

*Nova Scotia Department of Health Promotion & Protection*

**Environmental Scan Exploring Systemic  
Barriers for Screening and Brief Intervention  
Initiatives for Universal & Targeted  
Prevention by Health Care Professionals**

Literature Review

June 4, 2008

Prepared by: Research Power Incorporated



Finding the solution is simple when you know how



# Table of Contents

**Literature Review**..... 2

**Introduction** ..... 2

- ❖ *Screening & Brief Intervention in Primary Care* ..... 2

**Barriers to Screening & Brief Interventions by Primary Care Providers ... 3**

- ❖ *Inadequate Training & Lack of Knowledge, Skills & Confidence* ..... 3
- ❖ *Lack of Time*..... 5
- ❖ *Negative Patient Reactions & Reception to Questions* ..... 6
- ❖ *Lack of Detection & Use of Tools*..... 7
- ❖ *Discomfort with Substance Use & Problem Gambling* ..... 9
- ❖ *Lack of Financial Incentives*..... 9

**References**..... 10

# Literature Review

## Introduction

Substance abuse and problem gambling are linked to numerous physical, social and emotional health issues such as chronic diseases and mental health illnesses (e.g., cancer, cardiovascular disease, anxiety, depression, etc.), injury, violence, financial problems, family/relationship issues, etc. [1-3]. Screening and brief interventions are increasingly being recognized as proven and effective secondary prevention strategies for substance use (e.g., alcohol, smoking, illicit drugs, etc.) and problem gambling in primary health care settings [4-7]. Fleming (2004/2005) [8] describes screening and brief interventions (in the context of alcohol use) as “*screening [and] an interview process by which practitioners can identify at-risk drinkers...followed by [a] one time or repeat short counseling sessions...designed to help the patient reduce their drinking and minimize related problems*” (p.57) [8].

### ❖ **Screening & Brief Intervention in Primary Care**

Given that primary care professionals (e.g., family physicians, nurse practitioners, family practice nurses, etc.) are the preferred providers by patients for discussing substance issues [9] as well as the effectiveness and cost benefits [5] of screening and brief interventions, it has been suggested that they be included as a key role of primary care providers [9, 10]. As described by the Ministry of Health (New Zealand) [11] “*there is the opportunity in primary care settings to provide an integrated package of service provision and to intervene at an early stage in the harm continuum, with screening and assessment... This will require workforce development in primary care settings on screening and brief and early intervention*” (p.20).

It has been suggested that screening and brief interventions are effective in theory but less so in practice [12]. The effectiveness of screening brief interventions have been well documented in the literature, however some have criticized that this has been done in ideal research conditions and does not account for the barriers faced in ‘real world’ practice [12]. These systemic barriers have challenged the use of brief intervention in primary health care settings and have prevented the effective engagement of primary care providers working in ‘real world’ settings. The literature suggests that these barriers are both practical and attitudinal from the providers, the patients and the primary care health system itself [12, 13]. The systemic barriers for screening and brief intervention by health care providers are the focus of this literature review.

## **Barriers to Screening & Brief Interventions by Primary Care Providers**

The following section presents the literature review related to engagement and screening and barriers to brief intervention by primary care providers including: inadequate training and lack of knowledge, skills, and confidence; lack of time; negative patient reactions and reception to questions; discomfort with substance use and problem gambling; lack of detection and use of tools; and, lack of financial incentives.

### **❖ *Inadequate Training & Lack of Knowledge, Skills & Confidence***

Studies have identified inadequate training as well as a lack of knowledge, skills and confidence around screening, brief intervention and discussions surrounding substance use and problem gambling as the most common barriers preventing primary care providers from carrying out competent brief interventions [10, 14-19]. For example, Sullivan, Arroll, Coster, Abbott and Adams (2000) [10] found that more than half of physicians surveyed indicated that they had low confidence in their ability to raise and address issues such as

gambling problems with their patients. Aalto, Pekuri and Seppa (2001) [14] revealed that only 18% of surveyed primary care nurses and physicians felt they had enough knowledge to provide competent brief interventions. Further, only 12% had participated in any brief intervention training. Physician confidence in screening and intervening tends to be especially low for patients dealing with illicit drug related problems compared with patients with smoking related issues [12].

