

Adapting the Drug and Alcohol Service Planning Model for Aboriginal and Torres Strait Islander people receiving alcohol, tobacco and other drug services: Components of care and a resource estimation tool

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EXECUTIVE SUMMARY

Project aims

This project sought to develop a resource planning tool for use by health planners in relation to alcohol, tobacco and other drug (ATOD) treatment for Aboriginal and Torres Strait Islander¹ people. It is a project which has focussed on identifying the elements of ATOD care suitable for Aboriginal people, and the funding requirements to deliver that level of care. It was built from the Drug and Alcohol Service Planning Model (DASP Model) and the DASP Decision Support Tool (DASP DST), commissioned by the Ministerial Council on Drug Strategy and undertaken by the NSW Ministry of Health as an Inter Governmental Committee on Drugs (IGCD) cost-shared project between 2010 and 2013 (NSW Ministry of Health, 2012). The final DASP Model and associated report was presented to IGCD in 2013, providing a planning and resource estimation tool for mainstream ATOD treatment service provision. Preliminary work had been undertaken to develop an Aboriginal adaptation. The current project sought to build on that initial work and deliver a useful and relevant tool for health planners, to facilitate improved purchasing of services for Aboriginal people through the identification of evidence-based components of care and the associated resource implications.

The project aimed to:

1. Review the DASP Model care packages for their applicability to and appropriateness for Aboriginal people seeking ATOD treatment;
2. Document the evidence supporting treatment as specified in the revised DASP Model care packages for Aboriginal people;
3. Establish resource estimates for the revised Aboriginal care packages.

Providing ATOD care to Aboriginal people

There are five types of organisations providing ATOD treatment services specifically for Aboriginal people:

1. ACCHOs are Aboriginal community controlled health organisations or Aboriginal Medical Services (AMSs) established to provide primary health care (PHC) services but which provide specialist ATOD treatment services in addition to PHC services.
2. There are Aboriginal community controlled organisations (ACCOs) established specifically to provide ATOD services for Aboriginal people.
3. ACCO non-ATOD specific services are Aboriginal community controlled organisations established primarily to provide a broad range of community services or community governance but which also provide some ATOD treatment services.
4. Non-Aboriginal NGOs; and
5. Government agencies which most commonly provide ATOD treatment services targeted at the general population, but can be inclusive of Aboriginal clients.

The care packages described in this document have been designed to apply to *all* Aboriginal people receiving ATOD treatment. That is, we expect that all Aboriginal clients will be provided with the levels of care described within these packages, according to the severity of their problems and *regardless of which organisation provides the services*. We regard the care described in this report as essential elements for good practice and required to achieve positive health outcomes.

Where non-Aboriginal NGOs and government agencies provide Aboriginal specific services, in addition to providing the level of care documented in the care packages herein (Chapter 4) they

¹ The term Aboriginal is used throughout this report and is taken to be inclusive of Aboriginal and Torres Strait Islander Peoples. The term 'indigenous' is only used if a direct quote or when part of an organisation's title. This usage of the term Aboriginal is in accord with that recommended by NACCHO. Note that no specific consultations were held with Torres Strait Islander communities.

require additional, adequately resourced capacity (not inherent within their organisational history and governance) to provide those services in a culturally safe manner (Chapter 5).

Adaptations to mainstream care packages

The DASP Model uses 'care packages' to describe evidence-based care and the associated resources. There are more than 200 different care packages in the mainstream DASP Model. Care packages describe a level of care over the course of one year (this distinguishes them from 'episodes of care' which describe a single intervention, rather than treatment over the course of a year).

We focussed on seven different care packages and used these as templates for all Aboriginal ATOD care. The seven template care packages were:

- Mild intervention
- Moderate care
- Severe - Psychosocial interventions – with relapse prevention medications
- Severe - Withdrawal outpatient – with relapse prevention pharmacotherapies
- Severe - Withdrawal management – residential – with relapse prevention pharmacotherapies
- Severe - Day Program – 25 days
- Severe - Residential rehabilitation – 13 weeks residential care and 13 weeks ongoing care

These seven template care packages cover the major forms ATOD service types.

The mainstream care packages required review and amendment to ensure that they would be appropriate for Aboriginal people. There are a number of important themes that need to be considered when reviewing and adapting the DASP Model care packages. They include elements of Aboriginal cultures such as spirituality, connection of Aboriginal people to "country", and ties to family, kinship networks and community; all of which are central to Aboriginal individual and social wellbeing. Also to be considered are the complex needs of Aboriginal people stemming from the multifaceted and interrelated social and economic inequalities, cultural dislocation and their social and emotional consequences such as unresolved loss and grief, trauma and abuse, physical health problems, identity issues, discrimination and social disadvantage.

The following elements within the care packages required adjustment:

1. Tobacco intervention
2. Screening and brief intervention
3. Assessment in primary care setting
4. Assessment
5. Psychosocial interventions – group, family and individual counselling
6. Case management and support
7. Assertive follow-up
8. Medication support for relapse prevention pharmacotherapies
9. Withdrawal care
10. Residential rehabilitation

New elements were:

11. Return to country/community
12. Transport
13. Ongoing care
14. Overnight staff

The care elements identified here for appropriate and evidence-based clinical care for Aboriginal clients included attention to kinship and family relationships; greater time and flexibility in providing immersion in cultural activities; the need for transport; greater time in counselling to address complex issues, needs and comorbidities; additional ongoing care and assertive follow-up; enhanced tobacco intervention; and return to country/community. Only a proportion of Aboriginal clients will require some of these – for example not every client will require transport to every appointment. This has been taken into consideration and appropriate percentages applied to the additional care elements.

The resource implications

The DASP Model was designed as a mainstream resource estimation tool – it did not consider care packages specific to Aboriginal people and hence did not estimate resources specific for Aboriginal alcohol, tobacco and other drugs (ATOD) care.

Resources that were altered consequent to the revised care packages took one of the following six forms:

1. Clinical staff time – which entailed increasing the minute allocations (consistent with the evidence-based care detailed in Chapter 4). The ATOD worker rate was applied consistently to all additional time involved in providing Aboriginal care.
2. Two staff instead of one staff member for group work.
3. Transport – factored in as more time (minutes) of ATOD worker time.
4. Overnight staffing - additional FTE for overnight staffing.
5. Bed for support person – additional bed-day cost in residential withdrawal services
6. Medication costs: the proportions receiving the medications were varied while the original costs per se were applied.

New calculations of the resource estimates then proceeded based on the adjusted care package elements. The approach taken here was to estimate the average cost per care package type. When compared to the mainstream average cost per care package, a multiplier for resource estimation for the Aboriginal care packages can be derived. The ‘multipliers’ provide an estimate of the resources ratio between mainstream and Aboriginal care packages.

Table A: Multipliers: the ratio of costs between mainstream and Aboriginal care packages

Care Package	Multiplier – ratio of resource estimate between mainstream and Aboriginal care
Alcohol (18-64 years)	
Mild intervention	12.6 ¹
Moderate care	5.6 ¹
Psychosocial interventions – with relapse prevention medications – complex	3.2
Withdrawal outpatient – complex with relapse prevention pharmacotherapies	3.1
Withdrawal management – residential – complex – with relapse prevention pharmacotherapies	2.6
Day Program – 25 days – standard	5.1 ²
Residential rehabilitation – 13 weeks residential care and 13 weeks ongoing care)	1.9

Notes: 1. The mild and moderate care packages for Aboriginal people include the tobacco intervention. This was not included in the mainstream care packages, which partly accounts for the substantially higher costs for the Aboriginal care package. 2. One of the additional costs is the cost of transport. The day program requires daily transport costs, hence the multiplier is higher than for the other care packages.

There are additional costs associated with providing the ATOD care required for Aboriginal clients. These costs are about two to three times as much as for non-Aboriginal clients receiving ATOD care. The costs are greater because of the need to include additional elements, such as more intensive assertive follow-up, tobacco interventions, better engagement with families, a need for two staff members, and care components such as return to country/community. This evidence-based approach to ATOD treatment for Aboriginal clients maximises health outcomes.

While the multipliers here apply to 'care packages' – treatment over the course of one year – they are equally suitable for application to 'episodes of care'. For example any withdrawal episodes of care could appropriately use the multiplier to ascertain the additional costs associated with providing withdrawal care to an Aboriginal person in line with the evidence-based components included here. What these results mean in practice, is that jurisdictions purchasing ATOD care (at whatever rate or purchasing system is used) have data which suggests that if it is for an Aboriginal person, those costs (or existing rate) should be doubled.

It is important to acknowledge that these are average costs, not per client or per care package delivered. In some cases the costs to provide that care to an individual will be less, in other cases it will be more. The costs assume that the care is provided within an Aboriginal-specific organisation or service such that additional organisational and workforce training is not required. We have separately costed the necessary workforce development that is required for mainstream services that are providing the care identified herein to Aboriginal clients.

As mainstream ATOD services exist in order to provide services to all people in the Australian community, and as some Aboriginal people use them, there is a need to make sure that these mainstream services are culturally appropriate and can deliver the care. For mainstream organisations providing care to Aboriginal clients, not only is the care package cost two to three times the existing cost, but additional resources are also required, including time and specific funding. These additional resources are necessary to be able to deliver the care packages in a culturally appropriate, safe, and secure way for those Aboriginal people who use mainstream services.

We provide some guidance as to the activities and tasks required for a mainstream organisation to attain culturally secure practice and we approximate the resources required, but note that these will vary depending on the mainstream organisation itself, the history and culture within the organisation and the extent of current and ongoing workforce development. Three components that were considered to cover the requirements were: protocols for partnerships; organisational policy, procedures and service delivery; and training and workforce development. A total of \$60,494 was the resource estimation per organisation per annum to achieve culturally secure services for Aboriginal clients in mainstream services.

Conclusion

The provision of evidence-based ATOD care to Aboriginal people is essential to achieve positive health outcomes, reduce the health inequalities, and maximise the existing investment in ATOD treatment. Aboriginal people require ATOD care that is appropriate for them, underpinned by Aboriginal culture and delivered in settings that are culturally secure. Both Aboriginal-specific and non-Aboriginal organisations deliver ATOD care. The care elements described in this report provide the basis for ensuring evidence-based care irrespective of setting. The inclusion of transport, more focus on families in clinical work, an option for return to country/community, a focus on intensive follow-up and aftercare are some of the features of these revised care packages.

Unsurprisingly there are additional costs associated with providing this evidence-based care. These additional costs vary depending on the care package, but on average the resource estimation conducted here revealed a two to three fold increase in costs.

CHAPTER 1: INTRODUCTION

This chapter provides a brief summary of what the DASP Model is and its components, followed by the specific aims of this project.

The DASP Model original

The Drug and Alcohol Service Planning Model (DASP Model) (NSW Ministry of Health, 2012) is a planning tool that aims to assist health planners in determining the resources required to meet the needs of people with alcohol and other drug problems. The model identifies the types of care required by drug type and age group, and the components of that care (termed care packages). It then estimates the resources required to deliver that care across a typical population of 100,000 people.

In the DASP Model, the care packages specify the amount of care that a person should receive (under optimal but realistic conditions) over the course of one year, specified by age group and by drug type.

There are three age groups:

- 12 to 17 year olds
- 18 to 64 year olds
- 65 year olds and over.

There are five drug types:

- Alcohol
- Cannabis
- Amphetamines
- Illicit Opioids
- Benzodiazepines.

There is also a generic “all drugs” modelled for children under 12 (0-11 months and 1 to 11 years). Harm reduction and prevention were also modelled in the original DASP Model (separate tool).

There are four broad types of treatment and support covered by the DASP Model care packages:²

1. Brief interventions for those with mild or moderate problems
2. Psychosocial interventions - group and individual counselling
3. Withdrawal interventions – provided on a home-based, outpatient or residential basis
4. Rehabilitation programs – provided as a five week day program; or as a residential program (at three different lengths).

Each of these four treatment types has a strong evidence-base (see Appendix 1 through 4 for a brief summary of the evidence-base for each treatment type as they apply to mainstream services).

These four broad types of care are further divided up into different care packages, depending on the level of client complexity (complex versus standard), and sub-types of treatment (for example psychosocial counselling with or without medication) and in some case depending on the length of stay. For example there is a standard and a complex withdrawal care package, and there are three residential rehabilitation care packages to cover three different lengths of stay.

² For opioids there was also pharmacotherapy maintenance programs (methadone and buprenorphine).

Within each care package there are a number of elements: assessment, case management, psycho-social counselling, referral/discharge planning and transfer of care; medications (where required); diagnostic testing (where required); tobacco interventions; assertive follow-up and so on.

In total there are approximately 10–12 care packages per drug type and age group. This means that in total there are 3 (age groups) by 5 (drugs types) by up to 17 care packages = $3 \times 5 \times 17$ = about 255 different care packages. The full list of the original DASP Model care packages can be found in Appendix 5.

The DASP Model distributes 100,000 people between age and drug types across the many care packages, to estimate the total resources that would be required to serve a typical 100,000 people. The purpose of the DASP Model is not to specify clinical standards of care rather it is a tool for resource estimation.

The full details of the DASP Model can be found in the technical manual (NSW Ministry of Health, 2013).

Applicability of the DASP Model original to Aboriginal people

The DASP Model was designed as a mainstream resource estimation tool – it did not consider care packages specific to Aboriginal and Torres Strait Islander people³, and hence did not estimate resources specific for Aboriginal alcohol, tobacco and other drugs (ATOD) care.

How care is delivered for Aboriginal people makes a difference. An assessment for an Aboriginal person will entail skills and culturally appropriate adjustments, for example the inclusion of family members in the assessment process and sufficient time to allow the person's story to emerge. This is one simple example. The DASP Model requires review and adjustment to suit the needs and clinical requirements for Aboriginal people, and requires an overall clinical service approach that is culturally safe and culturally appropriate.

It is important that a resource estimation tool such as the DASP Model can accommodate and be suitable for use in planning ATOD services for Aboriginal people. "Despite Indigenous Australians comprising less than 3% of the Australian population, one in eight episodes for ATOD treatment was received by this group nationally (2010–2011)" (AIHW, 2012b).

Initial work was completed on the DASP Model Indigenous⁴ modules in 2011/2012, including the documentation of care packages specific to Aboriginal ATOD treatment. (The mainstream care packages were not finalised at that time). This work, completed with NIDAC, was enormously valuable to start the process of ensuring that a comprehensive, culturally appropriate and well-constructed planning tool would be available for Aboriginal ATOD treatment services planning (NIDAC, 2012b; NSWMMH, 2013).

However, given that the original care packages were not finished, and there were no dedicated resources to complete the DASP Model adaptation for Aboriginal people, ACT Health sought a new project, co-funded by the Inter Governmental Committee on Drugs (IGCD), to review and develop

³ The term Aboriginal is used throughout this report and is taken to be inclusive of Aboriginal and Torres Strait Islander Peoples. The term 'indigenous' is only used if a direct quote or when part of an organisation's title. This usage of the term Aboriginal is in accord with that recommended by NACCHO. Note that no specific consultations were held with Torres Strait Islander communities.

⁴ The initial work to modify DASP Model to be suitable for Aboriginal people was called the "Indigenous adaptation".

appropriate care packages for Aboriginal people and provide an associated resource estimation tool. The DPMP was contracted to undertake this work, in collaboration with the National Indigenous Drug and Alcohol Committee (NIDAC).

Project aims

This project sought to develop a resource planning tool for use by health planners in relation to ATOD services for Aboriginal people.

More specifically the project aimed to:

1. Review the DASP Model care packages for their applicability to and appropriateness for Aboriginal people seeking ATOD treatment;
2. Document the evidence supporting treatment as specified in the revised DASP Model care packages for Aboriginal people;
3. Establish resource estimates for the revised Aboriginal care packages.

Aboriginal ownership of solutions was overwhelmingly identified as being an important principle in the consultations held by NIDAC to inform the development of the National Aboriginal and Torres Strait Islanders People's Drug Strategy. Aboriginal ownership was identified as needing to occur from inception and planning, through to implementation and provision and then monitoring and evaluation of any solutions (NIDAC, 2014). This understanding is consistent with international research (Marmot, 2011). This project has been conducted in collaboration with a working group of NIDAC, as detailed in the next chapter.

CHAPTER 2: METHODOLOGY

There were four main tasks:

- Review and revise the current version of the DASP Model care packages – and document updated care package details;
- Review and summarise the literature/evidence for the care;
- Collate and analyse the costs associated with each component of the care packages (e.g. FTE, transport etc.);
- Bring together a final consolidated set of care packages, which included the research evidence, expert consensus, and the resources associated with delivering such care.

An Expert Advisory Group (EAG) was established for the project, formed from NIDAC members and the NIDAC Secretariat. The membership of the EAG was:

Mr Bradley Freeburn, Aboriginal Medical Service, Drug and Alcohol Unit Redfern
 Ms Kristie Harrison, Aboriginal Health and Medical Research Council of NSW
 Mr Scott Wilson, Aboriginal Drug and Alcohol Council
 Professor Dennis Gray, National Drug Research Institute, Curtin University
 Ms Denise Gilchrist, NIDAC Secretariat

The NIDAC EAG has played a central role in overseeing and providing the expert Aboriginal input. The NSW Aboriginal Residential Healing and Drug and Alcohol Network (NARHDAN) provided feedback on the residential rehabilitation care package. Additional consultation and review of the draft report occurred with NIDAC (inclusive of NACCHO members), Helene Delany (ACT Health), Gary Kirby (WA Drug and Alcohol Office), Michael Wright (Curtin University), Alice Knight (NDARC researcher), and the NSW Ministry of Health⁵. All the feedback and comments were very useful in finalising the report, and we are most grateful for the time taken to review the draft report by all the above people.

The project work was coordinated by Alison Ritter (previous Chair of the DASP Model Expert Reference Group) and Maria Gomez (researcher). The project was conducted between February 2014 and December 2014, and the final report delivered to ACT Health on 17th December, 2014.

Approach to the care packages

One possible way of approaching this project was to individually review every care package and identify the required adaptations, then produce a manual with the 255 care packages, and revise the associated DASP Model spreadsheets such that resources estimation could proceed for the population of 100,000. There were three problems with this approach: firstly, the DASP Model mainstream was never reviewed and finalised so the care packages themselves and the spreadsheet (resource estimation tool) remain in draft form and are subject to change. Any errors or uncertainties would carry across in the Aboriginal version; secondly there were time constraints and it did not appear feasible to do every single care package (and review the evidence and the costings) within the allocated time and resources; thirdly and perhaps most importantly, it was not clear that this approach provided good intuition for health planners. A more general and applicable approach appeared better.

To that end, we focussed on a policy tool that would provide health planners with a report which documented the elements of care required for Aboriginal people and the associated evidence-base, along with information to assist in estimating the additional resource requirements for the delivery

⁵ The advice and comments provided by the MHDAO Program Modelling and Planning team should not be interpreted as an endorsement of the document by MHDAO, or the NSW Ministry of Health.

of ATOD care to Aboriginal people. When approached in this way, it appeared preferable to select the typical care types and work with those to develop a robust analysis of the components of care and a resource estimation tool that could be used across multiple service types.

Additionally, it became apparent fairly early on that we needed to deal with whether a service was an Aboriginal-specific service or a mainstream service providing care to Aboriginal people. These two scenarios are different and required a different way of thinking about care and resource estimation (the DASP Model does not include reference to who the 'provider' is – but for Aboriginal services this is a fundamental issue, as seen below).

After discussion of the relative advantages and disadvantages of the different approaches with the EAG, we proceeded with the second approach. We used the alcohol, 18–64 years care packages, selecting only the complex care packages (as these were the ones most suitable for Aboriginal people) and focussed on seven specific care packages:

1. Mild intervention;
2. Moderate care;
3. Psychosocial intervention – with relapse prevention medications - complex;
4. Withdrawal outpatient – complex with relapse prevention pharmacotherapies;
5. Withdrawal residential – complex with relapse prevention pharmacotherapies;
6. Day program;
7. Residential rehabilitation – 13 week stay.

These seven template care packages cover the major treatment types within the DASP Model. Each of these seven care packages includes a number of elements: assessment, case management, referral/discharge planning and transfer of care; medications (where required); diagnostic testing (where required); tobacco interventions; and assertive follow-up. We focused on the elements – and sought to establish best practice for Aboriginal people in relation to each element, and supporting evidence (as detailed in Chapter 4). We required guiding principles for the review and with the EAG reached an understanding of the central cultural and social issues associated with ATOD treatment for Aboriginal people. These principles (documented in Chapter 3) were the foundation for the revisions to the care package.

We also conducted targeted discussions with the EAG about the applicability of these care elements to other age groups within the DASP Model and to drugs other than alcohol. The results of those considerations are given in Chapter 7.

Resource estimation

Having established the necessary revisions to the elements within each care package, we used the original DASP Model Microsoft Excel (©) program to derive an estimate of the average cost per mainstream care package, then a revised estimate of the average cost per Aboriginal care package.

The EAG reviewed the original DASP Model approach to costings: including the salaries assigned to the three different types of workers (medical practitioner, allied health/nursing and ATOD worker) and the other costings used within the DASP Model, such as the overheads etc. (Further details are given in Chapter 6). The EAG concluded that there was no logical basis to vary the underlying cost rates – the salaries and operating costs would be the same for an Aboriginal service as for a mainstream service. Thus the cost bases were not altered from the DASP Model original.

New calculations of the resource estimates then proceeded based on the revised care package elements. These then provide multipliers for resource estimation for the Aboriginal care packages. The details of the resource estimation are given in Chapter 6. A distinction is drawn between

Aboriginal-specific and mainstream services resource implications. This is also dealt with in this chapter.

Some caveats

This project focussed on reviewing the original version of the DASP Model for its suitability for Aboriginal ATOD care. It did not extend to reviewing the original DASP Model. Thus, the definition of treatment is as per the DASP Model original, and the care package labels remain the same. For Aboriginal people the definition of treatment may be broader. We acknowledge the importance of the full array of lifestyle and health interventions, but as these were outside the scope of the DASP Model, they have remained outside the scope of this current project. Similarly, many will know the importance of a continuum between prevention and treatment for Aboriginal people, as well as the importance of interventions such as night patrols and sobering up shelters. Again, this was outside the original DASP Model. Thus it needs to be understood that the work here pertains only to those treatment types (and care packages) within the original DASP Model but should not be taken to mean that other types of interventions are not important.

A second caveat is that due to the sheer number of individual care packages (some 220 in total) we focussed on using the alcohol, 18 to 64 years as the primary basis for the review. In addition, we selected seven specific care packages from that array. Our approach as detailed above entailed the use of a resource multiplier (rather than individual adjustments to every individual care package). We think this provides a more sensible footing for policy decision-making around resources for Aboriginal services.

CHAPTER 3: GUIDING PRINCIPLES FOR ALCOHOL, TOBACCO AND OTHER DRUG TREATMENT FOR ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLE

Alcohol, tobacco and other drug use – harmful or otherwise – does not take place in a vacuum. It has long been recognised that the way in which a psychoactive substance is used and its effects are a consequence of the interaction between: the pharmacological characteristics of the substance itself and the amount ingested; the characteristics of the individual user including his or her life history; and the environment in which use takes place, including both the cultural and social contexts (Zinberg, 1984). Correspondingly, treatment for ATOD problems must be sensitive to the characteristics of the person being treated and the cultural and social context in which he or she is embedded (Brady, 1995; Smith, Rodriguez, & Bernal, 2011). Failure to take adequate account of these is an important reason why treatment interventions found to be effective among non-Aboriginal Australians have been less so among Aboriginal people (NIDAC, 2014). Recognition of this provides the rationale for the current project in which clinical care packages designed for the non-Aboriginal population have been modified to make them more suitable for the treatment of Aboriginal people.

Aboriginal cultures

Summarising anthropological understandings, Hudelson defines culture as:

“... the shared set of (implicit and explicit) values, ideas, concepts, and rules of behaviour that allow a social group to function and perpetuate itself. Rather than simply the presence or absence of a particular attribute, culture is understood as the dynamic and evolving socially constructed reality that exists in the minds of social group members” (Hudelson, 2004, p. 345).

Culture provides a lens through which people view, interact with, and make sense of, or give meaning to, the world around them. Both clients and practitioners bring their particular cultural perspectives to therapeutic encounters – with the potential for negative impacts where differences in those perspectives are unrecognised, particularly by service providers.

Aboriginal Australians do not have one culture but many. These cultures vary as a consequence of pre-European contact variation, historical developments and responses to different social circumstances, as well as to the degree by which they are shared by members of particular social groups. Nevertheless, there are some elements which are common in varying forms. These elements include emphasis on: spirituality; connection to ‘country’ as place and as the embodiment of spirit and creation; networks of family, kin and community, and the reciprocal social obligations between members of those networks including inter-generational and gender relations; and common ways of relating to each other in social interactions. Importantly, these elements are parts of complex interrelated wholes and Aboriginal cultures cannot simply be reduced to ‘checklists’ of those elements.

In a review of the literature on Aboriginal spirituality and its implications for social and emotional wellbeing, Grieves has defined spirituality as:

... “the philosophical basis of a culturally derived and wholistic concept of personhood, what it means to be a person, the nature of relationships to others and to the natural and material world” (Grieves, 2009, p. 5).

As discussed by Grieves, while these cultures find expression in art, literature and song, they pervade Aboriginal people’s lives and are closely linked to their personal and social identities and to

their social and emotional wellbeing. When an individual's wellbeing is upset – whether through factors such as illness, disruption of social relationships, or the adverse effects of ATOD use – this may be perceived as having a spiritual dimension and traditional healers called upon to address disharmonies in that dimension (Hazelhurst, 1994; Reid, 1982, 1983).

Adaptations of evidence-based mainstream interventions that are underpinned by culturally specific practices, including traditional values, spirituality and activities that are relevant to the person receiving treatment have been shown to be more effective than mainstream services (Brady, 1995; Gray, Wilson, Allsop, Saggars, Wilkes, & Ober, 2014; Nagel, Robinson, Condon, & Trauer, 2009). Traditional therapeutic techniques such as storytelling, use of traditional healers, and engaging elders (culturally knowledgeable and respected men and women) which reinforce immersion of clients in culture and community are all seen as effective therapeutic interventions in and of themselves (Brady, 1995; Chenhall, 2007; Gray et al., 2014; Nagel et al., 2009).

In Aboriginal societies the land is seen as the embodiment of creation by spiritual ancestors. Many Aboriginal people see themselves as *belonging to the land* and as *having responsibilities to care for it* both practically and through the performance of particular ceremonies (Host, 2009; Williams, 1986). Connection to country is for many Aboriginal people an essential element in their identity as individuals, as members of families, larger kinship groups and communities, and vis-à-vis other groups and is central to their existence (Kingsley, Townsend, Henderson-Wilson, & Bolam, 2013).

“Even today, when two unacquainted Indigenous people first meet, there are two questions first asked before any further discussion: “Who’s your mob?” and “Where’s your country?”. The concepts of “mob” and “country” are fundamental to Indigenous identity. “Mob” generally refers to the cultural or linguistic groups from which Indigenous Australian’s lineage can be traced. “Country” refers to the geographic location from where that language group originated. Recognising the role that these concepts can play in a holistic approach to Indigenous health and wellbeing is important, especially in building rapport and trust” (Lovett, Dance, Guthrie, Brown, & Tongs, 2014, p. 441).

Maintaining a “spiritual, physical and emotional connection to the land” is fundamental to many people’s beliefs about social and emotional wellbeing (Dudgeon, Mallard, Oxenham, & Fiedler, 2002) and there is extensive evidence acknowledging the benefits to health and wellbeing of Aboriginal people “caring for country” (Burgess, Johnston, Berry, McDonnell, Yibarbuk, Gunabarra, Mileran, & Bailie, 2009; Campbell, Burgess, Garnett, & Wakerman, 2011; Kingsley, Townsend, Phillips, & Aldous, 2009). Burgess and colleagues (2009) conducted a cross-sectional study to investigate the association between “caring for country” and health outcomes relevant to excess Aboriginal morbidity and mortality. The results showed that controlling for socio-demographic characteristics and health behaviours, there was a significant and substantial association between “caring for country” and health outcomes – including lower body mass index, less diabetes, lower blood pressure, lower psychological distress, and lower cardiovascular disease risk. The authors concluded that their findings contribute preliminary empirical support for the Aboriginal assertion that “caring for country” may deliver health gains through social, cultural and behavioural pathways (Burgess et al., 2009).

While connections to and caring for Country have been demonstrated to have positive effects, disconnection from country through dispossession and removal has been shown to have a negative impact on Aboriginal people’s health and well-being. The devastating impact that disconnection from country and culture has on self-identity, and subsequently on risk taking behaviours in young people was highlighted by the Royal Commission into Aboriginal Deaths in Custody (RCIADIC, 1991). Marmot et al. have shown that lack of control, stress and social isolation have been shown to affect

health outcomes across all populations (Marmot, Smith, Stansfeld, Patel, North, Head, White, Brunner, & Feeney, 1991) and in the case of Aboriginal people disconnection from country may contribute an extra layer to this distress and inequality (Kingsley et al., 2009).

Aboriginal communities are essentially kin-based. They are organised largely on the basis of biological relationships and relationships through marriage, with the extended family being equally as important as the nuclear family for some purposes. Between members of kinship networks there are both formal and informal rights and responsibilities. Particularly important among these are mutual obligations to provide care and support. So important is kinship that the principles underlying behaviour between kin are extended to include social behaviour between members of wider communities who are not directly related (Berndt & Berndt, 1996). On this basis, individuals were organised into categories that are commonly referred to as 'skin groups'. In some parts of the country such relationships are formally maintained; in others, the underlying principles of mutual support and obligation continue to inform social interaction on a more informal basis. In order to minimise the potential for social conflict and disruption within kinship networks, some also include 'avoidance relationships' which place restrictions on interactions and physical contact – such as between a 'son-in-law' and his 'mother-in-law'. Importantly, amongst all Aboriginal people, regardless of where they are from and what their life histories have been, family and kinship relationships remain fundamental to contemporary social life (Bishop, Colquhoun, & Johnson, 2006). This has implications for the provision of ATOD services. In this regard it is also important to note that obligations to kin usually take precedence over all other relationships including those with health care providers.

A number of issues related to kinship and gender, and in some instances inter-group disputes, need to be considered in providing culturally safe services. For example, in many instances it is not appropriate for male staff members to be working on their own or with female clients, or for female staff members to be working on their own or with male clients (Lee, Jagtenberg, Ellis, & Conigrave, 2013; Maher, 1999). It is also inappropriate for a man to talk to a woman about certain gender-related issues – often referred to as "men's business" or "women's business" (Taylor & Guerin, 2014). Thus, the structural arrangements and gender of the Aboriginal workforce is an important consideration in ATOD treatment provision.

"Such structural barriers have been implicated in the high levels of Indigenous clients leaving prior to discharge of treatment. The issue has also been the basis for requests for not only more Indigenous staff, but also for gender balance within the staffing of treatment services" (Taylor & Guerin, 2014, p. 146).

Nagel and colleagues (2009) successfully incorporated "family" into a mental health and substance dependence intervention among Aboriginal people. On the basis of qualitative research which identified the importance of "family" they incorporated it into the intervention in three ways: first, through engagement of carers in the treatment session; second, through incorporation of carers on a "family map"; and third, by involving family in the goal-setting phase of care-planning (Nagel et al., 2009). When working with Aboriginal people, the involvement of family and community members can be pivotal in achieving optimal outcomes for an individual (Nagel et al., 2009; NIDAC, 2014). Recognising cultural differences in the ways that "family" is perceived, engagement and working with families and kinship networks needs to move away from a focus on the nuclear family (Taylor & Guerin, 2014). Importantly, however, it should not be assumed that every Aboriginal client requires engagement with his or her wider family or kinship group in treatment. Variation between individuals needs to be recognised and their individual choices in this regard respected.

Several publications report on ways in which culture can be employed in the provision of ATOD treatment for Aboriginal people (Hazelhurst, 1994; Phillips, 2003). Exemplifying such an approach is Bunjilwarra Koori Aboriginal Youth Alcohol and Drug Healing service in Victoria. Bunjilwarra's service model is based on a "holistic approach embedded in culture and inclusive of family and community, and connected to country" (<http://bunjilwarra.org.au/>). As Brady (1995) has highlighted, and as supported by the international evidence (Smith et al., 2011), "culture in treatment" and "culture as treatment" produces better therapeutic outcomes and the care packages documented in this report have been modified to reflect this.

Social inequality and complex needs

The history of non-Aboriginal colonisation of Australia, the alienation of most Aboriginal land and its negative consequences for Aboriginal people have been well documented (Hunter, 1993; McGregor, 2011; Rowley, 1972). This includes the removal of Aboriginal people from their countries and Aboriginal children from their parents; and ongoing prejudice, discrimination and racism. The continuing legacy of this history can be seen in the social inequalities facing large sections of the Aboriginal population. These inequalities are both a consequence of and further contribute to Aboriginal social disadvantage.

In a summary of the international evidence conducted for the World Health Organization, Wilkinson and Marmot identified ten key determinants of health: the social gradient, stress, early life events, social exclusion, work, unemployment, social support, addiction, food and transport (Wilkinson & Marmot, 2003). Gaps between Aboriginal and non-Aboriginal Australians in these areas have been reported by the Productivity Commission's Steering Committee for the Review of Government Service Provision (SCRGSP, 2011). These consequences have been well documented and include: unresolved loss and grief, trauma and abuse, domestic violence, physical health problems, identity issues, cultural dislocation, discrimination and social disadvantage (Carson, Dunbar, Chenhall, & Bailie, 2007; Roche, Duraisingam, Trifonoff, Battams, Freeman, Tovell, Weetra, & Bates, 2013). These complex, interrelated physical, social, emotional, economic and environmental inequalities contribute to and exacerbate ATOD use (Marsh, Dale, & Willis, 2007; Siggers & Gray, 1998). The prevalence of harmful alcohol and illicit drug use among Aboriginal people is approximately double that in the non-Aboriginal population and is both a consequence of and contributes to socioeconomic disadvantage, mental disorders, family breakdown, violence, poorer physical health, hospitalisation and mortality (AIHW, 2011b).

Aboriginal people experience higher rates of mental health disorders and social and emotional well-being problems than other Australians. The compounding impacts of racism, the "Stolen Generations", loss of identity, and colonialism exacerbate mental health problems among Aboriginal people (Raphael & Swan, 1997). Various reports have documented the impact that forcible removal policies have had on Aboriginal people such as loss, trauma and grief (Raphael & Swan, 1997), criminal offending behaviour (Edney, 2003), adverse life outcomes including lower employment, significantly poorer health, greater contact with the criminal justice system, greater alcohol consumption (ATSIS, 2003), and greater contact with mental health service.

These effects and consequences are intergenerational (HREOC, 1997). The Bringing Them Home Report found that "the overwhelming evidence is that the impact does not stop with the children removed. It is inherited by their own children in complex and sometimes heightened ways" (HREOC, 1997, p. 193). A wide range of adverse intergenerational consequences of Stolen Generation experiences are highlighted in the literature, including: higher rates of depression and mental illness, higher levels of substance abuse, higher rates of offending, including domestic violence, over-representation of Aboriginal children in the child welfare system (HREOC, 1997) and ongoing symptoms and effects of unresolved trauma, loss and grief (Koolmatrie & Williams, 2000).

Inequality and poverty impact directly on the ability of Aboriginal people to access ATOD and other health services. Many of those with severe substance use disorders are homeless and the constant moving in search of temporary accommodation means that their contact with service providers or the contact of service providers with them is difficult and attenuated. Many others reside in low-cost accommodation in the outer suburbs of large cities or areas of regional towns where they have no or limited access to either private or public transportation. This often necessitates the provision of transportation to enable them to access services or for services to be delivered to them.

