Quality improvement in action

Facilitating uptake of Aboriginal Adult Health Checks through community engagement and health promotion

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ABSTRACT

Background Adult Health Checks (AHCs) for Aboriginal and Torres Strait Islander people (MBS Item 710) promote comprehensive physical and psychosocial health assessments. Despite the poor uptake of health assessments in Aboriginal and Torres Strait Islander people, a small number of successful implementation initiatives have been reported. In order to ensure uptake of these screening initiatives, there remains a need to demonstrate the feasibility of models of implementing AHCs.

Aims The aim of this paper is to address the process issues and overarching outcomes of a two-day targeted screening and assessment programme to increase the uptake of AHCs at an Aboriginal Community Controlled Medical Service.

Method Clients of an urban Aboriginal Medical Service (AMS) were invited to undertake an AHC during a two-day screening initiative. On-site general practitioners (GPs), nurses, and Aboriginal Health Workers (AHWs) worked within a team to facilitate screenings at an AMS. Barriers and facilitators to the initiative and strategies for quality improvement were discussed by the team. A review of medical notes was undertaken six months following the screening days to document uptake of recommendations.

Results Forty clients undertook AHCs as part of the initiative. In total, 113 diagnostic tests, interventions, specialist referrals and medication initiatives had been enacted within the following six months as a result of screening day visits. Benefits to individual clients, the community, the AMS and staff were identified.

Conclusions The screening day demonstrated feasibility and acceptability of this approach and provides support for its implementation in other health facilities. Importantly, this service was provided in a culturally sensitive framework and within an interdisciplinary teamwork model. This targeted approach increased uptake of assessment items and provided opportunities for health advice and risk factor modification.

Keywords: health assessment, health promotion, indigenous health, primary care

Quality in Primary Care 2010;18:57–64 © 2010 Radcliffe Publishing
Introduction

The Enhanced Primary Care (EPC) program was incorporated into the Medical Benefits Scheme (MBS) in November 1999 by the Australian Department of Health to encourage more preventive care and improve co-ordination of care for older Australians and those with chronic conditions. Since then the program has been expanded to include Aboriginal and Torres Strait Islander health assessment MBS items comprising of child health checks, AHCs and health assessments for older Aboriginal people. The health checks promote comprehensive physical and psychosocial health assessments to ensure that Aboriginal and Torres Strait Islander people receive culturally targeted primary health care commensurate with their needs. Such systematic assessments have the potential to diagnose and address undetected disease and provide better treatment of existing disease, thereby reducing morbidity and healthcare costs. The AHC allows biannual health assessments of Aboriginal and Torres Strait Islander people aged from 15 to 54 years. It is linked to Medicare item numbers allowing follow-up of issues arising from the AHC by practice nurses and AHWs, and also allows referral to allied health services under Medicare.

Since their introduction in 1999 there has been poor uptake of health assessments by Aboriginal and Torres Strait Islander people. Early reports indicated that only 1% of all health assessments were done among indigenous people, despite their significantly lower health status. Reported barriers to conducting health assessments with Aboriginal and Torres Strait Islander patients in general practice reflect system, provider and patient issues. System and provider barriers include the absence of systems identifying Aboriginal and Torres Strait Islander patients, little awareness of Aboriginal and Torres Strait Islander specific GP-mediated health interventions among practice staff, lack of time and workforce to conduct assessments, low numbers of indigenous health professionals, a walk-in appointment style at AMs, physical space constraints, racism and problems with cross-cultural communication.

Other barriers to Aboriginal people accessing health services for health assessments may reflect their own perceptions of cultural barriers to the available services. Some Aboriginal people do not feel comfortable attending services because of educational, cultural, linguistic and lifestyle factors. The decision to access services may depend upon community control of the service and availability of Aboriginal and Torres Strait Islander staff. Difficulties in remote areas with reading, speaking, or writing English may impede Aboriginal people attending health services, particularly if Aboriginal health staff are unavailable. Aboriginal people may lack awareness of the health assessment item, which is potentially mediated by the quality of communication between patients and providers. Some Aboriginal people report difficulty communicating with services providers, including difficulty understanding and/or being understood by service providers. Further, many Aboriginal people report the importance of peer support and community engagement in healthcare interactions. The process of comprehensive assessment can also be daunting for some individuals and impractical at times. Many patients attend primary care for, and are focused on, an acute problem or problems and may find it difficult to also opportunistically
undertake an AHC, particularly if the GP has a busy clinic day. Therefore, tailoring the implementation of the AHC process to address these barriers is important in addressing the adverse health outcomes of Aboriginal Australians.13

