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COMMENTARY

Improving access to medicines in urban, regional and rural Aboriginal communities – is expansion of Section 100 the answer?

J Stoneman, SJ Taylor

Faculty of Pharmacy, The University of Sydney, New South Wales, Australia

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Stoneman J, Taylor SJ

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ABSTRACT

The poor health of Indigenous Australians is highlighted by the fact that their life expectancy is 17 years less than that of non-Indigenous Australians. The cause of this health disparity is multifactorial, and includes the under use of health services and medications. Distance, cost, and embarrassment, or fear of seeking help from culturally inappropriate services have all contributed to the reduced health status of Indigenous Australians. The introduction of Aboriginal medical services (AMS), Aboriginal health workers, and Section 100 (S100) of the Australian Pharmaceutical Benefits Scheme (PBS) have been important steps towards improving Aboriginal access to health services and medications. Despite this, spending on pharmaceuticals under the PBS per capita among the Indigenous population remains significantly lower than that of the non-Indigenous population. Because Aboriginal people from all areas experience similar barriers in their access to medicines, it has been suggested that the S100 scheme be made available to all AMS. Ensuring quality use of medicines needs to be addressed because patient counselling is carried out by the clinic staff, rather than the pharmacist and, therefore, in this case the pharmacist's role converts to one of training and providing information to the AMS. This expansion of S100 services may lead Indigenous health down a path of separation from mainstream services, which in turn would require nearly no adjustment by pharmacies and pharmacists to meet the needs of

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Indigenous people. Unfortunately, for no known reasons, previous suggestions to improve Aboriginal people's utilisation of mainstream health services and pharmacies have not been actioned.

Key words: Aboriginal, Aboriginal health workers, Aboriginal medical services, Australia, medications, Pharmaceutical Benefits Scheme.

The state of Aboriginal health in Australia

It is commonly known that the health of Indigenous Australians is poor. In 1999-2001 the life expectancy of Indigenous Australians was 17 years less than that of non-Indigenous Australians¹. Between 1999 and 2003, Indigenous people died at almost three times the rate of non-Indigenous people. The mortality rates for endocrine, nutritional and metabolic diseases were seven times that of non-Indigenous males and eleven times that of non-Indigenous females². The onset of most chronic diseases is experienced earlier in Indigenous Australians, who are also 12 times more likely to be hospitalised². Circulatory and respiratory diseases, diabetes, musculoskeletal conditions, kidney disease and mental and behavioural disorders are conditions that account for most of the consultations with GPs for Indigenous people². The prevalence of diabetes in the Indigenous population is four times that of the non-Indigenous population². These are all conditions that, more often than not, require continuous pharmacological therapy, along with constant lifestyle advice.

While the mortality rates for non-Indigenous Australians are improving³, Indigenous Australians are continuing to experience poorer health compared with the Indigenous populations of New Zealand, Canada and the USA, who experienced similar disempowerment and mistreatment. Since the early 1970s, an improvement in Indigenous health promotion and services in these countries has significantly helped to reduce mortality rates, which are now approaching those of the general population³. Mortality rates of the Australian Indigenous population are poor when compared with these countries^{3,4}, with the mortality rate being 1.9 times that of New Zealand Maoris, and 2.4 times that of the US Indigenous population³. The estimated life expectancy of Indigenous Australians is comparable to certain developing countries such as Pakistan and Indonesia, although notable in Aboriginal mortality is that the majority of deaths occur in middleage, which is unlike any other country in the world⁴.

The lack of improvement in mortality has been attributed to the absence of a treaty between the Indigenous and non-Indigenous population (which has happened in the USA, New Zealand and Canada), the official Australian policy of assimilation (which discouraged the formation of specialised Indigenous programs)^{3,5}, and a lack of a single identity in many Indigenous communities, due to grouping individuals from different tribal groups in one location⁶. It has been suggested that the sense of control that people have over their lives and the sense of hope this creates are important determinants of health status⁵.

The cause of poor health among Australia's Indigenous population is multifactorial. Educational shortcomings, poverty, shared crowded households and harsh environmental conditions^{7,8}, all contribute to the poor diet and lifestyle seen in many communities. Risk-taking behaviour, such as smoking and excess use of alcohol, and misuse and under-use of medications also contribute to the poor health status of the Indigenous population⁹. This is evident from 2002 figures that revealed 49% of the Indigenous population aged 15 years or older smoked and 51% had not participated in any physical recreational activities in the past 12 months². Moreover, chronic ear infections causing hearing loss, and poor nutrition have been linked to poor educational outcomes for Indigenous children².