Racism and indifference is a fact of life for many Aboriginal people. Twenty-seven per cent of respondents to the National Aboriginal and Torres Strait Islander Social Survey reported being discriminated against in the previous 12 months (NATSISS, 2008). A study of Aboriginal people aged 16–20 years found that 32 per cent reported experiences of racism and that this was significantly associated with anxiety; depression; suicide risk; and poor overall mental health (Priest, Paradies, Gunthorpe, Sheree, Carney, & Sayers, 2011). Experience of racism has also been found to be associated with higher levels of ATOD use (Paradies, 2007). Not only does racism contribute to Aboriginal ill-health and ATOD use, it is a further impediment to Aboriginal access to ATOD and other health services (Awofeso, 2011). Past direct experience of racism from service providers or the fear of potential racist attitudes and discriminatory behaviour result in a reluctance to engage with non-Aboriginal health workers or service provider organisation and/or a lack of trust that undermines therapeutic relationships. For this reason, the way in which and by whom treatment services are delivered are as important as the services themselves. This requires all organisations, but particularly non-Aboriginal organisations to carefully consider how they deliver appropriate services and how this is to be adequately resourced.

Research shows that people with complex needs may require more intensive support (Clarke & Forrell, 2007). In a report on multiple and complex needs, Hamilton and Elford suggested that the main areas for attention are: stable housing, health and wellbeing, safety, social connectedness and service system responsiveness (Hamilton & Elford, 2009). They also reported that the ingredients for effective service and coordinated care planning partnerships are: “consistency of purpose, respectful, collaborative processes built on trust, capacity for flexibility, sharing of risk, information and feedback, and a clarity of roles” (Hamilton & Elford, 2009, p. 37).

Given the complexity of the factors contributing to ATOD problems among some sections of the Aboriginal population there is a need to adopt a “whole of system” approach across government and community organisations. Partnerships and collaboration with mainstream non-government agencies, Aboriginal organisations and individuals are central (Marsh et al., 2007). While it is beyond the scope of ATOD treatment service providers to address all of these complex needs, the care packages herein have been modified to take account of them to the extent that they impact directly on treatment and to ensure that appropriate links are made to organisations that are resourced to do so.

Organisational types and target populations

In considering the delivery of ATOD treatment services to Aboriginal people (including the care packages described below), it is important to distinguish between the types of organisations providing services and the population groups at which services are targeted. Organisational types are identifiable by the purpose for which they were chiefly established (e.g. delivery of primary health care services or ATOD services) and governance arrangements (i.e. whether they are Aboriginal community controlled, non-Aboriginal non-government organisations, or government organisations). Services are also distinguishable by whether they are targeted specifically at Aboriginal people or are ‘mainstream’ services targeted at the community in general including

Aboriginal people. This distinction has important implications for the appropriateness of services for Aboriginal people and for treatment outcomes. The table below summarises the organisational types. The left hand column identifies the organisational type and the second and third columns the populations at which the services provided by these organisations are targeted, the approximate number of services and some examples.

Table 1: Organisational types and target populations

Organisational type	Aboriginal-specific (for Aboriginal people)	General population (including Aboriginal people)
1. Aboriginal community controlled health organisations (ACCHOs)	<p>Aboriginal community controlled health organisations (ACCOs) or Aboriginal medical services (AMS) providing ATOD-specific services in addition to primary health care services.</p> <p>Approx N=21 who provide treatment as defined in the DASP Model.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Aboriginal Medical Service (Redfern) Cooperative (NSW) • Central Australian Aboriginal Congress (NT) • Winnunga Nimmityjah Aboriginal Health Service (ACT) 	n.a.
2. Aboriginal community controlled organisation – ATOD specific	<p>Aboriginal community controlled organisations established specifically to provide ATOD treatment services to Aboriginal people.</p> <p>Approx N=38 who provide treatment as defined in DASP Model.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Meeanjin Treatment Association (QLD) • Oolong House Aboriginal Corporation (NSW) • Council for Aboriginal Alcohol Programs Services (NT) 	n.a.
3. Aboriginal community controlled organisation – non-ATOD specific	<p>Non-ATOD specific Aboriginal community controlled organisations are community service or community government organisations which provide a broad range of services specifically for Aboriginal people (including community management, youth programs, men’s activities, etc.) but which were not established primarily to address ATOD issues.</p> <p>Approx N=7 who provide treatment as defined in the DASP Model.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Angurugu Community Government Council (NT) • Palm Island Men's Business Group (QLD) • Nirrumbuk Aboriginal Corporation (WA) 	n.a.

4. Non-Aboriginal NGOs	<p>Non-Aboriginal non-government organisations providing Aboriginal-specific services</p> <p>Approx N=18 who provide treatment as defined in the DASP Model.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Addiction Help Agency Cairns (QLD) • Latrobe Community Health Service (VIC) • Holyoake Institute - Wheatbelt Community Drug Service Team (WA) • Odyssey Victoria Koorie Pilot Program 	<p>All NGOs across Australia can provide treatment to Aboriginal clients, but the programs they offer are not Aboriginal-specific.</p> <p>Approx N=300 NGO ATOD services in Australia</p> <p>Examples:</p> <ul style="list-style-type: none"> • ReGen • Turning Point • Ted Noffs Foundation • Drug ARM • Teen Challenge QLD • Banyan House
5. Government agencies	<p>Aboriginal-specific ATOD intervention services provided by state and territory government agencies.</p> <p>Approx N= 8 who provide treatment as defined in the DASP Model.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Western Health: Drug and Alcohol Services (VIC) • ACT Health, Alcohol and Drug Program • Northwest Mental Health Service - Kimberley Community Drug Service Team (WA) 	<p>All government ATOD services</p> <p>Examples:</p> <ul style="list-style-type: none"> • Area Health Services

Table notes:

1. The numbers of agencies are taken from data collated by NDRI for the ANCD project 'greatest areas of need' and reflect the situation in the 2007–2008 financial year. Although there have been changes in these numbers since that time they nevertheless provide a broad indication of the breakdown by service type.
2. The table does not include prevention or harm reduction services. It focusses solely on ATOD treatment services

As can be seen in the above table, there are five types of organisation providing ATOD treatment services specifically for Aboriginal people. ACCHOs (#1 above) are Aboriginal community controlled health organisations or Aboriginal medical services (AMSS) established to provide primary health care (PHC) services but which provide specialist ATOD treatment services in addition to PHC services. ACCO ATOD-specific (#2 above) are Aboriginal community controlled organisations (ACCOs) established specifically to provide ATOD services targeted at Aboriginal people. ACCO non-ATOD specific (#3 above) are Aboriginal community controlled organisations established primarily to provide a broad range of community services or community governance but which also provide some ATOD treatment services.

Non-Aboriginal NGOs (#4) and government agencies (#5) most commonly provide ATOD treatment services that are targeted at the general population. These latter services may be accessed by Aboriginal people either by choice or because there are no Aboriginal-specific service providers in the locations in which they reside. In addition, however, some non-Aboriginal NGOs (#4) – ranging from small local to large national or international organisations – also provide Aboriginal specific services. These NGOs may either exclusively provide services for Aboriginal people or have sub-programs or structures within them that do so. Similarly, some state and territory government agencies (#5) also provide Aboriginal-specific ATOD treatment services through particular sub-programs or organisational structures. Where non-Aboriginal NGOs and governments agencies provide Aboriginal specific services, in addition to providing the level of care documented in the packages in Chapter 4 they require additional, adequately resourced capacity (not inherent within their organisational history and governance) to provide those services in a culturally safe manner (as detailed in Chapter 5).

Cultural awareness, safety and security

The care packages described in this document have been designed to apply to *all* Aboriginal people receiving ATOD treatment. That is, we expect that all Aboriginal clients will be provided with the levels of care described within these packages, according to the severity of their problems and *regardless of which organisation provides the services*. We regard the care described in the next Chapter as essential elements for good practice and positive health outcomes. Importantly, however, it is not sufficient to simply provide the service described in the packages. Those services should be provided in a way which is sensitive to the cultures of particular clients.

The importance of providing treatment in a manner which takes account of clients' cultural backgrounds has been shown to improve outcomes (Smith et al., 2011). In this regard, important distinctions have been made between cultural awareness, cultural safety and cultural security and their implications for the outcomes of health service delivery (Coffin, 2007). At a minimum, all those providing treatment services to Aboriginal people – including those employed by organisations targeting the general population – should be culturally aware. In addition, those organisations providing Aboriginal-specific services should work to ensure that those services are provided in a culturally safe or secure manner. This is taken up further in Chapter 5.

“Cultural appropriateness embraces how people are treated within the service, staff awareness and sensitivity to cultural needs, and intervention methods that are culturally meaningful and complementary and, hence, more likely to succeed” (AIHW, 2006, p. 113).

Cultural safety involves working with individuals or communities to develop and implement culturally appropriate practices (Liaw, Lau, Pyett, Furler, Burchill, Rowley, & Kelaher, 2011). Cultural security is subtly different from cultural safety and imposes a stronger obligation on those that work with Aboriginal people to move beyond “cultural awareness” to actively ensuring that cultural needs are met for individuals. It shifts the emphasis from attitudes to behaviour, focusing directly on practice, skills and efficacy. Cultural security involves employing Aboriginal staff and having policies and procedures that are automatically applied when an Aboriginal person seeks care (Liaw et al., 2011).

The fact that ACCHOs and other ACCOs (#s 1–3) were established by local Aboriginal communities, are governed by Aboriginal boards of management and employ large proportions of Aboriginal people means that they are more likely to be responsive to the circumstances and needs of Aboriginal clients and are more likely to be culturally secure or safe. Organisations that are not Aboriginal community controlled (# 4 and 5) will, of necessity and to varying degrees, require additional capacity to deliver the care packages in culturally aware, safe or secure ways. The additional resources required by non-Aboriginal organisations to build and maintain this capacity are discussed in detail in Chapter 5 of this report.

Summary

There are a number of important themes that need to be considered when reviewing and adapting the DASP Model care packages. They include elements of Aboriginal cultures such as spirituality, connection of Aboriginal people to “country”, and ties to family, kinship networks and community; all of which are central to Aboriginal individual and social wellbeing. Also to be considered are the complex needs of Aboriginal people stemming from the multifaceted and interrelated social and economic inequalities and their social and emotional consequences. All of these have implications for both the care packages and the elements within them.

ATOD services can be and are provided by both Aboriginal-specific services and mainstream services. Evidence has demonstrated that Aboriginal Community Controlled health services provide better access to care: they make the health care provided more appropriate, they provide a more holistic approach to better serve people with complex needs, and they improve health outcomes (Councillor, 2003; Gray, Stearne, Wilson, & Doyle, 2010; Larkin, Geia, & Panaretto, 2006). In the next Chapter (Chapter 4) the details of the revisions to the care packages are provided. Importantly, the care packages and the elements within them are focussed on what the client needs (irrespective of the provider). Chapter 5 then details the additional requirements when these elements of care are delivered in mainstream services.

CHAPTER 4: ADAPTATIONS AND ADDITIONS TO THE DASP MODEL CARE PACKAGES

This chapter moves us from the key principles identified in Chapter 3, to the specific adaptations that were required for each element within the care packages and the identification of new elements of care that will ensure positive health outcomes from ATOD treatment for Aboriginal people. In some cases this involved adjusting the element to be culturally appropriate and consistent with the evidence-base (for example including follow-up sessions in the tobacco intervention). In other cases new elements were required, such as 'return to country/community'.

As noted above, we used the seven main care packages from alcohol 18–64yrs as the master templates. The seven care packages were:

1. Mild intervention
2. Moderate care
3. Psychosocial intervention – with relapse prevention medications - complex
4. Withdrawal outpatient – complex with relapse prevention pharmacotherapies
5. Withdrawal residential – complex with relapse prevention pharmacotherapies
6. Day program – 25 days
7. Residential rehabilitation – 13 week residential care and 13 weeks ongoing care.

The full details are provided in the table at the end of this Chapter, which documents the original DASP Model care package (mainstream) and the detailed revisions and additions to elements within each care package to ensure suitability for Aboriginal people.

The following elements within the care packages required adjustment:

1. Tobacco intervention (in care packages # 1, 2, 3, 4, 5, 6 & 7)
2. Screening and brief intervention (in care package # 1)
3. Assessment in primary care setting (in care package #2)
4. Assessment (in care package # 3, 4, 5, 6 and 7)
5. Psychosocial interventions – group, family and individual counselling (in care packages # 2, 3, 4, 5 & 6)
6. Case management and support (in care packages # 3, 4, 5 & 6)
7. Assertive follow-up (in care packages # 2, 3, 4, 5, 6 & 7)
8. Medication support for relapse prevention pharmacotherapies (in care packages # 2, 3, 4 & 5)
9. Withdrawal care (in care packages # 4, 5 & 6)
10. Residential rehabilitation (care package # 7)

New elements are:

11. Return to country/community
12. Transport
13. Ongoing care
14. Overnight staff

Each of these is dealt with in turn.

Before proceeding, we note that there were a number of elements within the DASP Model care packages that did not require any adjustment. These were:

- Diagnostic testing
- Withdrawal management pharmacotherapies
- Urine drug screens
- Vocational Training, Education and Employment

1. Tobacco intervention

The tobacco intervention is provided for in the 'severe' care packages in the DASP Model (that is, it was not included in the mild or moderate care packages). For the Aboriginal care packages – given the high prevalence of tobacco smoking and the morbidity and mortality associated with smoking – it is appropriate to have a tobacco intervention in every care package, including mild and moderate.

Aboriginal and Torres Strait Islander people smoke at higher rates than non-Aboriginal people. In 2012–13, the age-standardised prevalence of current smoking among Aboriginal people was more than double that among other Australians (41% compared with 20.5% of those aged 18 years and over) (ABS, 2014; Thomas, 2012). This contributes to higher rates of hospitalisation and death from tobacco-related conditions and to the wider health disparity between Aboriginal and non-Aboriginal Australians (Vos, Barker, Begg, Stanley, & Lopez, 2009). Tobacco use was responsible for one-in-five deaths among Aboriginal people in 2003. Of 11 risk factors for health, tobacco smoking accounts for 12.1% of the burden of disease, more than any other risk factors. The contribution of tobacco to the total burden of disease was six times greater for Indigenous than non-Indigenous people (Vos, Barker, Stanley, & Lopez, 2007). Tobacco smoking is thus an important healthcare priority.

In the original DASP Model, the tobacco intervention was only applied in the severe care packages and assumed to apply to 80% of the clients. For Aboriginal people it is provided in all care packages:

- Mild – at the current Aboriginal population prevalence rate (41%)
- Moderate – at a rate between the mild and severe prevalence rates (70%)
- Severe care packages (that is care packages # 3 to 7) - 100% ie for every client.

The population prevalence rate (for the mild care package) was taken from ABS statistics. In 2012/13, two in five (41%) Aboriginal people aged 15 years and over reported smoking on a daily basis (ABS, 2014). The EAG advised that every client they see in ATOD services smoke cigarettes, hence the decision to apply a 100% rate for the severe care packages.

The original DASP Model specified the following tobacco interventions:

- 20% receive no tobacco intervention
- 32% receive brief intervention of 30 mins only
- 40% receive brief intervention of 30 minutes and NRT patches 3 for months
- 7.71 % receive 30 mins of brief intervention and varenicline (Champix-TM) for 3 months
- 0.29% receives 30 mins of brief intervention and bupropion (Zyban-TM) for 2 months.

Power and colleagues (2009) conducted a review of recent evidence of tobacco interventions for Aboriginal Australians. With regard to the use of pharmacological interventions, the evidence showed that there are some small studies that have examined the extent to which subsidised or free provision of NRT is an effective smoking cessation intervention for Aboriginal Australians. One program, that involved administration of free nicotine patches to Aboriginal people, attained a quit rate of 10%. The author's concluded that while this is slightly lower than quit rates achieved in NRT programs in the general population, it still indicates that NRT is an effective strategy for supporting Aboriginal people to quit smoking (Young & Campbell, 2007).

A study by Ivers and colleagues (2003) assessed the use of free nicotine patches by Aboriginal people when offered a brief intervention for smoking cessation. Forty Aboriginal smokers self-selected to receive free nicotine patches and a brief intervention for smoking cessation, and 71 chose the brief intervention only. At six months follow-up, 15% of the nicotine patches group and 1% of the brief intervention group reported that they had quit smoking (Ivers et al., 2003). This is consistent with Power and colleagues review (2009) which found no evidence regarding the

effectiveness of face-to-face counselling alone for Aboriginal people. However, one study achieved quit rates of up to 6% among participants using a combination of counselling programs with free access to NRT (Mark, McLeod, Booker, & Ardler, 2004). The review by Power and Colleagues (2009) identified no studies which have looked at the efficacy of bupropion (marketed in Australia as Zyban) for Aboriginal people.

From these research findings, it appears that there is little evidence to support a change from the original DASP Model distribution of the tobacco interventions: that is aside from the increase in the proportion who receive a tobacco intervention overall, for the mild and moderate care packages, the proportions who receive a brief intervention only, NRT, varenicline or bupropion are the same⁶. However for the severe group, where 100% receive a tobacco intervention, the EAG felt that the two medication prescribing rates (varenicline and bupropion) would be too high. Hence for the severe care packages, of the additional 20% of people receiving a tobacco intervention: 5% received the brief intervention alone; and 15% were added to the NRT group.

Thus for the Aboriginal care packages:

Mild

For 100 people in the Mild Group the breakdown for the Tobacco Intervention is based on:

- 59% are non-smokers and receive no intervention at all
- 16.4% receive brief intervention of 30 mins only
- 20.5% receive brief intervention of 30 minutes and NRT patches 3 for months
- 3.9 % receive 30 mins of brief intervention and varenicline (Champix-TM) for 3 months.
- 0.2% receives 30 mins of brief intervention and bupropion (Zyban-TM) for 2 months.

Moderate

For 100 people in the Moderate Group the breakdown for the Tobacco Intervention is based on:

- 30% are non-smokers and receive no intervention at all
- 28% receive brief intervention of 30 mins only
- 35% receive brief intervention of 30 minutes and NRT patches 3 for months
- 6.72 % receive 30 mins of brief intervention and varenicline (Champix-TM) for 3 months.
- 0.28% receives 30 mins of brief intervention and bupropion (Zyban-TM) for 2 months.

Severe

For 100 people in the Severe Group the breakdown for the Tobacco Intervention is based on:

- 37% receive brief intervention of 30 mins only
- 55% receive brief intervention of 30 minutes and NRT patches 3 for months
- 7.71 % receive 30 mins of brief intervention and varenicline (Champix-TM) for 3 months.
- 0.29% receives 30 mins of brief intervention and bupropion (Zyban-TM) for 2 months.

The minutes per script is calculated, where an average of 7 minutes per script was used.^{7 8} The costs for the medications followed the DASP Model original methodology (see Chapter 6).

⁶ In the DASP Model original (see above), 40% of those who receive tobacco intervention received a BI only; 50% of those who received a tobacco intervention received BI plus NRT, 9.6% varenicline and .4% bupropion. Those percentages were then applied to the 41% for mild, and to the 70% for moderate.

⁷ In the DASP Model original, both 5 minutes and 7 minutes per script were used. For consistency we chose the 7 minutes per script for all tobacco interventions.

⁸ We note that only one script per person was used in the DASP Model mainstream. This remains unchanged.

It is clear that smoking cessation programs in Australia have not had the same impact on Aboriginal smokers as on non-Aboriginal smokers. A randomised controlled trial to test the efficacy of a locally-tailored, intensive, multidimensional smoking cessation program was conducted in 2013 (Marley, Atkinson, Kitaura, Nelson, Gray, Metcalf, & Maguire, 2014). The intervention involved Aboriginal researchers delivering tailored smoking cessation counselling during face-to-face visits, weekly for the first four weeks, monthly to six months, and two monthly to 12 months. The control group received routine care relating to smoking cessation at their local primary health care service. Overall the quit rate in the intensive support group was double that of the usual care group, although this was not statistically significant as the study was under-powered (Marley et al., 2014). The results of this study also demonstrated the importance of local Aboriginal ownership, commitment, participation and control. This included knowledge of local communities, the flexibility to adapt interventions to local settings and circumstances, and taking sufficient time for this to occur (Marley et al., 2014). The results of the study were pooled together with those from the only other published study investigating the long-term benefit of personal support interventions in primary care (Eades, Sanson-Fisher, Wenitong, Panaretto, D'Este, Gilligan, & Stewart, 2012) – the statistically significant results indicate that one-on-one intensive intervention delivered by and provided to Aboriginal and Torres Strait Islander people in a primary health care setting is more effective than usual care in encouraging smoking cessation (Marley et al., 2014).

As a result, the tobacco intervention has been adapted to reflect this evidence-base with the inclusion of 14 follow-up sessions provided by a primary health care worker. As per the trial results, the follow-up appointment would occur weekly for the first 4 weeks, then monthly to 6 months and two-monthly to 12 months (Marley et al., 2014). This amounts to 12 sessions.

Details of the adaptation

Mainstream	Aboriginal
<p><u>Tobacco intervention</u></p> <p>Severe care packages only 24 min per person for the brief intervention (80 smokers/100 people = 0.8*30 min = 24 min per person) Staff time to prescribe varenicline or bupropion or NRT patches: 0.48 *5mins = 2.4 mins per person Medication costs</p>	<p><u>Tobacco intervention</u></p> <p>All care packages Mild = 41% Moderate = 70% Severe = 100% 30 min for the brief intervention Staff time to prescribe varenicline or bupropion or NRT patches:7mins per script</p> <p>Follow-up sessions: 12 x 60 min (PHC worker) Transport where required (see separate section on transport details)</p>

2. Mild Intervention (screening and brief intervention)

As originally designed in the DASP Model the screening and brief intervention for mild presentations entailed 5 x 15min sessions in a primary health care setting. This requires adjustment for Aboriginal clients. The EAG perceived that a brief intervention was not suitable for Aboriginal clients, and that greater time was required as this first intervention should be seen as a pathway into treatment. More time is also consistent with the complex needs and with the potential need to engage family and kinship members in the process (Scrimgeour & Scrimgeour, 2008). Brief interventions require the establishment of some level of rapport, it takes time to develop rapport and trust, and this process involves listening to the individual’s issues and story as the client wants to tell it (Brett,

Lawrence, Ivers, & Conigrave, 2014). For Aboriginal clients, 15 minutes is insufficient time to conduct brief interventions.

The importance of establishing rapport is evidenced in the study by Lovett and colleagues (2014) whose research involved the design and implementation of a culturally mediated case management model at *Winnunga Nimmityjah Aboriginal Health Service* for Aboriginal clients who consume alcohol at problematic levels. The screening and brief intervention component of the model included specific questions about “belonging” and “country” designed to facilitate client engagement with the service (Lovett et al., 2014). The concepts of “mob” and “country” are fundamental to Aboriginal identity. “Mob” generally refers to the cultural or linguistic groups from which an Aboriginal Australian’s lineage can be traced. “Country” refers to the geographic location from where that language group originated. Recognising the role that these concepts can play in a holistic approach to Aboriginal health and wellbeing is important, especially in building rapport and trust (Lovett, 2013).

An additional element that needs to be included is consultation with the primary carer or other family member of the client. Here, the importance of family and kinship is addressed and how family involvement is viewed as part of the treatment process (Taylor & Guerin, 2014). Thirty minutes has been added to the moderate intervention for this: it may be a carer, family member or significant other. It could also be a paid carer.

Due to the complexity of issues for Aboriginal people, time has been included for referrals to other services, for example, housing services/support, financial aid and budgeting support, parenting skills and managing legal issues. Four by 15 minutes has been added for the referral of clients with mild presentations to other services.

Details of the adaptation

Mainstream	Aboriginal
5 x 15 min primary care assessment	3 x 30 min screening and brief intervention 1 x 30 min consultation with primary carer or other family member 4 x 15 min referral by phone

3. Assessment in primary care (moderate care)

The moderate care package was originally designed for presentations by clients who were not severely impaired by their use of alcohol or other drugs (the moderate refers to moderate impairment). It sits between a brief intervention (see above) and the more intensive alcohol and other drug specific treatments covered in the remaining care packages. In the original DASP Model the moderate intervention was assumed to be provided in non-specialist, primary health care settings and included assessment by a primary health care practitioner, the prescribing of relapse prevention pharmacotherapies, and five individual counselling sessions. For the Aboriginal care packages, the components within the primary care assessment element needed adaption (the changes to the relapse prevention pharmacotherapies, return to country and assertive follow-up are detailed later, under each specific element).

It requires adaptation not dissimilar to brief intervention – as originally designed it is simply too short to achieve positive health outcomes. Extra sessions and time have been added for the primary

care assessment and time for the assessor to liaise with others due to the complexity of issues for Aboriginal and Torres Strait Islander people.

Over and above the primary care assessment, 4 additional sessions of screening and brief intervention have been included in the moderate care package. This is needed to build rapport with the client, and to listen to the client’s story (Brett et al., 2014; Lovett et al., 2014). There is also the issue of gender and kinship. Where possible, male health professionals should deal with male adult clients, and females with female clients (Taylor & Guerin, 2014). This needs to be taken into account when making referrals to other services, and thus requires additional time for both care coordination and for referral.

For Aboriginal clients there is a need for case coordination across and between multiple services due to the complex needs of clients. For this reason, extra time has been added for referral and case coordination due to complex presentations.

Details of the adaptation

Mainstream	Aboriginal
1 x 30 min primary care medical assessment and referral 2 x 15 min medical monitoring by primary carer 1 x 10 min liaison between medical primary carer, psychologist/MBS providers	1 x 30 min primary health care provider assessment and referral 3 x 30 min monitoring by primary health care provider 1 x 30 min liaison between primary health care provider, psychologist /MBS providers 4 x 30 min screening and brief interventions 4 x 15 min care coordination 4 x 15 min supported referral

4. Assessment

In the DASP Model mainstream, the standard assessment was either 50 or 60 minutes and in some cases 75 minutes. Consistent with the guiding principles (Chapter 3), more time is required for an Aboriginal assessment, and we have standardised all assessments at 75 minutes.

More time is required for assessments because of the time taken by a client to tell his or her story. More time is also required for family members/others who are often also present in the assessment process (where requested). There is a need to ensure program appointment times for assessment with Aboriginal people are long enough to allow the client to “yarn” about their circumstances. An important communication protocol is to “allow time for yarning” at the start of any contact (Nagel & Thompson, 2007). There are also additional assessment sessions given complex presentations (Scrimgeour & Scrimgeour, 2008).

Family and kinship networks are fundamental to Aboriginal people (Bishop et al., 2006). Accordingly, when working with Aboriginal people, involvement of family and community members can be pivotal in achieving best outcomes for an individual (Hayman, White, & Spurling, 2009; Nagel et al., 2009). This can be particularly true in a remote setting where the kinship system/economy is at its strongest. For people who have a substance problem, there is immense pressure to give in to the cultural expectations of mutual obligation. For example if a kin relative says ‘come and drink with me’ the person with the substance problem (even if they are trying to do something about that problem) is highly likely to prioritise cultural obligations over their own health, and go and drink with that relative. This is a difficult cycle to break, and requires engagement of the kin network in ATOD

treatment. Families and communities may also need assistance in their own right in responding to those with an ATOD problem (Lee, Freeburn, Ella, Miller, Perry, & Conigrave, 2012). Family and community involvement should be discussed at the time of assessment and, depending on wishes of the person being assessed and the needs of the family and the community, incorporated into further treatment planning.

Details of the adaptation

Mainstream	Aboriginal
<p><u>Assessment</u></p> <p>2 x 60 min assessment*</p> <p>1 x 30 complex case conference</p> <p>2 x 15 min transfer/referral of care/follow up</p>	<p><u>Assessment</u></p> <p>2 x 75 min assessment</p> <p>2 x 30 complex case conference</p> <p>2 x 15 min transfer/referral of care/follow up</p>

* As per withdrawal outpatient and withdrawal residential. Different figures are used for the mainstream psycho-social intervention, day program and residential rehabilitation.

5. Psychosocial interventions

The psycho-social elements within the original DASP Model care packages contained both individual and group counselling sessions. Individual sessions were generally 60 minutes in duration; and group sessions were also 60 minutes; with one staff member per 8 group participants. These time allocations have not altered for Aboriginal clients (given all clients’ ability to concentrate and optimal time of counselling interventions remains the same).

A qualitative study by Berry et al. (2013) of five residential drug and alcohol rehabilitation services for Aboriginal men in New South Wales examined “culture as treatment” through different cultural activities offered by the services. Part of the research involved asking participants what cultural activities they would most like to engage in during treatment. The responses included “time on Country; learning about culture/heritage/land; traditional art/craft; and time with Elders” (Berry, 2013). Previous research has indicated that re-establishing and promoting traditional culture is an important way of restoring social and emotional wellbeing for Aboriginal Australians (Hunter & Garvey, 1998; Hunter, Tsey, Baird, & Baird, 2002). The practice of traditional healing is still very much a part of Aboriginal culture. An Office of Aboriginal and Torres Strait Islander Health (OATSIH) report on the provision of health-care services in 2010/2011 includes traditional healing and provision of bush medicine as elements of such services (AIHW, 2012a). Of Aboriginal and Torres Strait Islander health services that received OATSIH funding for provision of primary health care in that year, 20 per cent of clinics offered the services of traditional healers (AIHW, 2012a).

Individual counselling, while not varied in terms of the time allocation in the DASP Model, should therefore be flexibly tailored to be culturally appropriate and to include ‘culture as treatment’. This means the time allocated to individual counselling, group sessions and group activities may include taking part in different cultural activities during treatment such as time on country; learning about culture/heritage/land; making traditional artefacts; learning about or making traditional foods and medicines; traditional art/craft; traditional language classes; time with Elders; and education regarding history (Berry, 2013; Brady, 2002; Dance, Tongs, Guthrie, McDonald, D’Souza, Cubillo, & Bammer, 2005). These cultural activities can take many forms, for example, in the *Makin Tracks* intervention they included “youth activities in Yalata, support for a group from Yalata to attend a

football carnival at Finke in the Northern Territory, and support for a men’s camp conducted in conjunction with Port Lincoln Aboriginal Health Services and Nunkuwarrin Yunti health service” (Gray & Stearne, 2004, p. 18).

In interviews with Aboriginal and Torres Strait Islander service providers, counselling was seen as important for client engagement and program completion at most services and was delivered on either a formal or informal basis. Counselling of Aboriginal clients often included practical and supportive elements, and was not confined to one modality but tailored to the needs of the client by drug and alcohol workers, nurses, or counsellors (Brett et al., 2014).

When counselling an Aboriginal person, workers should be aware that the concept of family in Aboriginal culture includes immediate and extended family and relatives, and, with the permission of the client, should include family members in the counselling as much as possible (Williams, Nasir, Smither, & Troon, 2006). The relationship between the Aboriginal social context and patterns of drinking means that to be effective, programs need to target individuals and their wider family and kinship group (Alati, Madden, & Morton, 1996). Yet not all Aboriginal clients welcome the involvement of their family in treatment. Research has shown that while some prefer to be away from family influences, others find family separation has a negative effect (Nichols, 2002). The different needs of individual clients necessitate program choices (Taylor, Thompson, & Davis, 2010). Therefore, for some Aboriginal clients, family engagement is an important element of their treatment. Thus the group sessions in the original DASP Model should be configured as family sessions, with flexibility depending on the client and the group needs. Additional time (20 minutes) has been included for staff to prepare for each of the sessions with the family. An evaluation of an inner city outpatient treatment facility in NSW recommended incorporation of support groups and more integrated health care involving family to better engage with its Aboriginal clients (Teasdale, Conigrave, Kiel, Freeburn, Long, & Becker, 2008).

For the group sessions, the gender and kinship related issues identified in Chapter 3 mean that for this element, an extra staff member is required to ensure gender balance in group counselling sessions⁹ (Taylor & Guerin, 2014). In a study by Lee and colleagues (2014) that assessed the needs of Aboriginal Australian women with comorbid mental and alcohol and other drug use disorders and their families, many family members suggested that “more information and group family support should be provided for families and carers to improve their understanding of symptoms and enable them to better support their loved one” (Lee et al., 2014).

Details of the adaptation

Mainstream	Aboriginal
<u>Individual – Psychosocial interventions – complex</u> 2 x 1 x 15 min intake 2 x 1 x 60 min assessment 2 x 5 x 60 min 1:1 psychosocial intervention/family/supporter 2 x 1 x 15 min case conference 2 x 2 x 30 min transfer of care/ discharge / care coordination	<u>Individual – Psychosocial interventions – complex</u> 2 x 1 x 15 min intake 2 x 1 x 75 min assessment 2 x 5 x 60 min 1:1 psychosocial intervention/family/supporter 2 x 1 x 15 min case conference 2 x 2 x 30 min transfer of care/discharge/care coordination
<u>Group Psychosocial intervention</u> 1 x 30 min screening / brief assessment and	<u>Group/Family – Psychosocial interventions-</u> 1 x 30 min screening/brief assessment and orientation

⁹ This does not apply to gender specific treatment services.

orientation 6 x 60 min group sessions (assume 1 x staff for 8 participants)	6 x 60 min group sessions (assume 2 x staff for 8 participants) 6 x 20 mins preparation for family sessions
<u>Day program</u> 25 x 60 min group counselling (assume 1 staff and 8 participants) 5 x 60 min 1:1 counselling 25 x 90 min group counselling (assume 1 staff and 8 participants) 25 x 120 min group activity (assume 1 staff and 8 participants) 25 x 120 min group activity (assume 1 staff and 8 participants)	<u>Day program</u> 25 x 60 min group counselling(assume 2 staff and 8 participants) 5 x 60 min 1:1 counselling 25 x 90 min group counselling (assume 2 staff and 8 participants) 25 x 120 min group activity (assume 2 staff and 8 participants) 25 x 120 min group activity (assume 2 staff and 8 participants)

6. Case management & support

Case management has been defined as the process that oversees or directs the administration, planning, coordination and delivery of services to the client by the case worker/case manager and/or by other workers (Marsh et al., 2007). There is good evidence that case management can improve outcomes for residents attending residential rehabilitation. In a study of four treatment modalities (short-term residential (3,112 residents), long-term residents (2,888 residents), outpatient (7,431) and detoxification (7,776 residents), all residents receiving case management compared to residents who received no case management demonstrated higher retention, and lower likelihood of representation to detoxification (Schwartz, Baker, Mulvey, & Plough, 1997). No specific evidence regarding case management in Aboriginal and Torres Strait Islander clients was able to be located. Gray (2010) stated that “ coordination and case management need to be resourced in terms of both infrastructure (records and communications) and staffing, and in some regions or localities a good case can be made for the establishment of case-coordinator positions within lead Indigenous organisations” (Gray et al., 2010, p. 130).

Case management and support throughout ATOD treatment is an essential component of all care packages. In the original DASP Model case management and support included assessment, engagement with family/carer, implementation of case plans, case conferences and discharge/referral and transfer of care.

For Aboriginal and Torres Strait Islander clients there is a need for case coordination across and between multiple services due to the complex needs of clients. More coordination time required, case conferencing, case management time is required due to complex presentations and the need for family involvement (see Chapter 3). Discharge planning should involve supported referral for Aboriginal clients and more time on transfer of care. Engagement with family is a very important part of the discharge plan and it is essential to let family know that the client is being discharged. The Exit Pack should contain information on referrals, contact details, etc.