One of the important aspects of AHCs is that they address planning and communication with patients, encompassing physical, psychological and lifestyle factors.14 This is significant within the world view of Aboriginal people; a further issue in this process is consideration of community and country.15 The need for comprehensive screening, risk identification, and recall systems to ensure clients are flagged for routine and other planned follow-up episodes of health care is particularly important among Aboriginal and Torres Strait Islander people. In spite of the challenges in implementation, recall and reminder systems have been associated with improvements in delivery of preventive services in other Aboriginal communities.16

Introducing enabling processes can assist in engaging individuals and in their adhering to screening and treatment recommendations. Aboriginal Community Controlled Health Services (ACCHSs) are incorporated Aboriginal organisations that are initiated by and based in Aboriginal communities and governed by locally elected Aboriginal Boards of Management.17 These organisations provide comprehensive primary health care that aims to improve access to health care for Aboriginal Australians via holistic, integrated and culturally appropriate services.17 Aboriginal people view health as encompassing not only the physical wellbeing of individuals but also the social, emotional and cultural wellbeing of the whole community.17 A central factor in engaging Aboriginal people is to do so in a culturally appropriate manner and to be sensitive to social and cultural contexts.19,20 A culturally appropriate service incorporates local language(s), beliefs, gender and kinship systems, thereby making service delivery settings more acceptable to the indigenous community.20 Furthermore, providing health services in a non-judgemental, non-threatening environment is an important consideration.21

With these issues in mind, AHC programs for Aboriginal people have been implemented and reported. In one instance, a Well Persons Health Check/AHC was implemented for 20 months in rural and remote indigenous communities in Queensland. This program demonstrated a high prevalence of largely preventable health problems and indicated the need for a sustainable early detection strategy for the region.2 The screening took place in a large open-plan boardroom of an AMS. To promote privacy, erected partitions formed four stations at which designated health professionals performed assessments and recorded data. Clients attending the screening day had access to fresh fruit and water and were given a ticket for a raffle of a grocery hamper containing healthy foods.

Likewise, AHCs were found to be a useful strategy for evaluating and addressing chronic disease risks and related health problems over 14 months in a non-community controlled, urban indigenous primary healthcare facility in Queensland.22 AHC ‘events’ to improve early detection of disease in Aboriginal people have also been employed.23 To address the needs of the diverse communities, brief intensive periods of assessment were held in remote areas, while in more populated areas, a monthly screening day was instituted. Although unpublished, this program reveals that ‘AHC events’ can be viable and feasible strategies for ACCHSs.23

Although few, these accounts of AHC implementation indicate that strategies are being implemented in communities to maximise uptake of these EPC items. However, the need to achieve more widespread and commonplace usage of these items remains, as does the importance of sharing successful operational strategies. In particular, there is a need to demonstrate the feasibility of smaller scale AHC events that can be enacted within and by communities, including ACCHS settings. We sought to assess the impact of a two-day targeted screening and assessment program to increase the uptake of AHCs (Item 710) at an Aboriginal community controlled medical service. The aim of this paper is to address the process issues and overarching outcomes of the two days rather than the findings of individual participants’ screenings. Although not a research report, observations of this clinic-based event provide useful information for clinicians and quality improvement in primary care.

Methods

This project took place at an AMS, based in an outer metropolitan location, which provides a comprehensive range of services including clinical medical, dental, child and maternal, chronic care, mental health/emotional and social wellbeing, alcohol and drug services, eye care, hearing and health promotion. All current and previous participants in a diabetes cooking class at an Aboriginal Medical Service were mailed a flyer inviting them to attend one of two consecutive AHC screening days at the AMS. Clients were also referred to the AHC screening days by GPs and AHWs. Clients were given a brief description of the AHC and their consent was gained before screening procedures were commenced.

