

A web-based alcohol risk communication tool

Summary of the development process

December 2018

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ISBN: 978-0-478-44963-1

Citation: Kool, B., Dobson, R., Sharpe, S., Whittaker, R., Humphrey, G. and Ameratunga, S. (2018). *A web-based alcohol risk communication tool: Summary of the development process*. Wellington: Health Promotion Agency

Acknowledgements

HPA would like to thank those respondents who took the time to participate in this research.

The researchers would like to acknowledge the input of members of the Study Reference Group and the participants who took part in the study.

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SUMMARY REPORT: Web-based alcohol risk communication tool

BACKGROUND

Excessive alcohol use is a major public health concern associated with an increased risk of morbidity and mortality. Approximately one in five New Zealanders over the age of 15 years drink in a way that is hazardous to their health.¹ Alcohol-related harm has an enormous impact on the lives and health of New Zealanders.² Health professionals in primary care commonly see patients with a range of alcohol-related risks and problems providing ideal opportunity for screening and brief intervention.^{3,4}

Although the efficacy of brief alcohol interventions is well established⁵ and assessing alcohol consumption, drinking behaviours, and alcohol-related problems is relatively easy using validated clinical alcohol risk assessment tools (e.g. Alcohol Use Disorders Identification Tool (AUDIT)⁶), health professionals can find it difficult to explain to patients the concept of risk for alcohol-related harm, and how small changes can have positive benefits.⁷ This report provides a summary of a project which developed and pre-tested a web-based alcohol risk communication tool designed for alcohol screening and brief intervention by health professionals in primary care. The project was funded by a Health Promotion Agency contestable fund.

THE PROJECT

The aim of this project was to develop a prototype for a web-based alcohol risk communication tool for use by health professionals in primary care to screen for, and communicate, the risk of alcohol harm and the benefit of lifestyle changes to their patients. The project consisted of three phases. This report summarises the work undertaken in all three phases and our recommendations for progressing research and practice in this field.

Phase one: Conceptualisation

An Alcohol Risk Communication Tool Development Team (Study Reference Group) was established to oversee and guide the development process. The team comprised of experts in alcohol and injury epidemiology, biostatistics, public health, Māori Health, Pacific Health, health technology and web development, health literacy, primary care, drug and alcohol counselling, and a health consumer representative. The group provided guidance on all stages of the development and testing of the prototype.

As part of the conceptualization work, background reviews of evidence and resources were undertaken. This included a synthesis of the underpinning principles and theoretical basis for alcohol risk communication, and a review of the literature to identify evidence of the effectiveness of existing risk communication tools. The review of the relevant literature confirmed the effectiveness of alcohol screening and brief interventions, with most alcohol brief interventions underpinned to some degree by the 'stages of change' theory⁸ and motivational interviewing.⁹ Among the studies reviewed, there is moderate evidence of the effectiveness of web-based tools to help people reduce alcohol consumption. The advantages of web-based tools are that they can be provided at a relatively low cost and have the ability to reach a potentially large audience making them highly desirable within a public health setting.

Phase two: Formative research and prototype development

This phase of the project focussed on exploring the ideas and experiences of health professionals, consumers and experts with communicating alcohol risk; pre-testing the initial prototype concepts, including presenting visual/graphic displays of the tool and seeking feedback; and finalizing the development of the tool prototype.

A total of 11 key informants and seven consumers participated in either focus groups or individual interviews. Key informants were recruited by members of the Study Advisory Group and consumers through Waitemata District Health Board Community Engagement Team. There were two focus groups completed: one with five health professionals (primary care-based General Practitioners [GPs] and nurses), and a second with seven consumers (predominantly NZ European and of middle age). A total of six individual interviews were completed with key informants including a clinician from Community Alcohol and Drug Services, an academic in addiction research, a primary care nurse, a health literacy expert, a consumer representative, and a GP.

Overall, all key informants and consumers were very positive about the prototype - they liked it, felt it was clear and simple, and believed that it would be useful in practice. All participants felt that the tool would be highly acceptable to clinicians and patients. Key informants identified the key point of difference with the tool was that it provided 'all the pieces' in one place (i.e. the tool included the assessment, its interpretation, and resources, whereas other currently available tools only included one or some of these attributes). Participants provided feedback on how the tool could be improved, and these suggestions were incorporated into the prototype where possible.

Phase three: Pre-testing and refinement of prototype

Following development of the tool in phase two, the tool underwent pre-testing to gain feedback on the performance of the tool in real-world settings, its relevance, ease of use, and any suggested refinements. A total of seven people completed the pre-testing, of which five were GPs and the remaining two were nurses. The majority of participants (n= 6/7) came from primary care settings.