Details of the adaptation

Mainstream	Aboriginal
<u>Case management and support – complex</u>	<u>Case management and support – complex</u>
2 x 1 x 60 min case management assessment	2 x 1 x 75 min case management assessment
2 x 1 x 30 min family / carer engagement	2 x 3 x 60 min family / carer / partner engagement
2 x 3 x 30 min implementation of case management and support	2 x 3 x 60 min implementation of case management and support
2 x 2 x 40 min case conference	2 x 2 x 60 min case conference
2 x 1 x 30 min discharge/ referral/ transfer of care / follow up	2 x 1 x 60 min discharge/ referral/ transfer of care / follow up

7. Assertive follow-up

The importance of follow-up in improving outcomes for the client has been acknowledged in the literature, although it can be difficult and time consuming to implement given the transient nature of some clients. Follow-up provides clients with a sense of care and commitment on behalf of the service provider and may result in the client being more likely to re-engage in treatment should the need arise (Gray et al., 2010).

Research by Chenhall et al. (2013) aimed to present an analysis of the key features of treatment associated with four Aboriginal Australian alcohol and drug treatment centres, as expressed by staff working in these centres. With regard to *aftercare and follow-up*, in this study, all of the participating organisations indicated that they lack the resources to follow up or provide (or link to) aftercare programmes. At one site, the CEO stated that the resources and time required to follow up on residents post-treatment would require a dedicated staff position (Chenhall & Senior, 2013). The authors mention that while all staff interviewed attempted to contact residents after they had completed treatment, this was not organised into any organisational aftercare programme and in reality, many staff did not have time to locate residents. Chenhall et al. (2013) state that this is an important issue, and is “one that needs to be argued to government in terms of gaining extra funds for developing follow-up procedures or for the shifting of resources to support this activity.” However, many of the services were unclear as to what an effective aftercare programme would look like, whether it meant:

- Staff visiting residents in their home communities,
- Developing outpatient units offering various support services or
- Linking with other services to offer better case management of residents following treatment completion (Chenhall & Senior, 2013)

In the original DASP Model, assertive follow-up was included in every severe care package, and was specified as one 10 minute telephone call. The EAG noted that this was insufficient for Aboriginal clients. Reinforcing that this element facilitates checks on a person’s stability, not the provision of treatment (it’s an early warning system for when the person may need to return to treatment/support), it is vital that ongoing assertive follow-up occur for every client on a monthly basis after treatment has concluded. Given the importance of keeping the rapport/connection that has been built with Aboriginal clients, face-to-face appointments (outreach visits) are required. This could also involve communicating with the family (rather than the client), and providing them with support. Trying to contact clients can be difficult and time consuming – contingencies need to be factored in, for example having an agreed upon process whereby the ATOD clinician faxes a reminder to the health clinic asking them to ask the client to call the ATOD service from the clinic

phone. In remote communities in particular, involving a community nurse or the local health service from the beginning becomes critical. The EAG also included the assertive follow-up in the moderate care package – although at a lower intensity than for the severe care packages.

Assertive follow-up should commence immediately after treatment is finished. 12 sessions have been nominated to cover a tapered schedule – where it may be weekly for the first month, then moving to monthly thereafter. Importantly, this clinical time allocation can be flexibly deployed: in some cases it may involve telephone contact with the client, in others contact with family members. In some cases it is a face-to-face outreach support opportunity, in others a more formal counselling session. As above, this element is essential in maintaining a pathway back into treatment should it be required.

Details of the adaptation

Mainstream	Aboriginal
<p><u>Assertive Follow-up</u></p> <p>Moderate care package: No assertive follow-up</p> <p>Severe care packages 1 x 10 min phone call</p>	<p><u>Assertive Follow-up</u></p> <p>Moderate care package: 6 x 30 mins face-to-face 6 x 30 mins phone</p> <p>Severe care packages: 12 x 60 mins face to face visit</p>

8. Medication support for relapse prevention pharmacotherapies

“Social and emotional wellbeing issues deeply pervade the lives of all Aboriginal people and seriously diminish the value that individuals place upon medicines and the potential of these medicines to improve their quality of life” (Emden, Kowanko, de Crespigny, & Murray, 2005, p. 83).

A qualitative study by Swain et al. (2013) explored the Aboriginal and Torres Strait Islander patients’ experiences with medicines and the barriers and facilitators to their effective use of medicines. The research involved 18 semi-structured focus groups with 101 Aboriginal and Torres Strait Islander participants. Groups were conducted at 11 Aboriginal health services. The results showed that there was confusion over medicines, and a perceived lack of advice from health professionals about medicines. Many participants acknowledged that others in their communities also struggled to manage their medicines. Some community members elected not to take medicines, others tried to be adherent with their medications but found the barriers too great. Distrust and fear of Western medicine, family trauma, lack of understanding about medicines were reasons given for lack of medication adherence (Swain & Barclay, 2013). Participants wanted more information about medicine, indications for medicine, how they should be used, potential side effects, drug interactions and duration of therapy (Swain & Barclay, 2013). In another study, the importance of effective communication about medications was highlighted. The use of language that was not easily understood by the Aboriginal community presented communication problems. Many of the Aboriginal Health Workers interviewed felt the language used was too complex, too medically oriented or not explained in sufficiently simple terms to the client (Hamrosi, Taylor, & Aslani, 2006). Literacy and the ability to interpret labelling and written information provided was a substantial barrier, and over half the respondents mentioned this as a significant issue affecting a person’s ability to take their medication correctly (Hamrosi et al., 2006).

There have been a number of other studies of medication use in Aboriginal communities (Hamrosi et al., 2006; Kowanko, de Crespigny, Murray, Groenkjaer, & Emden, 2004), which all point to the need for greater attention to education, information, and support with maintaining consumption of prescribed medications. Hamrosi and colleagues conclude that “beliefs, both cultural, and spiritual need to be taken into account when considering non-compliance” and that it is imperative that health care professionals increase their understanding of the different cultural needs of their clients (Langer, 1999) and provide adequate counselling to ensure a thorough understanding of the reasons for, and the nature of the treatment, but also actively include the client in the interaction (Langer, 1999).

Larkin et al. (2005) reported on strategies to improve medication adherence uptake in Aboriginal Australians which involve approaches such as effective communication and simplifying drug regimes. In tailoring drug regimens, the need to take medicines regularly should be emphasised in education and information as it may not fit the client’s understandings of how medicines are to be used (Larkin & Murray, 2005). Discussing administration of medications, and using educational tools to foster communication and shared understanding are useful approaches (Larkin & Murray, 2005).

Based on this research evidence, the elements regarding relapse prevention medication were adapted for Aboriginal clients. Additional education and information time was included, along with the inclusion of an outreach or health worker during the prescribing sessions. This provides the opportunity for time to discuss the medications, their effects, the prescription regime, side effects and so on in more detail, as the research has shown is required for Aboriginal clients.

The medications themselves in the original DASP Model were acamprosate, naltrexone and disulfiram (prescribed for 50% of clients in the moderate care package: 10% acamprosate; 20% naltrexone and 20% disulfiram; and prescribed for 100% of clients in the severe care packages: 20% acamprosate; 40% disulfiram and 40% naltrexone). In the first work from NIDAC on the DASP Model adaptation, it was noted that “In keeping with the *Alcohol Treatment Guidelines for Indigenous Australians* the use of disulfiram has been removed from the alcohol packages due to high rates of poor health in Indigenous clients”. The EAG concurred with the original NIDAC advice that disulfiram was an inappropriate medication for Aboriginal clients. Hence the Aboriginal care packages do not include disulfiram, and increase the prescribing rate of acamprosate to 15% and of naltrexone to 35% (resulting in an overall 50% prescribing rate in the moderate care package as per the mainstream DASP Model) and increasing the prescribing rate of acamprosate to 40% and of naltrexone to 60% (resulting in an overall 100% prescribing rate in the severe care packages as per the mainstream DASP Model)

Details of the adaptation

Mainstream	Aboriginal
<u>Pharmacotherapies – complex</u>	<u>Pharmacotherapies – complex</u>
2 x 1 x 30 min medical assessment	2 x 1 x 30 min medical assessment
2 x 5 min bloods / diagnostic testing	2 x 5 min bloods / diagnostic testing
9 x 30 min medical review and prescribing	2 x 2 x 15 min information/education re medications
2 x 2 x 15 min case conference	9 x 30 min medical review and prescribing
2 x 2 x 15 min referral / transfer of care / care coordination	2 x 2 x 15 min case conference
	2 x 2 x 15 min referral / transfer of care / care coordination
	9 x 30 min outreach/ health worker support at the consultation
<u>Moderate</u>	
Prescription relapse prevention medicines	<u>Moderate</u>

Applies to 50% Acamprosate (10%); disulfiram (20%), naltrexone (20%) <u>Severe</u> Prescription relapse prevention medicines Applies to 100% Acamprosate (20%); disulfiram (40%); naltrexone (40%)	Prescription relapse prevention medicines Applies to 50% Acamprosate (15%); naltrexone (35%) <u>Severe</u> Prescription relapse prevention medicines Applies to 100% Acamprosate (40%); naltrexone (60%)
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9. Withdrawal care

Withdrawal services for Aboriginal clients – both residential and non-residential are an important part of a comprehensive treatment service system. While the sporadic drinking patterns observed in Aboriginal communities (Chikritzhs & Brady, 2006) often mean that risk of tolerance, and hence withdrawal, is lower (Margolis, Ypinazar, Clough, & Hunter, 2008), those who do experience withdrawal symptoms may be more at risk of complications due to higher rates of medical and psychiatric comorbidities (Brett et al., 2014). The report by Gray and colleagues (2010) identified a deficiency in the availability of withdrawal management services for Aboriginal and Torres Strait Islander peoples, and prioritised this as a key area for development. It also recognised the role of outpatient withdrawal management from mainstream literature (Hayashida, Alterman, McLellan, O'Brien, Purtill, Volpicelli, Raphaelson, & Hall, 1989).

Outpatient withdrawal can be much more difficult for Aboriginal people, primarily because their environment is often not safe, and not free from the drinking behaviour of others (Brady, 2002). A primary requirement for out-patient detoxification is safety. Brett and colleagues (2014) recently published a paper that aimed to determine the successful components of a selection of urban and regional services that provide outpatient alcohol withdrawal management for Aboriginal and Torres Strait Islander peoples. They found that initial individual engagement was vital – staff of all the services interviewed for the study (n= 12) stressed the importance of client engagement. Staff described the development of rapport and trust, which may take several consultations, before the discussion of withdrawal management. This process involves listening to the individual's issues and story as the client wants to tell it, as well as helping with practical problem-solving, for example linking to social services, financial services, and other health services specific for Aboriginal and Torres Strait Islanders (Brett et al., 2014). Flexibility was also emphasised – most services felt that being able to facilitate assessment for withdrawal management as soon as the client is ready (without waiting lists) was important. Flexibility can reduce the chance of a window of opportunity being missed and the client disengaging (Brett et al., 2014).

Care packages for both non-residential and residential withdrawal care were adapted; focussed on more time to develop the care plan (given complex needs), daily review for non-residential withdrawal, and greater time in discharge planning for residential withdrawal. There is a need for more time for care planning and for review due to complex presentations. In residential withdrawal there is also a need for a bed or access to accommodation for support person/family (inclusion of family in treatment). This should not be at the expense of a clinical bed, and may be off-site, but the importance of having a family member stay with an Aboriginal client is well noted, as discussed in the next paragraph.

Lack of personal support is a barrier for clients going through withdrawal management. Evidence has shown that family separation has a negative effect on treatment (Nichols, 2002; Stearne, 2002). As

reported by Stearne et al. (2002) in an assessment of the need for Perth-based Aboriginal substance misuse services, “many Indigenous people with substance misuse problems are reluctant to leave family and ‘country’ for treatment”, and because of the absence of appropriate residential detoxification and rehabilitation programs in many areas, Aboriginal people with substance misuse problems go untreated (Stearne, 2002, p. 33). Hence, family support has been added to address this issue. The inclusion of a support bed is necessary but not for every client. The EAG felt that it may be required in about 50% of cases. (Noting that in some places it would be higher; in others it will be lower; the DASP Model works on averages).

In the DASP Model original there was also a home-based withdrawal option. This is not appropriate for Aboriginal clients and hence has not been included. The Aboriginal Medical Services Alliance of the Northern Territory notes that home-based withdrawal management should be available to those with good social support, no major medical or psychological comorbidity, low risk of complicated withdrawal and good access to 24 hour medical support, but this may exclude many Aboriginal people (AMSANT, 2008). The NIDAC working group that modified the original DASP Model were of the view that this applied to most Aboriginal clients and hence it has not been included.

Details of the adaptation

Mainstream	Aboriginal
<p><u>Withdrawal Management – outpatient</u></p> <p>1 x 30 min development of care plan 1 x 15 min intake assessment (Withdrawal Management) 1 x 30 min medical assessment and prescribing 2 x 40 min assessment (Withdrawal Management) 6 x 15 min review 2 x 10 min brief interventions to coincide with dispensing events or reviews 1 x 30 min medical consult 1 x 30 min referral /transfer of care / Follow up 1 x 30 min case conference 1 x 40 min dispensing time per patient</p> <p>1 x 20 min medical consult 1 x 60 min psychosocial intervention 1:1 1 x 30 min case conference (simple) 1 x 30 min referral /transfer of care / follow up</p>	<p><u>Withdrawal Management – outpatient</u></p> <p>1 x 60 min development of care plan 1 x 30 min intake assessment (Withdrawal Management) 1 x 30 min medical assessment and prescribing 2 x 40 min assessment (Withdrawal Management) 7 x 30 min review 2 x 10 min brief interventions to coincide with dispensing events or reviews 1 x 30 min medical consult 1 x 30 min referral/ transfer of care/ follow up 1 x 30 min case conference 1 x 40 min dispensing time per patient</p> <p>1 x 20 min medical consult 1 x 60 min psychosocial intervention 1:1 1 x 30 min case conference (simple) 1 x 30 min referral /transfer of care / follow up</p>
<p><u>Withdrawal Management Stay (Bed type DETOX) –</u></p> <p>1 x 30 min development of care plan 1 x 15 min assessment (intake) 1 x 60 min assessment 1 x 45 min medical assessment 1 x 40 min dispensing per patient 5 x 90 min group sessions (assume 1 staff and 5 participants per group) 5 x 30 min reviews nursing 2 x 15 min medical review 2 x 30 min referral /transfer of care / follow up Overnight staff (assume 1 staff member)</p>	<p><u>Withdrawal Management – residential</u></p> <p>1 x 5 min diagnostic testing 1 x 30 min development of care plan 1 x 15 min assessment (intake) 1 x 75 min assessment 1 x 45 min medical assessment 1 x 40 min dispensing per patient 5 x 90 min group sessions (assume 2 staff and 5 participants per group) 5 x 30 min reviews nursing 2 x 15 min medical review 2 x 60 min discharge planning sessions 2 x 30 min referral /transfer of care / follow up 1 x bed cost for family member/ support person (50%) Overnight Staff (assume 2 staff members)</p>

10. Residential rehabilitation

Generally, residential treatment is not more effective than non-residential treatment (Babor, Caetano, Casswell, Edwards, & Giesbrecht, 2010). However, the evidence suggests that it is more effective for particular groups of clients including those who are:

1. Highly resistant to treatment
2. Have few financial resources
3. Come from environments that are not conducive to recovery
4. Have more serious, coexisting medical and psychiatric conditions (Babor et al., 2010)

These are characteristics of many Aboriginal clients and for them residential treatment may be the only practical option.

Brady (2002) has provided an overview of Aboriginal residential treatment programs, which includes the factors contributing to their efficacy. The overall trend for the general population is to use non-residential services, which are now more prevalent than residential services. Aboriginal people are more likely to use residential forms of treatment than are non-Aboriginal Australians (Brady, 2002). Research indicates that more than 50% of Aboriginal clients “choose” residential services over other forms of treatment (Shand & Mattick, 2001). A paper by Berry et al. (2009) states that given the high rates of poverty, unemployment, and low socio-economic status within Aboriginal populations, residential programs are likely to be especially advantageous for Aboriginal clients. However, “these services need to be appropriately managed and staffed to ensure maximum engagement, cultural safety and appropriate responsiveness to the complexity of needs of disempowered people” (Berry & Crowe, 2009, p. 5).

The relationship between the Aboriginal social context and patterns of drinking has influenced thinking that programs need to target the individual together with kin relationships to be effective (Alati et al., 1996). Yet not all Aboriginal clients welcome the involvement of their family in treatment. Research has shown that while some prefer to be away from family influences, others find family separation has a negative affect (Nichols, 2002). The different needs of individual clients necessitate program choices (Taylor et al., 2010). Therefore, for some Aboriginal clients, family therapy is an important element of their treatment. There are an increasing number of residential rehabilitation centres that are opening their doors to entire families (Ellis, 1998, 1999).

According to a qualitative study of a number of Aboriginal residential rehabilitation centres by Chenhall (2013) a “flexible approach” was a key issue with organisations offering a wide range of services other than the provision of education about the harms of substance misuse. Underlying this was a view by all organisations that they were treating residents holistically – they were focussing on the “physical, social and emotional and spiritual needs of the resident” (Chenhall & Senior, 2013). A flexible approach has been advocated by a number of Aboriginal residential rehabilitation centres, for example, the Weigelli Centre in Cowra does not adhere to a specific program but attempts to cater for the individual needs of their clients (Ellis, 1999).

Cultural activities form an important element in the Aboriginal residential rehabilitation package. A qualitative study by Berry (2013) of five residential drug and alcohol rehabilitation services for Aboriginal men in New South Wales examined “culture as treatment” through different cultural activities offered by the services. Part of the research involved asking participant what cultural activities they would most like to engage in during treatment, the responses included “time on Country; learning about culture/heritage/land; traditional art/craft; and time with Elders” (Berry, 2013). Previous research has indicated that re-establishing and promoting traditional culture is an

important way of restoring social and emotional wellbeing for Aboriginal Australians (Hunter & Garvey, 1998; Hunter et al., 2002).

The five services included in the research (Berry, 2013) each provided opportunities to engage in some of these activities, although no service offered all activities, and some services offered the activities more regularly than others. The study found that “Time on Country” appeared to be of primary importance, with participants rating this as their most desired cultural activity, this is consistent with the findings of Burgess et al. (2009), and other previous research linking time spent on Country with enhanced identity, self-esteem, pride, and a sense of connection (Kingsley et al., 2009).

Benefits such as reconnection with tradition, as sense of community/belonging, enhanced spirituality/self-esteem/identity, skill-building, and a sense of pride in Aboriginality were all articulated by service providers to be benefits of cultural engagement (Berry, 2013).

It was indicated by participants in several stages of the research that it is not simply participation in cultural activities which result in cultural engagement, but that internal aspects also play an important role in culture (Berry, 2013). When considering what comprises cultural engagement in everyday life, participant spoke about “respect for Elders and their traditional teachings, having strong kinship links, being aware of one’s Country and acknowledging where one is from, belonging to land associated with one’s people, and feeling accepted as part of the Aboriginal community”, these are the “invisible and non-tangible” aspects of culture which lie within individuals and communities themselves (Berry, 2013). This view of culture was confirmed by interviews with service providers where it was explained that “culture cannot be conjured up, but that the people themselves make culture, and that being immersed or surrounded by a cultural environment is key in providing clients with a sense of cultural engagement (Berry, 2013).

Details of the adaptation

The NSW Aboriginal Residential Healing and Drug and Alcohol Network (NARHDAN) provided expert input into the revisions to the Aboriginal residential rehabilitation care package.

In the DASP Model original there were three different residential rehabilitation packages. The EAG advised to select the second of the three – the 13 week program as this reflects the average length of stay in residential rehabilitation for Aboriginal clients (not all clients will stay 13 weeks – some may stay for a shorter period, and others for a longer period). It should be noted that the other two residential rehabilitation care packages (8 week stay and 26 week stay) apply equally to Aboriginal clients but we chose the 13 week stay program as a template for the Aboriginal care package but the “multiplier” is equally applicable to an 8 week or 26 week residential rehabilitation program.

The gender and kinship related issues identified in Chapter 3 (for culturally safe practices) mean that for this care packages, extra staff are required to ensure gender balance in the assignment of case managers; in group counselling sessions; and for overnight staff. For the group sessions, the DASP Model mainstream specified one staff member per group activity; for the Aboriginal care packages this needs to be two staff members (gender and kinship issues).¹⁰

There is also the issue of “connection to family”; this may be in the form of family engagement in treatment and/or flexibility around contacting family members whilst in rehabilitation (Dance et al., 2005). As a result, family, community and cultural days have been added to the package.

¹⁰ This does not apply to gender-specific services

Culture in treatment is also a crucial component of this care package; this means the time allocated to “group therapy/psychosocial activity/peer support activity” in the care package may include taking part in different cultural activities during treatment such as time on country; learning about culture/heritage/land; making traditional artefacts; learning about or making traditional foods and medicines; traditional art/craft; traditional language classes; time with Elders; and education regarding history (Berry, 2013; Brady, 2002; Dance et al., 2005).

Extra time has also been factored into this care package for ‘court support’, for example, taking clients to court and preparation of court reports (NIDAC, 2012a). Available studies indicate that ATOD use may play either a similar or greater role in child removals from Aboriginal women than from non-Aboriginal women (O'Donnell, Nassar, Leonard, Jacoby, Mathews, Patterson, & Stanley, 2010; Taplin & Mattick, 2011). For this reason, support time and engagement with government departmental family/child restorative programs (eg. those run by NSW Department of Family and Community Services (FACS) have been included in the transition care element of the Aboriginal residential rehabilitation care package.

Trauma management has been identified as an important issue for staff and clients in residential rehabilitation. The EAG talked about one or two incidents each week which would require some form of debriefing or trauma management (for staff or for clients). Time for this has been included in the revised care package (2 x 3 x 60 min crisis/trauma management (clients and staff) @ 20%).

The period of preadmission and outpatient support (14 days in the DASP Model mainstream and 25 days in the Aboriginal care package) is an important part of the preparation for admission to a residential program. The EAG advised that the preadmission work actually occurs before the client enters withdrawal – such that there is a smooth transition between withdrawal and residential rehabilitation (rather than any waiting period between the two interventions). When a bed becomes available in a residential rehabilitation, then the withdrawal management is facilitated for the week before. During the preadmission period a number of case management activities are required: sorting out Centrelink, housing issues, GP arrangements, medications and so on.

In addition to the formal 13 week residential stay component, the mainstream DASP Model (and the Aboriginal adaptation) also have a 13 week ongoing care component. This may occur in the community, or in some form of transitional housing (at a lower intensity than the original 13 weeks in the residential service). The important activities during this part of treatment include self-care management; relapse prevention; resolution of issues concerned with legal matters, housing, and Centrelink; community integration (referrals, advocacy, support, programs); and cultural engagement activities (cultural processes and Aboriginal ways of working are immersed within Aboriginal services and their programs).

Details of the adaptations

Mainstream	Aboriginal
<p><u>14 days of Outpatient support and Preadmission</u> 1 x 70 min of incoming telephone calls 1 x 60 min telephone assessment 2 x 60 min administration regarding admission 2 x 60 min worker liaison with government agencies eg. Centrelink, Department of Housing</p>	<p><u>25 days of Outpatient support and Preadmission</u> 1 x 120 min of incoming telephone calls 1 x 90 min telephone assessment (legal, health) 1 x 90 min face to face assessment (local) 20% 1 x 30 min travel (worker) 20% 2 x 60 min administration regarding admission 2 x 90 min worker liaison with government agencies eg Centrelink, Department of Housing</p>

<u>Admission</u> 4 x 60 min total admission which includes: Orientation, check/search, urinary drug screen	<u>Admission</u> 4 x 60 min total admission which includes: Orientation, check/search, urinary drug screen
<u>Urinary Drug Screen</u> 1 x 20 min UDS	<u>Urinary Drug Screen</u> 1 x 20 min UDS
<u>Week 1 and 2 of program</u> 2 x 12 x 90 min group therapy (assume 2 staff and 13 participants per group) 2 x 10 x 90 min group psycho education (assume 1 staff and 13 participants per group) 2 x 2 x 60 min 1:1 counselling 2 x 3 x 60 min care planning (history taking, psychometric testing, collection/entry) 2 x 5 x 120 min psychosocial activity (work and recreation) (assume 1 staff and 8 participants) 2 x 20 min routine review 2 x 60 min family engagement 2 x 17 x 90 min peer support activity (assume 1 staff and 15 participants) 2 x 1 x 60 min medical care/ clinical intervention 2 x 1 x 5 min drug screening	<u>Week 1 and 2 of program</u> 2 x 12 x 90 min group therapy (assume 2 staff and 13 participants per group) 2 x 10 x 90 min group psycho education (assume 2 staff and 13 participants per group) 2 x 2 x 60 min 1:1 counselling 2 x 3 x 60 min care planning (history taking, genograms, psychometric testing, collection/entry) 2 x 5 x 120 min psychosocial activity(work and recreation) (assume 2 staff and 8 participants) 2 x 20 min routine review 2 x 90 min family engagement (family days) 2 x 17 x 90 min peer support activity (assume 2 staff and 15 participants) (specific cultural engagement activity, (cultural processes and Aboriginal ways of working are immersed within Aboriginal services and their programs) 2 x 1 x 90 min medical care/ clinical/dental/legal intervention 2 x 1 x 5 min drug screening 2 x 2 x 60 min transport (medical/clinical/legal appointments) (70% of clients) 2 x 1 x 60 min transport (family/community days and cultural days) (applies to 30%) 2 x 3 x 60 min crisis/trauma management (clients and staff) (applies to 20%) Overnight staffing per place (assume 2 staff and 20 residents)
<u>Weeks 3, 4, 5, and 6 of program</u> 4 x 1 x 60 min family engagement 4 x 10 x 90 min group therapy (assume 2 staff and 13 participants per group) 4 x 10 x 90 min group psycho education (assume 1 staff and 13 participants per group) 4 x 2 x 60 min 1:1 counselling 4 x 1 x 60 min care planning 4 x 15 x 120 min psychosocial activity (work and recreation) (assume 1 staff and 8 participants) 4 x 1 x 40 min routine review 4 x 17 x 90 min peer support activity (assume 1 staff and 15 participants) 4 x 1 x 40 min medical consultation	<u>Weeks 3, 4, 5, and 6 of program</u> 2 x 2 x 60 min court support (2x court visits in 4 months 20%, court reports 60%) 4 x 1 x 90 min family engagement 4 x 10 x 90 min group therapy (assume 2 staff and 13 participants per group) 4 x 10 x 90 min group psycho education (assume 2 staff and 13 participants per group) 4 x 2 x 60 min 1:1 counselling 4 x 1 x 75 min care/treatment planning (relapse prevention) 4 x 15 x 120 min psychosocial activity (work and recreation) (assume 2 staff and 8 participants) 4 x 1 x 40 min routine review 4 x 17 x 90 min peer support activity (assume 2 staff and 15 participants) (specific cultural engagement activities. Cultural processes and Aboriginal ways of working are immersed within Aboriginal services and their programs) 4 x 1 x 60 min medical, legal consultation (off site) 4 x 1 x 60 min transport (clinical, legal) (70% of clients) 2 x 2 x 60 transport (family/community days and cultural days) (30% of clients) 4 x 7 nights x standard overnight staffing per place (assume 2 staff and 20 residents)
<u>Weeks 7 and 8 of program</u>	<u>Weeks 7 and 8 of program</u>

<p>2 x 2 x 60 min family engagement 2 x 5 x 90 min group therapy (assume 2 staff and 13 participants per group) 2 x 10 x 90 min group psycho education (assume 1 staff and 13 participants per group) 2 x 2 x 60 min 1:1 counselling 2 x 2 x 60 min care planning 2 x 15 x 120 min psychosocial activity (work and recreation) (assume 1 staff and 8 participants) 2 x 1 x 40 min routine review 2 x 17 x 90 min peer support activity (assume 1 staff and 15 participants) 2 x 2 x 20 min medical consultation</p>	<p>2 x 2 x 90 min family engagement 2 x 5 x 90 min group therapy (assume 2 staff and 13 participants per group) 2 x 10 x 90 min group psycho education (assume 2 staff and 13 participants per group) 2 x 2 x 60 min 1:1 counselling 2 x 2 x 75 min care/treatment planning 2 x 15 x 120 min psychosocial activity (work and recreation) (assume 2 staff and 8 participants) 2 x 1 x 40 min routine review 2 x 17 x 90 min peer support activity (assume 2 staff and 15 participants) (specific cultural engagement activity. Cultural processes and Aboriginal ways of working are immersed within Aboriginal services and their programs) 2 x 1 x 60 min transport (clinical, legal) (70% of clients) 1 x 2 x 60 transport (family/community days and cultural days) (30% of clients) 2 x 2 x 20 min medical consultation 1 x 60 min housing preparation for end of program 2 x 7 nights x standard overnight staffing per place (assume 2 staff and 20 residents)</p>
<p><u>Vocational Education, Training and Employment (VETE)</u> 2 x 90 min x 8 weeks writing CV, mock interviews, attending TAFE (trade), pre-employment training 5 x 4 hours per week x 8 weeks active on the job learning</p>	<p><u>Vocational Education, Training and Employment (VETE)</u> 2 x 90 min x 8 weeks writing CV, mock interviews, attending TAFE (trade), pre-employment training 5 x 4 hours per week x 8 weeks active on the job learning</p>
<p><u>Weeks 9, 10, 11, 12 and 13 of treatment</u> 5 x 1 x 60 min family engagement 5 x 10 x 90 min group therapy (assume 2 staff and 13 participants per group) 5 x 10 x 90 min group psycho education (assume 1 staff and 13 participants per group) 5 x 2 x 60 min 1:1 counselling 5 x 1 x 60 min care planning 5 x 15 x 120 min psychosocial activity (work and recreation) (assume 1 staff and 8 participants) 5 x 1 x 40 min routine review 5 x 17 x 90 min peer support activity (assume 1 staff and 15 participants) 5 x 1 x 40 min medical consultation</p>	<p><u>Weeks 9, 10, 11, 12 and 13 of treatment</u> 5 x 1 x 90 min family engagement 5 x 10 x 90 min group therapy (assume 2 staff and 13 participants per group) 5 x 10 x 90 min group psycho education (assume 2 staff and 13 participants per group) 5 x 2 x 60 min 1:1 counselling 5 x 1 x 60 min care planning 5 x 15 x 120 min psychosocial activity (work and recreation) (assume 2 staff and 8 participants) 5 x 1 x 40 min routine review 5 x 17 x 90 min peer support activity (assume 2 staff and 15 participants) 5 x 1 x 40 min medical consultation 5 x 7 nights x standard overnight staffing per place (assume 2 staff and 20 residents)</p>
<p>Discharge and transfer of care 2 x 60 min total discharge/ transfer of care time which includes: Exit survey, exit pack</p>	<p>Discharge and transfer of care 2 x 60 min total discharge/ transfer of care time which includes: Exit survey, exit pack</p>
<p><u>Start 13 weeks after care/transition/re-entry in the community</u> After care in the community – 13 x 30 min case management 13 x 30 relapse prevention/ budgeting</p>	<p><u>Start 13 weeks ongoing care – in community or in transitional accommodation</u> 6 x 60 min FACS family/child restorative programs 12 x 4 x 60 min specific cultural engagement activity (2 staff and 15 participants)</p>

<p>skills 13 x 60 min 1:1 counselling 13 x 90 min group counselling (assume 1 staff and 10 participants per group) 13 x 60 mins pre- employment training (assume 1 staff: 1 participant)</p> <p>13 weeks of Exit Program/Out client in community 13 x 90 min group counselling (assume 1 staff and 5 participants per group) 13 x 20 min case management 13 x 30 min assertive follow up (note 1) 13 x 30 min 1:1 counselling</p>	<p>6 x 2 x 60 min transport (family/community days and cultural days) 13 x 30 min case management 13 x 30 min relapse prevention/budgeting skills 13 x 75 min 1:1 counselling 13 x 90 min group counselling (assume 2 staff and 10 participants per group) 13 x 60 min pre-employment training (assume 1 staff: 1 participant)</p> <p>13 weeks of Exit Program/Out client in community 13 x 90 min group counselling (assume 2 staff and 5 participants per group) 13 x 30 min 1:1 counselling 13 x 20 min case management</p> <p>For transitional accommodation clients (applies to 35% of clients) 13 x 7 nights accommodation (at bed-day rate)</p>
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Notes: 1: 13 x 30 minutes of assertive follow-up in the mainstream RR care package appears as 12 x 60 min of assertive follow-up at its own element in the Aboriginal care package.

11. Return to country/community

A new element has been included across all the care packages: ‘return to country/community’¹¹. This is a culturally based, spiritual healing component. While this may only apply to 20% of all clients (and the resource estimation has taken that into account), the return to country/community option should be available to all Aboriginal people. It is consistent with the guiding principles of Aboriginal care: cultural connection (see Chapter 3). Maintaining a “spiritual, physical and emotional connection to the land” is fundamental to many people’s beliefs about social and emotional wellbeing (Dudgeon et al., 2002), and there is extensive evidence acknowledging the benefits of Aboriginal people “caring for Country” (Burgess et al., 2009; Campbell et al., 2011; Kingsley et al., 2009).

“Going home means finding out who you are as an Aboriginal: where you come from, who your people are, where your belonging place is, what your identity is. Going home is fundamental to the healing processes of those who were taken away as well as those who were left behind.....It is essential for Aboriginal people to ‘have a country’” (HREOC, 1997, p. 318).

In Aboriginal societies the land is seen as the embodiment of creation by spiritual ancestors. Many Aboriginal people see themselves as *belonging to the land* and as *having responsibilities to care for it* both practically and through the performance of particular ceremonies (Host, 2009; Williams, 1986). Connection to country is for many Aboriginal people an essential element in their identity as individuals, as members of families, larger kinship groups and communities, and vis-à-vis other groups and is central to their existence (Kingsley et al., 2013).

Burgess and colleagues (Burgess et al., 2009) conducted a cross-sectional study to investigate the association between “caring for country” and health outcomes relevant to excess Aboriginal

¹¹ The term ‘return to country/community’ has been chosen as it not just about a physical place (country), but can also be about connecting with the person’s community, irrespective of place.

morbidity and mortality. The results showed that controlling for socio-demographic characteristics and health behaviours, there was a significant and substantial association between “caring for country” and health outcomes – including lower body mass index, less diabetes, lower blood pressure, lower psychological distress, and lower cardiovascular disease risk. The authors concluded that their findings contribute preliminary empirical support for the Aboriginal assertion that “caring for country” may deliver health gains through social, cultural and behavioural pathways (Burgess et al., 2009).

Reconnection with country is therapeutic in itself (Weir, Stacey, & Youngetob, 2011). Return to Country programs have been implemented outside the ATOD sector, for example, the Jimmy Little Foundation has a Return to Country program (<http://www.jlf.org.au/return-to-country/>) which has given patients and carers a chance to make short visits home to their remote communities between dialysis sessions.

Details of the additional element

“Return to country/community” involves returning to a place where there is an attachment. This intervention would follow-on after some initial treatment/intervention. It needs to be flexible and tailored to the needs of the individual.

This intervention involves firstly establishing connections (where they are from), then co-ordinating and preparing the “return to country/community”, which includes contacting the community, making arrangements for support and ongoing care at the specific location to which the person is returning – this could be an ATOD worker in the community; the “boss” of an Out Station; and so on. It may also involve liaising with an AMS and other workers in the community to which the client is returning. All this needs to be in place before a client can return to his/her community.

The second step involves ongoing supervision/monitoring as well as counselling and will have been co-ordinated before the client returns to his/her community. The costs for ongoing care has already been calculated into the care packages (so it is not included here – just the monitoring costs). The final step is assertive follow-up. This involves checking on a person’s stability rather than provision of treatment and needs to be done weekly for the first month. This cost has already been calculated into the care packages.

