

REDUCING HARMFUL DRINKING THROUGH OPTIMIZED SCREENING AND BRIEF INTERVENTION

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EXECUTIVE SUMMARY

Despite widespread efforts by government agencies, the medical community, businesses, and others, the harmful use of alcohol remains a significant public health challenge, causing illness, injury, and death. Among the many evidence-based approaches to reduce harmful drinking, the World Health Organization (WHO) has identified Screening and Brief Intervention (SBI) as particularly effective. However, for a variety of reasons, adoption and access to traditional SBI has been limited, particularly in areas of greatest need. Thankfully, many of these issues can be addressed by transitioning to digital health technologies which can also align the interests of stakeholders to create cost-effective and sustainable impact.

INTRODUCTION

Harmful drinking is defined as a pattern of alcohol consumption causing health and social problems directly related to alcohol. It is different than alcohol use disorder, which is a medical condition characterized by an impaired ability to stop or control alcohol use despite adverse social, occupational, or health consequences (NIAAA). According to the World Health Organization (WHO), alcohol consumption contributes to three million deaths each year globally, and harmful use of alcohol is responsible for over 5% of the global burden of disease. Harmful use of alcohol is a causal factor in more than 200 diseases and injury conditions, a range of mental and behavioral disorders, other noncommunicable conditions, and death and disability relatively early in life. In people aged 20-39, approximately 13.5% of total deaths are attributable to alcohol.

Consequences are felt at an individual level, within families and communities, and across the wider society. On a personal level, one may experience mental and physical illness, loss of income or relationships, and an increased risk of alcohol dependency. Local communities and society more broadly may face domestic violence and other crimes, burdens on the health and legal systems, and more.

There are many public health interventions aimed at tackling harmful alcohol use. These act at various levels, including the individual, community, and macro-level. One such evidence-based intervention at the individual level, is screening and brief intervention (SBI). SBI has been recommended by the WHO as an effective preventive strategy.

Unfortunately, myriad constraints have prevented the wide adoption of SBI by many healthcare systems, particularly in low- and middle-income countries, denying access to the population in need. Many of these challenges revolve around limited infrastructure, inadequate human resources, and technological capacity constraints, particularly in terms of capturing, processing and utilizing health data for effective decision-making.

Considering these challenges, there is increasing recognition of the comparative advantage in partnerships to support the development, deployment, and adoption of digital health technologies aimed at improving population access.

Our objective is to advance the digital transformation of SBI and align stakeholder interests to improve public access and health outcomes.

REDUCING HARMFUL DRINKING

Harmful drinking has remained a persistent global challenge because the causes are complex, and solutions face challenges. Fragmented social conditions, such as unemployment, poverty, and limited public services can lead to a breakdown in social meaning and connection. This promotes harmful drinking patterns, resulting in binge drinking, aggression and violence, drunk driving, self-harm, and mental and physical illness. Ultimately the short-term and long-term consequences further fragment social conditions, establishing a vicious cycle which becomes increasingly difficult to disrupt.

CHALLENGES

Programs and solutions to address harmful drinking face myriad challenges that need policy attention and actions to make progress:

1. **Stigma:** Persistent societal stigma associated with alcohol abuse can deter individuals from seeking help and make it difficult for programs to operate effectively.
2. **Lack of awareness:** Many people are unaware of the available programs or the severity of their problem. Raising awareness can be a significant challenge.
3. **Limited access to treatment:** Accessing treatment programs, especially in rural areas or low-income communities, can be difficult.
4. **Insufficient funding:** Many programs face budget constraints, limiting their ability to provide adequate and sustained services and support.
5. **Co-morbidities:** Target individuals often have co-occurring mental health issues, which can complicate treatment and require more comprehensive care.
6. **Staffing:** Public health programs may struggle to find and retain qualified staff, including counselors and healthcare professionals.
7. **Inadequate insurance coverage:** Individuals may not have financial resources to cover the out-of-pocket cost of treatment.

8. **Relapse and recidivism:** Successful outcomes may not come with a single intervention, and often require multiple encounters to sustain the gains.
9. **Cultural competence:** Providing culturally sensitive and relevant services can be challenging, as the needs and beliefs of different populations vary.
10. **Legal and ethical considerations:** Navigating legal and ethical issues, such as patient confidentiality and consent, is essential but can be complex.

SUCCESSFUL APPROACHES: SCREENING AND BRIEF INTERVENTION

Reducing harmful drinking requires a multifaceted approach that combines prevention, treatment, and support strategies. Public education campaigns can raise awareness and foster supportive, non-judgmental communities. Regulatory measures can limit alcohol access through minimum legal drinking ages, alcohol taxation and pricing controls, and responsible beverage service. Ongoing research and data collection to evaluate the effectiveness of strategies can inform policy decisions.