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The use of health services by Indigenous people is less than optimal. Many barriers have been identified, which include Indigenous people feeling embarrassed, uncomfortable or afraid when visiting health service providers, experiencing lack of trust, differing health beliefs, distance and cost¹⁰⁻¹³. Barriers to accessing medications such as distance to services and pharmacies, lack of private vehicle ownership, cost of medication, and culturally inappropriate services have all contributed to the misuse and under-use of medications^{2,13,14}.

The purpose of this article was to review the current literature on strategies implemented so far to improve the access to and quality use of medicines in Aboriginal communities, and to report on the limitations of these strategies and the barriers remaining. While many initiatives have been undertaken in remote areas of Australia, this article explored how these same initiatives might be implemented in urban, regional and rural areas, and the possible consequences of this.

Strategies implemented to improve Indigenous health

Access to healthcare

One strategy to overcome access barriers was the introduction of Aboriginal Medical Services (AMS) in the 1970s. Aboriginal Community Controlled Health Services (ACCHS), or AMSs are primary healthcare services run by local Aboriginal communities. They aim to offer health services in a culturally appropriate setting¹⁴. Seventy percent of employees in these services are Indigenous, and services offered include GP and health checks, emergency care, dentistry, optometry, men's and women's health programs, immunisation, counselling services and transport to and from other health-related appointments¹⁵. Currently there are over 130 AMS operating in Australia, varying in size from small clinics relying solely on Aboriginal health workers (AHWs) and nurses, to large multi-functional centres employing several GPs and offering a wide range of services¹⁵. A recent

audit of these services found that of the 142 AMS surveyed, 62 were located in urban or semi-urban areas, 11 in rural areas, and 51 in either remote or very remote areas¹⁵.

Aboriginal health workers are the most commonly employed Indigenous staff in both government controlled services and ACCHS¹⁶, and are often the first, and sometimes the only, port of call for Aboriginal people with health issues. The role of the AHW varies considerably among communities, but generally involves health promotion and education, consulting with the community on health needs, advising community members on health issues, liaising between health professionals and the Indigenous population and, in some more remote settings, a clinical role, such as managing dialvsis or administering medicines¹⁵. Aboriginal health workers currently undertake a training program to equip them with some of the skills needed to support this role in the community. However, a national review of this program found that the training for AHWs is inadequate, particularly with respect to medication¹⁴. This review suggested that AHWs require skills equivalent to other health professionals to meet the health needs of the communities in which they practise¹⁶.

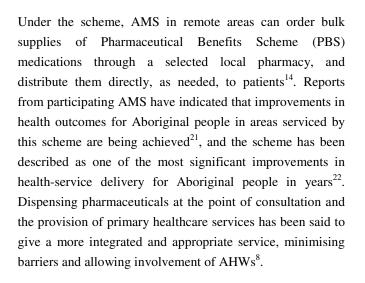
Access to pharmaceuticals

The use of pharmaceuticals in Aboriginal communities has been linked to advanced disease control and prevention¹⁷. Studies have been conducted showing beneficial health outcomes in patients using medications in conjunction with a model of primary health care, such as an estimated 50% reduction in natural deaths and 57% reduction in renal deaths seen in Aboriginal patients in the Northern Territory after 3 years of ACE inhibitor treatment¹⁸. In all the major diseases causing premature death among Indigenous people, pharmacological treatment is advised¹⁹.

In response to the undeniable poor health and limited access to medicines for Indigenous Australians, Section 100 of the *National Health Act* of 1953 (S100) was introduced in Australia in February 1999, in order to improve access to medicine for Indigenous people in designated remote areas²⁰.



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Although expenditure on health services provided to Indigenous Australians during 2001–2002 was 18% higher than the expenditure on services delivered to non-Indigenous Australians, spending on pharmaceuticals under the PBS per capita in the Indigenous population was one-third that of the non-Indigenous population². This highlights the continuing shortfall in Indigenous access to and use of medication.

The Indigenous population in Australia in 2001 was estimated to be 458 500, or 2.4% of the total population¹. The largest proportion (29%) of the Indigenous population was located in New South Wales $(NSW)^1$. It was estimated that S100 benefits 36% of the Australian Indigenous population. However, of the 153 S100-approved Aboriginal and Torres Strait Islander Health Services, only four are located in NSW²³, the state having the largest Indigenous population², suggesting that this program may not serve a great proportion of the NSW Indigenous population.

In 2001, only 26% of the Australian Indigenous population lived in remote areas, while 43% lived in regional areas and 30% in urban areas². The 76% of the Indigenous population who do not live in remote areas must obtain their medication through standard delivery systems, for example by visiting a GP for a prescription, and then attending a pharmacy to have the prescription filled. Unlike the S100 supply scheme, standard delivery systems are not tailored for Indigenous people and may not be appropriate for them to access. However, the health problems that burden Indigenous Australians are not limited to remote populations²¹. This was highlighted by a 1997 report 1997²⁴, which found that Aboriginal people from remote, regional and urban areas experienced similar barriers in their access to medicines.