Details of the additional element:

Mainstream	Aboriginal
NA	<u>Return to Country/Community</u> 180 minutes (20% of clients)

12. Transport

Many studies have identified transport as a critical issue for Aboriginal clients. Many clients do not have their own transport - no license, no vehicle, and/or no cash for transport (Helps & Moller, 2007). Geographical distances and lack of transport (in both urban and non-urban regions) are significant barriers to accessing drug and alcohol treatment (Gray et al., 2010). Many Aboriginal clients require supported referral (that is facilitating /helping/ensuring their attendance) due to their complex needs. Compliance with treatment attendance is enhanced if transport is available or

provided (Brett et al., 2014). In 2005/06, 37 out of 40 Australian Government funded Aboriginal and Torres Strait Islander substance use specific services that responded to the Drug and Alcohol Services Report (DASR) provided transport services to clients (OATSIH, 2007). This finding illustrates the role the provision of transport services plays in the accessibility of drug and alcohol treatment services to Aboriginal clients. Provision of transport also facilitates rapport and relationship building between clinician and client in a non-clinical and less confrontational setting.

A pilot study of community-based education and brief intervention in an urban Aboriginal setting (Conigrave, Freeman, Carroll, Simpson, Lee, Wade, Kiel, Ella, Becker, & Freeburn, 2012) identified transport as the most common barrier stopping participants getting help for their alcohol or drug problem.

Lee and colleagues (2014) conducted a study examining the needs of Aboriginal Australian women with comorbid mental and alcohol and other drug use disorders. They interviewed Aboriginal female clients in four Aboriginal Community Controlled Health Services in urban and regional New South Wales. The study identified “lack of available transport to service” as a major barrier. Specialist services were often not available in smaller towns and using public transport was unreliable, time consuming and expensive.”

In interviews with services regarding outpatient withdrawal for Aboriginal and Torres Strait Islander clients, Brett et al (2014) noted that many clients do not have access to private vehicles and so rely on public transport, which can be costly, time-consuming or simply unavailable. Staff at most services stated that either offering a transport service or reimbursement for travel improves engagement (Brett et al., 2014).

Details of the additional element

The time required involves clinical time (where further rapport can be built). There are no solid data about the amount of time that should be included under transport. We assume that transport is flexibly tailored to the individual client’s needs, so while it involves staff time, it may in some cases include taxi vouchers, bus voucher, train ticket etc.

Transportation is required for every appointment: thus, in each care package for every counselling session there are two trips, for every group session two trips, for every case management meeting two trips etc. However, double-counting has been avoided, so for example we assume that the tobacco follow-up intervention is delivered at the same site as another intervention and therefore transport is not separately included for this in all care package.

The average time per trip needed to be estimated, and with EAG advice we used 60 minutes – dealing with urban, rural and remote, averaging across all of these, where some trips will take 10 minutes and others 1.5 hours.

We recognise that not every client needs transport. We estimate that 70% require transportation for each element of care, based on EAG advice.

13. Ongoing care

Many people with ATOD dependence suffer multiple relapses following treatments and are thought to retain a continuing vulnerability to relapse for years or perhaps a lifetime. For this reason, ongoing care is essential and has been shown to reduce the frequency of relapse (McLellan, 2002; Stout, Rubin, Zwick, Zywiak, & Bellino, 1999). Unfortunately, however, there is a lack of such

services for Aboriginal Australians. As indicated in a report on Aboriginal specific alcohol and other drug interventions:

“...there were only two projects funded to provide ongoing care and a small number of other organisations providing such services on an ad hoc basis. Failure to provide and adequately resource ongoing care is both a failure to clients and a failure to protect the investment made in the provision of treatment services” (Gray et al., 2010, p. 13).

Ongoing care was not included in the original DASP Model care packages. The EAG considered that the provision of ongoing care was vital to ensure better health outcomes, given complex client presentations (Scrimgeour & Scrimgeour, 2008). This involves integrating the client back into the community and encompasses social/welfare support, vocational and workforce development, family reconnections and social support. Ongoing care is a way of maximising the investment thus far.

Ongoing care involves both individual and group work; there is flexibility to include culturally appropriate services in this time allocation. Ongoing care may involve referral to another service that has capacity to do that work, for example, AMS, PHC, or Centacare. Areas covered as part of the ongoing care element may include:

- Relapse prevention
- Integrating into the community
- Social/welfare needs and creating supports
- Support for managing Centrelink arrangements
- Social support
- Vocational training and support
- Addressing comorbidity
- Family restorative work.

There is provision for both individual counselling and/or group counselling. The group element may be mutual aid, or men’s groups or women’s groups. The additional group care is documented as 12 group sessions by 90 minutes per group, but it should be noted that this time can be flexibly used: for example it may be 7 sessions by 120 minutes, or it may involve a half-day or full-day group outing to a culturally relevant site.

This element ensures “transition” from intensive treatment to ongoing support and care.

Details of the additional element

Mainstream	Aboriginal
	<p><u>Ongoing care</u></p> <p>12 x 90 min group counselling (assume 2 staff and 8 participants per group)</p> <p>12 x 60 min 1:1 counselling</p>

14. Overnight staff

For the residential care (withdrawal and residential rehabilitation) the DASP Model mainstream included only one FTE overnight. The EAG advised that this is inadequate, does not meet occupational health and safety standards, and is not appropriate for Aboriginal care, where gender and kinship issues means that at least two staff members are required.

Where-ever the overnight staff profile is listed in the DASP Model mainstream as one FTE, this has been changed to 2 FTE.

Mainstream	Aboriginal
<u>1 FTE overnight in residential care settings</u>	<u>2 FTE overnight in residential care settings</u>

Other issues

The use of interpreters has not been included within the Aboriginal care packages. Depending on where people are from, Indigenous languages may remain in current usage (Taylor & Guerin, 2014). This is particularly the case in rural and remote communities, where English is often the third or fourth language spoken (GWA, 2014). Indigenous language interpreters have not been as prominent in services as other international languages have. Taylor & Guerin (2014) argue that not only should the use of interpreters for speakers of Indigenous languages need to be given the same kind of priority, but possibly more attention should be given “because of the lack of preparation of most health professionals in cross-cultural communication with Indigenous Peoples” (Taylor & Guerin, 2014, p. 162). There may also be more than language issues to consider; these include gender, subject matter, community connections that may either hinder or help with interpretation (Taylor & Guerin, 2014).

In a report by Lowell (1998) which reviewed communication in Aboriginal health care. The author states:

“Where there is any cultural and/or language differences between groups, the communicative needs of both must be accommodated for effective dialogue to occur. The strategy which requires the least accommodation by either party to the needs of the other is the employment of a professional interpreter: neither group is required to change their language, beliefs, values nor behaviour, other than to recognise a need for improved understanding which, with the use of an interpreter, can be achieved with minimal threat to cultural safety”(Lowell, 1998, p. 21).

Another issue not explicitly addressed in the above Aboriginal care packages is the difference between urban, rural and remote settings. Each will have its own challenges. A service provided to people in Redfern will vary dramatically to that delivered in Halls Creek (WA), and the associated needs of Aboriginal clients, the extent to which certain care elements are appropriate and available will vary. The challenges of transport is but one example where there may be significant differences between an urban and a remote Aboriginal service.

Summary

Having established the details, evidence-base and rationale for each of the Aboriginal care package elements, the following table provides a comprehensive summary of every change made to the original mainstream DASP Model care packages, and how they appear in the Aboriginal care packages.

Table 2: Seven template care packages: mainstream version (DASP Model original) and the parallel Aboriginal care packages

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
Mild Intervention	<u>Assessment</u> 5 x 15 min primary care assessment	<u>Assessment</u> 3 x 30 min screening and brief intervention 1 x 30 min consultation with primary carer or other family member 4 x 15 min referral by phone 3 x 2 x 60 min transport (70% of clients)
	NA	<u>Tobacco intervention</u> 41% receive this intervention 12 min per person for the brief intervention (0.41*30 min = 12 min) Other tobacco interventions: <ul style="list-style-type: none"> • 16.4% receive brief intervention of 30 mins only • 20.5% receive brief intervention of 30 minutes and NRT patches 3 for months • 3.9 % receive 30 mins of brief intervention and varenicline (Champix-TM) for 3 months • 0.2% receives 30 mins of brief intervention and bupropion (Zyban-TM) for 2 months. Staff time to prescribe varenicline or bupropion or NRT patches 12 x 60 min (PHC worker) 12 x 2 x 60 min transport (70% of clients)
Moderate Care	<u>Assessment</u> 1 x 30 min primary care medical assessment and referral 2 x 15 min medical monitoring by primary carer 1 x 10 min liaison between medical primary carer, psychologist/MBS providers	<u>Assessment</u> 1 x 30 min primary health care provider assessment and referral 3 x 30 min monitoring by primary health care provider 1 x 30 min liaison between primary health care provider, psychologist /MBS providers 4 x 30 min screening and brief interventions 4 x 15 min care coordination 4 x 15 min supported referral

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
		5 x 2 x 60 min transport (70% of clients)
	<p><u>Relapse Prevention Pharmacotherapies</u></p> <p>Prescription medicines Applies to 50% Acamprosate (10%); disulfiram (20%), naltrexone (20%)</p> <p>2 x 1 x 30 min medical assessment 2 x 5 min bloods / diagnostic testing 9 x 30 min medical review and prescribing 2 x 2 x 15 min case conference 2 x 2 x 15 min referral / transfer of care / care coordination</p>	<p><u>Relapse Prevention Pharmacotherapies</u></p> <p>Prescription medicines Applies to 50% Acamprosate (15%); naltrexone (35%)</p> <p>2 x 1 x 30 min medical assessment 2 x 5 min bloods/diagnostic testing 2 x 2 x 15 min information/education re: medications 9 x 30 min medical review and prescribing 2 x 2 x 15 min case conference 2 x 2 x 15 min referral/transfer of care/care coordination 9 x 30 min outreach/health worker support at the consultation 9 x 60 min transport (70% of clients)</p>
	<p><u>Individual Psychosocial Intervention</u></p> <p>1 x 50 min assessment 5 x 50 min psychological interventions</p>	<p><u>Individual Psychosocial Intervention</u></p> <p>1 x 75 min assessment 5 x 50 min psychosocial interventions 6 x 2 x 60 min transport (70% of clients)</p>

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	NA	<p><u>Tobacco intervention</u> 70% receive this intervention 21 min per person for the brief intervention</p> <ul style="list-style-type: none"> • (0.7*30 min = 21 min per person) 28% receive brief intervention of 30 mins only • 35% receive brief intervention of 30 minutes and NRT patches 3 for months • 6.72 % receive 30 mins of brief intervention and varenicline (Champix-TM) for 3 months. • 0.28% receives 30 mins of brief intervention and bupropion (Zyban-TM) for 2 months. <p>Staff time to prescribe varenicline or bupropion or NRT patches</p> <p>12 x 60 min (PHC worker) (Note: transport for the follow-up tobacco intervention not included as can be delivered in conjunction with above interventions).</p>
	NA	<p><u>Return to country</u></p> <p>180 min (20% of clients) 2 x 60 min transport (70% of clients)</p>
	NA	<p><u>Assertive follow-up</u></p> <p>6 x 30 mins face to face 6 x 30 mins phone contact 6 x 2 x 60 min transport (70% of clients)</p>
Psychosocial interventions – with relapse prevention medications - complex	<p><u>Assessment – complex</u></p> <p>2 x 75 min assessment 2 x 30 complex case conference 2 x 15 min transfer/referral of care/follow up</p>	<p><u>Assessment – complex</u></p> <p>2 x 75 min clinical assessment 2 x 30 min complex case conference 2 x 15 min transfer/referral of care/follow up 2 x 2 x 60 min transport (70% of clients)</p>

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	<p><u>Individual – Psychosocial interventions – complex</u></p> <p>2 x 1 x 15 min intake 2 x 1 x 60 min assessment 2 x 5 x 60 min 1:1 psychosocial intervention/family/supporter 2 x 1 x 15 min case conference 2 x 2 x 30 min transfer of care/ discharge / care coordination</p>	<p><u>Individual – Psychosocial interventions – complex</u></p> <p>2 x 1 x 15 min intake 2 x 1 x 75 min assessment 2 x 5 x 60 min 1:1 psychosocial intervention/family/supporter 2 x 1 x 15 min case conference 2 x 2 x 30 min transfer of care/discharge/care coordination 16 x 2 x 60 min transport (70% of clients)</p>
	<p><u>Group Psychosocial intervention</u></p> <p>1 x 30 min screening / brief assessment and orientation 6 x 60 min group sessions (assume 1 x staff for 8 participants)</p>	<p><u>Group/Family – Psychosocial interventions-</u></p> <p>1 x 30 min screening/brief assessment and orientation 6 x 60 min group sessions (assume 2 x staff for 8 participants) 6 x 20 mins preparation for family sessions 7 x 2 x 60 min transport (70% of clients)</p>
	<p><u>Relapse Prevention Pharmacotherapies – complex</u></p> <p>Prescription medicines Applies to 100% Acamprosate (20%); disulfiram (40%), naltrexone (40%)</p> <p>2 x 1 x 30 min medical assessment 2 x 5 min bloods / diagnostic testing 9 x 30 min medical review and prescribing 2 x 2 x 15 min case conference 2 x 2 x 15 min referral / transfer of care / care coordination</p>	<p><u>Relapse Prevention Pharmacotherapies – complex</u></p> <p>Prescription medicines Applies to 100% Acamprosate (40%); naltrexone (60%)</p> <p>2 x 1 x 30 min medical assessment 2 x 5 min bloods/diagnostic testing 2 x 2 x 15 min information/education re: medications 9 x 30 min medical review and prescribing 2 x 2 x 15 min case conference 2 x 2 x 15 min referral/transfer of care/care coordination 9 x 30 min outreach/health worker support at the consultation 9 x 60 min transport (70% of clients)</p>
	<p><u>Diagnostic Testing</u></p> <p>Full Blood Examination (FBE, FBC, CBC) Liver Function Tests (LFT) Urea, Electrolytes, Creatinine (U&E)</p>	<p><u>Diagnostic testing</u></p> <p>Full Blood Examination (FBE, FBC, CBC) Liver Function Tests (LFT) Urea, Electrolytes, Creatinine (U&E)</p>

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	Urinary Drug Screen (UDS)	Urinary Drug Screen (UDS)
	<u>Case management and support – complex</u> 2 x 1 x 60 min case management assessment 2 x 1 x 30 min family / carer engagement 2 x 3 x 30 min implementation of case management and support 2 x 2 x 40 min case conference 2 x 1 x 30 min discharge/ referral/ transfer of care / follow up	<u>Case management and support – complex</u> 2 x 1 x 75 min case management assessment 2 x 3 x 60 min family/carers/partner engagement 2 x 3 x 60 min implementation of case management and support 2 x 2 x 60 min case conference 2 x 1 x 60 min discharge/referral/transfer of care/follow up 16 x 2 x 60 min transport (70% of clients)
	<u>Tobacco intervention</u> 80% of clients 24 min per person for the brief intervention (0.8*30 min = 24 min per person) Staff time to prescribe varenicline or bupropion or NRT patches: 0.48 *5mins = 2.4 mins per person <ul style="list-style-type: none"> • 32% receive brief intervention of 30 mins only • 40% receive brief intervention of 30 minutes and NRT patches 3 for months • 7.71 % receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months • 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months. 	<u>Tobacco intervention</u> 100% of clients 30 min per person for the brief intervention Staff time to prescribe varenicline or bupropion or NRT patches <ul style="list-style-type: none"> • 37% receive brief intervention of 30 mins only • 55% receive brief intervention of 30 minutes and NRT patches 3 for months • 7.71% receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months. • 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months. 12 x 60 min (PHC worker) (Note: transport for the follow-up tobacco intervention not included as can be delivered in conjunction with above interventions).
	NA	<u>Return to Country</u> 180 minutes (20% of clients) 2 x 60 min transport (70% of clients)
	NA	<u>Ongoing /transitional care</u>

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
		12 x 90 min group counselling (assume 2 staff and 8 participants per group) 12 x 60 min 1:1 counselling 24 x 2 x 60 min transport (70% of clients)
	<u>Assertive follow up</u> 1 x 10 min 'phone call'	<u>Assertive follow up – complex</u> 12 x 60 min face to face visit 12 x 2 x 60 min transport (70% of clients)
Withdrawal outpatient – Complex With relapse prevention pharmacotherapies	<u>Assessment – complex</u> 2 x 60 min assessment 1 x 30 min complex case conference 2 x 15 min referral/ transfer of care / Follow up	<u>Assessment – complex</u> 2 x 75 min clinical assessment 2 x 30 min complex case conference 2 x 15 min transfer/referral of care/follow up 2 x 2 x 60 min transport (70% of clients)
	<u>Withdrawal management - daily outpatient</u> 1 x 30 min development of care plan 1 x 15 min intake assessment (Withdrawal management) 1 x 30 min medical assessment and prescribing 2 x 40 min assessment (Withdrawal Management) 6 x 15 min review 2 x 10 min brief intervention to coincide with dispensing events or reviews 1 x 30 min medical consult 1 x 30 min referral/transfer of care/follow up 1 x 30 min case conference 1 x 40 min dispensing time per patient 1 x 20 min medical consult 1 x 60 min psychosocial intervention 1:1 1 x 30 min case conference (simple)	<u>Withdrawal Management – daily outpatient</u> 1 x 60 min development of care plan 1 x 30 min intake assessment (Withdrawal Management) 1 x 30 min medical assessment and prescribing 2 x 40 min assessment (Withdrawal Management) 7 x 30 min review 2 x 10 min brief interventions to coincide with dispensing events or reviews 1 x 30 min medical consult 1 x 30 min referral/ transfer of care/ follow up 1 x 30 min case conference 1 x 40 min dispensing time per patient 8 x 2 x 60 mins transport (70% of clients) 1 x 20 min medical consult 1 x 60 min psychosocial intervention 1:1 1 x 30 min case conference (simple)

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	1 x 30 min referral /transfer of care / follow up	1 x 30 min referral /transfer of care / follow up
	<u>Withdrawal Management – Pharmacotherapies-</u> The thiamine is 100mg oral daily for days 1-14, then 100mg oral for 2 months post discharge if the patient continues to consume alcohol. The Diazepam is prescribed as a 20mg taper over 5 days.	<u>Withdrawal Management – Pharmacotherapies-</u> The thiamine is 100mg oral daily for days 1-14, then 100mg oral for 2 months post discharge if the patient continues to consume alcohol. The Diazepam is prescribed as a 20mg taper over 5 days.
	<u>Individual - Psychosocial interventions – complex –</u> 2 x 1 x 15 min intake 2 x 1 x 60 min assessment 2 x 5 x 60 min 1:1 psychosocial intervention/family/supporter 2 x 1 x 15 min case conference 2 x 2 x 30 min transfer of care/ discharge / care coordination	<u>Individual - Psychosocial interventions – complex –</u> 2 x 1 x 15 min intake 2 x1 x 75 min assessment 2 x 5 x 60 min 1:1 psychosocial intervention/family/supporter 2 x1 x 15 min case conference 2 x 2 x 30 min transfer of care/ discharge / care coordination 16 x 2 x 60 min transport (70% of clients)
	<u>Group – Psychosocial interventions</u> 1 x 30 min screening / brief assessment and orientation 6 x 60 min group sessions (assume 1 x staff for 8 participants)	<u>Group/Family – Psychosocial interventions</u> 1 x 30 min screening / brief assessment and orientation 6 x 60 min group sessions (assume 2 x staff for 8 participants) 6 x 20 mins preparation for family sessions 7 x 2 x 60 min transport (70% of clients)
	<u>Pharmacotherapies – complex – ongoing for 6 months</u> Prescription medicines Applies to 100% Acamprosate (20%); disulfiram (40%), naltrexone (40%) 2 x 1 x 30 min medical assessment 2 x 5 min bloods / diagnostic testing 9 x 30 min medical review and prescribing 2 x 2 x 15 min case conference 2 x 2 x 15 min referral / transfer of care / care coordination	<u>Pharmacotherapies – complex – ongoing for 6 months</u> Prescription medicines Applies to 100% Acamprosate (40%); naltrexone (60%) 2 x 1 x 30 min medical assessment 2 x 5 min bloods / diagnostic testing 2 x 2 x 15 min information/ education re medications 9 x 30 min medical review and prescribing 2 x 2 x 15 min case conference 2 x 2 x 15 min referral / transfer of care / care coordination

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
		9 x 30 min outreach/ health worker support at the consultation 9 x 60 min transport (70% of clients)
	<p><u>Diagnostic Testing</u></p> <p>Full Blood Examination (FBE, FBC, CBC) Liver Function Tests (LFT) Urea, Electrolytes, Creatinine (U&E) Urinary Drug Screen (UDS)</p>	<p><u>Diagnostic Testing-</u></p> <p>Full Blood Examination (FBE, FBC, CBC) Liver Function Tests (LFT) Urea, Electrolytes, Creatinine (U&E) Urinary Drug Screen (UDS)</p>
	<p><u>Case management and support – complex</u></p> <p>2 x 1 x 60 min case management assessment 2 x 1 x 30 min family / carer engagement 2 x 3 x 30 min implementation of case management and support 2 x 2 x 40 min case conference 2 x 1 x 30 min discharge/ referral/ transfer of care / follow up</p>	<p><u>Case management and support – complex</u></p> <p>2 x 1 x 75 min case management assessment 2 x 3 x 60 min family / carer/partner engagement 2 x 3 x 60 min implementation of case management and support 2 x 2 x 60 min case conference 2 x 1 x 60 min discharge/ referral/ transfer of care / follow up 16 x 2 x 60 min transport (70% of clients)</p>
	<p><u>Tobacco intervention</u></p> <p>80% of clients 24 min per person for the brief intervention (0.8*30 min = 24 min per person) Staff time to prescribe varenicline or bupropion or NRT patches: 0.48 *5mins = 2.4 mins per person</p> <ul style="list-style-type: none"> • 32% receive brief intervention of 30 mins only • 40% receive brief intervention of 30 minutes and NRT patches 3 for months • 7.71 % receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months • 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months. 	<p><u>Tobacco intervention</u></p> <p>100% of clients 30 min per person for the brief intervention</p> <p>Staff time to prescribe varenicline or bupropion or NRT patches</p> <ul style="list-style-type: none"> • 37% receive brief intervention of 30 mins only • 55% receive brief intervention of 30 minutes and NRT patches 3 for months • 7.71% receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months. • 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months. <p>12 x 60 min (PHC worker) (Note: transport for the follow-up tobacco intervention not included as can be delivered in conjunction with above interventions).</p>

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	NA	<u>Return to Country</u> 180 minutes (20% of clients) 2 x 60 min transport (70% of clients)
	NA	<u>Ongoing care</u> 12 x 90 min group counselling (assume 2 staff and 8 participants per group) 12 x 60 min 1:1 counselling 24 x 2 x 60 min transport (70% of clients)
	<u>Assertive follow up</u> 1 x 10 min phone call	<u>Assertive follow up –complex</u> 12 x 60 min face to face visit 12 x 2 x 60 min transport (70% of clients)
Withdrawal Management – Residential – Complex – with relapse prevention pharmacotherapies	<u>Assessment – complex</u> 2 x 60 min assessment 1 x 30 complex case conference 2 x 15 min transfer/referral of care/follow up	<u>Assessment – complex</u> 2 x 75 min clinical assessment 2 x 30 min complex case conference 2 x 15 min transfer/ referral of care/ follow up 2 x 2 x 60 min transport (70% of clients)
	<u>Withdrawal Management Stay (Bed type DETOX) –</u> 1 x 30 min development of care plan 1 x 15 min assessment (intake) 1 x 60 min assessment 1 x 45 min medical assessment 1 x 40 min dispensing per patient 5 x 90 min group sessions (assume 1 staff and 5 participants per group) 5 x 30 min reviews nursing	<u>Withdrawal Management – residential</u> 1 x 5 min diagnostic testing 1 x 30 min development of care plan 1 x 15 min assessment (intake) 1 x 75 min assessment 1 x 45 min medical assessment 1 x 40 min dispensing per patient 5 x 90 min group sessions (assume 2 staff and 5 participants per group) 5 x 30 min reviews nursing

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	<p>2 x 15 min medical review 2 x 30 min referral /transfer of care / follow up</p>	<p>2 x 15 min medical review 2 x 60 min discharge planning sessions 2 x 30 min referral /transfer of care / follow up 1 x bed cost for family member/ support person (50% of clients) 2 x 60 min transport (70% of clients)</p>
	<p><u>Withdrawal Management Pharmacotherapies –</u></p> <p>The thiamine is 100mg oral daily for days 1-14, then 100mg oral for 2 months post discharge if the patient continues to consume alcohol. The Diazepam is prescribed as a 20mg taper over 5 days.</p>	<p><u>Withdrawal Management Pharmacotherapies –</u></p> <p>The thiamine is 100mg oral daily for days 1-14, then 100mg oral for 2 months post discharge if the patient continues to consume alcohol. The Diazepam is prescribed as a 20mg taper over 5 days.</p>
	<p><u>Individual – Psychosocial interventions –</u></p> <p>2 x 1 x 15 min intake 2 x 1 x 60 min assessment 2 x 5 x 60 min 1:1 psychosocial intervention/family/supporter 2 x 1 x 15 min case conference 2 x 2 x 30 min transfer of care/ discharge / care coordination</p>	<p><u>Individual - Psychosocial interventions – complex</u></p> <p>2 x 1 x 15 min intake 2 x 1 x 75 min assessment 2 x 5 x 60 min 1:1 psychosocial intervention/family/supporter 2 x 1 x 15 min case conference 2 x 2 x 30 min transfer of care/ discharge / care coordination 16 x 2 x 60 min transport (70% of clients)</p>
	<p><u>Group – Psychosocial interventions</u></p> <p>1 x 30 min screening / brief assessment and orientation 6 x 60 min group sessions (assume 1 x staff for 8 participants)</p>	<p><u>Group/ Family - Psychosocial interventions</u></p> <p>1 x 30 min screening / brief assessment and orientation 6 x 60 min group sessions (assume 2 x staff for 8 participants) 6 x 20 mins preparation for family sessions 7 x 2 x 60 min transport (70% of clients)</p>
	<p><u>Case management and support – complex</u></p> <p>2 x 1 x 60 min case management assessment 2 x 1 x 30 min family / carer engagement 2 x 3 x 30 min implementation of case management and support 2 x 2 x 40 min case conference</p>	<p><u>Case management and support – complex</u></p> <p>2 x 1 x 75 min case management assessment 2 x 3 x 60 min family / carer /partner engagement 2 x 3 x 60 min implementation of case management and support 2 x 2 x 60 min case conference 2 x 1 x 60 min discharge/ referral/ transfer of care / follow up</p>

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	2 x 1 x 30 min discharge/ referral/ transfer of care / follow up	16 x 2 x 60 min transport (70% of clients)
	<p><u>Pharmacotherapies – complex</u></p> <p>Prescription medicines Applies to 100% Acamprosate (20%); disulfiram (40%), naltrexone (40%)</p> <p>2 x 1 x 30 min medical assessment 2 x 5 min bloods / diagnostic testing 9 x 30 min medical review and prescribing 2 x 2 x 15 min case conference 2 x 2 x 15 min referral / transfer of care / care coordination</p>	<p><u>Pharmacotherapies – complex</u></p> <p>Prescription medicines Applies to 100% Acamprosate (40%); naltrexone (60%)</p> <p>2 x 1 x 30 min medical assessment 2 x 5 min bloods / diagnostic testing 2 x 2 x 15 min information/ education re medications 9 x 30 min medical review and prescribing 2 x 2 x 15 min case conference 2 x 2 x 15 min referral / transfer of care / care coordination 9 x 30 min outreach/ health worker support at the consultation 9 x 60 min transport (70% of clients)</p>
	<p><u>Diagnostic Testing</u></p> <p>Full Blood Examination (FBE, FBC, CBC) Liver Function Tests (LFT) Urea, Electrolytes, Creatinine (U&E) Urinary Drug Screen (UDS)</p>	<p><u>Diagnostic Testing</u></p> <p>Full Blood Examination (FBE, FBC, CBC) Liver Function Tests (LFT) Urea, Electrolytes, Creatinine (U&E) Urinary Drug Screen (UDS)</p>
	<p><u>Tobacco intervention</u></p> <p>80% of clients 24 min per person for the brief intervention (0.8*30 min = 24 min per person) Staff time to prescribe varenicline or bupropion or NRT patches: 0.48 *5mins = 2.4 mins per person</p> <ul style="list-style-type: none"> • 32% receive brief intervention of 30 mins only • 40% receive brief intervention of 30 minutes and NRT patches 3 for months • 7.71 % receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months • 0.29% receives 30 mins of brief intervention and bupropion 	<p><u>Tobacco intervention</u></p> <p>100% of clients 30 min per person for the brief intervention</p> <p>Staff time to prescribe varenicline or bupropion or NRT patches</p> <ul style="list-style-type: none"> • 37% receive brief intervention of 30 mins only • 55% receive brief intervention of 30 minutes and NRT patches 3 for months • 7.71% receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months. • 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months.

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	(Zyban- TM) for 2 months.	12 x 60 min (PHC worker) (Note: transport for the follow-up tobacco intervention not included as can be delivered in conjunction with above interventions).
	NA	<u>Return to Country</u> 180 minutes (20% of clients) 2 x 60 min transport (70% of clients)
	NA	<u>Ongoing care</u> 12 x 90 min group counselling (assume 2 staff and 8 participants per group) 12 x 60 min 1:1 counselling 24 x 2 x 60 min transport (70% of clients)
	<u>Assertive follow-up –</u> 1 x 10 min ‘phone call	<u>Assertive follow up</u> 12 x 60 min face to face visit 12 x 2 x 60 min transport (70% of clients)
Day Program – 25 days - Complex	<u>Assessment – standard</u> 1 x 60 min assessment 1 x 60 min transfer/referral of care/follow up	<u>Assessment – complex</u> 2 x 75 min clinical assessment 2 x 30 min complex case conference 1 x 60 min transfer/ referral of care/ follow up 2 x 2 x 60 min transport (70% of clients)
	<u>Withdrawal Management – outpatient</u> 1 x 30 min development of care plan 1 x 15 min intake assessment (Withdrawal Management) 1 x 30 min medical assessment and prescribing 2 x 40 min assessment (Withdrawal Management)	<u>Withdrawal Management – outpatient</u> 1 x 60 min development of care plan 1 x 30 min intake assessment (Withdrawal Management) 1 x 30 min medical assessment and prescribing 2 x 40 min assessment (Withdrawal Management)

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	<p>6 x 15 min review 2 x 10 min brief interventions to coincide with dispensing events or reviews 1 x 30 min medical consult 1 x 30 min referral /transfer of care / Follow up 1 x 30 min case conference 1 x 40 min dispensing time per patient</p>	<p>7 x 30 min review 2 x 10 min brief interventions to coincide with dispensing events or reviews 1 x 30 min medical consult 1 x 30 min referral/ transfer of care/ follow up 1 x 30 min case conference 1 x 40 min dispensing time per patient 8 x 2 x 60 mins transport (70% of clients)</p>
	<p><u>Withdrawal Management Pharmacotherapies</u></p> <p>The thiamine is 100mg oral daily for days 1-14, then 100mg oral for 2 months post discharge if the patient continues to consume alcohol. The Diazepam is prescribed as a 20mg taper over 5 days.</p>	<p><u>Withdrawal Management Pharmacotherapies</u></p> <p>The thiamine is 100mg oral daily for days 1-14, then 100mg oral for 2 months post discharge if the patient continues to consume alcohol. The Diazepam is prescribed as a 20mg taper over 5 days.</p>
	<p><u>Group or Individual Psychosocial interventions</u></p> <p>25 x 60 min group counselling (assume 1 staff and 8 participants) 5 x 60 min 1:1 counselling</p>	<p><u>Group or Individual Psychosocial interventions</u></p> <p>25 x 60 min group counseling (assume 2 staff and 8 participants) 5 x 60 min 1:1 counselling</p>
	<p><u>Group or Individual Psychosocial interventions</u></p> <p>25 x 90 min group counselling (assume 1 staff and 8 participants)</p>	<p><u>Group or Individual Psychosocial interventions</u></p> <p>25 x 90 min group counseling (assume 2 staff and 8 participants)</p>
	<p><u>Group or Individual Psychosocial interventions</u></p> <p>25 x 120 min group activity (assume 1 staff and 8 participants)</p>	<p><u>Group or Individual Psychosocial interventions</u></p> <p>25 x 120 min group activity (assume 2 staff and 8 participants)</p>
	<p><u>Group or Individual Psychosocial interventions</u></p> <p>25 x 120 min group activity (assume 1 staff and 8 participants)</p>	<p><u>Group or Individual Psychosocial interventions</u></p> <p>25 x 120 min group activity (assume 2 staff and 8 participants) 25 x 2 x 60 min transport (70% of clients)</p>
	<p><u>Case management and support – standard</u></p> <p>1 x 60 min case management assessment</p>	<p><u>Case management and support – complex</u></p> <p>2 x 1 x 75 min case management assessment</p>

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	<p>1 x 30 min family / carer engagement 3 x 30 min implementation of case management and support 2 x 40 min case conference 1 x 30 min discharge/ referral/ transfer of care /follow up</p>	<p>2 x 3 x 60 min family / carer/partner engagement 2 x 3 x 60 min implementation of case management and support 2 x 2 x 60 min case conference 2 x 1 x 60 min discharge/ referral/ transfer of care / follow up 16 x 2 x 60 min transport (70% of clients)</p>
	<p><u>Tobacco intervention</u> 80% of clients 24 min per person for the brief intervention (0.8*30 min = 24 min per person) Staff time to prescribe varenicline or bupropion or NRT patches: 0.48 *5mins = 2.4 mins per person</p> <ul style="list-style-type: none"> • 32% receive brief intervention of 30 mins only • 40% receive brief intervention of 30 minutes and NRT patches 3 for months • 7.71 % receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months • 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months. 	<p><u>Tobacco intervention</u> 100% of clients 30 min per person for the brief intervention</p> <p>Staff time to prescribe varenicline or bupropion or NRT patches</p> <ul style="list-style-type: none"> • 37% receive brief intervention of 30 mins only • 55% receive brief intervention of 30 minutes and NRT patches 3 for months • 7.71% receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months. • 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months. <p>12 x 60 min (PHC worker) (Note: transport for the follow-up tobacco intervention not included as can be delivered in conjunction with above interventions).</p>
	<p>NA</p>	<p><u>Return to Country</u></p> <p>180 minutes (20% of clients) 2 x 60 min transport (70% of clients)</p>
	<p>NA</p>	<p><u>Ongoing care</u></p> <p>12 x 90 min group counselling (assume 2 staff and 8 participants per group) 12 x 60 min 1:1 counselling 24 x 2 x 60 min transport (70% of clients)</p>

