavior, allowing patients to engage in self-evaluation.[12-14] Patients interact by reporting recent or long-term hazardous alcohol use and related behaviors via text or secure Web site interface. Some clinical interventions also solicit patient feedback on perceived program tolerability and efficacy. Patients may also be prompted to provide feedback before or after periods of potential hazardous alcohol use. Limited data have shown that this added step may encourage corrective behavior in some patients.[15] Patients tend to view text-messaging interventions favorably, and in some cases rate this approach as a more palatable, less intrusive form of health care communication than traditional mail or phone calls.[16,17]

Depending on the intervention's design, clinicians can provide periodic or real-time information to patients and receive responses in turn. With this model, patient feedback could also prompt clinicians to modify treatment approaches or to initiate acute therapies.

Clinical trials: Internationally, completed and ongoing trials have examined text messaging intervention efficacy, with treatment having varying success. The majority of completed studies are brief unphased or early-phase clinical trials with limited patient-interaction components; published data from these trials show varied intervention efficacy, although patients frequently reported high intervention tolerance and acceptability.[13,18]

A 2013 Swiss study reported 3-month outcomes for a minimally interactive, patient-specific text-messaging intervention to reduce binge drinking among vocational school students (n=364). The intervention was well tolerated, and investigators concluded that text-messaging was somewhat effective in reducing hazardous alcohol use, as measured by a decrease in number of patients reporting a binge-drinking event (baseline: 75.5%; 3-month followup: 67.6%; $p<0.001$).

In July 2014, a University of Pittsburgh (Pittsburgh, PA)-based research group reported results from a larger phase III interactive text-messaging intervention.[15] Young adults (n=765) at risk for hazardous alcohol use were identified based on admission to 1 of 4 local emergency departments. Patients were randomized to receive no text messages (control group), weekly text messaging assessments (SA group), or twice-weekly text messaging assessments with feedback (SA+F group) for 12 weeks. In the SA+F group, patients received interactive queries regarding planned or recently completed weekend drinking behavior and received real-time positive feedback based on their responses. Subsequently, the intervention system promoted responsible goal-setting to reduce total alcohol consumption and binge-drinking behaviors.[15]

Researchers found that patients in the SA+F group reported fewer binge-drinking days, while patients in control and SA groups reported increased numbers of drinking days. Additionally, after 3 months, significantly fewer SA+F group patients reported any binge drinking days (baseline: 79.3%; 3 months: 64.8%; change: -14.5 percentage points) than either the control (baseline: 79.7%; 3 months: 77.7%; change: -2.0 percentage points) or SA (baseline: 78.1%; 3 months: 75.0%; change: -3.1 percentage points) groups.[15] In an online followup survey, investigators found that these reductions persisted for 6 months or longer after the intervention; this report is the first published long-term positive efficacy data for this intervention.[19]

Manufacturer and regulatory status: Multiple American and international groups have developed interactive text-messaging programs for preventing hazardous alcohol use. To date, published intervention efficacy data are available from studies on adults in Scotland, Switzerland, and the United States; the Horizon Scanning System also identified related ongoing registered clinical trials in Australia, the United Kingdom, and the United States.[14,20,21] Few interventions have diffused beyond clinical trials. However, the aforementioned University of Pittsburgh intervention was subsequently licensed to HealthStratica, LLC (Pittsburgh, PA), and a commercial version, branded as CaringTXT, has been available since February 2015. CaringTXT is marketed to colleges and universities, medical centers, and emergency departments.[22]

FDA does not regulate these interactive text-messaging programs because they are not classified as medical device applications.[23] We note, however, that FDA regulatory guidelines are subject to reevaluation and change.[23]

Diffusion and costs: Texting by mobile phone is widespread and indicates potential for wide diffusion of this intervention, whether the intervention is distributed by health care facilities or distributed as commercial products. A 2011 Pew Research Center study reported that 83% of adult Americans own a mobile phone, and 73% of these mobile phone owners regularly use text messaging features.[24] Ninety-five percent of young adult Americans aged 18–29 years own a mobile phone, and 97% of mobile phone owners regularly send and receive text messages, averaging 109 texts daily.[24]

Text-messaging interventions, as a group, tend to have low or no end-user costs and relatively inexpensive per-patient fees for providers. For example, CaringTXT annual licenses cost about $12,000 to $18,000 for an average-sized university or college client. CaringTXT patients incur costs only if their text-messaging services are prorated or not included in their usual mobile phone fees.[24]

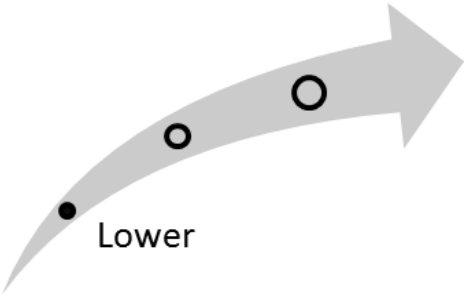
To date, HealthStratica's CaringTXT product is the only commercial hazardous alcohol use prevention text-messaging intervention identified by the Horizon Scanning System. As a result, we are unable to speculate on diffusion and cost patterns of other texting programs that might be used for the same purpose.