### *Recommended Resources & Strategies to Address Lack of Training, Knowledge, Skills & Confidence*

Research suggests that primary care providers feel there is a need for increased formal training (e.g., university medical education and training) and continuing medical education related to substance use and gambling problems to facilitate the engagement and use of brief intervention among primary care providers [14, 18]. With the increased recognition regarding the potential for screening and brief interventions in primary care settings, several training resources have been developed to support primary care providers such as:

- *Training Physicians in Techniques for Alcohol Screening & Brief Intervention.* Author: The National Institute on Alcohol Abuse and Alcoholism's (NIAAA)
- *Brief Intervention For Hazardous and Harmful Drinking: A Manual for Use in Primary Care.* Author: Babor, T.F. & Higgins-Biddle, J.C. (World Health Organization)
- *Drink-Less Program* (package of materials to assist primary care workers screen for alcohol related problems and offer appropriate advice to patients) Author: University of Sydney & the World Health Organization
- *Alcohol Screening and Brief Intervention: A Training Program of Veteran Service Providers.* Australian Government- Department of Veterans' Affairs.

Studies suggests that some of the most effective physician training strategies for screening and brief intervention include: skills-based role playing (e.g., interviewing techniques, rehearsals, etc.); performance feedback (e.g., feedback regarding practice performance, patient outcomes, etc.); clinical protocols and guidelines (e.g., guidelines in *Brief Intervention For Hazardous and Harmful Drinking: A Manual for Use in Primary Care*); clinic based education; and training by credible experts [8, 14].

Although training is a recognized facilitator in the use of screening and brief intervention, Roache and Freeman (2004) [12] caution that a number obstacles exists in the use of training and learning opportunities for primary care providers. Barriers which prevent the participation in learning opportunities include a lack of time, faculty expertise, funding support, training sites, institutional support, and competing educational needs and priorities among physicians and nurses [12].

### ❖ ***Lack of Time***

A lack of time has been identified as another key barrier preventing the implementation of brief interventions by primary care providers [13, 16, 17, 19]. This is due, in part, to patients presenting at primary care settings (e.g., family doctor offices, walk-in clinics, emergency departments, etc.) with acute issues requiring time and immediate attention [16, 17, 19]. In a study by Brady et al. (2002) [20], physicians reported that patients were often annoyed when issues such as their alcohol consumption were raised as they were most interested in having their immediate presenting problems addressed. Its been suggested that a lack of time is also commonly cited as a barrier by primary care providers due to misconceptions surrounding the length of time and effort required to conduct screening and a brief intervention [14, 16].

### *Recommendations for Addressing Lack of Time*

Overcoming this barrier may include providing supports to physicians through the use of nurse practitioners in screening and brief interventions. Physicians

who receive training and are supported by a nurse are significantly more likely to provide screening and brief interventions than those who receive information or guidelines on brief interventions alone [21]. Nurse practitioners have been found to be capable of providing effective screening and brief interventions which help to decrease the time burden on physicians [7]. It has been suggested that the use of nurses rather than physicians may also be beneficial to patients who often feel more comfortable discussing issues such as substance use and problem gambling with a nurse with whom they could relate to rather than with their family physician who is often viewed more as an 'authoritarian' [17]. Further, patient visits with family practice nurses or nurse practitioners are typically longer than those with physicians, therefore allowing additional time to be spent screening and engaging in brief interventions [17]. A literature review by Roche and Freeman (2004) [12] suggests that nurse screening and brief interventions also cost 10% to 42% less than physician interventions and are of the same quality of service.