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	<p><u>Assertive follow up</u></p> <p>1 x 10 min 'phone call'</p>	<p><u>Assertive follow up</u></p> <p>12 x 60 mins face to face visit 12 x 2 x 60 mins transport (70% of clients)</p>
Residential rehabilitation – 13 week stay	<p><u>Assessment – standard</u></p> <p>1 x 60 min assessment 1 x 60 min transfer/referral of care/follow up</p>	<p><u>Assessment – complex</u></p> <p>2 x 75 min clinical assessment 2 x 30 min complex case conference 1 x 60 min transfer/referral of care/follow up 2 x 2 x 60 min transport (70% of clients)</p>
	<p><u>Withdrawal management Stay (Bed type DETOX)</u></p> <p>1 x 30 min development of care plan 1 x 15 min assessment (intake) 1 x 60 min assessment 1 x 45 min medical assessment 1 x 40 min dispensing per patient 5 x 90 min group sessions (assume 1 staff and 5 participants per group) 5 x 30 min reviews nursing 2 x 15 min medical review 2 x 30 min referral /transfer of care / follow up (eg 2 x 30 min for discharge, 1 x 30 min phone calls)</p>	<p><u>Withdrawal Management – complex</u></p> <p>1 x 30 min development of care plan 1 x 15 min assessment (intake) 1 x 75 min assessment 1 x 45 min medical assessment 1 x 40 min dispensing per patient 5 x 90 min group sessions (assume 2 staff and 5 participants per group) 5 x 30 min reviews nursing 2 x 15 min medical review 2 x 60 min discharge planning sessions 2 x 30 min referral /transfer of care / follow up (eg 1 x 30 min for discharge, 1 x 30 min phone calls) 1 x bed cost for family member/ support person (50% of clients) 2 x 60 min transport (70% of clients)</p>
	<p><u>Withdrawal Management Pharmacotherapies</u></p> <p>The thiamine is 100mg oral daily for days 1-14, then 100mg oral for 2 months post discharge if the patient continues to consume alcohol. The Diazepam is prescribed as a 20mg taper over 5 days.</p>	<p><u>Withdrawal Management Pharmacotherapies</u></p> <p>The thiamine is 100mg oral daily for days 1-14, then 100mg oral for 2 months post discharge if the patient continues to consume alcohol. The Diazepam is prescribed as a 20mg taper over 5 days.</p>

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	<u>14 days of Outpatient support and Preadmission</u> 1 x 70 min of incoming telephone calls 1 x 60 min telephone assessment 2 x 60 min administration regarding admission 2 x 60 min worker liaison with government agencies eg Centrelink, Department of Housing	<u>25 days of Outpatient support and Preadmission</u> 1 x 120 min of incoming telephone calls 1 x 90 min telephone assessment (legal, health) 1 x 90 min face to face assessment (local) 20% 1 x 30 min travel (worker) 20% 2 x 60 min administration regarding admission 2 x 90 min worker liaison with government agencies eg Centrelink, Department of Housing
	<u>Admission</u> 4 x 60 min admission time which includes: Orientation, check/search	<u>Admission</u> 4 x 60 min total admission time which includes: Orientation, check/search 1 x 60 min transport (70% of clients)
	<u>Urinary Drug Screen</u> 1 x 20 min UDS	<u>Urinary Drug Screen</u> 1 x 20 min UDS
	<u>Week 1 and 2 of program (Bed type RR1) –</u> 2 x 12 x 90 min group therapy (assume 2 staff and 13 participants per group) 2 x 10 x 90 min group psycho education (assume 1 staff and 13 participants per group) 2 x 2 x 60 min 1:1 counselling 2 x 3 x 60 min care planning (history taking, psychometric testing, collection/entry) 2 x 5 x 120 min psychosocial activity (work and recreation) (assume 1 staff and 8 participants) 2 x 20 min routine review 2 x 60 min family engagement 2 x 17 x 90 min peer support activity (assume 1 staff and 15 participants) 2 x 1 x 60 min medical care/ clinical intervention	<u>Week 1 and 2 of program</u> 2 x 12 x 90 min group therapy (assume 2 staff and 13 participants per group) 2 x 10 x 90 min group psycho education (assume 2 staff and 13 participants per group) 2 x 2 x 60 min 1:1 counselling 2 x 3 x 60 min care planning (history taking, genograms, psychometric testing, collection/entry) 2 x 5 x 120 min psychosocial activity(work and recreation) (assume 2 staff and 8 participants) 2 x 20 min routine review 2 x 90 min family engagement (family days) 2 x 17 x 90 min peer support activity (assume 2 staff and 15 participants) (specific cultural engagement activity, (cultural processes and Aboriginal ways of working are immersed within Aboriginal services and their

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	<p>2 x 1 x 5 min drug screening</p>	<p>programs) 2 x 1 x 90 min medical care/ clinical/dental/legal intervention 2 x 1 x 5 min drug screening 2 x 2 x 60 min transport (medical/clinical/legal appointments) (70% of clients) 2 x 1 x 60 min transport (family/community days and cultural days) (applies to 30%) 2 x 3 x 60 min crisis/trauma management (clients and staff)(applies to 20%) Overnight staffing per place (assume 2 staff and 20 residents)</p>
	<p><u>Weeks 3, 4, 5, and 6 of program (Bed type RR1) –</u></p> <p>4 x 1x 60 min family engagement 4 x 10 x 90 min group therapy (assume 2 staff and 13 participants per group) 4 x 10 x 90 min group psycho education (assume 1 staff and 13 participants per group) 4 x 2 x 60 min 1:1 counselling 4 x 1 x 60 min care planning 4 x 15 x 120 min psychosocial activity (work and recreation) (assume 1 staff and 8 participants) 4 x 1 x 40 min routine review 4 x 17 x 90 min peer support activity (assume 1 staff and 15 participants) 4 x 1 x 40 min medical consultation</p>	<p><u>Weeks 3, 4, 5, and 6 of program</u></p> <p>2 x 2 x 60 min court support (2 x court visits in 3 months 20% of clients, court reports 60% of clients) 4 x 1 x 90 min family engagement 4 x 10 x 90 min group therapy (assume 2 staff and 13 participants per group) 4 x 10 x 90 min group psycho education (assume 2 staff and 13 participants per group) 4 x 2 x 60 min 1:1 counselling 4 x 1 x 75 min care/treatment planning (relapse prevention) 4 x 15 x 120 min psychosocial activity (work and recreation) (assume 2 staff and 8 participants) 4 x 1 x 40 min routine review 4 x 17 x 90 min peer support activity (assume 2 staff and 15 participants) (specific cultural engagement activity (cultural processes and Aboriginal ways of working are immersed within Aboriginal services and their programs) 4 x 1 x 60 min medical/legal consultation (off site) 4 x 1 x 60 min transport (clinical, legal) (70% of clients) 2 x 2 x 60 transport (family/community days and cultural days) (30% of clients) Overnight staffing per place (assume 2 staff and 20 residents)</p>

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	<p><u>Weeks 7 and 8 of program (Bed type RR1)</u></p> <p>2 x 2 x 60 min family engagement 2 x 5 x 90 min group therapy (assume 2 staff and 13 participants per group) 2 x 10 x 90 min group psycho education (assume 1 staff and 13 participants per group) 2 x 2 x 60 min 1:1 counselling 2 x 2 x 60 min care planning 2 x 15 x 120 min psychosocial activity (work and recreation) (assume 1 staff and 8 participants) 2 x 1 x 40 min routine review 2 x 17 x 90 min peer support activity (assume 1 staff and 15 participants) 2 x 2 x 20 min medical consultation</p>	<p><u>Weeks 7 and 8 of program</u></p> <p>2 x 1 x 90 min family engagement 2 x 5 x 90 min group therapy (assume 2 staff and 13 participants per group) 2 x 10 x 90 min group psycho education (assume 2 staff and 13 participants per group) 2 x 2 x 60 min 1:1 counselling 2 x 2 x 75 min care/treatment planning 2 x 15 x 120 min psychosocial activity (work and recreation) (assume 2 staff and 8 participants) 2 x 1 x 40 min routine review 2 x 17 x 90 min peer support activity (assume 2 staff and 15 participants) specific cultural engagement activity (cultural processes and Aboriginal ways of working are immersed within Aboriginal services and their programs) 2 x 1 x 60 min transport (clinical, legal) appointments (70% of clients) 1 x 2 x 60 min transport for Family/community days and cultural days (30% of clients) 2 x 2 x 20 min medical/legal consultation (off site) 1 x 60 min housing preparation for end of program; transport Overnight staffing per place (assume 2 staff and 20 residents)</p>
	<p><u>Vocational Education, Training and Employment (VETE)</u></p> <p>2 x 90 min x 8 weeks writing CV, mock interviews, attending TAFE (trade), pre-employment training 5 x 4 hours per week x 8 weeks active on the job learning</p>	<p><u>Vocational Education, Training and Employment (VETE)</u></p> <p>2 x 90 min x 8 weeks writing CV, mock interviews, attending TAFE (trade), pre-employment training 5 x 4 hours per week x 8 weeks active on the job learning</p>
	<p><u>Weeks 9, 10, 11, 12 and 13 of treatment</u></p> <p>5 x 1 x 60 min family engagement 5 x 10 x 90 min group therapy (assume 2 staff and 13 participants per group) 5 x 10 x 90 min group psycho education (assume 1 staff and 13 participants per group)</p>	<p><u>Weeks 9, 10, 11, 12 and 13 of treatment</u></p> <p>5 x 1 x 90 min family engagement 5 x 10 x 90 min group therapy (assume 2 staff and 13 participants per group) 5 x 10 x 90 min group psycho education (assume 2 staff and 13 participants per group)</p>

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
	5 x 2 x 60 min 1:1 counselling 5 x 1 x 60 min care planning 5 x 15 x 120 min psychosocial activity (work and recreation) (assume 1 staff and 8 participants) 5 x 1 x 40 min routine review 5 x 17 x 90 min peer support activity (assume 1 staff and 15 participants) 5 x 1 x 40 min medical consultation	5 x 2 x 60 min 1:1 counselling 5 x 1 x 60 min care planning 5 x 15 x 120 min psychosocial activity (work and recreation) (assume 2 staff and 8 participants) 5 x 1 x 40 min routine review 5 x 17 x 90 min peer support activity (assume 2 staff and 15 participants) 5 x 1 x 40 min medical consultation Overnight staffing per place (assume 2 staff and 20 residents)
	<u>Discharge and transfer of Care</u> 2 x 60 min total discharge/ transfer of care time which includes: Exit survey, exit pack	<u>Discharge and transfer of care</u> 2 x 60 min total discharge/ transfer of care time which includes: Exit survey, exit pack 1 x 60 min transport (70% of clients)
	<u>Start 13 weeks after care/transition/re-entry in the community</u> After care in the community – 13 x 30 min case management 13 x 30 relapse prevention/ budgeting skills 13 x 75 min 1:1 counselling 13 x 90 min group counselling (assume 1 staff and 10 participants per group) 13 x 60 mins pre- employment training (assume 1 staff: 1 participant) 13 weeks of Exit Program/Out client in community 13 x 90 min group counselling (assume 1 staff and 5 participants per group) 13 x 20 min case management 13 x 30 min assertive follow up 13 x 30 min 1:1 counselling	<u>Start 13 weeks ongoing care – in community or in transitional accommodation</u> 6 x 60 mins FACS family/child restorative programs 12 x 4 x 60 min specific group cultural engagement activity (2 staff and 15 participants) 6 x 2 x 60 min transport (family/community days and cultural days)(30% of clients) 13 x 30 min case management 12 x 1 x 60 min transport (clinical, legal appointments) (70% of clients) 13 x 30 relapse prevention/ budgeting skills 13 x 75 min 1:1 counselling 13 x 90 min group counselling (assume 2 staff and 10 participants per group) 13 x 60 mins pre- employment training (assume 1 staff: 1 participant) 13 weeks of Exit Program/Out client in community 13 x 90 min group counselling (assume 2 staff and 5 participants per group) 13 x 30 min 1:1 counselling 13 x 20 min case management 26 x 2 x 60 min transport (70% of clients)

Care Package	Mainstream (DASP Model original, Aug 2013 final version)	Aboriginal
		For transitional accomm clients: applies to 35% of clients: 12 x 7 nights accommodation (at bed-day rate)
	<p><u>Tobacco intervention</u> 80% of clients 24 min per person for the brief intervention (0.8*30 min = 24 min per person) Staff time to prescribe varenicline or bupropion or NRT patches: 0.48 *5mins = 2.4 mins per person</p> <ul style="list-style-type: none"> • 32% receive brief intervention of 30 mins only • 40% receive brief intervention of 30 minutes and NRT patches 3 for months • 7.71 % receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months • 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months. 	<p><u>Tobacco intervention</u> 100% of clients 30 min per person for the brief intervention</p> <p>Staff time to prescribe varenicline or bupropion or NRT patches</p> <ul style="list-style-type: none"> • 37% receive brief intervention of 30 mins only • 55% receive brief intervention of 30 minutes and NRT patches 3 for months • 7.71% receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months. • 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months. <p>12 x 60 min (PHC worker) (Note: transport for the follow-up tobacco intervention not included as can be delivered in conjunction with above interventions).</p>
	NA	<p><u>Return to Country</u></p> <p>180 minutes (20% of clients) 2 x 60 min transport (70% of clients)</p>
	<p><u>Assertive Follow-up</u></p> <p>1 x 10 min phone call</p>	<p><u>Assertive Follow-up</u></p> <p>12 x 60 mins face to face visit 12 x 2 x 60 mins transport (70% of clients)</p>

CHAPTER 5: MAINSTREAM SERVICES

This chapter addresses the issue of provision of ATOD treatment in non-Aboriginal specific services. The simplest way of ensuring culturally appropriate services is to provide these within the context of an Aboriginal-specific service (see Table 1). The rationale for the provision of services to Aboriginal people by an Aboriginal-specific organisation is because:

- The people most able or equipped to provide a culturally safe atmosphere are people from the same culture (Williams, 1999)
- Aboriginal people prefer practitioners from their own cultural background in most instances (Dance et al., 2005)
- Aboriginal-control of services means that Aboriginal people are “owning” their own pathways out of inequality and poverty (Wilkes, 2014)
- People do better when they control conditions that enable them to take control of their lives (Marmot, 2011).
- “Addressing the ill health of Aboriginal people can only be achieved by local Aboriginal people amounting to Aboriginal Health in Aboriginal Hands” (Alford, 2014, p. 5)
- It is the preferred model (NIDAC, 2014)

However, more Aboriginal people receive ATOD care from mainstream drug and alcohol services than from Aboriginal-specific services (AIHW, 2011b). There are not enough Aboriginal-specific services to meet the needs of Aboriginal clients. In addition some Aboriginal people do not want to use Aboriginal services due to personal, social or cultural reasons. Admitting to having a problem with alcohol or other drugs has often been associated with feelings of shame and some individuals (both Aboriginal and non-Aboriginal) have preferred the anonymity of using a service that is not associated with their own community or group (Teasdale et al., 2008).

In 2008/09, about 170,000 treatment episodes for alcohol or other drugs were provided to clients of Aboriginal and/or Torres Strait Islander origin, accounting for 12% of all treatment episodes (AIHW, 2011b). Although in theory, mainstream services are available to Aboriginal people, many are not readily accessible, affordable or seen as culturally safe by Aboriginal people (Loxley, Toumbourou, & Stockwell, 2004) and some fail to address Aboriginal needs (Wilson, Stearne, Gray, & Siggers, 2010). There has been considerable emphasis on enhancing the cultural safety of mainstream services over the last decade (Taylor & Guerin, 2014).

As mainstream ATOD services exist in order to provide services to all people in the Australian community, and as some Aboriginal Australians use them, there is a need to make sure that these mainstream services are culturally appropriate and can deliver the care as documented in the previous chapter. This requires additional resources, including time and specific funding. This chapter of the report, therefore, documents the requirements for the provision of ATOD treatment to Aboriginal clients in mainstream services. Importantly, the care packages and the elements within them do not change. This chapter concerns the resources required in order for mainstream services to be able to deliver the care packages as detailed in Chapter 4 in a culturally appropriate, safe, and secure way for those Aboriginal people who use mainstream services.

Theory of cultural awareness, safety and security

A pyramid is used to describe three levels: cultural awareness (the bottom of the pyramid), cultural safety and then cultural security. Cultural security is an essential component of health services for Aboriginal people (Coffin, 2007) yet most of the existing literature only considers cultural safety or cultural awareness (Williams, 1999). Cultural awareness and cultural safety are important

foundations for the attainment of cultural security. The first two levels must be addressed in order to progress to the next level (Figure 1 below).

Figure 1: The pyramid: cultural awareness, cultural safety, cultural security (Coffin, 2007)



Cultural awareness recognises Aboriginal culture, but is knowledge and understanding without action. *Cultural safety* involves actions that build from the awareness, but are not formally embedded within an organisation and as such rely on individual practitioners taking culturally appropriate action. Cultural security, at the top of the pyramid, involves actions that are formalised within organisational policies and procedures and are automatically applied, without reliance on individual practitioner differences (Coffin, 2007). Cultural security refers to the ability to apply a sound level of knowledge, understanding, sensitivity, and appreciation of culture in a practical and appropriate manner. Cultural security is an *ongoing* process and must be continually monitored, reviewed and adapted to meet the specific cultural needs of Aboriginal clients. The actions consistent with a culturally secure service may include the skills and practices of the clinician, the physical environment of the health service, the administrative arrangements (such as appointment booking systems), the workforce (inclusive of Aboriginal staff) and the organisational mission and policies. Some examples of culturally secure actions include flexibility when working with Aboriginal clients. Flexibility may include the day-to-day structure of services, for example, no fixed appointment, and availability of drop-in services (Ware, 2013); and the provision of different entry points to assist clients in maintaining their culturally appropriate relationships related to kinship and gender (Lowell, Brown, Marrnanyin, Flack, Christie, & Snelling, 2005).

Coffin (2007) likens “security” to the highest attainment level. It is the hardest to achieve but, “like a house, if the foundations are good, it will stay strong and be easy to maintain for many years to come” (Coffin, 2007, p. 23). In addition to improving the foundations of awareness and safety, two more elements must be developed to achieve and sustain cultural security: brokerage and protocols. Brokerage involves two-way communication between Aboriginal and non-Aboriginal participants that is mutually respectful, builds trust and involves time for “listening and yarning” (Coffin, 2007), p.23). Protocols are a strategy that can take a culturally safe practice to a culturally secure one. Protocols formalise the fact that in an Aboriginal context, service delivery and programs need to be

done in consultation with the elders and key stakeholders within the particular community (Coffin, 2007).

Mainstream models of practice in the ATOD field have been developed primarily within western systems and application of these models to working with Aboriginal people can be detrimental, to the extent that some approaches can directly undermine Aboriginal cultural and Aboriginal ways of working resulting in Aboriginal people feeling disempowered as their cultural beliefs/values and family systems are ignored, misunderstood or disrespected. This can result in Aboriginal people disengaging from seeking treatment (Marsh et al., 2007). There is evidence that Aboriginal people are said to have a poor record of attendance in mainstream alcohol and drug treatment (Davis, 1998; Jonas, 2002). This illustrates the importance of mainstream ATOD treatment services becoming culturally secure.

The capacity of mainstream services to deliver culturally safe or secure care to Aboriginal clients will depend on a number of elements. These include: the setting in which services are provided; the partnerships they have with Aboriginal controlled organisations; the staffing profile which may be inclusive of an Aboriginal worker or workers; and the extent of ongoing workforce development and training programs in cultural competence. All these elements, which form part of an organisation's 'cultural capacity' will influence where a mainstream service is positioned in terms of Coffin's cultural security model (Figure 1).

If a mainstream service is consistently and regularly seeing clients then they need to be 'culturally secure'. The following methods may be used to monitor and assess the level of cultural competency of individuals and the organisation:

- Interviews – conducted by employees and or community members;
- Observations – planned or random observations by employees, community members, reference groups;
- Community feedback –verbally or by completing surveys or feedback sheets with staff;
- Completion of audits.

A number of cultural audit or assessment tools have been developed to provide mainstream organisations with a basic framework for self-evaluation of its policies and practices in relation to Aboriginal clients and partner agencies. One such tool is the *Koori Practice Checklist*, which is a cultural audit tool for the alcohol and other drugs services sector in Victoria and was developed by the *Ngwala Willumbong Co-operative*. The checklist aims to consider a wide range of issues relating to improving access to mainstream services by Aboriginal clients. The checklist also seeks to assist agencies in the identification of tasks and activities to address any identified problem areas. Where possible, staff of mainstream organisations are encouraged to identify an Aboriginal organisation with which they will work to address any issues identified as requiring attention. This process allows staff of both organisations to become familiar with each other and the changes which can be made to design services which are culturally appropriate to meeting the needs of Aboriginal clients.

Partnerships

There is broad agreement that Aboriginal and mainstream organisations need to work together in genuine partnerships in order to work effectively with Aboriginal people (Walker & Sonn, 2010; Wilkes, Gray, Saggars, Casey, & Sterne, 2010). As stated by Gray and colleagues (2010) "partnerships between Indigenous and non-indigenous service providers are imperative to ensure that the design and delivery of programs and services are professional, competent, holistic and culturally appropriate." There is evidence that partnerships between mainstream and Aboriginal services result in culturally appropriate treatment and improves outcomes (Teasdale et al., 2008; Williams et

al., 2006). In non-community controlled withdrawal services, the involvement of Aboriginal health staff and partnership with community has been shown to reduce barriers to treatment access (Brett et al., 2014).

Partnerships between Aboriginal community controlled and mainstream services can extend the health care options and improve the cultural safety of services (Taylor, Bessarab, Hunter, & Thompson, 2013). Taylor and colleagues (2013) conducted a study that undertook to explore the challenges and enhancers of a government initiated service partnership between an Aboriginal Community Controlled alcohol and drug service and three mainstream alcohol rehabilitation and support services. The partnerships added “a richness and diversity to treatment possibilities and opportunities to explore different, more culturally appropriate ways of working” (Taylor et al., 2013).

Improved partnerships can be achieved through developing Memoranda of Understandings (MOUs) with local services that outline each agency’s role and responsibilities relating to clinical referral pathways, information exchange, and shared management of clients, for example, the *Strong Spirit Strong Mind program* (Casey & Keen, 2006). Partnerships can also be established by developing models of shared care and case management including case reviews and care planning meetings; sharing training initiatives with Aboriginal organisations, and initiating cross organisational staff placements.

To be successful such partnerships must be voluntary, equitable, accountable and based on trust (Taylor et al., 2013). Mutual recognition of the strengths that each organisation brings is important. Partnerships will assist mainstream services to provide specific elements of Aboriginal treatment, for example, the “Return to Country” component of an Aboriginal care package could be organised by an Aboriginal Controlled Organisation which would have a partnership with a mainstream service.

Aboriginal staff

Aboriginal health workers are crucial to culturally secure care (Taylor & Guerin, 2014). They make it more acceptable for Aboriginal people to seek treatment when it is needed. The employment of a sole Aboriginal worker in a mainstream service was not regarded as good practice – at least two Aboriginal workers are required. This enables mutual support, plus the capacity to attend to the gender and kinship issues identified throughout this report.

If Aboriginal people are regularly attending a mainstream ATOD service then the mainstream service needs to have Aboriginal AOD workers (Roche et al., 2013). There is an important distinction between an Aboriginal health worker, and an Aboriginal ATOD worker – the latter having the specialised skills for dealing with alcohol, tobacco and other drug use. The specialist services provided by Aboriginal ATOD workers are not just clinical. Aboriginal ATOD workers play a critical role in the delivery of treatment services and offer essential support to their communities; they often act as “cultural brokers” and have the ability to interpret and understand “mainstream” issues for their community/clients (Panaretto & Wenitong, 2006).

Due to the comparative shortages of skilled Aboriginal alcohol and other drug workers, service deliverers may need to take the time to train new staff and retrain/reskills existing employees (WANADA, 2011). It is vital that those working with Aboriginal staff in mainstream services do so in a collaborative and inclusive way that recognises the unique skills and knowledge inherent in the role, and do not try to “mainstream” the position to function like other non-Aboriginal professional roles (Taylor & Guerin, 2014).

A culturally secure workplace is worker-friendly and supportive of Aboriginal workers and is where an “organisation actively demonstrates a commitment to creating a fair and respectful environment

that meets the cultural needs and obligations for all workers” (WANADA, 2011). For example, given the strong mutual obligations between Aboriginal workers and their families and communities mainstream organisations need to respect worker’s cultural obligations to attend funerals, ceremonies and other community meetings and events.

Where mainstream organisations are seeing a large number of Aboriginal clients, to facilitate delivery of the care packages, it behoves those organisations to have a dedicated Aboriginal staff position or positions. There was much discussion in the EAG about whether it is possible to specify a threshold level: for example, if there are more than 20% of clients who are Aboriginal, then at least one Aboriginal worker would be required. However the application of a simple percentage is not useful, particularly as it does not take into account the varying proportions of Aboriginal clients over time. The EAG also thought that the size of the program/service was important. Thus in a ten bed facility and with 20% as the threshold this would equate to 2 Aboriginal clients; compared to a larger facility with 50 beds, where 20% would equal 10 Aboriginal clients. After much consideration, the EAG agreed that a threshold could not be specified. However, this should not be taken to mean that organisations do not require Aboriginal staff.¹²

Cultural awareness and competency training and support

Non-Aboriginal staff need to understand and receive training on how to conduct themselves with Aboriginal clients, for example, understanding protocols, kinship relationships and language, as well as having an understanding of the social context of Aboriginal communities. This is crucial if treating Aboriginal clients in mainstream services (Chenhall & Senior, 2013). Training can be accessed through a number of means including: specialised cultural trainers who deliver generalised and targeted workshops; field trips/excursions and supervised placements in Aboriginal communities/organisations (Farrelly & Lumby, 2009). Farrelly et al. (2009) conducted a review of the literature to determine a best practice approach to Cultural Competence Training (CCT). The mode of delivery of the cultural competency training will depend on what best suits the organisation. Valadian et al. (2000) identified that potential CCT participants reported a preference for the workshop as opposed to other modes of delivery. Workshops have been reported in the literature to have provided high levels of participant satisfaction as well as other positive outcomes (Bennet & Wellard, 2003; Fitzpatrick & Gillies, 2000).

Cultural competency training may also involve “field visits and cultural immersion through visits, placements, and staff exchanges”. These should be incorporated as deemed appropriate for particular organisations, addressing particular training components, as an adjunct to other modes of delivery (Farrelly & Lumby, 2009). Cultural immersion activities involving longer term visits to Aboriginal communities, placements in Aboriginal organisations, and staff exchange programs have been particularly successful (Kamaka, 2001; Kavanagh, 1998). Mentoring can also be incorporated into training components. Aboriginal mentors may be external consultants, or may be Aboriginal employees in other organisations (mainstream or Aboriginal) that can form a reciprocal partnership with the organisation, whereby staff from both organisations serve as mentors for each other.

Cultural competency training should be frequent, long-term and *ongoing*, so as to provide staff with long-term exposure to aspects of Aboriginal culture and the required skills to achieve culturally appropriate service delivery (Farrelly & Lumby, 2009).

¹² There are not resource implications in the specification of threshold number of Aboriginal clients requiring Aboriginal workers on staff. It was assumed that those Aboriginal staff would form part of the overall staff profile, and the time allocated to clinical care (in the care packages, Chapter 4) is covered (ie there are no additional resources per se in employing Aboriginal staff members).

The settings in which services are provided

The physical location of mainstream services is an important factor in whether an Aboriginal client will access a mainstream service, for example, if the service is located far from their home (due to the transportation issue). Settings need to be appropriate and conducive to Aboriginal clients, such as different physical “spaces” provided for men and women, or child friendly facilities, such as play areas for children. These other factors are outside the scope of costings – the facilities are there or they are not. But it is important to take into account that these ‘setting’ issues will influence whether an Aboriginal client will access a service.

Another aspect of setting is whether the service is urban, rural or remote. The cultural challenges will be different. For example in remote Australia, some Aboriginal people would prioritise attending a funeral, sports carnival or royalty meeting, over attending a treatment session/service. This may not be the case in urban settings. The mainstream service needs to be able to be flexible and to have contingencies in place that are appropriate to its own local circumstances (whether that be urban, rural or remote). Inclusion of Elders in consultation processes for mainstream services for example (and the partnership process mentioned below) are important ways in which services can be attuned to cultural needs.

What resources need to be included such that mainstream services can deliver the care packages as specified in Chapter 4?

The brief review of the literature above indicates that resources are required for mainstream services to be able to deliver the care specified in Chapter 4 in ways that are culturally secure. We acknowledge that there is a diversity of ATOD services: some will be at the bottom of the pyramid; others higher up the pyramid. Thus, some mainstream service providers will already have good collaborative relationships with local Aboriginal-specific services, may employ Aboriginal staff and have culturally secure programs within their organisations. Others may have little expertise or experience working with Aboriginal clients and have few resources and capacities to address the care package requirements. This diversity of mainstream providers make a generic assessment of resource utilisation difficult. Here we provide some guidance as to the activities, and tasks required for a mainstream organisation to attain culturally secure practice and we approximate the resources required, but note that these will vary depending on the mainstream organisation itself, the history and culture within the organisation and the extent of current and ongoing workforce development.

There are two levels at which attention to cultural security is required: firstly at the organisation level, including the organisational culture, policy and protocols and premises; secondly at the individual clinician/worker level. While some strategies apply at the individual worker level and others at the organisational level, they are intimately intertwined. For example a mainstream organisation needs to understand the need for flexibility, eg in the appointment systems, welcoming families and so on. This applies to both individual clinicians having such an understanding as well as the organisation as a whole having such an understanding so that individual clinical practice is aligned within a broader organisational context that is culturally secure.

We have defined three components, consistent with the above literature:

1. *Protocols for partnerships*
2. *Organisational policy, procedures and service delivery*
3. *Training and workforce development*

1. Protocols for partnerships

Solid partnerships with Aboriginal-specific services are required (especially where there are no Aboriginal staff employed by the mainstream organisation). These partnerships need to include documented working relationships between the two organisations as well as provision for an Aboriginal consultant, to provide services to non-Aboriginal clinicians, community engagement, policy and protocol development, liaison, supervision, and mentoring. There is a broad agreement that Aboriginal and non-Aboriginal practitioners need to work together in genuine partnerships in order to work effectively with Aboriginal people (Wilkes et al., 2010).

The types of activities that form the work of building and sustaining partnerships between mainstream and Aboriginal services include:

- Developing Memoranda of Understanding (MOUs) with local services that outline each agency's roles and responsibilities relating to clinical referral pathways, information exchange, and shared management of clients
- Providing assistance and support to employ Aboriginal people in mainstream service positions that have the role to develop partnerships and relationships with Aboriginal communities/organisations
- Developing models of shared care and case management including case reviews and care planning meetings
- Hosting cross sectoral networking meetings with Aboriginal services, ATOD and mental health and other social services
- Initiating cross organisational staff placements (eg. ATOD worker from Ted Noffs Foundation on an "exchange" program at AMS in Redfern)
- Participation by Aboriginal-controlled organisations in decision-making processes in the mainstream organisation
- Regular consultation activities with local Aboriginal services
- Develop and maintain a register of Local Aboriginal community groups and agencies which is available to all staff in the mainstream organisations
- Provision of supervision and mentoring services

(Refs: Aboriginal Cultural Security Guide for Human Service Organisations, developed by the Perth Co-occurring Disorders Capacity Building Project; Koori Practice Checklist; *Strong Spirit Strong Mind*, 2011; APONT protocol).

Estimating the resources required for a mainstream service to achieve these partnership relationships is difficult. The EAG considered the tasks and activities listed above (derived from the literature and other resources) and estimated that it would entail approximately 30 day's work, spread over the course of a year, on behalf of one worker. This means an additional resource of 30 days (240 hours). This was then costed at the AOD worker rate, using the same salary cost as that employed by the DASP Model for staff costs.

2. Organisational policy, procedures and service delivery

The types of activities and tasks required at the organisational and individual clinician level include:

- Review of the organisation mission/vision statement to be inclusive of Aboriginal people
- Establishment of written policies for working with Aboriginal clients
- Employment policies that encourage employment of Aboriginal workers
- Regularly maintained organisational information about the local Aboriginal community, its needs, and services
- Review of the appropriateness of client input, complaints mechanisms, feedback processes at an organisational level that are appropriately tailored for Aboriginal clients
- Signage, waiting areas and clinical spaces that are Aboriginal-friendly
- Forms and self-assessment materials that are user-friendly and culturally appropriate

- Information and promotional material that is appropriately tailored for Aboriginal clients
- Review of appropriateness of the care packages to ensure user friendly and culturally appropriate
- Service delivery and care plans that can provide the care specified in Chapter 4.

(Refs Casey & Keen, 2006; Ngwala, 2007; PCDCBP, 2012; APONT protocol).

Service delivery protocols document the processes and standards that need to be in place in mainstream organisations that work with Aboriginal clients. The kinds of areas that a service delivery protocol needs to cover includes how care is delivered, gender, age, Elders, language, and working with families. The details of the care packages provided in the previous chapter could form the basis for the development of service delivery protocols that are culturally secure. These could be developed by a peak Aboriginal organisation and then modified for use by individual organisations.

Again, it was difficult to estimate the amount of time involved in the establishment and maintenance of these organisational and service delivery policies and procedures. The EAG also notes that some organisations will already have much of this in place, and it will only require annual review and update; whereas other organisations may need to commence from scratch with all organisational policies and procedures. We reinforce the point that those mainstream organisations that regularly see Aboriginal clients should be attaining a level of cultural security, whereas mainstream organisations that rarely see Aboriginal clients may have lower requirements (for example attaining cultural safety, rather than cultural security).

We used the Koori Practice Checklist (Ngwalal Willumbong) as a basis to ascertain the amount of time involved in conducting these activities. For each item on the checklist, we reviewed whether it was already included in the time allocated within the care package, in the partnerships development (see above) or in training programs (see next section). For all these areas not otherwise covered, an estimate was made of the time involved. This resulted in an estimate of 56 days in total over the course of one year. For one staff member this would mean approximately one day per week (note that it is not expected that it would be one staff member alone, but that the roles and tasks would be most appropriately spread between Board members, managers and clinicians, depending on the task). For the sake of rounding, we took 52 days as the best estimate. This was then costed at the AOD worker rate, using the same salary costing method as that employed by the DASP Model for staff costs.

3. Training and workforce development

The above two components are focussed on organisational and service delivery aspects of being culturally secure. In addition to the above, and indeed, essential to being able to achieve the above, is a requirement for staff training on an annual basis. We have estimated the costs for two different types of training: cultural awareness training; and cultural competence training.

All ATOD treatment services should be culturally aware – the minimum standard. Cultural awareness is a learning process which needs to be practiced as well as built upon on an ongoing basis. All people working within an organisation should have an understanding of the historical factors that have influenced alcohol and other drug related harm in Aboriginal communities (PCDCBP, 2012). The kinds of topics covered in cultural awareness training include:

- Introduction to concepts of identity, culture and Aboriginality
- History of Australia and how it affects current work practices and Aboriginal people in today's society.

- Aboriginal identity (pre-colonisation; post-colonisation and today).
- The languages and culture within regions.
- How to engage and communicate with Aboriginal people.
- Sharing and learning stories - personal and work experiences.
- Local Elders who share their history and knowledge

Cultural competency training

Beyond awareness, those non-Aboriginal AOD treatment organisations that are working with Aboriginal clients need a higher level of training. Cultural competence training is skills-based and can include the following:

- Skills in cultural competence as it relates to working with the diversity of Aboriginal and Torres Strait Islander cultures and people
- Understanding of the emotional and social issues faced by survivors of removal policies & the skills to respond appropriately
- the ability of participants to engage, communicate and form partnerships with Aboriginal people
- Ability to develop a more-integrated model of culturally-safe work and organisational practice
- provision of Aboriginal perspectives, experience and knowledge interwoven with best practice strategies across the organisation and programs
- skills to enable practice within a social and emotional wellbeing framework and accommodating the social determinants
- field visits and cultural immersion (visits, placements, staff exchanges)

Summary

The below table summarises the resource implications for mainstream services provided ATOD care to Aboriginal clients:

Table 3: Resource implications for mainstream services

Component required for mainstream services	Estimate of resources
Protocols for partnerships	30 days
Organisational policy, procedures and service delivery	52 days
Training and workforce development	Awareness training costs Cultural competency training costs

The costs associated with this, along with the original care packages are described in the next chapter.

