

**Carole A Reeve**

MBChB, MPH, is Public Health Medical Officer, Kimberley Population Health Unit, Queensland. carolereeve@gmail.com

Stephanie De La Rue

PhD, Director of Research & Development, Mount Isa Centre for Rural and Remote Health, James Cook University, Mount Isa, Queensland.

Kristin E McBain

BSocSc(Hons) is a medical anthropologist, Mount Isa Centre for Rural and Remote Health, James Cook University, Mount Isa, Queensland.

Indigenous Lifescripts

A tool for modifying lifestyle risk factors for chronic disease

Background

A national chronic disease strategy has been described focusing on health promotion and lifestyle change, screening and evidence based disease management. The Lifescripts resources complement this strategy by focusing on health promotion and lifestyle change.

Objective

To provide an overview of the role of the recently developed indigenous Lifescripts resources as a tool for health checks and chronic disease prevention and management.

Discussion

Effective indigenous health promotion requires appropriate tools for behavioural modification and community engagement. This involves a greater emphasis on the social determinants of health to reduce the barriers to healthy behaviours. The indigenous Lifescripts provide a flexible tool for health care providers in the indigenous health sector to deliver lifestyle related brief interventions that accommodate local community resources and support structures. However, to maximise their potential, a systematic approach to incorporating these tools into practice must be adopted.

■ **Lifestyle factors such as poor nutrition, physical inactivity, tobacco smoking and alcohol misuse remain the four underlying risk factors associated with the growing burden of chronic disease.¹ In Australia, chronic disease is particularly common among Aboriginal people and Torres Strait Islanders.² For example, Indigenous Australians suffer from a higher prevalence of type 2 diabetes which is frequently characterised by earlier onset and higher complication rates³ than that experienced by other Australians. In addition, Aboriginal people and Torres Strait Islanders have a significantly shorter life expectancy than most other Australians, largely due to complications of chronic disease.⁴**

The National Chronic Disease Strategy⁵ is aimed at engaging all Australian health professionals in the prevention and management of chronic disease by providing a framework for a multidisciplinary approach based on primary, secondary and tertiary prevention. Consistent with this strategy, the Australian Government Department of Health and Ageing supported the development of two evidence based brief intervention tools: the smoking, nutrition, alcohol and physical activity ('SNAP') framework,⁶ and more recently the Lifescripts⁷ resources. The adoption of a brief intervention approach is consistent with current Australian guidelines for disease prevention in primary care.⁸

The Lifescripts initiative

The Lifescripts initiative was launched in 2005 to provide general practice with the resources and skills to advise patients on how to reduce lifestyle risk factors for chronic disease. The Lifescripts brief intervention tool is based on individual assessment using the '5As' framework (*Table 1*).

By 2006 it became evident that Lifescripts needed to be modified for use in indigenous primary health care. The Mount Isa Centre for Rural and Remote Health was contracted to undertake this adaptation

Shaun Solomon

Cert IV Work Placement Assessment and Training, Cert III Aboriginal Health Work, Mount Isa Centre for Rural and Remote Health, James Cook University, Mount Isa, Queensland.

Catrina Felton-Busch

BA, is Indigenous Studies Coordinator, Mount Isa Centre for Rural and Remote Health, James Cook University, Mount Isa, Queensland.

Table 1. The 5As approach adopted in the Lifescripts brief intervention

5As framework	Smoking cessation example
Ask	Check if the patient is currently smoking
Assess	Ask the patient how many cigarettes they smoke per day and if they are ready to stop smoking
Advise	Explain the health consequences of this lifestyle choice to all patients and give encouragement to stop smoking
Assist	Provide the patient with strategies to stop smoking, including referrals to other professional services and/or prescription medications where appropriate
Arrange	Make a follow up appointment to monitor progress

process. The indigenous Lifescripts were created after extensive consultation, particularly with Aboriginal medical services (*Table 2*). These revised resources incorporate the stages of change model⁹ used previously in the Smokescreen brief intervention training program.¹⁰ In the stages of change model, the health professional assesses the patient's readiness to change (*Figure 1*) and then uses motivational interviewing to encourage the patient to move toward the next stage.