It has been recommended that technology be used to overcome the obstacle of a lack of time. Moyer and Finney (2004) [22] provide examples of various computer programs designed to help physicians screen patients for substance use and gambling problems. These types of programs often take the form of electronic surveys which may be completed by patients prior to their appointment online at home (thereby saving time for the physician during the screening stage). Results are then made accessible to primary care providers who may plan for a brief intervention should this be needed.

### ❖ ***Negative Patient Reactions & Reception to Questions***

Another barrier is uncertainty among providers regarding the reception of patients to discussions regarding substance use and gambling problems. Given that patients often present in primary care settings for more acute issues, providers often are concerned that asking questions around substance use and gambling would be inappropriate, intrusive and potentially insulting to patients [16, 17]. McCormick et al. (2006) [23] found that patients often disclose information regarding their drinking (both in response to questions and without

prompting), however primary care providers often do not explore these disclosures (e.g., abruptly change the subject, downplay the significance of their patients' drinking, etc.). A review of the literature by Roche & Freeman (2004) [12] revealed that attitudinal barriers by family physicians prevent them from engaging in screening and brief intervention. These barriers include perceptions that patients with substance use problems are difficult, aggressive, demanding, manipulative, deceitful, unmotivated and unwilling to change.

### *Recommendations to Addressing Perceptions around Patient Reactions & Reception to Questions*

Contrary to the belief that providers will encounter resistance or negative reactions by patients, Sullivan, McCormick, Lamont, and Penfold (2006) [19] found that physicians who used brief intervention for problem gambling found their patients to be receptive to questions pertaining to their gambling. Primary care providers have suggested that their comfort around screening and asking questions related to substance use and problem gambling is increased and seen as more appropriate when its part of patient's generally lifestyle screening (e.g., yearly check up, hypertension screening, diabetes clinics, etc.) where the substance and use of the substance are not the focus of the appointment [17]. Further, providers' comfort in asking questions related to substance use is heightened when the patient exhibits negative health symptoms related to substance use as providers perceive that their questions in this case are 'justified' [13].

### **❖ Lack of Detection & Use of Tools**

Failure to detect substance use and gambling problems has been identified as an implementation barrier of brief interventions (Roche & Freeman, 2004). For example, through a focus group with family physicians, Sullivan, McCormick, Lamont and Penfold (2006) revealed that physicians were unaware and surprised by the prevalence of issues such as gambling among their patient populations. This lack of detection was due, in part, to the lack of overt physical symptoms presented by patients with gambling problems. In the case

of other substances such as alcohol, there is confusion and lack of awareness among many physicians as to what constitutes misuse such that intervention is needed [26].

### *Recommended Tools for Detection*

Several short, easy to use tools have been developed to overcome this barrier and help primary care providers detect and screen for problematic substance use and gambling [12]. Commonly used tools which have found to be accurate and effective for assessing the use and/or degree of dependence on various substances [12] are presented in the following table:

*Table 1: Tools to Assess, Screen & Detect Substance Use Problems*

<b>Target Substance</b>	<b>Tool</b>	<b>Description</b>
<i>Alcohol</i>	Alcohol Use Disorders Identification Test ( <i>AUDIT</i> )	Accurately predicts patient's future related harm from alcohol (e.g., illness, hospitalization, social issues, etc.)
	Fast Alcohol Screening Test ( <i>FAST</i> )	Abbreviated version of the AUDIT tool, with a high degree of sensitivity to detect alcohol problems
<i>Smoking</i>	Heaviness of Smoking Index ( <i>HSI</i> )	Measurement of nicotine dependence
<i>Multiple Drugs</i>	Alcohol, Smoking and Substance Involvement Screening Test ( <i>ASSIST</i> )	Comprehensive measure of drug use for a variety of drugs such as alcohol, tobacco, prescription drugs and illicit drugs
<i>Problem Gambling</i>	Center for Addiction and Mental Health Short Gambling Screen	Short questioning to alert possible gambling concerns

Despite efforts to create tools that are not only sensitive and effective at screening and detecting substance use problems but also short and easy to use to facilitate their use by busy primary care practitioners, barriers to their use exist. Roche and Freemam (2004) [12] indicate that these tools make use of

‘pen and paper’ screening which is not part of standard clinical protocols or general practitioner culture (i.e., diagnosis via empirical observation and verbal questioning around symptoms).