Current screening behaviour

Before pre-testing the tool participants completed a brief survey about current screening behaviour. More than half (n=4/7) of the participants reported that they 'always' screen their patients for alcohol use, with the remainder reporting only screening 'sometimes'. When asked about barriers to screening for alcohol use, the most common theme was time constraints (n=5) and the nature of the topic (e.g., it being difficult to discuss or potentially offensive, privacy, or patients not being honest) (n=5). Other common themes included a lack of access to appropriate skills, resources or referral options if an issue was identified (n=4), or it not being a priority for them in the consultation (n=3). Only one participant reported a lack of training being a barrier to screening. These findings are consistent with previous literature on the barriers to alcohol screening and brief interventions.⁷

Usability and acceptability of the tool

All seven participants reported that the tool provided a useful framework for intervention and they would be likely to use it in their practice if the tool became freely available. There were no reports of technical glitches while pretesting the tool. When asked how acceptable they thought the tool was/would be for their patients, the majority (n=5/7) reported it would be very acceptable, two participants were

"To have a visual tool to use with a patient can be more engaging than just hearing advice"
(Participant 06)

ambivalent while none felt it was unacceptable. Participants rated on average the tool's ease of use as 8.4¹ on a scale from 1=extremely difficult to 10=extremely easy.

When asked whether they felt the tool had the potential to increase their confidence in assessing alcohol risks and providing advice to patients, most (n=5/7) agreed while the remainder stated it was not applicable as they already had high confidence. Reasons provided for increased confidence included it being a simple and straightforward tool (n=2), feeling that it increased the credibility of the clinician (n=1), that it reinforces harm minimization (n=1), and that the use of a visual tool was more engaging for patients (n=1).

"I think it will increase the credibility of the clinician. Patients believe this sort of tool - they see the tool telling them something not the person (who might be biased)." (Participant 02)

Participants were also asked about whether there were any potential barriers to using the tool in general practice. The responses included: non-integration with the patient management system/dashboard (n=3), patient literacy skills or English language ability (n=2), time constraints (n=2), and that they were already using something else for this purpose (n=1).

Suggestions for improvement of the tool

Participants provided suggestions for how the tool could be improved. These included changing or removing the pop-up instructions on one of the pages of the tool which they felt were annoying and unnecessary (n=5), changes to the terminology used on a page, adding a tab to provide the health professional with more information about what classifies a patient as low or high risk and associated interventions, and the capability for the data from the tool to be both written into clinical notes and printed in summary form for the patient to take away. The tool was further refined based on this feedback.

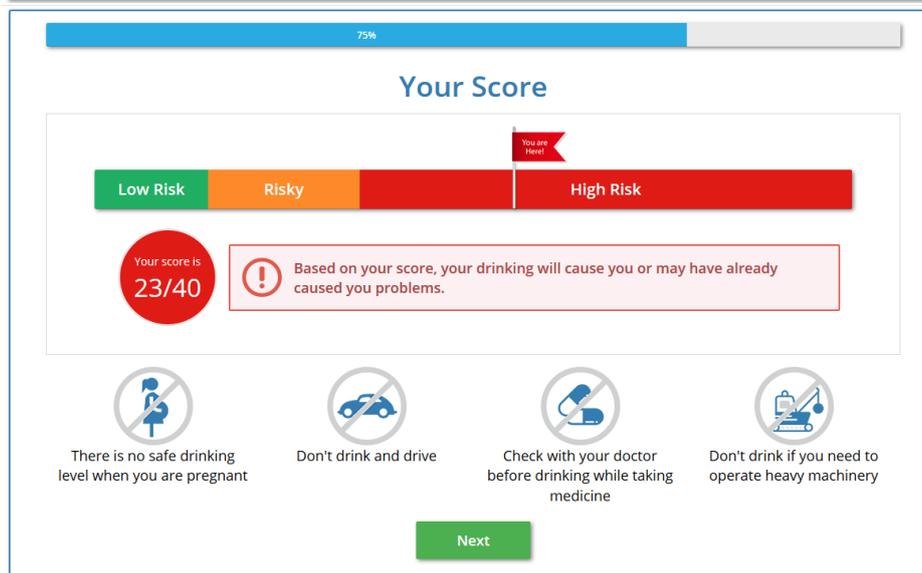
THE PROTOTYPE

The final prototype for the web-based alcohol risk communication tool was developed for use by health professionals in primary care to assess alcohol harm risk, and communicate this risk and the benefit of lifestyle changes to their patients. The prototype consists of:

1. Welcome and demographic questions.
2. Individual alcohol risk screening using the AUDIT.⁶ The AUDIT is a validated tool for screening for excessive drinking and to assist in brief assessment. Note, the 10 questions from the full AUDIT are presented in the tool but if after completing the first 3 questions (which comprise the AUDIT-C¹⁰) and the score indicates low risk they do not complete the remaining questions of the full tool.
3. The individual's risk score presented using a risk continuum incorporating traffic light colours to indicate level of risk, and interpretation of this in relation to risk. Contexts where risk and harm differ are also highlighted including pregnancy, driving, operating machinery, and when taking medication.
4. How an individual can change their risk through modifying their drinking behaviours including how often they drink, how much they drink, and how often they drink a lot.
5. Assessment of concern for the drinking of others, including concerning signs to look out for.
6. Details of available resources and support.
7. A brief summary including the individuals score, how their risk can be reduced by changing their behaviour, options for recording personalised actions discussed during the assessment, and the details for available resources and support.

¹ This had a standard deviation of 1.1.

Example screens from the prototype are presented below including: (1) The welcome screen; (2) Question 2 of the AUDIT; and (3) Presentation of risk assessment score.



NEXT STEPS

The research team will investigate opportunities for further funding to make this tool more widely available in general practice and have it integrated into patient management systems. They will also look to assess its effectiveness and its potential in other settings, such as self-administered through patient portals or via the internet.

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