The screening took place in a large open-plan boardroom of an AMS. To promote privacy, erected partitions formed four stations at which designated health professional personnel performed assessments and recorded data. Clients attending the screening day had access to fresh fruit and water and were given a ticket for a raffle of a grocery hamper containing healthy foods.

The AHC days served additional purposes at the AMS, including providing an opportunity to train staff in conducting the assessment. Screening team members consisted of three registered nurses (RNs,)
one Aboriginal student nurse and two AHWs. Additionally, the availability of a diabetes educator and a smoking cessation counsellor provided participants with opportunities for health promotion consultations. In consultation with the GPs, AHWs undertook a preliminary assessment of clients and determined their suitability for the AHC. The AHC visit consisted of health history review with a senior registered nurse, assessment of blood pressure, blood glucose level, HbA1C where indicated, urinalysis, height, weight, vision and a final review and action planning with a GP. The screening by the RN involved a targeted approach of assessing drug and alcohol history, sexual health history, depression (using the Patient Health Questionnaire (PHQ-2)), medication compliance using items from the Morisky scale, social circumstances and medical history. It is important to undertake a culturally appropriate assessment, in particular addressing the impact of social, economic and psychological factors on health, as well as the ability to access services. Therefore the initial assessment mapped services according to evidence-based recommendations for immunisations and sexual health screening as well as potential adverse health behaviours, such as alcohol and drug usage. Compliance with these recommendations was noted and non-compliance was flagged for the attention of the GPs. Appropriate sections of an AHC form were completed upon visiting each station. Following this, clients met with a GP for discussion, review of findings and negotiation of an action plan. A fluorescent green sticker with the words ‘Adult Health Check’ was used to signal appropriate billing upon account resolution and to facilitate follow-up on issues identified in the screening process. Following the screening days, the project team discussed the barriers and facilitators encountered and strategies for quality improvement.

This paper seeks to report on the evaluation of the screening days. A review of medical notes was undertaken by the senior RN six months later to identify adherence with recommended strategies and appointments undertaken as a result of client attendance at the AHC screening days. A case study using medical notes was selected to depict one client’s journey through the AHC experience.

Results

Forty clients of the AMS, ranging in age from 23 to 66 years, were screened as part of the AHC over the two-day initiative. One client has not had ongoing contact with the AMS following the screening, while the remaining 39 returned for follow-up and regular visits. Figure 1 presents the amalgamated data reflecting numbers of diagnostic tests, interventions, specialist referrals and medication initiatives enacted at six months as a result of screening day visits. These results reflect multiple opportunities for early diagnosis and management of a range of conditions, as well as opportunities to provide better treatment of existing disease, for example changing the type, mode or dose of medication. Box 1 contains a case study depicting one client’s journey through the AHC screening process and follow-up. The screening was undertaken in a collaborative and non-threatening environment and we consider that the community focus of the initiative and the high level of involvement of AHWs was crucial to its success. Many clients engaged in discussion with each other and on several occasions clients shared with one another their strategies for smoking cessation and increasing physical activity, suggesting a level of comfort and appreciation of the communal approach to screening, while protecting individuals’ records and clinical details. Table 1 summarises the challenges and facilitators to the screening day based upon the review of case notes and critical reflection among the project team.

Benefits of holding an AHC screening day

Based upon the reflection of the project team we have identified that the AHC screening days had benefits beyond improving the health of individual participants, as listed below.

Benefits to the community

The marketing of the AHC screening days appeared to be successful in increasing personal health awareness, facilitating brief interventions and referrals and reinforcing the concern that the AMS has for the health and wellbeing of the community. The facilitating, non-threatening environment of the screening made individuals feel comfortable in accessing specific referrals such as smoking cessation and cervical screening. Furthermore, the nature of information collected during the AHC represents an opportunity for patients and health professionals to discuss issues, such as drug and alcohol use, sexual health and social and emotional wellbeing that may otherwise be difficult to broach in a normal consultation. It is also likely that the community focus of this intervention was more conducive to the world view of Aboriginal people, in contrast to the individualistic focus of a one-on-one consultation with a health professional.