### ❖ ***Discomfort with Substance Use & Problem Gambling***

An obstacle preventing primary care providers from engaging in screening and brief interventions is misconceptions and discomfort around discussing substance use and problem gambling with patients (16, 23, 24). Many physicians find it challenging to raise issues related to gambling, drug and alcohol usage with their patients [25]. Research has found that this discomfort is due, in part, to physicians fearing interfering or spoiling their relationships with patients as well as concerns around losing patients (16, 17, 23-25). It has also been suggested that this discomfort is linked to a lack of skills needed to engage in preventative health care, which represents a new way of working from many primary care providers [23].

### ❖ ***Lack of Financial Incentives***

Some studies have also identified financial barriers (e.g., MSI code for brief interventions), however little is known about potential barriers specific to the Canadian health care system context. Researchers have suggested that financial re-imburement may encourage providers to include brief intervention into their clinical practice [15, 27, 28].

## References

- 1) Canadian Addictions Survey (CAS) (November 2004). A National Survey of Canadians' Use of Alcohol and Other Drugs- Highlights and Related Harms.
- 2) Office of Health Promotion Addictions Services (June 2004). 2003 Nova Scotia Gambling Prevalence Study. Nova Scotia Health Promotion & Protection
- 3) Addictions Services Alcohol Task Group (2007). Changing the Culture of Alcohol Use in Nova Scotia: An Alcohol Strategy to Prevent and Reduce the Burden of Alcohol Related Harm in Nova Scotia.
- 4) Humeniuk, R. (2008). The Effectiveness of a Brief Intervention for Illicit Drugs Linked to the Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) in Primary Health Care Settings. World Health Organization.
- 5) Fleming, M.F. (2002). Brief Physician Advice for Problem Drinkers: Long-Term Efficacy and Benefit Cost Analysis. *Alcoholism: Clinical and Experimental Research*, 26(1); 36-43.
- 6) Fleming, M.F. (1999). Brief Intervention in Primary Care Settings: A primary Treatment Method for At-Risk, Problem, and Dependent Drinkers. *Alcohol Research and Health*, 23; 128-137.
- 7) Ockene, J.K., Adams, A., Hurley, T.G., Wheeler, E.V., Hebert, J.R. (1999). Brief physician- and nurse practitioner- delivered counselling for high risk drinkers: does it work? *Archives of Internal Medicine*, 159; 2198-2205.
- 8) Fleming, M.F. (2004/2005). Screening and Brief Intervention in Primary Care Settings. *Alcohol Research and Health*, 28(2); 57-62.
- 9) Lock, C.A. (2004). Alcohol and Brief Intervention in Primary Health Care: What do Patients Think? *Primary Health Care Research & Development*, 5; 162-178.