CHAPTER 6: THE COST ASSOCIATED WITH PROVIDING THE CARE DESCRIBED HEREIN

The purpose of this project is to develop evidence-based care packages for Aboriginal people and to provide decision-makers with a tool which estimates the amount of resources which may be required to deliver this evidence-based care and hence meet the needs of Aboriginal clients.

This chapter details the approach to resource estimation. The task was to establish whether the costs used in the DASP Model could be reasonably applied to Aboriginal care packages, and estimate the amount of resource required. Estimating the costs per 100,000 people with the inclusion of Aboriginal care packages was not possible because that required epidemiological data that are not available (beyond the scope of this project). Development of a care package cost multiplier for the provision of Aboriginal care packages seemed a more useful policy tool. This is the path we have taken.

We sought to establish a multiplier, standardised across care packages, that provides an estimate of the resources ratio between mainstream and Aboriginal care packages. This provides good intuition for policy makers (“these are the weights/added time and costs that need to be added for Aboriginal service delivery”). Its use does not rely on the DASP Model – it can be used by jurisdictions in any context.

How does the ‘multiplier’ work? For each of the seven template care packages in the mainstream DASP Model, the additional resource ‘costs’ were calculated, then a ratio was derived between mainstream and Aboriginal care. The additional resources reflect the additional time, and care elements that meet best practice in the provision of ATOD treatment to Aboriginal people.

This chapter starts with an outline of the original DASP Model resource estimation approach, then details how that has been adapted to derive resource estimates for the Aboriginal care packages, then the multiplier results.

Original DASP Model resource estimation

The key resource areas in the original DASP Model were:

1. Clinical staff time (measured as FTE required to deliver the care specified in the care packages)
2. Medications
3. Bed-day costs (for residential services)
4. Diagnostic tests

(Taken from DASP Model Technical Manual, Aug 2013)

For the calculation of the costs associated with clinical staff time, the DASP Model used the following assumptions and calculations to derive the costs for the clinical staff FTE.

38 hour week, 6 weeks annual leave

Direct care time: 2/3rd (67%)

Indirect care time: 1/3rd (33%) (see below)

Plus on-costs (28% WorkCover, payroll tax, superannuation etc)

Plus administration overhead (HR, CEO, reception, clerical support) add 10% to salary

What this means in hours:

1,755 hours per annum available (having taken out AL) (52 weeks x 38 hours/week less AL)

1,171 hours direct care (approx. 31 weeks worth)

584 hours indirect care (approx. 15 weeks worth)

Indirect care time includes

- Service administration meetings
- Writing case notes
- Completing information system data input
- Reporting stats (monthly)
- Ordering equipment (e.g. sterile injecting equipment, specimen jars, gloves, etc)
- Professional development activities, training sessions, seminars, conferences
- Performance appraisal
- Service development activities, e.g. developing standardised referral form; quality assurance meetings
- Collaboration/liaison with other service providers (e.g. developing care pathways, processes for referral service agreements, MOUs, etc)
- Promoting access to treatment – information sessions, awareness raising
- Information and education sessions for health and welfare staff, primary care staff etc. (training provision)
- Monitoring and evaluation
- Research
- Mandatory clients; court reports etc (where writing reports).

Three salary types were used in the DASP Model: doctor (Addiction Medicine Specialist), Nurse/Allied Health, and ATOD worker. The final agreed Clinical Staff FTE prices (salaries and on-costs) used in the original DASP Model are given in Table 4.

Table 4: DASP Model clinical staff salary costs

	Base Salary	28% on costs	10% administration overheads	Total
Doctor - Addiction Medicine Specialist (AMS)	222,503.00	62,300.84	22,250.30	307,054.14
Nurse/Allied Health	81,590.00	22,845.20	8,159.00	112,594.20
ATOD worker	59,711.00	16,719.08	5,971.10	82,401.18

Note: for details regarding how these were derived, please refer to DASP Model Technical Manual, Aug 2013

All of the additional care (time) allocated within the revised Aboriginal care packages was assigned to an ATOD worker.

For Aboriginal and Torres Strait Islander model, the EAG were asked to consider:

- Is the 2/3rd direct care 1/3rd indirect care split right?
- Do we need to increase the time for indirect costs (writing case notes etc.)
- Are the salaries used in the DASP Model appropriate for Aboriginal services?

The EAG reviewed the DASP Model clinical staff time methodology. While there were arguments put forward to increase the amount of time for case note writing, it was determined that there was little rationale for more time for case note writing for Aboriginal care than mainstream care. Furthermore, there appeared to be no rationale for varying the salary costs for the ATOD Worker.

The advantages of standardising the resource costs for clinical staff with the DASP Model methods outweighed any minor differences. Thus, the clinical staff costs were calculated identically to the DASP Model.

A detailed methodology was used by the DASP Model to derive medication costs, bed-day costs (including occupancy rates and staffing levels for residential services overnight and weekends) and the costs for diagnostic tests.

Because most of the additional care in the Aboriginal care packages is staff time, the cost methodology associated with these non-salary items was not reviewed. Thus, the existing DASP Model methods were used for medications, diagnostic tests and so on. There is no reason to assume that medication costs, bed-day costs or diagnostic test costs would vary significantly for an Aboriginal person compared to a non-Aboriginal person in ATOD treatment. The actual amount of these items, was, however varied. (See Chapter 4: change in medications for tobacco intervention and relapse prevention pharmacotherapies; inclusion of an additional overnight staff person). So while the costs changed, the methodology underlying their calculations did not.

The use of the DASP Model to generate new resource estimates for Aboriginal care packages

We began by using the DASP Model to estimate the individual costs of the original DASP Model seven template care packages (alcohol 18–64 years): mild intervention; moderate care; psychosocial intervention – with relapse prevention medications - complex; withdrawal outpatient – complex with relapse prevention pharmacotherapies; withdrawal management – residential – complex with relapse prevention pharmacotherapies; day program and; residential rehabilitation – 13 week stay. The DASP Model calculates the specific staffing costs (against time in the care packages), the additional costs associated with medications, bed-day costs (for residential services) and diagnostic tests. The vast majority of the costs are contained in the staffing. A population of 100,000 people is allocated to the different care packages and then the total cost (across all care packages) across that population of 100,000 is calculated (NSWMH, 2013).

We sought to derive a cost per person per care package, which is different from the DASP Model total costs. The method we employed was to calculate the total cost for the care package, identify the number of people allocated to that care package, and then divide the care package total by the number of people, giving an average cost per person per care package. To illustrate, with the “psychosocial intervention – with relapse prevention medications - complex” the DASP Model estimates the cost for this care package (psychosocial intervention) in the selected population (alcohol, 18–64 years of age) to be \$32,709,032. The model also estimates the number of people in the population who should receive this care package, so in the case of psychosocial interventions – with relapse prevention medications – complex, the model estimates that 5,548 people in the population should receive this intervention. Therefore we divide the total cost by the number of individuals ($\$32,709,032 \div 5,548$) to estimate the average individual cost of the psychosocial intervention care package (\$5,896). This same process was used to derive the individual costs for the six other template care packages (see Table 5).

Table 5: Original DASP Model – estimates of average cost per care package per person

Care Package Alcohol (18-64 years)	Average cost per package/person
Mild intervention	\$120
Moderate care	\$1,396
Psychosocial interventions – with relapse prevention medications - complex	\$5,896
Withdrawal outpatient – with relapse prevention medications – complex	\$6,811
Withdrawal management – residential – complex – with relapse prevention pharmacotherapies	\$8,976
Day Program – 25 days –standard	\$3,753
Residential rehabilitation – 13 weeks residential and 13 weeks ongoing care	\$31,565

Because we have chosen a multiplier approach, the distributions between the care packages is less important, and does not interfere with the individual care package cost calculations per se. However, summing the care package costs to derive a total population cost will be inaccurate and the data presented herein cannot be used in that way.

Indicative resources for the seven template Aboriginal care packages

We now turn to estimating the individual cost of the seven different care packages for an Aboriginal client. The master summary table (see Chapter 4) formed the basis for the revised resource estimation. The detailed working notes are given in Appendix 6.

Resources that were altered took one of the following six forms:

1. Clinical staff time – additional minutes. This was relatively straightforward and entailed increasing the minute allocations (consistent with Chapter 4). We applied the ATOD worker rate consistently to all additional time involved in providing Aboriginal care.
2. Two staff instead of one staff member for group work – doubling the amount of time, which captured the additional cost.
3. Transport – factored in as more time (minutes) of ATOD worker time.
4. Overnight staffing - additional FTE for overnight staffing – this entailed entering a “2” instead of a “1” in the overnight residential components of all care packages that included residential stays.
5. Bed for support person – additional bed-day cost – we chose the bed-day costs for residential rehabilitation (RR1). This applied to 50% of clients so entailed adding 0.5 (rather than 1.0). This was entered into the residential withdrawal care package and the residential rehabilitation care package (for the withdrawal component)
6. Medication costs: the proportions receiving the medications were varied while the original costs per se were applied. For example, with regard to relapse prevention pharmacotherapies, the proportion of doses were altered (in the mainstream care packages, the average person is prescribed 108 doses of acamprosate, and 216 doses of naltrexone, 72 doses of disulfiram, and 365 doses of thiamine, whilst in the Aboriginal care packages no people receive disulfiram, so the average person is prescribed 216 doses of acamprosate, and 324 doses of naltrexone, 0 doses of disulfiram and 365 doses of thiamine).

The specific detail of each variation to the DASP Model original spreadsheets is given in Appendix 6. All the alterations were made in the 'data' sheet or the 'parameters' sheets of the DASP Model Excel spreadsheets.

The vast majority of the adaptations were accommodated in staff time. Not every single client receives every single adaptation. For example 20% are assumed to receive return to country/community; 70% are assumed to require travel and so on (the rationale and evidence-base for these proportions was given in Chapter 4). Therefore, wherever the adaptation was specified to only apply to a proportion of people it was divided by the associated percentage. The final results, therefore, are statistical averages and cannot be interpreted as a specific cost for one individual, but an average cost over a population of people receiving that care package.

Once all of the elements had been adjusted we ran the program again to derive the costs of delivering the care packages to an Aboriginal client. So, to continue with the example, in the case of the "psychosocial intervention – with relapse prevention medication – complex", the total cost (when we include the adjustment and adaptations for Aboriginal clients) is \$105,447,308. This amount is then divided by the number of people in the population who should receive this intervention (5,547) to obtain the average individual cost of the psychosocial care package for an Aboriginal person for 12 months (\$19,010). This same process was used to derive the average individual costs for the six other template care packages (see Table 6 below).

Table 6: Aboriginal cost (average per person) for seven care packages

Care Package Alcohol (18-64 years)	Average cost
Mild intervention	\$1,507
Moderate Care	\$7,862
Psychosocial interventions – with relapse prevention medications – complex	\$19,010
Withdrawal outpatient – complex with relapse prevention pharmacotherapies	\$21,160
Withdrawal management – residential – complex – with relapse prevention pharmacotherapies	\$23,001
Day Program – 25 days – standard	\$19,110
Residential rehabilitation – 13 weeks residential and 13 weeks ongoing care	\$59,009

The average costs per Aboriginal care package (Table 6) can be compared with the original DASP Model average cost per care package (Table 5). The ratio of these two costs is the important main result. As noted earlier the actual amount is not what is important in these analyses (as they reflect statistical averages), rather it is the multiplier that is most important. Table 7 gives the multipliers comparing resources for delivering treatment to a non-Aboriginal person, and delivering treatment to an Aboriginal person.

Table 7: Multipliers: the ratio of costs between mainstream and Aboriginal care packages

Care Package Alcohol (18-64 years)	Multiplier – ratio of resource estimate between mainstream and Aboriginal
Mild intervention	12.6 ¹
Moderate care	5.6 ¹
Psychosocial interventions – with relapse prevention medications – complex	3.2
Withdrawal outpatient – complex with relapse prevention pharmacotherapies	3.1
Withdrawal management – residential – complex – with relapse prevention pharmacotherapies	2.6
Day Program – 25 days – standard	5.1
Residential rehabilitation – 13 weeks residential and 13 weeks ongoing care	1.9

Notes: 1. The mild and moderate care packages for Aboriginal people include the tobacco intervention. This was not included in the mainstream care packages.

The largest difference is for the mild intervention, with a multiplier of 12.6. This is not surprising because in the mainstream DASP Model, the mild intervention was only 5 x 15 mins primary care assessment. As argued in Chapter 4 this is not appropriate for Aboriginal clients, and this care package was expanded to include more assessment, and referral as well as the tobacco intervention. Likewise for the moderate intervention – the original DASP Model did not include a tobacco intervention (nor return to country or comprehensive assertive follow-up). Given the very different care packages for mild and moderate, it is reasonable to leave these to one side and examine the multipliers for the severe care packages. These are all within range of each other, with the exception of the day program. This multiplier is larger because of the transport costs: 25 days' worth of transport is required for this program.

The DASP Model works on care packages which is a course of treatment over one year. Most ATOD care in Australia is thought about in terms of 'episodes of care' rather than care over the course of a year. What does this mean for the approach taken in this project? The absolute costs associated with each care package in the DASP Model mainstream (see Table 5) are not a reflection of what an organisation receives for each episode of care. Likewise, the Aboriginal care package costs (Table 6) should not be taken to mean that these costs are indicative of what organisations should be paid per episode of care. However the multiplier is a valid comparator: it ignores the absolute cost per se, and makes the comparison between the cost of evidence-based care for a non-Aboriginal person and evidence-based care for an Aboriginal person. Thus, it is the multipliers that are the most important results. What these results mean in practice, is that jurisdictions purchasing for example withdrawal care (at whatever rate or purchasing system is used) have data which suggests that if it is for an Aboriginal person, those costs (or existing rate) should be doubled.

In summary, the results suggest that in order to provide evidence-based Aboriginal care packages, the cost of care needs to be increased two to three fold over that in the mainstream care packages. The multipliers appear to be around 2 or 3 (see above table). Note, however, that this applies only to Aboriginal community-controlled organisations providing Aboriginal-specific services. For mainstream organisations providing care to Aboriginal clients, not only is the care package cost two to three times the existing cost, but additional resources are also required, as discussed below.

Additional costs for mainstream service providers

We defined three components that are required if mainstream services are to provide appropriate care for Aboriginal people (see Chapter 5):

1. Protocols for partnerships
2. Protocols for clinical practice
3. Training for workers

The costs have been estimated based on the salary rate for an AOD worker, multiplied by the number of days of work. The training costs were estimated by taking an average cost across a number of different training programs (see Appendix 7).

Table 8: Additional costs for mainstream services

Component required for mainstream services	Estimate of resources	Estimate of cost
Protocols for partnerships	30 days	\$9,510
Organisational policy, procedures and service delivery	52 days	\$16,484
Training and workforce development	Cost of training program	\$4,500 + \$30,000 = \$34,500
TOTAL per organisation		\$60,494

Note: Per annum salary = 82,401.18 (see Table 4) converted to a per day rate (divided by 260 working days in the year) = \$317 per day

The \$60,494 needs to be added to the cost of care provided in mainstream services. But it is not additive to each care package (inasmuch as organisations will provide multiple care packages to multiple clients over the course of a year). Thus the \$60,494 is a one-off annual cost for mainstream services that are seeing Aboriginal clients.

Summary

There are additional costs associated with providing the ATOD care required for Aboriginal clients. These costs are about two to three fold as much as for non-Aboriginal clients receiving ATOD care. The costs are greater because of the need to include additional elements, such as more intensive assertive follow-up, tobacco interventions, better engagement with families, a need for two staff members, and care components such as return to country/community. This evidence-based approach to ATOD treatment for Aboriginal clients maximises health outcomes.

It is important to acknowledge that these are average costs, not per client or per care package delivered. In some cases the costs to provide that care to an individual will be less, in other cases it will be more. The costs assume that the care is provided within an Aboriginal-specific organisation or service such that additional organisational and workforce training is not required. We have separately costed the necessary workforce development that is required for mainstream services that are providing the care identified herein to Aboriginal clients. For example, the mainstream cost for residential withdrawal averages out at \$8,976. The Aboriginal care is costed at an average of \$23,001. If that Aboriginal care is provided in a mainstream service, there is also \$60,494 in training and support to ensure the organisation is culturally competent.

CHAPTER 7: OTHER DRUGS AND AGE GROUPS

As detailed in Chapter 2 (methodology), we used the alcohol 18–64 year old care packages as the master template for the establishment of the Aboriginal care packages. Given that the approach that was taken was to calculate the resources from those and establish a ‘multiplier’ that can be applied to any Aboriginal care package, for any drug type or age group, here we provide a brief analysis of some of the specific issues associated with providing ATOD care to Aboriginal clients who are either from an age group other than 18–64 years, or who are presenting with a primary drug use problem other than alcohol.

12 – 17 year age group

Drug and alcohol use generally starts at a younger age in Aboriginal Australians than in the general population (AIHW, 2005; Burns, D'Abbs, & Currie, 1995; Clough, D'Abbs, Cairney, Gray, Maruff, Parker, & O'Reilly, 2004; Gray, Morfitt, Ryan, & Williams, 1997; Larson, 1996). The mean age of first drug use among the Aboriginal population is apparently between 2 and 6 years younger than the national average, but follows the general pattern of tobacco and alcohol being tried at younger ages followed by injected drugs when individuals are entering adulthood (AIHW, 2006). Range estimates presented in a number of surveys also indicate that some people first tried specific drugs at a very young age – 8 to 10 years (Burns et al., 1995; Gray et al., 1997). There is also evidence that Aboriginal clients who seek treatment are younger than other Australian treatment-seekers with 19% of episodes for Aboriginal clients being for those aged 10–19 years, compared with 11% for other Australians (AIHW, 2011a).

While alcohol and other drug misuse and poor mental health remain a national priority for all Australian youth, Aboriginal youth have particular needs. While just 3.8% of Australians aged 10–19 are Aboriginal, in 2002/03 Aboriginal youth comprised nearly half (48%) of those in juvenile detention (aged 10–17)(AIHW, 2005). Aboriginal youth (aged 15–24) experience the highest rate of physical violence of any Aboriginal Australians (AIHW, 2005). Suicide rates for Aboriginal females (aged 0–24) are five times greater than their non-Aboriginal counterparts, and for Aboriginal males are three times greater (AIHW, 2005).

Influences such as peer groups and typical teenage risk-taking behaviour are common reasons for drug taking in young people, however, in the case of young Aboriginal people, the pressures of family life and the limited array of options for young Aboriginal Australians intensify the situation and “mark it out as distinct from that of other young people”(Brady, 1992). “Cultural discontinuity” or lack of connectedness is believed to be a risk factor for poor mental health, suicide, violence and ATOD use among Aboriginal youth (Kirmayer, Brass, & Tait, 2000). For this reason, the way that ATOD treatment and care is delivered to young Aboriginal people requires a sensitivity to and immersion within Aboriginal culture.

The element “Return to Country/Community” that is included in all the Aboriginal care packages would be distinct for this age group. For example, it could involve the family unit “returning to country/community”, not just the individual. There would also be a need for more outreach, and peer support services. Connection to community and connection to Elders is also very important for young Aboriginal Australians; building and reinforcing cultural *identity* and *resilience*. Cultural activities such as connection with Elders, bush tucker trails, bush hunting excursions, and cultural camps are examples of activities that can be incorporated into the group activities of the treatment care packages for young Aboriginal people (Lee, Conigrave, Clough, Wallace, Silins, & Rawles, 2008).

65+ years

While significant improvements in Aboriginal life expectancy have been observed in recent years, Aboriginal Australians have a life expectancy that is about 10 years lower than non-Aboriginal Australians (AIHW, 2014). The report shows that the latest estimated life expectancy at birth for Aboriginal males was 69 years, and for females it was 73 years (AIHW, 2014). As life expectancy for Aboriginal Australians is 10 years lower than for non-Aboriginal Australians, the treatment care packages for older Aboriginal people should be for those aged 55+ years rather than 65+ years.

The complexity of needs also need to be taken into account in treatment packages for elderly Aboriginal clients. These include the likelihood of co-morbidities such as chronic diseases, for example, circulatory diseases, diabetes, cancer, and respiratory diseases (AIHW, 2014).

Specific elements that have been included in the Aboriginal care packages such as “Return to Country/Community”, and the role of family, are very important to clients in this age group. The elements would need to be adapted; for example, an elderly person returning to Country/Community would require a support person to accompany them. Connection to community is critical at this age.

Cannabis

Across the general community the research shows that cannabis use has been declining over the past decade. In contrast, the use of cannabis by Aboriginal people, specifically in remote communities has increased over the past 20 years or so (Lee, Conigrave, Patton, & Clough, 2009). Studies by Clough and colleagues found that between 60%–73% of males and 16%–27% of females (aged 13–36 years) in eastern Arnhem Land (NT) communities were using cannabis, with around three-quarters using it at least weekly and 44% smoking it daily (Clough et al., 2004). Follow up studies indicated that these high rates persisted.

In a recent study of knowledge, risk practices and health services access for sexually transmissible infections and blood borne viruses among young Aboriginal and Torres Strait Islander people (The Goanna Survey) (Ward, Bryant, Wand, Pitts, Smith, Delaney-Thiele, Worth, & Kaldor, 2014), cannabis was the most common drug used at 30% overall – with 33% of males and 29% of females using cannabis (Ward et al., 2014). This applied across different geographic regions and its use was reportedly highest among those living in regional areas (33%).

At a national level, the most recent National Aboriginal and Torres Strait Islander Health Survey (2012/2013) reported that cannabis was the most commonly used illicit drug, having been used by one in five (19%) Aboriginal and Torres Strait Islander people aged 15 years and over in the previous year (ABS, 2014). After removing the effects of different age structures, Aboriginal Australians were 1.6 times as likely as non-Aboriginal Australians to have recently used cannabis (AIHW, 2011b). These statistics suggest acceptability of cannabis use in Aboriginal people and speak to the need for attitudinal changes at a community level.

Poly drug use is very common with cannabis users. The studies of remote Aboriginal populations in Arnhem Land found that tobacco smokers were more likely than non-smokers to use cannabis and that the likelihood increased as the quantity of cannabis increased. For lifetime users of both tobacco and cannabis, one-third had initiated the use of both substances at the same time (Clough, 2005). For this reason the tobacco intervention within the Aboriginal care packages for cannabis users is very important.

A number of programs have been designed specifically around cannabis use for Aboriginal Australians, for example, a collaborative project between the Aboriginal Community Controlled Primary Health sector and the National Cannabis Prevention and Intervention Centre (NCPIC)

developed a “*Could it be the gunja*” program which includes a brief intervention manual and change booklets for clients and an agency level screening and brief intervention implementation package.

A study by Copeland and Allsop (Copeland & Allsop, 2014) that examined the client and treatment characteristics of ‘cannabis only’ treatment clinics in NSW found that Aboriginal and Torres Strait Islander treatment seekers were more likely to complete cannabis treatment in a dedicated cannabis clinic (49.6%) than in a non-dedicated clinic (40.5%; $P < 0.05$) (Copeland & Allsop, 2014).

Amphetamines

There is little information available about the use of amphetamine-type substances (ATS) among Aboriginal people, although there have been anecdotal reports of increases in the use of amphetamine-type substances among Aboriginal and Torres Strait Islander people in some locations (NIDAC/NACCHO, 2014). NIDAC and NACCHO conducted a consultation survey to gather information from front-line workers regarding ATS use among Aboriginal and Torres Strait Islander clients (NIDAC/NACCHO, 2014). The main survey finding included that most respondents had Aboriginal and Torres Strait Islander clients who used ATS; and that it is a significant issue amongst their Aboriginal and Torres Strait Islander clients as well as their local community; they noted a recent increase in ATS use among their clients; and that problems most commonly associated with ATS use included agitation or aggression, depression and anxiety, psychotic problems such as paranoia and hallucinations, criminal activity, and family breakdown (NIDAC/NACCHO, 2014). More than half of the respondents in urban areas indicated they needed more resources, knowledge or guidance, and linkages to other services to respond to ATS use. Such needs were also indicated from respondents in rural and remote areas (NIDAC/NACCHO, 2014).

Within the DASP Model amphetamine care packages, there is no acute presentation management component. It is missing across both the mainstream and Aboriginal care packages. Acute presentation management would involve linking up with other services to respond to the management of acute psychosis, for example, with police, with emergency hospital departments, and managing connections with mental health services. Training is also required for ATOD workers to be able to manage acute psychosis presentations. Some services may also require additional security measures. These issues are not unique to Aboriginal services.

There is a current perceived lack of support for family members regarding the impact of amphetamine use on families. As noted by an EAG member, the impact of ‘ice’ on kinship systems results in a ripple effect in communities. More attention is needed in the amphetamine care packages to supporting family, and a need for capacity building for community members.

Benzodiazepines

The non-medical use of pharmaceuticals has been identified as a significant drug problem in Australia. Prescribed benzodiazepines such as diazepam and temazepam are easily accessible, and can be obtained illegally, ‘doctor shopping’, or using stolen or forged prescriptions. Benzodiazepines are also associated with poly drug use, for example, in 2007 National Drug Strategy Household Survey, it was reported that of recent users of benzodiazepines, 42.5% also used alcohol, and 25% used cannabis (AIHW, 2008). The use of benzodiazepines in Aboriginal people is an area which we know very little about but there are concerns about the use of benzodiazepines in the community. Best practice clinical guidelines for the treatment of benzodiazepine dependence in Aboriginal clients are lacking. There is little evidence upon which to build care packages.

Illicit Opioids

Although there are gaps in the data on Aboriginal injecting populations, it appears from previous surveys that injecting drug use is over-represented in Aboriginal communities (Kratzmann, Mitchell,

Ware, Banach, Ward, & Ryan, 2011). Despite comprising about 3% of the population, between 11% and 12% of respondents in a national survey of needle and syringe program attendees identified as Aboriginal and Torres Strait Islander (Iversen & Maher, 2013).

Findings from the Goanna Survey (Ward et al., 2014) with regard to injecting drug use, found that of participants who reported injecting drugs in the last 12 months, 37% reported sharing needles/syringes. A higher proportion of males reported sharing needles and syringes compared to females (33% vs 20%) (Ward et al., 2014).

An EAG member reported that there had been a significant increase in Aboriginal people accessing Opioid Treatment Programs (OTP) in NSW. Data are lacking about the overall accessibility and availability of OTP treatment places for Aboriginal clients. The Aboriginal Medical Services could play a vital role in providing OTP to this population and capacity building initiatives in this regard are required.

There is a need for more flexibility around dosing in Aboriginal services, for example, broadening of opioid maintenance treatment hours (Teasdale et al., 2008); operation outside normal business hours; and having a booking system as well as a drop-in clinic (Teasdale et al., 2008; Williams et al., 2006).

Lack of transport has been identified previously as a major barrier to Aboriginal clients accessing treatment services (Teasdale et al., 2008). The same is true for OTP. It has been noted that transportation for a client to his/her first dosing point is more than that, it is about “introducing” the client to the service. The time taken to transport clients for dosing needs to be incorporated into the opioid care packages.

Summary

This project has concentrated on using seven template care packages to develop detailed care elements for Aboriginal clients. The template care packages were all taken from the alcohol, 18-64 years of age DASP Model care packages. As can be seen above, there are particular issues for Aboriginal clients in both the younger (under 18 years) and older (over 64 years) age groups. There are also particular needs in relation to drugs other than alcohol.

The care elements identified here for appropriate and evidence-based clinical care for Aboriginal clients with alcohol use disorders are not likely to be highly different from those for other drug use disorders. Thus the need for attention to kinship and family relationships; greater time and flexibility in providing immersion in cultural activities; the need for transport; and additional ongoing care and assertive follow-up is likely to apply equally to alcohol, cannabis and methamphetamine presentations. Likewise the return to country/community element added to the care packages will apply irrespective of the primary substance presentation.

The extent to which the multipliers reported earlier can be used across age groups, and across drug classes has not been tested. But again there is little reason to suspect that the multipliers will be much different for other drug classes. To take an example, the alcohol withdrawal care package when delivered in line with the Aboriginal care elements identified here is in the order of three times the costs (see Table 7). It is reasonable to assume that a cannabis or methamphetamine withdrawal appropriately tailored for an Aboriginal client will carry a similar additional cost.

REFERENCES

- ABS. (2014). *Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-2013*. Canberra: Australian Bureau of Statistics.
- AIHW. (2005). *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*. Canberra: Australian Institute of Health and Welfare.
- AIHW. (2006). *Drug Use Among Aboriginal and Torres Strait Islander Peoples: An Assessment of Data Sources*. Canberra: Australian Institute of Health and Welfare.
- AIHW. (2008). *2007 National Drug Strategy Household Survey*. Canberra: Australian Institute of Health and Welfare.
- AIHW. (2011a). *Access to Health Services for Aboriginal and Torres Strait Islander People*. Canberra: Australian Institute of Health and Welfare.
- AIHW. (2011b). *Substance Use Among Aboriginal and Torres Strait Islander People*. Canberra: Australian Institute of Health and Welfare.
- AIHW. (2012a). *Aboriginal and Torres Strait Islander Health Services Report, 2010-2011. OATSIH services reporting - key results*. Canberra: Australian Institute of Health and Welfare.
- AIHW. (2012b). *Alcohol and Other Drug Treatment Services in Australia 2010-2011: Report on the National Minimum Data Set*. Canberra: Australian Institute of Health and Welfare.
- AIHW. (2014). *Mortality and Life Expectancy of Indigenous Australians 2008 to 2012*. Canberra: Australian Institute of Health and Welfare.
- Alati, R., Madden, C., & Morton, J. (1996). *Issues related to the evaluation of an Aboriginal alcohol and drug program*. Paper presented at the Aboriginal Health: Social and Cultural Transitions: Proceedings of a Conference at the Northern Territory University: Sept 29-31., Darwin, NT.
- Alford, K. (2014). *Economic Value of Aboriginal Community Controlled Health Services: NACCHO - National Aboriginal Community Controlled Health Service*.
- Amato, L., Minozzi, S., & Davoli, M. (2011a). Efficacy and safety of pharmacological interventions for the treatment of the Alcohol Withdrawal Syndrome. *Cochrane Database Syst Rev*(6), CD008537.
- Amato, L., Minozzi, S., Davoli, M., & Vecchi, S. (2011b). Psychosocial and pharmacological treatments versus pharmacological treatments for opioid detoxification. *Cochrane Database of Systematic Reviews*(9), CD005031.
- Amato, L., Minozzi, S., Vecchi, S., & Davoli, M. (2010). Benzodiazepines for alcohol withdrawal. *Cochrane Database of Systematic Reviews*(3), CD005063.
- AMSANT. (2008). *A Model for Integrating Alcohol and Other Drug, Community Mental Health and Primary Health Care in Aboriginal Medical Services in the Northern Territory*. Northern Territory: Aboriginal Medical Services Alliance Northern Territory.
- ATSIS. (2003). *Evaluation of the Link-Up Program, Audit and Evaluation Services*. Canberra: Aboriginal and Torres Strait Islander Services.
- Awofeso, N. (2011). Racism: a major impediment to optimal Indigenous health and health care in Australia. *Australian Indigenous Health Bulletin*, 11(3), 1-14.
- Babor, T., Caetano, R., Casswell, S., Edwards, G., & Giesbrecht, N. (2010). *Alcohol: No Ordinary Commodity. Research and Public Policy*. Oxford: Oxford University Press.
- Baer, J. S., Garrett, S. B., Beadnell, B., Wells, E. A., & Peterson, P. L. (2007). Brief motivational intervention with homeless adolescents: evaluating effects on substance use and service utilization. *Psychol Addict Behav*, 21(4), 582-586.
- Barnett, E., Sussman, S., Smith, C., Rohrbach, L. A., & Spruijt-Metz, D. (2012). Motivational Interviewing for adolescent substance use: a review of the literature. *Addict Behav*, 37(12), 1325-1334.
- Bennet, J., & Wellard, R. (2003). *Evaluation of the Aboriginal and Torres Strait Islander Health Projects* South Melbourne: National Rural Faculty, RACGP.