Capacity development for health professionals

The team environment and mixed skills of the health professionals meant that new skills and relationships were forged. The AHWs learned skills from specialists...
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(e.g. from diabetes educators regarding counselling on healthy diets), and they were able to work with other health professionals at the AMS which enabled them to form a strategy as to how the team could more efficiently implement AHCs in the future. The AHWs also worked with non-AMS health professionals, the majority of whom were engaging with the AMS for the first time. Through shared AHW-led consultations, the AHWs assisted the non-indigenous health professionals’ learning about implementing culturally appropriate interventions, in particular demonstrating ways of communicating with clients. The non-indigenous health professionals imparted practical tips for various testing options such as objective assessment of functional status using the six-minute walk test. The relationships forged on the day facilitated

<table>
<thead>
<tr>
<th>Diagnostic testing</th>
<th>Interventions</th>
<th>Specialist referral</th>
<th>Medication initiatives</th>
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<tbody>
<tr>
<td>Cholesterol x2</td>
<td>Smoking cessation counselling</td>
<td>Cardiologist x4</td>
<td>Medication change/adj x6</td>
</tr>
<tr>
<td>Fasting lipids x2</td>
<td>Diabetes educator x7</td>
<td>Dietitian x1</td>
<td>(including 2 go/no from oral hypoglycaemics to insulin)</td>
</tr>
<tr>
<td>HbA1C x3</td>
<td>Carer support x1</td>
<td>Optometrist x1</td>
<td>QUMAX x13</td>
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<tr>
<td>ECG x1</td>
<td>ETOH x4</td>
<td>Optometrist x2</td>
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<tr>
<td>Prostate investigation x3</td>
<td>SEWB x1</td>
<td>Colposcopy x1</td>
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<tr>
<td>Pap smear x6</td>
<td>Sexual health x1</td>
<td>Sleep study x1</td>
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<tr>
<td>BSL review x3</td>
<td>Gambling counselling x1</td>
<td>Podiatrist x1</td>
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<td>Eye review x1</td>
<td>Weight reduction x2</td>
<td>Psychologist x2</td>
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<tr>
<td>BP review x2</td>
<td>Heart failure counselling x1</td>
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<td>Thyroid check x1</td>
<td>Contience check x1</td>
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<td>Vascular screening x1</td>
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<td>GP management plan x1</td>
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<td></td>
<td>CV review x3</td>
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<td></td>
<td>Spirometry x1</td>
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<td></td>
<td>Discussion re diet x2</td>
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<td></td>
<td>Discussion re physical activity x3</td>
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<td></td>
<td>Dentist x2</td>
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<td>Flaxax x7</td>
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<td></td>
<td>Pneumovax x9</td>
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$n = 24 \quad n = 57 \quad n = 13 \quad n = 19$

### Figure 1
Consequent initiatives at six months post-Adult Health Check screening day

QUMAX refers to the Quality Use of Medicines Maximised for Aboriginal and Torres Strait Islander People Program (QUMAX). This program commenced in July 2008 and is funded by the Commonwealth Government Department of Health and Ageing as part of an agreement with the Pharmacy Guild of Australia, developed in collaboration with the National Aboriginal Community Controlled Health Organisation (NACCHO).

EUC = urea, creatinine and electrolytes, BSL = blood sugar level; BP = blood pressure; CV = cardiovascular

### Box 1 Case study

Daphne is a 49-year-old Aboriginal woman who received an invitation to attend the AHC screening day at the AMS as she was known to have diabetes. Although she had previously been a regular patient, she had not attended the AMS for one year. Daphne has documented ischaemic heart disease, and a history of coronary angioplasty and asthma.

Daphne reported being in good health overall, was a non-smoker and undertook regular physical activity. At the screening day, cardiovascular assessment identified that Daphne had fatigue, shortness of breath and chest pain on exertion. Her blood pressure was 140/95 mmHg, waist circumference 91 cm, body mass index 29, blood sugar level 18.2 mmol/L and total cholesterol 4.81 mmol/L. Subsequent to the AHC, the following appointments and services were organised: cervical screening, mammography, ophthalmology review, continence check and cardiology review. Subsequently, her medications were adjusted to improve her blood pressure control, lipid profile and diabetes management, including commencement of insulin treatment.