The use of motivational interviewing encourages the patient to weigh up the personal benefits and disadvantages of their behaviour, then encourages the patient to set personalised goals which will enable them to make lasting lifestyle changes.¹¹

Health promotion in indigenous health

Although the evidence for the effectiveness of brief interventions as a population wide tool is impressive, traditional health promotion has been least effective among indigenous populations, possibly due to the lack of consideration of social and cultural issues.¹² However, evidence for the effectiveness of brief interventions among Aboriginal people and Torres Strait Islanders^{13–15} is increasing, with recent research identifying several contributing factors:

- Aboriginal and Torres Strait Islander support, participation, collaboration and control are essential for effective health promotion initiatives¹⁶
- having Aboriginal people provide health promotion helps break down barriers so that information is provided in culturally appropriate ways¹⁷
- programs that involve the whole family or community are more effective in indigenous health^{18,19}
- in particular, community engagement, mobilisation and capacity building by focusing on the community's strengths and assets are essential if programs are going to be sustainable and provide long term effects.²⁰

The importance of community engagement in indigenous health promotion is consistent with the principles of the 'Ottawa charter'²¹

to empower the community to control and improve their health. The focus on individual behavioural models of health promotion needs to be balanced with an emphasis on the social determinants of health and barriers to healthy behaviours present in communities. Lifestyle choices are fundamentally influenced by the social and economic environment, which must therefore be considered as part of any indigenous health promotion program.²² For health promotion to be effective it has to be culturally appropriate, community controlled, self determining and based on the goals of indigenous communities.²³

Chronic disease management in indigenous health

Effective chronic disease prevention and management requires a population health approach, which involves establishing a systematic preventive program. This involves implementing the following two initiatives:

- screening, risk assessment and preventive health care
 - as part of a comprehensive program, all patients need to be screened for chronic disease risk factors. This is achieved by offering all patients a health check based on the *National guide to a preventive assessment in Aboriginal and Torres Strait Islander peoples*²⁴
- disease register care plans and recalls
 - all patients identified as having a chronic disease are placed on care plans and entered into a disease register, and managed according to standardised management plans.

However, while there is considerable evidence of the value of a systematic approach to chronic disease management,^{25–27} it is important that this is not achieved at the expense of disease prevention activities. There is some evidence that while clinical improvements in the management of chronic diseases can be achieved through formal management programs, these initiatives can impact on the delivery of interventions aimed at disease prevention²⁸ and may not result in the reduction of lifestyle related chronic disease risk factors.²⁹ Given the difficulties associated with sustaining chronic

Table 2. Overview of the adaptation process used to develop the indigenous Lifescripts

Project phase	Domains of interest
Consultation*	<ul style="list-style-type: none"> Review original (or current draft) of the resources including the language and graphics used Appropriateness of the resources for use with patients with poor English literacy The transferability and adaptability of the new resources to other Aboriginal and Torres Strait Islander groups and practice contexts
Quality assurance†	<ul style="list-style-type: none"> Ensure the revised resources are consistent with Australian Government guidelines General comment on the content and format
Testing‡	<ul style="list-style-type: none"> Usability of the new indigenous Lifescript resources Appropriateness of the content and format of the new resources for use within the indigenous health sector Appropriateness of the content and format of the new resources for use with people with low English literacy Feedback regarding the adaptability of the resources Comments on the training and support required to support the implementation of these resources

* A consultation process was undertaken to determine which changes were necessary to adapt the mainstream resources for use in the indigenous health sector. This involved conducting focus groups with both a broad range of health professionals from Aboriginal medical services and/or mainstream practice (stakeholders) and patients (target audience). Consultation with both of these groups was undertaken in Mount Isa (Queensland), and Broome and Derby (Western Australia)

† At strategic points in the adaptation process the draft resources were reviewed by the project reference group which included representatives of the key state and national stakeholder organisations

‡ Testing was undertaken with a wide range of stakeholder and target audience members. Data was collected through structured interviews or self administered questionnaire. Testing sites were located in Brisbane, Mount Isa and Cairns (Queensland), Perth and Broome (Western Australia), and Darwin (Northern Territory)

disease management initiatives in the long term,³⁰ the promotion of lifestyle changes that reduce chronic disease risk factors presents an opportunity to effect lasting change, particularly if these initiatives are incorporated into existing disease management systems.