Irrespective of what overarching strategies are employed, a crucial component is the use of screening and brief intervention (SBI) for early identification of those at risk and timely action to prevent escalation of the problem. Its effectiveness has been proven by extensive scientific studies showing a significant percentage decrease (12% on average) in people who have reduced their alcohol consumption as a result of the brief intervention.

Screening

Screening refers to the process of systematically identifying individuals who may be at risk for or engaged in risky or harmful alcohol consumption patterns. These tools typically assess an individual's alcohol consumption, frequency of drinking, binge drinking, and related consequences.

The goal of screening is to identify those individuals who may benefit from further assessment, intervention, or treatment for alcohol-related problems. Utilizing a brief and standardized questionnaire or assessment tool, it serves several purposes:

1. **Early Identification:** Screening helps in the early identification of individuals who may not recognize or acknowledge their risky or harmful drinking behavior.
2. **Risk Assessment:** It assesses an individual's alcohol consumption patterns and risk factors to determine the likelihood of alcohol-related problems.

3. **Tailored Interventions:** Based on the screening results, healthcare providers can offer tailored interventions such as brief advice or brief interventions to those at risk.
4. **Referrals:** If necessary, screening can lead to referrals to more comprehensive assessments and treatment programs for individuals who show signs of alcohol dependence or severe alcohol-related problems.
5. **Monitoring Progress:** Screening may be repeated periodically to monitor an individual's progress and assess the effectiveness of interventions.

Brief Intervention

When screening indicates heightened risk, a brief intervention is warranted. This is a short, structured conversation or counseling session conducted by a healthcare professional to help individuals assess and modify their alcohol consumption. It is typically used as an early intervention strategy to prevent the escalation of alcohol-related problems. As one would expect, brief interventions are relatively brief, typically less than 30 minutes, and are designed to achieve the following goals:

1. **Raise Awareness:** The intervention aims to help individuals recognize and acknowledge their drinking habits and the potential risks associated with their alcohol use.
2. **Provide Feedback:** Healthcare professionals may provide feedback on the individual's alcohol consumption, comparing it to recommended guidelines and norms. This feedback can be an eye-opener for some individuals.
3. **Set Goals:** The healthcare provider and the individual work together to establish achievable goals related to reducing or moderating alcohol consumption.
4. **Offer Strategies:** Strategies and coping mechanisms may be discussed to help the individual make healthier choices and reduce the negative consequences of drinking.
5. **Offer Support:** The healthcare provider can connect individuals to additional resources, treatment programs, or support groups if necessary.

Brief interventions are typically used for individuals who are not yet dependent on alcohol but are engaging in risky or harmful drinking patterns. The goal is to prevent the progression from risky drinking to alcohol use disorder and its associated complications.

Brief interventions have been found to be effective in reducing alcohol consumption and associated problems in some cases. They are a valuable tool in the continuum of care for addressing alcohol-related issues and can be a first step toward promoting healthier drinking behaviors and minimizing the harm caused by alcohol abuse.

TRANSITION TO DIGITAL SBI (e-SBI)

Typically, screening for harmful drinking is conducted by a healthcare professional, social worker, or other qualified individual in healthcare settings, including primary care offices, emergency rooms, and behavioral health facilities. When warranted, a brief intervention would occur in a similar, physical location. However, despite its effectiveness, such an approach of offering SBI at physical locations can be hampered by the challenges previously mentioned. Limited resources and availability, combined with inconsistent delivery and data collection adversely impact cost, access, and outcomes.

The best way to mitigate these challenges is to transition to a digital platform. By utilizing a web-based, mobile compatible tool (e-SBI), programs can:

- Reduce barriers and effort to engage by using a platform that is already widely available. With mobile devices, help is literally already in their hand.
- Provide a personalized and private interaction in time, place, and language of choice, improving access and reducing stigma.
- Reach a broader population wherever they are, rather than being tied to physical locations.
- Scale more quickly at a lower cost.
- Better leverage providers across a broader geography through telemedicine.
- Streamline referrals.
- Automate data collection.

MAXIMIZING e-SBI ACCESS, IMPACT, AND SUSTAINABILITY THROUGH ALIGNED INTERESTS

Efforts to reduce harmful drinking through e-SBI can be most successful when stakeholder interests are aligned and support collaboration within regions with suitable characteristics. Stakeholder engagement is essential for the development, implementation, and sustainability of e-SBI. Building partnerships, sharing resources, and aligning strategies can lead to more comprehensive and successful efforts to address this and other public health issues.