- Berndt, R. M., & Berndt, C. H. (1996). *The World of the First Australians: Aboriginal Traditional Life, Past and Present* (5th Edition ed.). Canberra: Aboriginal Studies Press.
- Bernstein, E., Bernstein, J., Tassiopoulos, K., Heeren, T., Levenson, S., & Hingson, R. (2005). Brief intervention at a clinic visit reduced cocaine and heroin use. *Drug and Alcohol Dependence*, *77*, 49-59.
- Berry, S. L. (2013). *Culture in Treatment for Aboriginal Australian Men in New South Wales Residential Drug and Alcohol Rehabilitation*. University of Wollongong.
- Berry, S. L., & Crowe, T. P. (2009). A review of engagement of Indigenous Australians within mental health and substance abuse services. *e-journal for the Advancement of Mental Health*, *8*(1), 1-12.
- Bishop, B., Colquhoun, S., & Johnson, G. (2006). Psychological sense of community: An Australian Aboriginal experience. *Journal of Community Psychology*, *34*(1), 1-7.
- Brady, M. (1992). *Heavy Metal: Social Meaning of Petrol Sniffing in Australia*. Canberra: Aboriginal Studies Press.
- Brady, M. (1995). Culture in treatment, culture as treatment. A critical appraisal of developments in addictions programs for indigenous North Americans and Australians. *Social Science & Medicine*, *41*(11), 1487-1498.
- Brady, M. (2002). *Indigenous Residential Treatment Programs for Drug and Alcohol Problems: Current status and options for improvement*. Canberra: Centre for Aboriginal Economic Policy Research.
- Brecht, M. L., Greenwell, L., von Mayrhauser, C., & Anglin, M. D. (2006). Two-year outcomes of treatment for methamphetamine use. *Journal of Psychoactive Drugs, Suppl 3*, 415-426.
- Brett, J., Lawrence, L., Ivers, R., & Conigrave, K. (2014). Outpatient alcohol withdrawal management for Aboriginal and Torres Strait Islander peoples. *Australian Family Physician*, *43*(8), 563-566.
- Broekaert, E., Kooyman, M., & Ottenberg, D. J. (1993). What cannot be changed in a therapeutic community? *Orthopedagogische Reeks Gent 2*, 51-62.
- Brunette, M. F., Mueser, K. T., & Drake, R. E. (2004). A review of research on residential programs for people with severe mental illness and co-occurring substance use disorders. *Drug & Alcohol Review*, *23*(4), 471-481.
- Burgess, C. P., Johnston, F. H., Berry, H. L., McDonnell, J., Yibarbuk, D., Gunabarra, C., et al. (2009). Healthy country, healthy people: the relationship between Indigenous health status and "caring for country". *Medical Journal of Australia*, *190*(10), 567-572.
- Burns, C. B., D'Abbs, P., & Currie, B. J. (1995). Patterns of petrol sniffing and other drug use in young men from an Australian Aboriginal community in Arnhem Land, Northern Territory. *Drug and Alcohol Review*, *14*(2), 159-169.
- Campbell, D., Burgess, C. P., Garnett, S. T., & Wakerman, J. (2011). Potential primary health care savings for chronic disease care associated with Australian Aboriginal involvement in land management. *Health Policy*, *99*(1), 83-89.
- Carney, T., & Myers, B. (2012). Effectiveness of early interventions for substance-using adolescents: findings from a systematic review and meta-analysis. *Subst Abuse Treat Prev Policy*, *7*, 25.
- Carroll, K. M., & Onken, L. S. (2005). Behavioral therapies for drug abuse. *American Journal of Psychiatry*, *162*(8), 1452-1460.
- Carson, B., Dunbar, T., Chenhall, R., & Bailie, R. S. (2007). *Social determinants of Indigenous Health*. Sydney: Allen & Unwin.
- Casey, W., & Keen, J. (2006). *Strong Spirit Strong Mind, Aboriginal alcohol and other drug worker resource: A guide to working with our people, families and communities*: WA Drug and Alcohol Office.
- Chenhall, R. (2007). *Belong's Haven: recovery from alcohol and drug abuse within an Aboriginal residential treatment centre*. Melbourne: Melbourne University Press.
- Chenhall, R. D., & Senior, K. (2013). "The concepts are universal, it is the picture you paint that is different": key issues for Indigenous Australian alcohol and drug residential treatment

- centres. *Therapeutic Communities: The International Journal of Therapeutic Communities*, 34(2/3), 83-95.
- Chikritzhs, T., & Brady, M. (2006). Fact or fiction? A critique of the National Aboriginal and Torres Strait Islander Social Survey 2002. *Drug and Alcohol Review*, 25(3), 277-287.
- Clarke, S., & Forrell, S. (2007). *Pathways to Justice: The role of non-legal services*: Law and Justice Foundation of New South Wales.
- Cleary, M., Hunt, G. E., Matheson, S., & Walter, G. (2009). Psychosocial treatments for people with co-occurring severe mental illness and substance misuse: systematic review. *Journal of Advanced Nursing*, 65(2), 238-258.
- Clough, A. R. (2005). Associations between tobacco and cannabis use in remote indigenous populations in Northern Australia. *Addiction*, 100(3), 346-353.
- Clough, A. R., D'Abbs, P., Cairney, S., Gray, D., Maruff, P., Parker, R., et al. (2004). Emerging patterns of cannabis and other substance use in Aboriginal communities in Arnhem Land, Northern Territory: a study of two communities. *Drug Alcohol Rev*, 23(4), 381-390.
- Coffin, J. (2007). Rising to the Challenge in Aboriginal Health by Creating cultural security. *Aboriginal & Islander Health Worker Journal*, 31(3), 22-24.
- Conigrave, K., Freeman, B., Carroll, T., Simpson, L., Lee, K., Wade, V., et al. (2012). The Alcohol Awareness project: community education and brief intervention in an urban Aboriginal setting. *Health Promotion Journal of Australia*, 23(3), 219-225.
- Copeland, J., & Allsop, D. (2014). Dedicated 'cannabis only' treatment clinics in New South Wales, Australia: Client and treatment characteristics and associations with first-time treatment seeking. *Drug and Alcohol Review*, 33, 565-571.
- Councillor, H. (2003). Aboriginal community control in health. *The Australian Health Consumer*, 1.
- D'Amico, E. J., Miles, J. N., Stern, S. A., & Meredith, L. S. (2008). Brief motivational interviewing for teens at risk of substance use consequences: a randomized pilot study in a primary care clinic. *J Subst Abuse Treat*, 35(1), 53-61.
- Dance, P., Tongs, J., Guthrie, J., McDonald, D., D'Souza, R., Cubillo, C., et al. (2005). *I want to be heard - an analysis of needs of Aboriginal and Torres Strait Islander illegal drug users in the ACT and region for treatment and other services*. Canberra: Australian National University and Winnunga Nimmityjah Aboriginal Health Service.
- Darke, S., Campbell, G., & Popple, G. (2012). Retention, early dropout and treatment completion among therapeutic community admissions. *Drug & Alcohol Review*, 31(1), 64-71.
- Darke, S., Williamson, A., Ross, J., & Teeson, M. (2006). Residential rehabilitation for the treatment of heroin dependence: sustained heroin abstinence and drug-related problems 2 years after treatment entrance. *Addictive Disorders & Their Treatment*, 5(1), 9-18.
- Davis, J. (1998). Alcohol and Aboriginal society: is racism dead in the alcohol and drug field? In M. Hamilton, Kellehear, A., Rumbold, G. (Ed.), *Drug Use in Australia: A Harm Minimisation Approach* (pp. 85-97). Melbourne.
- Day, E., Ison, J., & Strang, J. (2005). Inpatient versus other settings for detoxification for opioid dependence. *Cochrane Database of Systematic Reviews*(4).
- De Leon, G. (1997). *Community as method. Therapeutic Communities for special populations and special settings*. Westport, CT.
- De Leon, G. (2010). Is the therapeutic community an evidence-based treatment? What the evidence says. *International Journal of Therapeutic Communities*, 31, 104-128.
- Denis, C., Lavie, E., Fatseas, M., & Auriacombe, M. (2006). Psychotherapeutic interventions for cannabis abuse and/or dependence in outpatient settings. *Cochrane Database Syst Rev*(3), CD005336.
- Diaper, A. M., Law, F. D., & Melichar, J. K. (2013). Pharmacological strategies for detoxification. *British Journal of Clinical Pharmacology*, 77(2), 302-314.
- Dinh-Zarr, T., Goss, C., Heitman, E., Roberts, I., & DiGiuseppi, C. (2004). Interventions for preventing injuries in problem drinkers. *Cochrane Database Syst Rev*(3), CD001857.

- Drake, R. E., O'Neal, E. L., & Wallach, M. A. (2008). A systematic review of psychosocial research on psychosocial interventions for people with co-occurring severe mental and substance use disorders. *Journal of Substance Abuse Treatment, 34*(1), 123-138.
- Dudgeon, P., Mallard, J., Oxenham, D., & Fiedler, J. (2002). Contemporary Aboriginal perceptions of community. In A. T. Fisher, C. C. Sonn & B. J. Bishop (Eds.), *Psychological sense of community: Research, application and implications* (pp. 247-267). New York: Kluwer Academic/Plenum.
- Dutra, L., Stathopoulou, G., Basden, S. L., Leyro, T. M., Powers, M. B., & Otto, M. W. (2008). A meta-analytic review of psychosocial interventions for substance use disorders. *Am J Psychiatry, 165*(2), 179-187.
- Eades, S. J., Sanson-Fisher, R. W., Wenitong, M., Panaretto, K., D'Este, C., Gilligan, C., et al. (2012). An intensive smoking intervention for pregnant Aboriginal and Torres Strait Islander women: a randomised controlled trial. *Medical Journal of Australia, 197*(1), 42-46.
- Edney, R. (2003). The Stolen Generation and the sentencing of Indigenous Offenders. *Indigenous Law Bulletin, 5*(23), 10-18.
- Ellis, R. (1998). Indigenous substance misuse services - every story is different: Benelong's Haven. *Aboriginal & Islander Health Worker Journal, 22*, 16-23.
- Ellis, R. (1999). Indigenous substance misuse services - Every story is different - Weigelli - Alcohol and other rehabilitation centre, Cowra. *Aboriginal & Islander Health Worker Journal, 23*(9-10).
- Emden, C., Kowanko, I., de Crespigny, C., & Murray, H. (2005). Better medication management for Indigenous Australians: findings from the field. *Australian Journal of Primary Health, 11*(1), 80-90.
- Emmen, M. J., Schippers, G. M., Bleijenberg, G., & Wollersheim, H. (2004). Effectiveness of opportunistic brief interventions for problem drinking in a general hospital setting: systematic review. *BMJ, 328*(7435), 318.
- Farrelly, T., & Lumby, B. (2009). A best practice approach to cultural competence training. *Aboriginal & Islander Health Worker Journal, 33*(5), 14-22.
- Farronato, N. S., Dursteler-Macfarland, K. M., Wiesbeck, G. A., & Petitjean, S. A. (2013). A systematic review comparing cognitive-behavioral therapy and contingency management for cocaine dependence. *Journal of Addictive Diseases, 32*(3), 274-287.
- Fitzpatrick, L., & Gillies, C. (2000). *Cultural awareness: Implementation considerations*. Toowoomba: Queensland Health, Cunningham Centre.
- Gossop, M., Marsden, J., Stewart, D., & Treacy, S. (2002). Change and stability of change after treatment of drug misuse: 2-year outcomes from the National Treatment Outcome Research Study (UK). *Addictive Behaviors, 27*(2), 155-166.
- Gowing, L., Ali, R., & White, J. M. (2009a). Buprenorphine for the management of opioid withdrawal. *Cochrane Database Syst Rev*(3), CD002025.
- Gowing, L., Ali, R., & White, J. M. (2009b). Opioid antagonists with minimal sedation for opioid withdrawal. *Cochrane Database Syst Rev*(4), CD002021.
- Gowing, L., Farrell, M. F., Ali, R., & White, J. M. (2014). Alpha2-adrenergic agonists for the management of opioid withdrawal. *Cochrane Database Syst Rev, 3*, CD002024.
- Gray, D., Morfitt, B., Ryan, K., & Williams, S. (1997). The use of tobacco, alcohol and other drugs by young Aboriginal people in Albany, Western Australia. *Aust N Z J Public Health, 21*(1), 71-76.
- Gray, D., & Stearne, A. (2004). *Makin Tracks - Final Evaluation Report*. Perth: National Drug Research Institute, Curtin University of Technology.
- Gray, D., Stearne, A., Wilson, M., & Doyle, M. (2010). *Indigenous specific alcohol and other drug interventions - continuities, changes and areas of greatest need*. Canberra, ACT: National Indigenous Drug and Alcohol Committee, Australian National Council on Drugs.
- Gray, D., Wilson, M., Allsop, S., Siggers, S., Wilkes, E., & Ober, C. (2014). Barriers and enablers to the provision of alcohol treatment among Aboriginal Australians: A thematic review of five research projects. *Drug Alcohol Review, 33*, 482-490.

- Grieves, V. (2009). *Aboriginal spirituality: Aboriginal philosophy, the basis of Aboriginal social and emotional wellbeing*. Darwin: Cooperative Research Centre for Aboriginal Health.
- GWA. (2014). *Western Australian Services Policy 2014 and Guidelines - Government of Western Australia*. Western Australia: Dept of Local Government and Communities, Office of Multicultural Interests.
- Hamilton, M., & Elford, K. (2009). *The report on the five years of the multiple and complex needs panel* Melbourne: Victorian Department of Human Services.
- Hamrosi, K., Taylor, S. J., & Aslani, P. (2006). Issues with prescribed medications in Aboriginal communities: Aboriginal health workers' perspectives. *Rural & Remote Health*, 6(2), 557.
- Havard, A., Shakeshaft, A., & Sanson-Fisher, R. (2008). Systematic review and meta-analyses of strategies targeting alcohol problems in emergency departments: interventions reduce alcohol-related injuries. *Addiction*, 103(3), 368-376.
- Hayashida, M., Alterman, A. I., McLellan, A. T., O'Brien, C. P., Purtill, J. J., Volpicelli, J. R., et al. (1989). Comparative effectiveness and costs of inpatient and outpatient detoxification of patients with mild-to-moderate alcohol withdrawal syndrome. *N Engl J Med*, 320(6), 358-365.
- Hayman, N. E., White, N. E., & Spurling, G. K. (2009). Improving Indigenous patients' access to mainstream health services: the Inala experience. *Med J Aust*, 190(10), 604-606.
- Hazelhurst, K. M. (1994). *A healing place: Indigenous visions for personal empowerment and community recovery*. Rockhampton, QLD: Central Queensland University.
- Helps, Y. L. M., & Moller, J. (2007). *Aboriginal people travelling well literature review: driver licensing issues, seat restraint non-compliance, Aboriginal health, Aboriginal disability*. Canberra: Australian Transport Safety Bureau.
- Higgins, S. T., Delaney, D. D., Budney, A. J., Bickel, W. K., Hughes, J. R., Foerg, F., et al. (1991). A behavioral approach to achieving initial cocaine abstinence. *American Journal of Psychiatry*, 148(9), 1218-1224.
- Host, J. (2009). *'It's still in my heart, this is my country' - The Single Noongar Claim History*. Crawley, WA: University of Western Australia
- HREOC. (1997). *Bringing Them Home: Report of the national inquiry into the separation of Aboriginal and Torres Strait Islander children from their families*. Sydney: Human Rights and Equal Opportunity Commission.
- Hser, Y. I., Evans, E., Huang, D., & Anglin, D. M. (2004). Relationship between drug treatment services, retention, and outcomes. *Psychiatric Services*, 55(7), 767-774.
- Huber, A., Ling, W., Shoptaw, S., Gulati, V., Brethen, P., & Rawson, R. (1997). Integrating treatments for methamphetamine abuse: a psychosocial perspective. *J Addict Dis*, 16(4), 41-50.
- Hudelson, P. M. (2004). Culture and quality: an anthropological perspective. *International Journal for Quality in Health Care*, 16(5), 345-346.
- Humeniuk, R., Ali, R., Babor, T., Souza-Formigoni, M. L., de Lacerda, R. B., Ling, W., et al. (2012). A randomized controlled trial of a brief intervention for illicit drugs linked to the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) in clients recruited from primary health-care settings in four countries. *Addiction*, 107(5), 957-966.
- Hunter, E. (1993). *Aboriginal History and Health: Power and prejudice in remote Australia*. Melbourne: Cambridge.
- Hunter, E., & Garvey, D. (1998). Indigenous mental health promotion: Mind over matter? *Australian Journal of Health Promotion*, 8, 4-11.
- Hunter, E., Tsey, K., Baird, M., & Baird, L. (2002). Indigenous mental health promotion: Process, politics, paradox and practicalities. In L. RowLing, G. Martin & L. Walker (Eds.), *Mental Health Promotion and Young People: Concepts, and Practices*. Roseville, NSW: McGraw-Hill.
- Ilgen, M. A., Jain, A., Lucas, E., & Moos, R. H. (2007). Substance use-disorder treatment and a decline in attempted suicide during and after treatment. *Journal of Studies on Alcohol & Drugs*, 68(4), 503-509.

- Ivers, R. G., Farrington, M., Burns, C. B., Bailie, R. S., D'Abbs, P. H., Richmond, R. L., et al. (2003). A study of the use of free nicotine patches by Indigenous people. *Aust N Z J Public Health*, 27(5), 486-490.
- Iversen, J., & Maher, L. (2013). *Australian Needle and Syringe Program National Data Report 2008-2012*. Sydney: The Kirby Institute, University of New South Wales.
- Jackson, R., Johnson, M., & Campbell, F. (2010). *Screening and Brief Interventions for Prevention and Early Identification of Alcohol Use Disorders in Adults and Young People*. Sheffield: University of Sheffield, School of Health and Related Research (ScHARR), Public Health Collaborating Centre.
- Jensen, C. D., Cushing, C. C., Aylward, B. S., Craig, J. T., Sorell, D. M., & Steele, R. G. (2011). Effectiveness of motivational interviewing interventions for adolescent substance use behavior change: a meta-analytic review. *J Consult Clin Psychol*, 79(4), 433-440.
- Jonas, W. (2002). *Social Justice Report*. Sydney: Office of the Aboriginal and Torres Strait Islander Social Justice Commissioner.
- Kamaka, M. L. (2001). Cultural immersion in a cultural competency curriculum. *Academic Medicine*, 76(5), 512.
- Kaner, E. F., Beyer, F., Dickinson, H. O., Pienaar, E., Campbell, F., Schlesinger, C., et al. (2007). Effectiveness of brief alcohol interventions in primary care populations. *Cochrane Database of Systematic Reviews*(2), CD004148.
- Kavanagh, K. H. (1998). Summers of no return: Transforming care through a nursing field school. *Journal of Nursing Education*, 37(2), 71-79.
- Kingsley, J., Townsend, M., Henderson-Wilson, C., & Bolam, B. (2013). Developing an exploratory framework linking Australian Aboriginal peoples' connection to country and concepts of wellbeing. *Int J Environ Res Public Health*, 10(2), 678-698.
- Kingsley, J., Townsend, M., Phillips, R., & Aldous, D. (2009). "If the land is healthy... it makes the people healthy": The relationship between caring for Country and health for the Yorta Yorta Nation, Boonwurrung and Bangerang Tribes. *Health & Place*, 15(2009), 291-299.
- Kirmayer, L. J., Brass, G. M., & Tait, C. L. (2000). The mental health of Aboriginal peoples: transformations of identity and community. *Can J Psychiatry*, 45(7), 607-616.
- Knapp, W. P., Soares, B. G., Farrel, M., & Lima, M. S. (2007). Psychosocial interventions for cocaine and psychostimulant amphetamines related disorders. *Cochrane Database Syst Rev*(3), CD003023.
- Koolmatrjie, J., & Williams, R. (2000). Unresolved grief and the removal of Indigenous Australian Children. *Australian Psychologist*, 35(2), 158-166.
- Kowanko, I., de Crespigny, C., Murray, H., Groenkjaer, M., & Emden, C. (2004). Better medication management for Aboriginal people with mental health disorders: a survey of providers. *Australian Journal of Rural Health*, 12(6), 253-257.
- Kratzmann, M., Mitchell, E., Ware, J., Banach, L., Ward, J., & Ryan, J. (2011). *Injecting Drug Use and Associated Harms Among Aboriginal Australians*. Canberra: Australian National Council on Drugs.
- Langer, N. (1999). Culturally competent professionals in therapeutic alliances enhance patient compliance. *Journal of Health Care for the Poor & Underserved*, 10(1), 19-26.
- Larkin, C., & Murray, R. (2005). Assisting Aboriginal patients with medication management. *Austr Prescriber*, 29, 123-125.
- Larkin, S. L., Geia, L. K., & Panaretto, K. (2006). Consultations in general practice and at an Aboriginal community controlled health service: Do they differ? *Rural & Remote Health*, 6(560).
- Larson, A. (1996). *What injectors say about drug use: preliminary findings from a survey of Indigenous injecting drug users. IDU working paper No. 2*. Australian Centre for International and Tropical Health and Nutrition: University of Queensland.
- Lee, K., Freeburn, B., Ella, S., Miller, W., Perry, J., & Conigrave, K. M. (2012). *Handbook for Aboriginal Alcohol and Drug Work*. Sydney: University of Sydney.

- Lee, K. K., Harrison, K., Mills, K., & Conigrave, K. M. (2014). Needs of Aboriginal Australian women with comorbid mental and alcohol and other drug use disorders. *Drug Alcohol Review, 33*, 473-481.
- Lee, K. S., Conigrave, K. M., Clough, A. R., Wallace, C., Silins, E., & Rawles, J. (2008). Evaluation of a community-driven preventive youth initiative in Arnhem Land, Northern Territory, Australia. *Drug Alcohol Rev, 27*(1), 75-82.
- Lee, K. S., Conigrave, K. M., Patton, G. C., & Clough, A. R. (2009). Cannabis use in remote Indigenous communities in Australia: endemic yet neglected. *Med J Aust, 190*(5), 228-229.
- Lee, K. S., Jagtenberg, M., Ellis, C. M., & Conigrave, K. M. (2013). Pressing need for more evidence to guide efforts to address substance use among young Indigenous Australians. *Health Promotion Journal of Australia, 24*(2), 87-97.
- Lee, N. K., & Rawson, R. A. (2008). A systematic review of cognitive and behavioural therapies for methamphetamine dependence. *Drug & Alcohol Review, 27*(3), 309-317.
- Liaw, S. T., Lau, P., Pyett, P., Furler, J., Burchill, M., Rowley, K., et al. (2011). Successful chronic disease care for Aboriginal Australians requires cultural competence. *Australian & New Zealand Journal of Public Health, 35*(3), 238-248.
- Lovett, R. (2013). *Mob and Country: A role for identity in alcohol screening for Indigenous Australians living in the ACT and region*. Australian National University, Canberra.
- Lovett, R., Dance, P., Guthrie, J., Brown, R., & Tongs, J. (2014). Walan Girri: developing a culturally mediated case management model for problematic alcohol use among urban Indigenous people. *Australian Health Review, 38*(4), 440-446.
- Lowell, A. (1998). *Communication in Aboriginal Health Care: Where are the interpreters?* Northern Territory: The Cooperative Research Centre for Aboriginal and Tropical Health.
- Lowell, A., Brown, I., Marrnanyin, B., Flack, M., Christie, M., & Snelling, P. (2005). *Sharing the true stories: improving communication between health staff and Aboriginal patients: Stage 1 report*. Darwin: Cooperative Research Centre for Aboriginal Health.
- Loxley, W., Toumbourou, J., & Stockwell, T. (2004). *The prevention of substance abuse, risk and harm in Australia: A review of the evidence*. Canberra: Commonwealth of Australia.
- Lussier, J. P., Heil, S. H., Mongeon, J. A., Badger, G. J., & Higgins, S. T. (2006). A meta-analysis of voucher-based reinforcement therapy for substance use disorders. *Addiction, 101*(2), 192-203.
- Madras, B. K., Compton, W. M., Avula, D., Stegbauer, T., Stein, J. B., & Clark, H. W. (2009). Screening, brief interventions, referral to treatment (SBIRT) for illicit drug and alcohol use at multiple healthcare sites: comparison at intake and 6 months later. *Drug & Alcohol Dependence, 99*(1-3), 280-295.
- Magill, M., & Ray, L. A. (2009). Cognitive-behavioral treatment with adult alcohol and illicit drug users: a meta-analysis of randomized controlled trials. *J Stud Alcohol Drugs, 70*(4), 516-527.
- Magor-Blatch, L., Bhullar, N., & Thomson, N. (2014). A systematic review of studies examining effectiveness of therapeutic communities. *Therapeutic Communities: The International Journal of Therapeutic Communities, 35*(4), 168-184.
- Maher, P. (1999). A review of 'traditional' aboriginal health beliefs. *Aust J Rural Health, 7*(4), 229-236.
- Malivert, M., Fatseas, M., Denis, C., Langlois, E., & Auriacombe, M. (2012). Effectiveness of therapeutic communities: a systematic review. *European Addiction Research, 18*(1), 1-11.
- Margolis, S. A., Ypinazar, V. A., Clough, A. R., & Hunter, E. (2008). Absence of alcohol withdrawal syndrome in a remote Indigenous community. *The Medical Journal of Australia, 189*(10), 596.
- Mark, A., McLeod, I., Booker, J., & Ardler, C. (2004). The Koori Tobacco Cessation Project. *Health Promotion Journal of Australia, 15*(3), 200-204.
- Marlatt, G. A., & Gordon, J. R. (1985). *Relapse Prevention: Maintenance strategies in the treatment of addictive behaviors*. New York: Guilford Press.

- Marley, J. V., Atkinson, D., Kitaura, T., Nelson, C., Gray, D., Metcalf, S., et al. (2014). The Be Our Ally Beat Smoking (BOABS) study, a randomised controlled trial of an intensive smoking cessation intervention in a remote aboriginal Australian health care setting. *BMC Public Health*, *14*, 32.
- Marmot, M. (2011). Social determinants and the health of Indigenous Australians. *Medical Journal of Australia*, *194*(10), 512-513.
- Marmot, M. G., Smith, G. D., Stansfeld, S., Patel, C., North, F., Head, J., et al. (1991). Health inequalities among British civil servants: the Whitehall II study. *Lancet*, *337*(8754), 1387-1393.
- Marsh, A., Dale, A., & Willis, L. (2007). *Evidence based practice indicators for alcohol and other drug interventions: literature review*. Perth: Department of Health, Western Australia.
- Martin, G., & Copeland, J. (2008). The adolescent cannabis check-up: randomized trial of a brief intervention for young cannabis users. *J Subst Abuse Treat*, *34*(4), 407-414.
- McGregor, R. (2011). *Indifferent Inclusion: Aboriginal people and the Australian nation*. Canberra: Aboriginal Studies Press.
- McKay, J. R., Alterman, A. I., McLellan, A. T., Snider, E. C., & O'Brien, C. P. (1995). Effect of random versus nonrandom assignment in a comparison of inpatient and day hospital rehabilitation for male alcoholics. *Journal of Consulting & Clinical Psychology*, *63*(1), 70-78.
- McLellan, A. T. (2002). Have we evaluated addiction treatment correctly? Implications from a chronic care perspective. *Addiction*, *97*(3), 249-252.
- McQueen, J., Howe, T. E., Allan, L., Mains, D., & Hardy, V. (2011). Brief interventions for heavy alcohol users admitted to general hospital wards. *Cochrane Database Syst Rev*(8), CD005191.
- Mdege, N. D., Fayter, D., Watson, J. M., Stirk, L., Sowden, A., & Godfrey, C. (2013). Interventions for reducing alcohol consumption among general hospital inpatient heavy alcohol users: a systematic review. *Drug & Alcohol Dependence*, *131*(1-2), 1-22.
- Meador, N. (2010). A comparison of methadone, buprenorphine and alpha₂ adrenergic agonists for opioid detoxification: A mixed treatment comparison meta-analysis. *Drug and Alcohol Dependence*, *108*(2010), 110-114.
- Meyers, R. J., & Smith, J. E. (1995). *Clinical Guide to Alcohol Treatment: The Community Reinforcement Approach*. New York: Guilford Press.
- Miller, W. R., & Rollnick, S. (1991). *Motivational Interviewing: Preparing People to Change Addictive Behaviour*. New York: Guilford Press.
- Miller, W. R., & Rollnick, S. (2002). *Motivational Interviewing: Preparing People for Change* (Second Edition ed.). New York: Guilford Press.
- Minozzi, S., Amato, L., & Davoli, M. (2009). Detoxification treatments for opiate dependent adolescents. *Cochrane Database Syst Rev*(2), CD006749.
- Minozzi, S., Amato, L., Vecchi, S., & Davoli, M. (2010). Anticonvulsants for alcohol withdrawal. *Cochrane Database Syst Rev*(3), CD005064.
- Mitchell, S. G., Gryczynski, J., O'Grady, K. E., & Schwartz, R. P. (2013). SBIRT for adolescent drug and alcohol use: current status and future directions. *Journal of Substance Abuse Treatment*, *44*(5), 463-472.
- Nagel, T., Robinson, G., Condon, J., & Trauer, T. (2009). Approach to treatment of mental illness and substance dependence in remote Indigenous communities: results of a mixed methods study. *Aust J Rural Health*, *17*(4), 174-182.
- Nagel, T., & Thompson, S. (2007). *Yarning About Mental Health Manual Northern Territory: Australian Integrated Mental Health Initiatives - Menzies School of Health Research*.
- NATSISS. (2008). *National Aboriginal and Torres Strait Islander Social Survey*: Australian Bureau of Statistics.
- Newton, A. S., Dong, K., Mabood, N., Ata, N., Ali, S., Gokiart, R., et al. (2013). Brief emergency department interventions for youth who use alcohol and other drugs: a systematic review. *Pediatric Emergency Care*, *29*(5), 673-684.

- Ngwala. (2007). *Koori Practice Checklist: A cultural audit tool for the alcohol & other drugs service sector*: Ngwala Willumbong Co-operative Ltd.
- Nichols, F. (2002). *Identity, Opportunity and Hope: An Aboriginal Model for Alcohol (and Other Drug) Harm Prevention and Intervention*. Curtin University, Perth Australia.
- NIDAC. (2012a). *Bridges and barriers. Addressing Indigenous incarceration and health*. Canberra: Australian National Council on Drugs.
- NIDAC. (2012b). *Report on the modification to the National Drug and Alcohol Clinical Care and Prevention (DA-CCP) project packages*. Canberra: National Indigenous Drug and Alcohol Committee.
- NIDAC. (2014). *Alcohol and other drug treatment for Aboriginal and Torres Strait Islander peoples, National Indigenous Drug and Alcohol Committee*. Canberra: Australian National Council on Drugs.
- NIDAC/NACCHO. (2014). *NIDAC/NACCHO online consultation: Amphetamine-Type Stimulants use*. Canberra.
- Nilsen, P., Baird, J., Mello, M. J., Nirenberg, T., Woolard, R., Bendtsen, P., et al. (2008). A systematic review of emergency care brief alcohol interventions for injury patients. *J Subst Abuse Treat*, 35(2), 184-201.
- NSW Ministry of Health. (2012). *The Drug and Alcohol Service Planning Model - commissioned by the Ministerial Council on Drug Strategy*. Sydney: NSW Ministry of Health.
- NSW Ministry of Health. (2013). *Drug and Alcohol Service Planning Model for Australia - Technical Manual for the Intergovernmental Committee on Drugs (IGCD)*: NSW Ministry of Health.
- O'Donnell, A., Anderson, P., Newbury-Birch, D., Schulte, B., Schmidt, C., Reimer, J., et al. (2014). The impact of brief alcohol interventions in primary healthcare: a systematic review of reviews. *Alcohol Alcohol*, 49(1), 66-78.
- O'Donnell, M., Nassar, N., Leonard, H., Jacoby, P., Mathews, R., Patterson, Y., et al. (2010). Characteristics of non-Aboriginal and Aboriginal children and families with substantiated child maltreatment: a population-based study. *Int J Epidemiol*, 39(3), 921-928.
- O'Farrell, T. J., & Fals-Stewart, W. (2006). *Behavioral Couples Therapy for Alcoholism and Drug Abuse*. New York: Guilford Press.
- OATSIH. (2007). *Drug and alcohol service reporting: 2005-06 key results: a national profile of Australian Government funded Aboriginal and Torres Strait Islander substance use specific services*. Canberra: Office for Aboriginal and Torres Strait Islander Health, Department of Health and Ageing.
- Panaretto, K. S., & Wenitong, M. (2006). The general practitioner. *Med J Aust*, 184(10), 527-528.
- Paradies, Y. (2007). Racism. In B. Carson, T. Dunbar, R. Chenhall & R. S. Bailie (Eds.), *Social Determinants of Indigenous Health*. Sydney: Allen & Unwin.
- PCDCBP. (2012). *Aboriginal cultural security guide for human service organisations*: Perth, Co-occurring Disorders Capacity Building Project, Department of Health and Ageing.
- Phillips, G. (2003). *Addictions and healing in Aboriginal country*. Canberra: Aboriginal Studies Press.
- Power, J., Grealy, C., & Rintoul, D. (2009). Tobacco interventions for Indigenous Australians: a review of current evidence. *Health Promotion Journal of Australia*, 20(3), 186-194.
- Powers, M. B., Vedel, E., & Emmelkamp, P. M. (2008). Behavioral couples therapy (BCT) for alcohol and drug use disorders: a meta-analysis. *Clinical Psychology Review*, 28(6), 952-962.
- Prendergast, M., Podus, D., Finney, J., Greenwell, L., & Roll, J. (2006). Contingency management for treatment of substance use disorders: a meta-analysis. *Addiction*, 101(11), 1546-1560.
- Priest, N. C., Paradies, Y. C., Gunthorpe, W., Sheree, J., Carney, S. J., & Sayers, S. M. (2011). Racism as a determinant of social and emotional wellbeing for Aboriginal Australian youth. *Medical Journal of Australia*, 194, 546-550.
- Raistrick, D., & Tober, G. (2004). Psychosocial interventions. *Psychiatry*, 3(1), 36-39.
- Raphael, B., & Swan, P. (1997). The mental health of Aboriginal and Torres Strait Islander People. *International Journal of Mental Health*, 26(3), 9-22.

- RCIADIC. (1991). *Australian Government Royal Commission into Aboriginal Deaths in Custody*: Australian Government.
- Reid, J. (1982). *Body, Land and Spirit: Health and Healing in Aboriginal Society*. Queensland: St Lucia, University of Queensland Press.
- Reid, J. (1983). *Sorcerers and Healing Spirits: Continuity and Change in an Aboriginal Medical System*. Canberra: Australian National University Press.
- Reif, S., George, P., Braude, L., Dougherty, R. H., Daniels, A. S., Ghose, S. S., et al. (2014). Residential treatment for individuals with substance use disorders: Assessing the evidence. *Psychiatric Services, 65*(3), 301-312.
- Ritter, A., King, T., & Hamilton, M. (2013). *Drug Use in Australian Society*. Melbourne, Victoria: Oxford University Press.
- Roche, A. M., Duraisingam, V., Trifonoff, A., Battams, S., Freeman, T., Tovell, A., et al. (2013). Sharing stories: indigenous alcohol and other drug workers' well-being, stress and burnout. *Drug & Alcohol Review, 32*(5), 527-535.
- Roozen, H. G., Boulogne, J. J., van Tulder, M. W., van den Brink, W., De Jong, C. A., & Kerkhof, A. J. (2004). A systematic review of the effectiveness of the community reinforcement approach in alcohol, cocaine and opioid addiction. *Drug & Alcohol Dependence, 74*(1), 1-13.
- Rowley, C. D. (1972). *The Destruction of Aboriginal Society*. Canberra: Australian National University Press.
- Rychtarik, R. G., Connors, G. J., Whitney, R. B., McGillicuddy, N. B., Fitterling, J. M., & Wirtz, P. W. (2000). Treatment settings for persons with alcoholism: evidence for matching clients to inpatient versus outpatient care. *Journal of Consulting & Clinical Psychology, 68*(2), 277-289.
- Saggers, S., & Gray, D. (1998). *Dealing with Alcohol: Indigenous Usage in Australia, New Zealand and Canada*. Melbourne: Cambridge.
- Saitz, R. (2010). Alcohol screening and brief intervention in primary care: Absence of evidence for efficacy in people with dependence or very heavy drinking. *Drug & Alcohol Review, 29*(6), 631-640.
- Schwartz, M., Baker, G., Mulvey, K. P., & Plough, A. (1997). Improving publicly funded substance abuse treatment: the value of case management. *American Journal of Public Health, 87*(10), 1659-1664.
- SCRGSP. (2011). *Steering Committee for the Review of Government Service Provision: Overcoming Indigenous Disadvantage: Key Indicators, 2011*. Canberra: Productivity Commission.
- Scrimgeour, M., & Scrimgeour, D. (2008). *Health Care Access for Aboriginal and Torres Strait Islander People Living in Urban Areas, and Related Research Issues: A Review of the Literature*. Darwin: Cooperative Research Centre for Aboriginal Health.
- Shand, F., & Mattick, R. (2001). *Clients of Treatment Service Agencies: May 2001 Census findings*: National Drug and Alcohol Research Centre.
- Smedslund, G., Berg, R. C., Hammerstrom, K. T., Steiro, A., Leiknes, K. A., Dahl, H. M., et al. (2011). Motivational interviewing for substance abuse. *Cochrane Database Syst Rev*(5), CD008063.
- Smith, A., Gates, S., & Foxcroft, D. (2006). Therapeutic communities for substance related disorder. *Cochrane Database of Systematic Reviews, 10.1002/14651858.CD005338.pub2*.
- Smith, T. B., Rodriguez, M. D., & Bernal, G. (2011). Culture. *Journal of Clinical Psychology, 67*(2), 166-175.
- Stearne, A. (2002). *Assessment of the need for Perth-based Aboriginal substance misuse services*. Perth: National Drug Research Institute.
- Stout, R. L., Rubin, A., Zwick, W., Zywiak, W., & Bellino, L. (1999). Optimizing the cost-effectiveness of alcohol treatment: a rationale for extended case monitoring. *Addictive Behaviours, 24*(1), 17-35.
- Swain, L., & Barclay, L. (2013). They've given me that many tablets, I'm bushed. I don't know where I'm going: Aboriginal and Torres Strait Islander peoples' experiences with medicines. *Australian Journal of Rural Health, 21*(4), 216-219.