Barriers remaining

There is little data exploring the current use of medication and medication adherence rates in Aboriginal populations, although a small number of studies (with specific patient focus) ^{25,26} have found poor and sometimes unsafe medication use among Aboriginal people. Despite a higher burden of acute infections and chronic diseases, under-use of medication is evident in the Aboriginal population, as highlighted by the statistics comparing the PBS spending of Indigenous and non-Indigenous populations.

It is widely reported that many Aboriginal patients feel uncomfortable or embarrassed when accessing mainstream health services^{10,11,13}. This presents a barrier, even if the health service, such as a doctor's surgery or pharmacy, is readily accessible to them, as in urban and regional centres. Patients often experience high levels of anxiety and stress¹¹, and even shame10 when having to consult with health authorities, which may stem not only from negative connotations and a lack of education about disease management, but also from historical influences, such as a view that accessing health services is related to dying^{11,13}.

For Aboriginal people, health is not just about the physical wellbeing of a person, but also the social, emotional and cultural wellbeing of the entire community¹⁵. Traditional healing remedies used by Aboriginal people for many generations contrast greatly to medicines used today. Because of this, Aboriginal people may be unsure and untrusting about the concept of taking medication in the absence of any symptoms, such as antihypertensives and hypoglycaemic medications^{26,27}. They may also have been taught about traditional remedies to treat problems and use these in place of prescribed medicines²⁷. A past study indicated that most respondents had never told a doctor that



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they use 'bush medicine', thinking that disclosing this is unnecessary or that bush medicine should be kept a secret among Aboriginal people¹⁰.

Literacy and the ability to understand instructions is another a barrier to medication regimen adherence^{10,13,28}. Aboriginal people can have difficulty understanding when and how to take their medications, and instructions such as 'take one tablet twice a day' can be misunderstood, resulting in two tablets being taken at once, or the tablets being taken with minimal interval between¹³. A common belief among health professionals that poor compliance, or not following the doctor's 'rules', may be 'due to ignorance or laziness', can cause frustration when a patient fails to follow a management plan that would improve their health²⁹. Such a belief does not take into account that the 'rules' in a consultation are culturally specific and may require knowledge that is foreign to people from a varying backgrounds^{7,30}. The use of medical terminology and complex language by health practitioners can also lead to misunderstanding, compounded by the fact that Aboriginal people may feel embarrassed or uncomfortable in asking for clarification¹³ and want to end the conversation as quickly as possible. Behaviour such as looking straight ahead and saying 'yes' or 'no' may convince the educator that they have conveyed information to the patient effectively¹². Such a communication barrier may also be caused by feelings of lack of control in the patient, differing conversational styles, lack of shared knowledge and understanding, and other cultural elements³¹.

The cost of medication is an issue for some Aboriginal patients in areas where S100 is not available. Many Aboriginal people receive a government benefit, reducing the amount of money available for medications and health consultations^{13,14}. In many areas GPs do not offer bulk-billing and patients cannot afford the cost of a consultation¹³. Administrative matters, such as the patient not having a current concession or pension card, or not understanding the need to carry a Medicare card, may also present barriers to GP and pharmacy services⁸. Most AMS that are not eligible for S100 divert funds from primary health services to pay for

medicines or devices such as spacers³² that are needed by their clients. This is usually in the form of an account at a local pharmacy, which may also cover the patient's copayment for their most needy clients or for children's medications. Diverting money from other programs in this way is considered necessary to assist clients obtain medications¹⁷.

Lack of available refrigeration^{8,27}, lack of knowledge of storage issues (for example not in sunlight or humid conditions), recurrent relocation (transient housing) and non-regular doctors and pharmacies may also play a part in an Aboriginal client's lack of adherence to the prescribed medication regemin²⁷.

Access to medications may also be limited by the distance to local pharmacies and doctors' surgeries. Public transport is problematic in rural areas, and private vehicle ownership is lower among Aboriginal people¹³. However, some AMS provide transport to health-related appointments and the pharmacy for patients in need of medications¹⁵. In larger regional centres and urban areas Aboriginal people may live close enough to health services for travelling not to be problematic.