Stakeholder Roles and Value Proposition

Specific roles and benefits of supporting e-SBI and digital transformation more broadly include:

Government Agencies and Policymakers	Government bodies at local, state, and national levels are responsible for developing and implementing policies and regulations related to alcohol access, taxation, screening, and treatment funding, as well as data privacy and governance. Public health officials have the data and authority to incorporate e-SBI into their efforts. They could enable agencies to reach more at-risk individuals and gain greater insight into the effectiveness of programs, thereby improving population health and reducing the overall cost and burden of harmful drinking. In addition, governments invest in and oversee the digital infrastructure to support health care and social services. These underlying platforms can be leveraged to advance other priorities in areas like education, energy and the environment, economic opportunity, public safety, and civic engagement.
Healthcare Providers	Healthcare professionals, social workers, and other frontline workers and facilities can maximize the impact of e-SBI by incorporating screening during routine interactions and episodes of concern, as well as participating within referral networks. The infrastructure, policies, and processes implemented for e-SBI can be leveraged for other digital programs. Digital solutions can help healthcare providers reduce disparities in care and improve patient access, outcomes, satisfaction, and safety while enhancing operational efficiency, personnel utilization, and provider satisfaction.
Insurance Providers	Health insurance companies can improve individual outcomes, operational efficiency, and customer experience through technology-enabled solutions. Data-sharing and advanced analytics can identify those at risk of harmful drinking, related gaps in care, and disparities across populations. Insurers can make coverage for e-SBI and alcohol abuse treatment available and accessible to those in need, reducing concerns of those who might seek help. They may ultimately lower their costs by averting longer-term medical sequelae of harmful drinking.
Professional Societies	Medical, mental health, and public health professional societies can utilize their platforms to educate and train members on e-SBI, while better leveraging allied professionals and providing guidance to local programs. Digital applications can keep members abreast of the most up-to-date information, clinical trends, and emerging challenges.
Health Technology Companies	As with any digital platform, adoption of e-SBI can be accelerated through integration with electronic health records and other patient data systems to streamline workflow and support analytics. This can also provide a more comprehensive and impactful user experience.

NGOs, Community Organizations, and Advocacy Groups	Local nonprofit organizations, community groups, and religious organizations can raise awareness of harmful drinking, support targeted outreach to at-risk individuals, address issues of cultural competency and equity, and promote necessary policy changes. Concurrently, they can make better use of their limited resources to achieve their goals.
Educational Institutions	Schools and universities can implement e-SBI as part of their alcohol prevention and education programs, targeting students and young adults more effectively. Academic settings offer broad access to early intervention and can help prevent the escalation of harmful drinking-related problems, improving academic outcomes for their students overall. Their unique role in young people's lives also positions them to help alter cultural norms around alcohol consumption.
Law Enforcement	Police and law enforcement agencies, beyond enforcing alcohol-related laws and regulations, are often the first to respond to the impacts of harmful drinking. By supporting e-SBI and reducing such events, they may be able to better deploy the limited resources that are available. Moreover, they may be better able to manage such incidents from a behavioral health perspective, rather than traditional law enforcement methods.
Businesses	Companies can promote e-SBI (through education and benefits) and support their employees through effective workplace wellness programs to address harmful alcohol consumption. Similarly, businesses have a wide reach of their customer base that can leveraged to promote e-SBI. This is especially true among those in the hospitality industry and beverage retailers at point-of-sale, as well as those that cater to target populations and their families. Imagine if an at-risk individual or someone concerned about one could easily and discreetly access e-SBI through a QR code on a store display or brochure. Strategies such as this could help businesses underscore their commitment to responsible alcohol consumption and reduction of harmful drinking.
Alcohol Beverage Industry	The alcohol industry already runs responsible drinking campaigns and supports efforts to reduce underage drinking and alcohol abuse. Continuing to measure results from those efforts, highlight public health concerns, and advocating for e-SBI are essential.
Individuals and Families	Individuals who may be struggling with harmful drinking and their families and friends are crucial stakeholders. Their engagement and willingness to seek or suggest help are key factors in successful outcomes. Leveraging a mobile device that they already have makes it quick and easy to get help.

TARGET GEOGRAPHIES

This collaboration can lead to the best outcomes when thoughtfully targeted to regions where the need is great and e-SBI can be deployed most effectively. Addressing the need first, harmful drinking must be a recognized problem, occurring with a high enough incidence and prevalence to create the social and economic incentives to make reduction a priority. Second, the region needs to have sufficient resources and underlying health infrastructure to support those requiring intervention. In addition, the technical infrastructure, including cell phones and Internet access, must be in place for digital solutions. Finally, there must be enough willing partners to create the collaboration described above. This includes having committed members of the alcohol beverage industry.

NEXT STEPS AND CALL TO ACTION

To effectively scale up e-SBI, organizations from different sectors operating within the same community must come together to support the initiative. This requires the cultivation and adoption of a shared vision, collaboration, and effective coordination, to plan and execute well-integrated public health programs that have the population reach to be impactful. This cross-organizational and cross-sector collaboration should also espouse strong accountability mechanisms to ensure that various stakeholders involved play an active role in supporting the objectives outlined in the shared vision. Finally, everyone will need to work towards the creation of a stronger, more integrated health and social care system that meets individuals where they are and improves equitable opportunities for the highest level of health and well-being.