(e.g. from diabetes educators regarding counselling on healthy diets), and they were able to work with other health professionals at the AMS which enabled them to form a strategy as to how the team could more efficiently implement AHCs in the future. The AHWs also worked with non-AMS health professionals, the majority of whom were engaging with the AMS for the first time. Through shared AHW-led consultations, the AHWs assisted the non-indigenous health professionals’ learning about implementing culturally appropriate interventions, in particular demonstrating ways of communicating with clients. The non-indigenous health professionals imparted practical tips for various testing options such as objective assessment of functional status using the six-minute walk test. The relationships forged on the day facilitated
relations between the AMS and local area health service facilities, identifying opportunities for future collaboration.

**Financial incentives**

The complexities of indigenous health mean that addressing the needs of individuals within a standard consultation can be challenging. Remuneration for the time undertaken in screening and referral is an important consideration.

**Discussion**

Implementing effective systems is crucial in addressing barriers to screening in indigenous communities. Undertaking comprehensive screening is very challenging within the busy usual working day of general practice. Prospective planning and dedication of a system to undertake this process, co-ordinated by AHWs, appears to be successful in our setting. This paper described the implementation of a targeted two-day Aboriginal AHC screening program which aimed to identify risks (e.g. for cardiovascular disease, diabetes) in an urban Aboriginal community and highlighted the need for health professional intervention and referral in relevant cases.

Setting the program in an AMS, being co-ordinated by AHWs, and providing transportation facilitated community members’ engagement in the screening days. These key elements of providing culturally appropriate care furthermore acted to overcome potential barriers involving access, the need for confidentiality and supporting clients during potentially daunting encounters. Having a focus on the community and creating a convivial and non-threatening setting were important factors in ensuring the acceptability of the screening days.

As in many other successful Aboriginal health initiatives, the role of the AHW in outreach to communities is underscored. The screening day service demonstrates the feasibility and acceptability of this approach and provides support for its implementation in other health facilities. This targeted approach increased uptake of assessment items and provided opportunities for health advice and risk factor modification. Importantly, this service was provided in a culturally sensitive framework and within an interdisciplinary, teamwork model. Ensuring the involvement of AHWs, culturally appropriate health information and community engagement through peer leaders was important in engaging the local community. Future

<table>
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<th>Table 1 Barriers and facilitators to the screening day</th>
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<tbody>
<tr>
<td><strong>Barriers</strong></td>
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<tr>
<td>Space constraints and equipment shortages</td>
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<tr>
<td>Need for confidentiality</td>
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<tr>
<td>Time limitations of GPs</td>
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<tr>
<td>Skill mix and scope of practice</td>
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<tr>
<td>Inability of invited clients to access screening day</td>
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<tr>
<td>Screening may be daunting for clients</td>
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evaluation specifically linking screening activities to achieving treatment targets and clinical outcomes is recommended.

Conclusion

Workforce issues and service delivery patterns can contribute to lower uptake of programs and incentives intended to decrease chronic conditions. This is commonly the case in busy general practice settings where there is often an emphasis on acute conditions. Importantly, screening days/events are useful in shifting the perspective of health professionals and community members to the importance of screening and prevention. In addition, the process of screening can be intrusive and daunting to some individuals. Based on our preliminary experience, it would appear that designating days and allocating specific space and staff time, using an interdisciplinary approach in a community controlled setting, can assist in increasing the uptake of AHCs in Aboriginal Australians.

ACKNOWLEDGEMENTS

MD is a postdoctoral fellow funded by the National Health and Medical Research Council (NHMRC) 533547.

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**CONFLICTS OF INTEREST**

None.

**ADDRESS FOR CORRESPONDENCE**

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Received 28 September 2009
Accepted 2 January 2010

**PEER REVIEW**

Not commissioned; externally peer reviewed.