Health checks using the indigenous Lifescripts

As part of the health check, lifestyle risk factors are assessed and advice and support given using motivational interviewing and brief interventions. The indigenous Lifescript resources can be used as a tool for this process. Each of the five key lifestyle risks for chronic disease are covered and, after assessing the patient's stage of change using the flip chart, an individualised action plan is negotiated with the patient based on what they would like to achieve. Frequent review and support is an essential part of this process. Where possible, this should be provided by Aboriginal health workers.

Indigenous Lifescripts as part of care plans

There is growing evidence that a systematic approach is effective in improving chronic disease management.^{31,32} Disease registers can be used to actively recall patients on care plans if they do not present for follow up appointments. In addition, observations and tests required for the care plan can be performed opportunistically each time a patient with a chronic disease visits a clinic. At the same time, the indigenous Lifescripts resources can be used by the health care provider to assess whether the patient is ready to make behavioural changes and to use motivational techniques to encourage change.

Figure 1. Example of the use of the stages of change concept in the indigenous Lifescripts resources



Conclusion

The indigenous Lifescripts provide a flexible tool for health professionals involved in indigenous primary health care to encourage behavioural change to reduce the burden of chronic disease. Informal feedback on the resources has been positive; it appears that the key to the effectiveness of these resources is their flexibility in accommodating the context in which they are being used.

The resources have been promoted to Aboriginal and Torres Strait Islander primary health care services and the Divisions of General Practice Network. The release of the indigenous Lifescripts will provide an opportunity for further evaluation of the resources. Support

materials to help health care providers use the indigenous Lifescripts are expected to be available in late 2008. However, it is anticipated that by incorporating these resources into existing chronic disease strategies, health care providers operating within the indigenous health sector will be able to deliver health promotion advice in a way that is appropriate for their communities. In addition, the indigenous Lifescripts provide health care professionals with an opportunity to engage the community in any adaptation of these resources required to suit the local context, thereby improving the relevance of these interventions to their community and increasing their likelihood of success.

Summary of important points

- Indigenous Lifescripts are a flexible resource for health checks and chronic disease management.
- The health care provider assesses the patient's readiness to change and uses motivational interviewing to encourage the patient to move toward the next stage.
- Community engagement, partnership and control are essential to providing an environment for effective health promotion.
- A systematic approach to incorporating these tools into practice must be adopted if their potential is to be maximised.

Conflict of interest: As the result of a tender process, the Mount Isa Centre for Rural and Remote Health was funded by the Department of Health and Ageing to develop the indigenous Lifescripts.