- 10) Sullivan, S., Arroll, B., Coster, G., Abbott, M., & Adams, P. (2000). Problem Gamblers: Do GPs Want to Intervene? *The New Zealand Medical Journal*, 113(1111): 204-207
- 11) Ministry of Health (2005). Preventing and Minimising Gambling Harm: Strategic Plan 2004-2010. Wellington: Ministry of Health.
- 12) Roche, A.M. & Freeman, T. (2004). Brief Interventions: Good in Theory but Weak in Practice. *Drug and Alcohol Review*, 23(1); 11-18.
- 13) Hansen, L.J., Olivarius, N.F., Beich, A., Barfod, S. (1999). Encouraging GPs to Undertake Screening and a Brief Intervention in Order to Reduce Problem Drinking: A Randomized Controlled Trial. *Family Practice*, 16(6); 551-557.
- 14) Aalto, M., Pekuri, P. & Seppa, K. (2003). Obstacles to Carrying Out Brief Intervention for Heavy Drinkers in Primary Health Care: A Focus Group Study. *Drug and Alcohol Review*, 22; 169-173.
- 15) Babor, T.F. & Higgins-Biddle, J.C. (2000). Alcohol Screening and Brief Intervention: Dissemination strategies for medical practice and public health. *Addiction*, 95(5); 677-686.
- 16) Babor, T.F., & Higgins-Biddle, J.C. (2001). Brief Intervention For Hazardous and Harmful Drinking: A Manual for Use in Primary Care. *World Health Organization Department of Mental Health and Substance*.
- 17) Heather, N., Hutchings, D., Dallolio, E., Kaner, E. & McAvoy, B. (2006). Implementing Screening and Brief Interventions in Primary Health Care in England. *The Alcohol Education and Research Council*.
- 18) Rowan, M.S. & Glasgow, C.S. (2000). Identifying Office Resource Needs of Canadian Physicians to Help Prevent, Assess and Treat Patients with Substance Use and Pathological Gambling Disorders. *Journal of Addictive Diseases*, 19(2); 43-58.
- 19) Sullivan, S.G., McCormick, R.N., Lamont, M.K., & Penfold, A.A. (2006). Problem gamblers and their families can be held by their GP. *New Zealand Family Practice*, 33(3); 188-191
- 20) Brady, M., Sibthorpe, B., Bailie, R., Ball, S. & Sumnerdodd, P. (2002). The Feasibility and Acceptability of Introducing Brief Intervention for

- Alcohol Misuse in an Urban Aboriginal Medical Service. *Drug and Alcohol Review*, 21; 375-380.
- 21) Kaner, E.F.S., Lock, C.A., Heather, N. & Gilvarry, E. (1999). A RCT of Three Training and Support Strategies to Encourage Implementation of Screening and Brief Alcohol Intervention by General Practitioners. *British Journal of General Practice*, 49(446); 699-703.
- 22) Moyer, A. & Finney, J.W. (2004). Brief Intervention for Alcohol Problems: Factors that Facilitate Implementation. *Alcohol Research and Health*, 28.
- 23) McCormick, K.A., Cochran, N.E., Back, A.L., Merrill, J.O., Williams, E.C. & Bradley, K.A. (2006). How primary care providers talk to patients about alcohol: A Qualitative Study. *Journal of General Internal Medicine*, 21(9); 996-972.
- 24) Arborelius, E. & Thakker, K.D. (1995). Why is it so difficult for general practitioners to discuss alcohol with patients? *Family Practice*, 12(4); 419-422.
- 25) Weller, D.P., Litt, J.C., Pols, R.G., Ali, R.L., Southgate, D.O. & Harris, R.D. (1992). Drug and Alcohol Related Health Problems in Primary Care- What do GPs Think? *Medical Journal of Australia*, 156(1); 43-48.
- 26) Rush, B. Ellis, K. Crowe, T. & Powell, L. (1994). How General Practitioners View Alcohol Use: Clearing Up the Confusion. *Canadian Family Physician*, 40; 1570-1579.
- 27) Fleming, M. & Manwell, L.B. (1999). Brief Intervention in Primary Care Settings: A Primary Treatment Method for At-Risk, Problem, and Dependent Drinkers. *Alcohol Research & Health*.
- 28) Wutzke, S.E., Gomel, M.K. & Donovan, R.J. (1998). Enhancing the Delivery of Brief Interventions for Hazardous Alcohol Use in the General Practice Setting: A Role for Both General Practitioners and Medical Receptionists. *Health Promotion Journal of Australia*, 8(2); 105-108.