Further strategies for improved access to pharmaceuticals

A report commissioned by the Office of Aboriginal and Torres Straight Islander Health stated that work to change the responsiveness of mainstream services should continue, but that primary health care is needed now¹⁹. It has been suggested that the most effective way for medicines to be supplied to Aboriginal people is through their local AMS, with assistance from community pharmacists regarding supply and support for quality use of medicines^{14,21}. It has been suggested that widening the S100 eligibility criteria to include AMS in non-remote areas would provide a benefit to a much larger proportion of the Indigenous population^{14,21}. A joint proposal from the National Aboriginal Community Controlled Health Organisation (NACCHO), the Pharmacy

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Guild of Australia and the Australian Medical Association recommended that the current S100 arrangements be available to all AMS, regardless of their location²¹. The three organisations collaborated to develop a model for non-remote access. This model involved the addition of services such as the capacity for AMS to write prescriptions that could be filled at a community pharmacy without a co-payment being required, and an increase in funding to address the need for quality use of medicines²¹.

What about quality use of medicines?

A question arises from the supply of medicines through S100 regarding whether quality use of medicines (QUM) is being achieved? Australian Government policy on QUM states that 'To achieve quality use of medicines, people must be provided with the most appropriate treatment, and have the knowledge and skills to use medicines to their best effect'³³. Because the S100 scheme does not address the interface between clients and the person supplying the pharmaceutical products, and the facilitation of dispensing has been transferred from the pharmacy to the AMS, there is limited scope in ensuring the judicious and efficacious use of medicines^{21,23}, and the provision of consumer medicines information³⁴.

As a consequence, the Pharmacy Guild of Australia and NACCHO developed a pharmacist assistance program whereby pharmacists offer services such as management of AMS dispensary, education of staff including AHWs, dose administration aids, assistance with medication enquiries and the provision of medication reviews¹⁴. An evaluation carried out on the S100 program concluded that, although the program fostered stronger relationships between pharmacists and AHWs, it could be strengthened in terms of QUM^{23} . Patient counselling on medication use in an AMS is normally carried out by the clinic staff, not a pharmacist. To ensure safe and effective therapy it is important that the staff member have an understanding of the prescribed medication, and the required medication regimen³⁵. The Pharmaceutical Society of Australia states that though pharmacists are trained and therefore best equipped to provide counselling on medicines, unique circumstances exist in AMS where this is not feasible. In this situation, the pharmacist's role converts to one of training AMS staff and providing information about their patients' medications³⁵.

The current education programs for AHWs provide little training on medicines and QUM³⁶, and it has been suggested that there is an unmet need in the AMS sector for continuing education by pharmacists on medication issues¹⁴. Currently, when a pharmacy is participating in the S100 program, the pharmacist may apply for a professional service allowance of between \$2000 and \$4500 for the cost of time and travel incurred while providing advice on S100 implementation, and education about QUM principles²¹. It has been suggested that this allowance is inadequate, and the uptake has been extremely low, resulting in both pharmacies and AMS expressing concern about QUM issues²¹. This may be compounded by a scarcity of pharmacist in rural and remote areas leading to issues of overwork¹⁴.

This issue was addressed by the joint proposal which recommended that pharmacists should be remunerated for supply equivalent to the remuneration available for individual dispensing²¹. This, along with extra funding to support pharmacist-facilitated QUM education sessions and dispensary management assistance would help to ensure QUM in a way that meets the needs of pharmacists, AMS and Aboriginal community members²¹.

Conclusion

There is no doubt that S100 has increased the access of Indigenous Australians to medication, but QUM issues still need to be addressed. If the proposed expansion of S100 to non-remote areas proceeds, access could be improved further. However, the danger of suboptimal QUM remains until issues relating to remuneration of pharmacists are addressed, and adequate training of AHWs is achieved.

Currently the majority of Indigenous patients are expected to access their medications through standard delivery



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systems²³. While the proposed expansion of S100 services may have many advantages, there remains a risk that it will separate Indigenous health from mainstream services and require minimal adjustment by pharmacies and pharmacists to meet the needs of Indigenous people. Where distance explains the lack of use of mainstream health services and pharmacies by Indigenous Australians in remote areas, it does not explain the lack of uptake in urban and rural areas. This implies that the services offered, or the way in which they are offered, is not meeting the needs of those Indigenous communities, and that work is still needed to improve the responsiveness of mainstream services. Indeed, many strategies have been suggested to improve utilisation of mainstream health services and pharmacies by Indigenous people, such as employing Indigenous staff, having Indigenous art or pamphlets on display, and staff undertaking cultural awareness training^{11,13}. However, currently such strategies have not been widely implemented. It is unclear if this is because of perceived difficulties in implementation or achievement of goals, or simply because such strategies are not regarded as the best way to assist change.

Regarding the call for the responsiveness of mainstream services to continue while improving primary health care 'now'¹⁹, the described use of S100 could be regarded as a primary healthcare initiative that has been implemented within a relatively short period of time. In this instance, however, changing the responsiveness of mainstream services may take longer to achieve.

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