References

1. Begg S, Vos T, Barker B, Stevenson C, Stanley L, Lopez AD. The burden of disease and injury in Australia. AIHW Cat. No. PHE 82. Canberra: Australian Institute of Health and Welfare, 2003.
2. Australian Bureau of Statistics, Australian Institute of Health and Welfare. Health and welfare of Australia's Aboriginal and Torres Strait Islander peoples. Canberra: ABS, AIHW, 2005.
3. Vos T, Barker B, Stanley L, Lopez AD. The burden of disease and injury in Aboriginal and Torres Strait Islander peoples. Brisbane: The University of Queensland School of Population Health, 2003.
4. Pincock S. Australia lags behind in attempts to improve health of indigenous people. *BMJ* 2007;334:765.
5. National Health Priority Action Council. National chronic disease strategy. Canberra: Australian Government Department of Health and Ageing, 2006.
6. The Royal Australian College of General Practitioners. Smoking, nutrition, alcohol and physical activity (SNAP): a population health guide to behavioural risk factors in general practice. Melbourne: RACGP, 2004.
7. Australian Institute of Health and Welfare. Lifestyle prescriptions. Canberra: AIHW, 2005. Available at www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-lifescripts-index.htm [Accessed 11 December 2007].
8. National Health and Medical Research Council. Guidelines for preventive interventions in primary care: cardiovascular disease and cancer. Canberra: NHMRC, 1996.
9. Prochaska JO, Clemente C. Toward a comprehensive model of change. In: Miller WR, Heather N, editors. Treating addictive behaviours: process of change. New York: Plenum Press, 1986.
10. Richmond R. Smokescreen brief intervention program for general practitioners. Sydney: University of New South Wales National Drug and Alcohol Research Centre, 1993.
11. Rollnick S, Heather N, Bell A. Negotiating behaviour change in medical settings: the development of brief motivational interviewing. *J Mental Health* 1992;1:25–37.
12. Mitchell P. Yarrabah: a success story in community empowerment. *Youth Suicide Prevention Bulletin* 2000;4:16–23.
13. Ivers R. Indigenous Australians and tobacco: a literature review. Darwin: Cooperative Research Centre for Aboriginal and Tropical Health, 2001.
14. Harvey D, Tsey K, Cadet-James Y, et al. An evaluation of tobacco brief intervention training in three indigenous health care settings in north Queensland. *Aust N Z J Public Health* 2002;26:426–31.
15. Mark A, McLeod I, Booker J, Ardler C. The Koori tobacco cessation project. *Health Promot J Austr* 2004;15:200–4.
16. Mikhailovich K, Morrison P, Arabena K. Evaluating Australian Indigenous community health promotion initiatives: a selective review. *Rural Remote Health* 2007;7:746.
17. Read CM. Working with an Aboriginal community liaison worker. *Rural Remote Health* 2006;6:381.
18. Thompson S, Gifford S. Trying to keep a balance: the meaning of health and diabetes in an urban Aboriginal community. *Soc Sci Med* 2000;51:1457–72.
19. Thompson S, Gifford S, Thorpe L. The social and cultural context of risk and prevention: food and physical activity in an urban Aboriginal community. *Health Educ Behav* 2000;27:725–43.
20. Parker E, Meiklejohn B, Patterson C, et al. Our games our health: a cultural asset for promoting health in indigenous communities. *Health Promot J Austr* 2006;17:103–8.
21. World Health Organization. Ottawa charter for health promotion. Geneva: WHO, 1985.
22. Baum F, Simpson S. Building healthy and equitable societies: what Australia can contribute to and learn from the Commission on Social Determinants of Health. *Health Promot J Austr* 2006;17:174–9.
23. McLennan V, Khavarpour F. Culturally appropriate health promotion: its meaning and application in Aboriginal communities. *Health Promot J Austr* 2004;15:237–9.
24. National Aboriginal Community Controlled Health Organisation. National guide to preventive assessment in Aboriginal and Torres Strait Islander peoples. Melbourne: The Royal Australia College of General Practitioners, 2005.
25. Bailie R, Si D, Dowden M, et al. Improving organizations systems for diabetes care in Australian Indigenous communities. *BMC Health Serv Res* 2007;7:67.
26. Hoy W, Kondalsamy-Chennakesavan S, Nicol J. Clinical outcomes associated with change in a chronic disease treatment program in an Australian Aboriginal community. *Med J Aust* 2005;183:305–9.
27. Si D, Bailie R, Connors C, et al. Assessing health centre systems for guiding improvement in diabetes care. *BMC Health Serv Res* 2005;5:56.
28. Si D, Bailie R, Dowden M, et al. Delivery of preventive health service to Indigenous adults: response to a systems-oriented primary care quality improvement intervention. *Med J Aust* 2007;187:453–7.
29. McDermott R, McCulloch B, Campbell S, et al. Diabetes in the Torres Strait Islands of Australia: better clinical systems but significance increase in weight and other risk conditions among adults, 1999–2005. *Med J Aust* 2007;186:505–8.
30. Bailie R, Robinson G, Kondalsamy-Chennakesavan S, et al. Investigating the sustainability of outcomes in a chronic disease treatment programme. *Soc Sci Med* 2006;63:1661–70.
31. Bailie R, Dowden M, Si D, et al. Audit and best practice for chronic disease: project progress report. Darwin: Menzies School of Health Research, 2005.
32. Shephard M. Cultural and clinical effectiveness of the "QAAMS" point-of-care testing model for diabetes management in Australian Aboriginal medical services. *Clin Biochem Rev* 2006;27:161–70.