Clinical Pathway at Point of This Intervention

Clinicians consider alcohol brief interventions (ABIs) as the standard of care for treating patients in whom hazardous alcohol use has been diagnosed.[25,26] ABI models are primarily designed to modify overall drinking behavior and reduce or eliminate hazardous alcohol use. In these models, clinicians or other care providers first use various diagnostic tests to screen for potential hazardous alcohol use; patients who screen positive are then engaged in several short, one-on-one counseling sessions. During these sessions, care providers use personalized motivational interviewing techniques to inform patients of potential negative outcomes of hazardous alcohol use and to encourage patients to make healthy future drinking decisions.[26]

ABIs could be used in conjunction with interactive text-messaging programs or potentially could be replaced by this new preventive option. Interactive texting may offer a more amenable treatment route for patients unwilling to participate in face-to-face therapy or for whom geographic, socioeconomic, or other factors make in-person counseling untenable. A text-messaging intervention that effectively reduces binge drinking could present an attractive, scalable option for hospitals and clinics to incorporate into routine screening, brief intervention, and referral to treatment protocols for hazardous-drinking young adults.[26]

Figure 1. Overall high-impact potential: interactive text-messaging program for prevention of hazardous alcohol use



For this intervention, experts' comments were based on published research and diffusion status through January 2015. At that time, experts concluded that interactive text-messaging programs have some potential to contribute to reduced hazardous alcohol use. Although they acknowledged that this intervention could particularly address hazardous alcohol use among adolescents and young adults, they thought that it may be effective only among patients already interested in improving their alcohol-use behavior, limiting impact for all individuals engaging in hazardous binge drinking. Experts thought that available clinical trial data indicated that interactive text-messaging had some efficacy, but failed to demonstrate broad value for multiple patient populations or long-term efficacy for preventing hazardous alcohol use. Although these concerns may have been adequately addressed by new data published since the time of expert comment, our assessment is that this intervention is in the lower end of the high-impact-potential range.

Results and Discussion of Comments

Six experts, with clinical, research, and health systems backgrounds, offered comments on this hazardous alcohol use prevention intervention.[27-32] We have organized the following discussion of expert comments by the parameters on which they commented.

Unmet need and health outcomes: Experts unanimously agreed that hazardous alcohol use is a significant public health issue, with a corresponding need for well-accepted, effective interventions that can reduce hazardous alcohol use behaviors. These experts concluded that interactive text

messaging could provide moderate improvements, primarily benefiting mobile phone-using adolescent and young adult patients. However, experts also observed that interactive text messaging would not effectively address all hazardous alcohol use patients, constraining its potential efficacy and impact.

Acceptance and adoption: All but one of the experts providing comments remarked that this intervention could be widely accepted and adopted by clinicians and patients. Several likeminded experts also thought interactive text messaging compared favorably to standard of care, suggesting that, for receptive patients, interactive text messaging would offer an intervention with less potential embarrassment and discomfort than traditional ABIs.[27,28,31,32] A health systems expert proffered the dissenting opinion, countering that clinician and patient acceptance would be dulled by an anticipated lack of third-party payer reimbursement and coverage.[30]

Health care delivery infrastructure and patient management: Overall, the experts thought that interactive text messaging would not significantly disrupt health care delivery infrastructure or patient management. Commenters remarked on the highly automated nature of this intervention, as well as its use of patient-owned mobile phones and applications. While supporting the consensus, one research expert and one clinical expert noted that insufficiently automated interactive text-messaging programs could create additional burdens on clinicians and staff, as this scenario would necessitate an additional post-screening treatment step.[29,31]

Health disparities: Interactive text messaging could positively affect health disparities, the experts anticipated. These experts focused on the increased ability of this intervention to aid often underserved patient populations because of the broad availability of mobile phones and minimal costs to end-users. However, two experts commented that some socioeconomically disadvantaged patients might still find interactive text-messaging programs inaccessible if they cannot afford mobile phones and texting plans or are not properly identified as potential beneficiaries of this intervention.[27,30]

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