- Tait, R. J., & Hulse, G. K. (2003). A systematic review of the effectiveness of brief interventions with substance using adolescents by type of drug. *Drug & Alcohol Review, 22*(3), 337-346.
- Taplin, S., & Mattick, R. (2011). *Child Protection and Mothers in Substance Abuse Treatment*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- Taylor, K., & Guerin, P. (2014). *Health care and Indigenous Australians* (Second ed.). South Yarra, VIC: Palgrave Macmillan.
- Taylor, K., Thompson, S., & Davis, R. (2010). Delivering culturally appropriate residential rehabilitation for urban Indigenous Australians: a review of the challenges and opportunities. *Australian & New Zealand Journal of Public Health, 34 Suppl 1*, S36-40.
- Taylor, K. P., Bessarab, D., Hunter, L., & Thompson, S. C. (2013). Aboriginal-mainstream partnerships: exploring the challenges and enhancers of a collaborative service arrangement for Aboriginal clients with substance use issues. *BMC Health Services Research, 13*, 12.
- Teasdale, K. E., Conigrave, K. M., Kiel, K. A., Freeburn, B., Long, G., & Becker, K. (2008). Improving services for prevention and treatment of substance misuse for Aboriginal communities in a Sydney Area Health Service. *Drug & Alcohol Review, 27*(2), 152-159.
- Thomas, D. P. (2012). Changes in smoking intensity among Aboriginal and Torres Strait Islander people, 1994-2008. *Medical Journal of Australia, 197*(9), 503-506.
- Tripodi, S. J. (2009). A comprehensive review: methodological rigor of studies on residential treatment centers for substance-abusing adolescents. *Journal of Evidence-Based Social Work, 6*(3), 288-299.
- Tripodi, S. J., Bender, K., Litschge, C., & Vaughn, M. G. (2010). Interventions for reducing adolescent alcohol abuse: a meta-analytic review. *Arch Pediatr Adolesc Med, 164*(1), 85-91.
- Valadian, J., Chittleborough, C., & Wilson, D. (2000). Aboriginal cross-cultural awareness perceptions among staff employed in the health sector. *Health Promotion Journal of Australia, 10*(2), 156-158.
- Vanderplasschen, W., Colpaert, K., Autrique, M., Rapp, R. C., Pearce, S., Broekaert, E., et al. (2013). Therapeutic communities for addictions: a review of their effectiveness from a recovery-oriented perspective. *The Scientific World Journal, Article ID 427817*.
- Vasilaki, E. I., Hosier, S. G., & Cox, W. M. (2006). The efficacy of motivational interviewing as a brief intervention for excessive drinking: a meta-analytic review. *Alcohol Alcohol, 41*(3), 328-335.
- Vos, T., Barker, B., Begg, S., Stanley, L., & Lopez, A. D. (2009). Burden of disease and injury in Aboriginal and Torres Strait Islander Peoples: the Indigenous health gap. *International Journal of Epidemiology, 38*(2), 470-477.
- Vos, T., Barker, B., Stanley, L., & Lopez, A. (2007). *The burden of disease and injury in Aboriginal and Torres Strait Islander peoples 2003*. Brisbane: Centre for Burden of Disease and Cost-Effectiveness, University of Queensland.
- Wachtel, T., & Staniford, M. (2010). The effectiveness of brief interventions in the clinical setting in reducing alcohol misuse and binge drinking in adolescents: a critical review of the literature. *J Clin Nurs, 19*(5-6), 605-620.
- Walker, R., & Sonn, C. (2010). Working as a culturally competent mental health practitioner. In N. Purdie, P. Dudgeon & R. Walker (Eds.), *Working together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice* (pp. 157-180). Barton, ACT: Commonwealth of Australia.
- WANADA. (2011). *The Culturally Secure Aboriginal and Torres Strait Islander Recruitment and Retention Guide*: Western Australian Network of Alcohol & other Drugs Agency.
- Ward, J., Bryant, J., Wand, H., Pitts, M., Smith, A., Delaney-Thiele, D., et al. (2014). *Sexual health and relationships in young Aboriginal and Torres Strait Islander people: Results from the first national study assessing knowledge, risk practices and health services use in relation to sexually transmitted infections and blood borne viruses*. Alice Springs, Northern Territory: Baker IDI Heart & Diabetes Institute.

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- Ware, V.-A. (2013). *Improving the Accessibility of Health Services in Urban and Regional Settings for Indigenous People*. Canberra: Australian Institute of Family Studies. Australian Institute of Health and Welfare.
- Weir, J. K., Stacey, C., & Youngetob, K. (2011). *The Benefits Associated with Caring for Country - Literature Review*. Canberra: Australian Institute of Aboriginal and Torres Strait Islander Studies.
- Wilkes, E. (2014, 29th October, 2014). *Alcohol harm and Aboriginal and Torres Strait Islander People* Paper presented at the Australian Medical Association National Alcohol Summit, Canberra.
- Wilkes, E., Gray, D., Siggers, S., Casey, W., & Sterne, A. (2010). Substance misuse and mental health among Aboriginal Australians. In N. Purdie, P. Dudgeon & R. Walker (Eds.), *Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice* (pp. 117-133). Barton, ACT: Commonwealth of Australia.
- Wilkinson, R. G., & Marmot, M. (2003). *Social determinants of health: the solid facts*. Copenhagen: World Health Organization, Regional Office for Europe.
- Williams, N. (1986). *The Yolngu and their land: a system of land tenure and the fight for its recognition*. Canberra: Australian Institute of Aboriginal Studies.
- Williams, N., Nasir, R., Smither, G., & Troon, S. (2006). Providing opioid substitution treatment to Indigenous heroin users within a community health service setting in Adelaide. *Drug & Alcohol Review*, 25(3), 227-232.
- Williams, R. (1999). Cultural safety - what does it mean for our work practice? *Australian & New Zealand Journal of Public Health*, 23(2), 213-214.
- Wilson, M., Stearne, A., Gray, D., & Siggers, S. (2010). *The harmful use of alcohol amongst Indigenous Australians*: HealthInfoNet.
- Winters, K. C., & Leitten, W. (2007). Brief intervention for drug-abusing adolescents in a school setting. *Psychol Addict Behav*, 21(2), 249-254.
- Witbrodt, J., Bond, J., Kaskutas, L. A., Weisner, C., Jaeger, G., Pating, D., et al. (2007). Day hospital and residential addiction treatment: randomized and nonrandomized managed care clients. *Journal of Consulting & Clinical Psychology*, 75(6), 947-959.
- Young, D., & Campbell, S. (2007). *Butt Out: Nicotine Replacement Therapy Trial (National Indigenous Tobacco Control Workshop Report)*. Melbourne: Centre for Excellence in Indigenous Tobacco Control.
- Young, M. M., Stevens, A., Porath-Waller, A., Pirie, T., Garritty, C., Skidmore, B., et al. (2012). Effectiveness of brief interventions as part of the screening, brief intervention and referral to treatment (SBIRT) model for reducing the non-medical use of psychoactive substances: a systematic review protocol. *Systems Review*, 1, 22.
- Zinberg, N. (1984). *Drug, Set and Setting: The Basis for Controlled Intoxicant Use*. New Haven: Yale University Press.

APPENDIX 1: BRIEF INTERVENTIONS – EVIDENCE BASE

Brief interventions (BI) describe a suite of possible interventions which include self-help and psycho-education; however, they often comprise screening for alcohol and other drugs, followed by brief advice to help reduce harms, reduce the quantity of alcohol and drugs used, or to cease alcohol and drug use completely (Ritter, King, & Hamilton, 2013). Brief interventions are often administered in non-substance abuse treatment settings, often referred to as *opportunistic settings*, where clients are not seeking help for their alcohol or substance use but have come to receive medical treatment for other reasons, for example, in primary care settings, general hospital wards, and emergency departments. A large body of evidence exists for brief interventions for alcohol use and to a lesser extent other substance use disorders. The evidence is summarised below:

Brief intervention in primary healthcare settings

O'Donnell and colleagues (2014) recently published a systematic review of reviews to assess the cumulative evidence on the effectiveness of brief alcohol interventions in primary healthcare. The authors searched MEDLINE, EMBASE, PsycINFO, the Cochrane Database, the Database of Abstracts of Reviews of Reviews. Full systematic reviews and meta-analyses of studies examining the effectiveness of brief alcohol intervention in comparison to control conditions in primary healthcare settings and published between 2002 and 2012 were eligible for inclusion. Twenty-four individual systematic reviews met the eligibility criteria, covering a total of 56 primary healthcare trials. O'Donnell and colleagues (2014) found that across the eligible reviews, it was consistently reported that brief alcohol interventions are effective at reducing hazardous and harmful drinking in primary healthcare. Weekly alcohol consumption was the most commonly reported outcome, and meta-analysis by Kaner (2007) showed that compared with control conditions, brief intervention reduced the quantity of alcohol drunk by 38g per week (95% CI: 23 – 54g). One of the research questions asked by this systematic review was whether the evidence base for brief alcohol interventions is applicable across different population groups. The authors conclude that whilst BI appears to improve alcohol-related outcomes for adults 18 and over, the evidence base at either end of the age spectrum is less conclusive (O'Donnell et al., 2014). There was limited consideration of the impact of socioeconomic status on the effectiveness of brief alcohol interventions in the majority of the included reviews, with a general acknowledgement of the lack of evidence for disadvantaged populations in those that did (O'Donnell et al., 2014). The authors concluded that this review of systematic reviews supports the effectiveness of brief intervention at reducing alcohol-related problems across 56 trials and a wide range of patients in primary healthcare. However the review highlighted evidence gaps regarding the effectiveness of brief interventions including in older and younger drinkers, as well as those from disadvantaged populations (O'Donnell et al., 2014).

Evidence for the effectiveness of brief interventions in adolescents

A systematic review by Jackson (2010) that was included in the above review by O'Donnell (2014) addressed the question of the effectiveness of brief alcohol interventions in young people. Due to the limited evidence available from systematic reviews the authors conducted further searches to identify primary studies on the effectiveness of brief intervention in young people. School-based interventions were out of scope of their review and were therefore excluded. Jackson (Jackson et al., 2010) identified eight trials. The trials were published between 1999 and 2008 and seven of the trials were conducted in the USA and one in Australia. The age of participant ranged from 12 to 24 years of age. Three trials targeted the intervention at socioeconomically disadvantaged groups where drug and alcohol abuses were more prevalent, four trials recruited and conducted the intervention in an emergency department and two studies recruited adolescents from a primary care setting during routine general check-ups. The authors concluded that the evidence for effectiveness of brief interventions to reduce alcohol consumption in young people appears inconclusive. Four trials reported significant positive effects of brief intervention, whilst a further

study described negative alcohol-related consequences as a result of intervention. Other trial findings were not statistically significant (Jackson et al., 2010).

Tait (2003) conducted a systematic review of the effectiveness of brief interventions (BI) with substance using adolescents by type of drug. The authors reviewed the literature up to 2002 by searching the following databases: MEDLINE, PsycINFO, Current Contents, Cochrane Database of Systematic Reviews, EMBASE and Sociological Abstracts and AustHealth. Tait et al. (2003) identified 11 studies that met their selection criteria, seven of the studies were interventions to reduce alcohol consumption, plus one study that intervened with multiple substances and that provided separate outcome details in alcohol consumption. Four of the studies intervened with either multiple substances or to reduce tobacco consumption. The studies were conducted across a diverse range of setting (dental clinic, hospital ED, schools, universities, and substance treatment centres). The overall effect size for the eight alcohol interventions (six of which were founded on the motivational interviewing approach) was $d=0.275$, which was statistically significant. The two multi-substance interventions were both based in specialist treatment centres. They resulted in a medium to large effect size ($d=0.78$) but the authors suggested that the results for brief intervention for multiple substance should be interpreted with caution as they involved few participants ($n=110$). Overall the authors concluded that BI, including those based on the motivational approach, were effective in reducing alcohol consumption by young people. There is limited evidence for the use of BI in treating adolescents who use multiple substances, but there is suggestions that the technique may be effective, but further studies are needed (Tait & Hulse, 2003).

Tripodi and colleagues (2010) conducted a meta-analysis to assess the effectiveness of substance abuse interventions for reducing adolescent alcohol use. The databases systematically searched included MEDLINE, PsycINFO, ERIC and Social Science Citation Index. Findings from 16 investigations published between 1994 and 2008 constituted the final study sample. Of the 16 included studies, three of the studies involved brief interventions (Baer, Garrett, Beadnell, Wells, & Peterson, 2007; D'Amico, Miles, Stern, & Meredith, 2008; Winters & Leitten, 2007). The authors found that brief motivational interviewing and brief intervention with adolescents and parent where of the studies that yielded the largest effect (>0.80). The authors found that 3 of the 5 interventions that produced large effect sizes included brief interventions. This is in contrast to Tait's (2003) previous systematic review of the effectiveness of brief interventions for substance-using adolescents, where they found that though statistically significant, the effect size for alcohol interventions was small. The authors concluded that "considering the emergence of brief interventions primarily owing to managed care, the larger effect sizes found in this review are yielding stronger reductions in alcohol use" (Tripodi et al., 2010, p. 90), although, more research is needed to assess the effectiveness of brief interventions for reducing adolescent alcohol abuse.

Wachtel and Staniford (2010) conducted a review to investigate the effectiveness of brief interventions in different settings for adolescent alcohol misuse. The authors searched multiple databases including MEDLINE, CINAHL, PschINFO and the Cochrane Database. Fourteen studies met their inclusion criteria and were reviewed. The review used studies from multiple settings, including four hospitals emergency departments, seven colleges or universities, one healthcare clinic and one youth service centre. The authors found that twelve studies used a motivational intervention (MI) style of intervention, seven of which reported reduced alcohol frequency and amount. Two studies specifically found a reduction in binge-drinking episodes and seven reported a decrease in harmful alcohol effects. The authors concluded that it is difficult to make a definitive conclusion on the effectiveness of any one brief intervention in reducing alcohol misuse and binge drinking among adolescents. It can be said that MI appeared to have more success than other brief intervention types and that even a single-session intervention can produce positive effects (Wachtel & Staniford, 2010).

Carney and Myers (2012) conducted a systematic review and meta-analysis on the effectiveness of early interventions for substance-using adolescents. The primary outcome was the effect of the intervention on substance use and secondary outcome was the effect of the intervention on behavioural outcomes (related to delinquent or criminal behaviour). The authors conducted electronic searches in: EMBASE, PsycINFO, PUBMED, Cochrane Database and Web of Knowledge. The authors identified nine studies that met their inclusion criteria. All but one of the studies reported the use of brief intervention strategies. Only seven of the studies contained information which allowed for the calculation of an effect size, and were therefore included in the meta-analysis. The results indicated that the overall effect size for all outcomes combined was small but significant ($g=0.25$, $p<0.001$). The overall outcome for substance use was small but significant ($g=0.28$, $p<0.001$). For studies with behavioural outcomes, the overall effect size reached significance ($g=0.28$, $p<0.001$). In general, subgroup analysis showed that individual interventions with more than one session had a stronger effect on the outcomes of interest (Carney & Myers, 2012). The authors concluded that the findings clearly demonstrate the value of early interventions for effectively targeting adolescent substance use and that these can reduce substance use and also impact on other behavioural outcomes.

Mitchell and colleagues (2013) conducted a review of SBIRT (Screening, brief intervention, and referral to treatment) for adolescent drug and alcohol use. The authors conducted an electronic literature search of PUBMED, PsycINFO and ERIC and review of references identified 15 studies that were included in their review. Mitchell and colleagues (2013) concluded that “limited evidence suggests that brief interventions may be effective for adolescents, but a number of gaps in the literature were identified. Randomized trials are needed that have adequate statistical power, employ longer-term follow-ups, and test the effectiveness of SBIRT for adolescents in various service delivery settings” (Mitchell et al., 2013).

A systematic review by Newton and colleagues (2013) was conducted to determine the effectiveness of brief emergency department interventions for youth who use alcohol and other drugs. The authors searched 14 electronic databases which included MEDLINE, Cochrane Central Register of Controlled Trials, CINAHL and EMBASE. The search identified nine studies meeting the authors’ inclusion criteria, which were randomized controlled trials that assessed the effect of BIs aimed at improving outcomes related to harmful and hazardous alcohol and other drug use in patients 21 years and younger. Two intervention approaches were represented across the nine studies: a targeted approach (BIs for alcohol-positive youth) was used in four studies, and a universal approach (BIs for youth with recent history of alcohol and other drug use) was used by five studies (Newton et al., 2013). The authors wrote that “current evidence regarding the use of BIs with youth who visit the ED for alcohol and other drug-related events is mixed and limited by variations in outcome reporting and study quality” (Newton et al., 2013, p. 677). The authors concluded that clear benefit of using ED-based BI to reduce alcohol and other drug use and associated injuries or high-risk behaviours in youth remain inconclusive.

Brief intervention in emergency departments

A review and meta-analysis of strategies targeting alcohol problems in emergency departments was published by Havard (2008). The authors searched the following databases: ACP Journal Club, CCTR, CDSR, DARE, EMBASE Global Health, MEDLINE, PsycINFO, SWAB, Current Contents Connect and Web of Science between January 1996 and July 2007 (inclusive) and identified 13 studies that met their inclusion criteria. Ten studies were included in the meta-analyses as only studies with a randomized controlled trial were eligible. Selected outcome measures were quantity/frequency of alcohol consumption at 12 months follow-up; frequency of high volume drinking at both 3 months and 12 months; consequences from drinking at 6 or 12 months; and alcohol-related injuries at 6 and 12

months. The results indicated that interventions did not have a significant impact on quantity/frequency of alcohol consumption or frequency of heavy drinking 12 months after the intervention was provided. The only statistically significant effect found from the analysis was that intervention patients had half the probability (OR:0.59) of controls in experiencing an alcohol-related injury (Havard et al., 2008).

A Cochrane review that examined interventions to prevent injuries in problem drinkers (Dinh-Zarr, Goss, Heitman, Roberts, & DiGuseppi, 2004) was published prior to the Havard paper above. The authors searched 12 electronic databases including: MEDLINE, EMBASE, PsycINFO, and CINAHL. The authors identified 17 studies that met their inclusion criteria. Interventions ranged from brief interventions to a one hour consultation with a psychologist and included blood test results, pharmacotherapy, and rehabilitation programs. The most commonly evaluated intervention was brief counselling in the clinical setting. This was studied in seven trials. Five of the seven trials that evaluated brief intervention for problem drinking reported reductions in injury outcomes. Three studies found significant decreases in alcohol consumption. However, two trials that reported significant reductions in alcohol-related injury outcomes did not find reductions in alcohol consumption. The authors concluded that the evidence from these studies suggests that action with problem drinkers is effective in reducing both injuries and events that lead to injury (such as falls, motor vehicle crashes Dinh-Zarr et al., 2004).

Nilsen (2008) carried out a systematic review of emergency care brief alcohol interventions for injured patients. Literature searches up to January 2007 were made in the following databases: MEDLINE, PsychLIT, CINAHL, and the Cochrane Library and 14 studies met inclusion criteria. Of the 12 studies that compared pre- and post-brief intervention results, 11 observed a significant effect of brief intervention on the following outcomes: alcohol intake, risky drinking practices, alcohol-related negative consequences, and injury frequency. Two studies assessed only post-brief intervention results. More intensive interventions tended to yield more favourable results, although no simple dose-response conclusions could be drawn. Brief intervention patients achieved greater reductions than control group patients, although there was a tendency for the control group(s) to also show improvements. However, five studies failed to show differences between the compared conditions. Several studies discussed factors that potentially influenced the results aside from the BI. These included the injury itself and/or experience of being in an emergency department can motivate patients to reduce their alcohol intake. It was also suggested that the screening and/or assessment procedure might function as a sort of intervention (Nilsen et al., 2008).

Brief intervention in general hospital settings

Emmen (2004) conducted a systematic review of the effectiveness of opportunistic brief interventions conducted in hospitals in reducing alcohol consumption. The authors searched MEDLINE, PsycINFO, Cochrane Library and reference lists from identified studies and review articles. Eight studies were identified and met the inclusion criteria. The sole outcome measure was change in alcohol consumption. Weaknesses in study reporting meant that the authors had difficulty in drawing any conclusions. These weaknesses included loss to small sample size, irretrievable data and losses to follow-up (Emmen et al., 2004). Only one study, with a short follow-up period, showed any significant effect, a larger reduction in weekly drinking by the intervention group. The authors suggest that the possible explanation for this result was that the intervention group were male outpatients with hypertension in which during every visit to the physician the importance of lowering alcohol consumption to control blood pressure was emphasised. The control group was told to continue with their usual consumption of alcohol, which was not the case in the other studies. In summary, Emmen (2004) found that the evidence for the effectiveness of opportunistic brief interventions in a general hospital setting for problem drinkers was inconclusive.

As the review by Emmen (2004) found inconclusive evidence for the effectiveness of brief interventions in the general hospital setting, McQueen and colleagues (2011) conducted a Cochrane review in 2011 due to the accumulation of fresh evidence. McQueen's (2011) systematic review aimed to determine whether brief interventions reduce alcohol consumption and improve outcomes for heavy alcohol users admitted to general hospital inpatient units. The authors searched the Cochrane Drug and Alcohol Group Register of Trials, MEDLINE, CINAHL up to March 2011. The review authors identified 14 randomised controlled trials and controlled clinical trials involving 4041 adults identified as heavy drinkers in hospital. The results demonstrated that patients receiving brief interventions have a greater reduction in alcohol consumption compared to those in control groups at six months, MD -69.43 (95% CI: -128.14 to -10.72) and nine months MD -182.88 (95% CI: -360.00 to -5.76) but this is not maintained at one year. The authors concluded that "there are benefits to delivering brief interventions to heavy alcohol users in general hospital" (McQueen et al., 2011).

A more recent systematic review by Mdege (2013) that examined the effectiveness of interventions for reducing alcohol consumption among general hospital inpatient heavy alcohol users was published in 2013. The authors state that McQueen's (2011) review had a number of limitations which included no exploration of how intervention characteristics such as intervention format, modality or design could potentially result in outcome and effect size differences. In this review the authors explored some of those differences in order to determine the intervention's active components, and why some interventions are more effective than others. Mdege and colleagues (2013) conducted a systematic search of the literature (databases searched included: MEDLINE, CINAHL, the Cochrane Library, EMBASE) up to November 2012. Twenty-two studies met the authors' inclusion criteria. The 22 studies were grouped according to number of sessions and whether they involved personal contact or not, the seven groups were: single session brief intervention vs usual care/no treatment; brief intervention of 2 to 3 sessions vs usual care/no treatment; self-help literature vs usual care/no treatment; brief intervention vs self-help literature; comparison between different single session brief interventions; comparing brief interventions, one of which is 2/3 sessions; and comparing an intervention of 4 or more sessions with another intervention. The review did not find a clear intervention benefit from single session brief interventions and self-help literature on alcohol consumption outcomes. Results suggest that brief interventions of more than one session are more effective than usual care/no intervention on reducing alcohol consumption, especially for non-dependent patients.

Mdege's (2013) conclusions on the effectiveness of brief interventions differ from those of McQueen et al (2011) mainly because of differences in the way that studies were grouped. McQueen and colleagues concluded that brief interventions in general hospital wards were effective in reducing alcohol consumption at 6 and 9 months follow-up but not at one year (McQueen et al., 2011). In contrast, Mdege's (2013) review, where studies were grouped according to number of intervention sessions, found that brief interventions of multiple sessions are effective compared to single brief interventions.

Brief interventions for drug use

In contrast to the alcohol literature, there have been few studies of brief interventions for substance use. Saitz and colleagues (2010) wrote of "the need for evidence-based research regarding the efficacy of screening and brief intervention for drug use, and that randomized controlled trials to determine its efficacy are urgently needed to bridge the gap between research, policy and clinical practice."

Madras (2009) conducted a before/after retrospective uncontrolled study to evaluate the Center for Substance Abuse Treatment's 6-state SBI referral and treatment initiatives. Settings were diverse, including trauma centres, emergency departments, primary and specialty care sites. Of the 459,599

patients screened for the study, 23% tested positive for risky or problematic alcohol or drug use. The majority were recommended for a brief intervention (16%), with a smaller percentage recommended for a brief treatment (3.2%) or referral to specialty treatment (3.7%). Ten percent of patients who screened positive were randomly selected for reassessment 6 months later, at which time self-reported rates of heavy alcohol use and illicit drug use had decreased by 39% and 68%, respectively (Madras et al., 2009).

Bernstein and colleagues (2005) conducted a randomized controlled study of brief intervention in adult outpatients with cocaine or heroin use identified by screening. They screened 23,660 patients from women's health, homeless, and urgent care clinics and randomized those who screened positive to risky cocaine or heroin use (N=1175) to a brief negotiated interview or to receipt of a referral list and written advice. Ninety-five percent of eligible subjects were enrolled, and 82% were available for follow-up. At 6 months, abstinence (biochemically confirmed via hair sample) was documented among 40% of the intervention subjects and 31% of control subjects who used opiates at baseline, and 22% of the intervention subjects and 17% of the control subjects who used cocaine at baseline (statistically significant differences) (Bernstein et al., 2005).

Martin (2008) conducted a randomized controlled study which aimed to evaluate the efficacy of a brief motivational enhancement therapy in reducing cannabis use and cannabis related problems in a population of non-treatment-seeking adolescent cannabis users. Participants were randomly assigned to either a two-session brief intervention or a 3-month delayed treatment control condition. Primary outcome measures were changes in days of cannabis use, mean quantity of cannabis used weekly, and number of dependence symptoms reported. The results showed significantly greater reductions on these measures in the brief intervention group at 3-months follow-up (Martin & Copeland, 2008).

World Health Organization researchers who developed the Alcohol, Smoking, and Substance Involvement Screening test (ASSIST) conducted a four-country randomized controlled trial to evaluate the effectiveness of brief intervention for illicit drugs in clients recruited from primary health-care settings (Humeniuk, Ali, Babor, Souza-Formigoni, de Lacerda, Ling, McRee, Newcombe, Pal, Poznyak, Simon, & Vendetti, 2012). The ASSIST screens for problem or risky use of 10 psychoactive substances, producing a score for each substance that falls into either - low, moderate or high risk category. Participants were either assigned to a 3-month waiting-list control condition or received brief motivational counselling lasting an average of 14 minutes for the drug receiving the highest ASSIST score. The study took place in primary health-care settings in four countries: Australia, Brazil, India and the United States. The results indicated that those receiving the BI had significantly reduced scores for all measures, compared with control participants. Country-specific analyses showed that, with the exception of the site in the United States, BI participants had significantly lower ASSIST total illicit substance involvement scores at follow-up compared with the control participants. The sites in India and Brazil demonstrated a very strong brief intervention effect for cannabis scores ($P < 0.005$ for both sites), as did the sites in Australia ($P < 0.005$) and Brazil ($P < 0.01$) for stimulant scores and the Indian site for opioid scores ($P < 0.01$). The authors concluded that the Alcohol and Substance Involvement Screening Test-linked brief intervention aimed at reducing illicit substance use and related risks is effective, at least in the short term, and the effect generalises across countries (Humeniuk et al., 2012).

Summary

In summary, there is strong support for the efficacy and effectiveness of brief interventions for alcohol use in primary care settings (O'Donnell et al., 2014), although the review highlighted evidence gaps regarding the effectiveness of brief interventions in older and younger drinkers, as well as those from disadvantaged populations. The inconclusive evidence for brief interventions in

young people is supported by the results of other systematic reviews (Jackson et al., 2010; Mitchell et al., 2013; Newton et al., 2013; Tait & Hulse, 2003; Tripodi et al., 2010). Although the evidence for brief interventions for alcohol use is strong in primary care settings, the evidence is not quite as strong in other settings, for example, in emergency departments (Havard et al., 2008; Nilsen et al., 2008) and hospital settings (Emmen et al., 2004; McQueen et al., 2011; Mdege et al., 2013).

In contrast to the alcohol literature, there have been few studies of brief interventions for substance use. The limited evidence from randomised controlled trials seems to show the effectiveness of brief interventions for substance use (Bernstein et al., 2005; Humeniuk et al., 2012). Young and colleagues (2012) have published a protocol to conduct a systematic review of the effectiveness of brief interventions to reduce psychoactive substances. The results of this upcoming review will hopefully provide evidence for the effectiveness of brief interventions for reducing substance use.

APPENDIX 2: PSYCHOSOCIAL EVIDENCE BASE

Psychosocial interventions for treatment of alcohol and substance use disorders cover a wide range of treatment interventions (Raistrick & Tober, 2004). Psychosocial interventions include contingency management therapies (CM); Cognitive behaviour therapies (CBT); motivational therapies; and couples and family treatments (Carroll & Onken, 2005). The effectiveness of any treatment depends on a number of independent variables. In the case of treatment for substance use disorders, important factors include: premorbid patient characteristics; nature and severity of substance misuse; therapist characteristics; and the process of treatment delivery (Carroll & Onken, 2005; Raistrick & Tober, 2004). There is substantial evidence for the effectiveness of different types of psychosocial interventions for substance use disorders. A brief description of different psychosocial interventions appears below:

Cognitive Behaviour Therapy (CBT)

Cognitive behaviour therapy (CBT) is an umbrella that includes a wide variety of treatments whose theories include both behavioural and cognitive drivers of alcohol and other drug use (Ritter et al., 2013). These include relapse prevention (Marlatt & Gordon, 1985) and behavioural couples therapy (BCT) (O'Farrell & Fals-Stewart, 2006).

Relapse prevention (RP) seeks to “identify high-risk situations in which an individual is vulnerable to relapse and to use both cognitive and behavioural coping strategies to prevent future relapse in similar situations” (Marlatt & Gordon, 1985).

Behavioural couples therapy (BCT) is based on an assumption that problematic alcohol and substance use and relationship functioning reciprocal. The purposes of BCT are to build support for abstinence with a “recovery contract” that involves both members of the couple in a daily ritual to reward abstinence (O'Farrell & Fals-Stewart, 2006).

Contingency Management (CM)

Contingency management also known as “motivational incentive therapy” is a strategy that uses rewards to reinforce drug-free behaviour. Incentives such as cash, vouchers, privileges, are offered when specific treatment goals are met such as drug free urine samples. The goal is to promote abstinence from drugs (Ritter et al., 2013).

Community reinforcement approach (CRA)

The community reinforcement approach (CRA) is a broad spectrum behavioural approach for substance abuse problems. It acknowledges the role of environmental events and influences in habitual abuse, and focuses on alternative positive resources in the social environment (Meyers & Smith, 1995).

Motivational Enhancement Therapy (MET)

Motivational enhancement therapy (motivational interviewing) is “a client-centred, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence (Miller & Rollnick, 2002). Miller (1991) named five key techniques of motivational interviewing (MI): expresses empathy, develops discrepancy, avoids argumentation, rolls with resistance and support self-efficacy.

Evidence for psychosocial interventions for substance use disorders

Dutra and colleagues (2008) conducted a meta-analysis of psychosocial interventions for substance use disorders. They reviewed the literature published between 1966 and March 2005, using PsycINFO, MEDLINE and the Cochrane Central Register of Controlled Trials. The authors identified a

total of 34 well controlled treatment trials – five for cannabis, nine for cocaine, seven for opiates and 13 for poly-substance use. Psychosocial treatments evaluated included contingency management, relapse prevention, general cognitive behaviour therapy, and treatments combining cognitive behaviour therapy and contingency management. Results showed that psychosocial treatments had the lowest efficacy for polysubstance use, with a significant difference between outcomes for polysubstance use and cannabis use disorders. Treatments targeting cocaine use yielded medium to large effect sizes, and treatments targeting opiate use yielded small to medium effect sizes. Across all active treatment conditions, almost one-third of the participants (31%) achieved post-treatment and/or clinically significant abstinence compared to only 13% of all participants in control conditions. Across drug groups, rates were similar with 36.2% of opiate users, 31.7% of cocaine users, and 26.0% of cannabis users achieving abstinence during the study period.

Denis and colleagues (2006) conducted a systematic review to evaluate the efficacy of psychosocial interventions for cannabis abuse and dependence. The authors searched the Cochrane Central Register of Trials, MEDLINE, PsycINFO and Toxibase (published between 1966 and October 2004) and identified six trials that met their inclusion criteria. Denis (2006) concluded that group and individual sessions of cognitive behavioural therapy (CBT) had both efficacy for the treatment of cannabis dependence and associated problems, CBT produced better outcomes than a brief intervention when CBT was delivered in individual sessions. Two studies suggested that adding voucher-based incentives may enhance treatment when used in combination with other effective psychotherapeutic interventions. Abstinence rates were relatively small overall but favoured the individual CBT 9-session (or more) condition. All included trials reported a statically significant reduction in frequency of cannabis use and dependence symptoms.

Knapp and colleagues (2007) conducted a systematic review of psychosocial interventions for cocaine and psychostimulant amphetamine related disorders. The authors conducted searches of the Cochrane library, EMBASE, MEDLINE, and LILACS up to May 2006 and identified 27 randomised controlled studies that fulfilled the inclusion criteria. Of the 27 studies identified cocaine dependence was the focus of 26 studies, with only one study from Australia where oral amphetamine was the psychostimulant used. The overall findings were that cognitive behavioural interventions reduced dropouts from treatment and use of cocaine when compared with drug counselling. Behavioural interventions also clearly performed better than clinical management (psychotherapy sessions attended), usual care (lower rates of cocaine users at 1 and 3 months), information and referral (non-attendance) (Knapp et al., 2007).

Much of the treatment knowledge about stimulant users has been extrapolated from studies of treatment for cocaine dependence. Huber (1997) found distinct differences between users of cocaine and methamphetamines, for example, age of first use, route of administration, frequency of use and prior exposure to treatment. Given these differences, extrapolating findings from studies of cocaine users may not provide a true picture of the effectiveness of treatment in methamphetamine users. For this reason, Lee (2008) undertook a systematic review of the effectiveness of cognitive and behavioural therapies for methamphetamine dependence. A literature search of the following databases: Web of Science, MEDLINE, CINAHL, PubMed, PsycINFO resulted in the identification of 12 studies that met the author's inclusion criteria. Lee (2008) found that there were only relatively small numbers of studies examining interventions for methamphetamine users. Those that have been conducted have shown good outcomes, with CBT (with and without MI) and CM showing evidence of efficacy. CM in particular appears to be a powerful intervention. The authors concluded that contrary to some clinical beliefs, there are effective interventions available for methamphetamine users that should be established as routine practice (Lee & Rawson, 2008).

Magill (2009) conducted a meta-analysis of cognitive-behavioural treatment studies with adult alcohol and illicit drug users. A literature search of Campbell Collaboration, Cochrane Collaboration, PubMed, PsycINFO, Social Services Abstracts and Social Work Abstracts published between 1982 and 2006 resulted in the identification of 53 eligible studies. The authors found that across a large, diverse, and rigorous sample of randomised controlled trials, CBT for adult substance-use disorders demonstrated a small, but statistically significant effect over comparison conditions (Magill & Ray, 2009). Studies of CBT combined with an additional psychosocial treatment had a larger effect than either CBT combined with pharmacological treatment or CBT alone in both fixed and random effect estimates. Larger departures from a small effect size were found only in studies of cannabis use disorders and across comparison types, in studies that compared CBT to no treatment. Magill (2009) concluded that the research demonstrates the overall effectiveness of CBT across adult alcohol and other drug-use disorders and that it is particularly effective with cannabis use disorders, with women, when combined with an additional psychosocial treatment, and when delivered in a brief format. The review also suggests that group CBT is as effective as CBT delivered as an individual treatment.

Prendergast and colleagues (2006) conducted a meta-analysis on the effectiveness of contingency management interventions for the treatment of substance use disorders. A systematic search of the following databases: BIOSIS, EMBASE, MEDLINE, PsycINFO, Sociological Abstracts, Cork Database and Cochrane Library (published between 1970 and 2002) resulted in the identification and inclusion of 47 studies. The mean effect size was CM was positive, with a magnitude of $d=0.42$ using a fixed effects model. The magnitude of the ES declined over time, following treatment. CM was more effective in treating opiate use ($d=0.65$) and cocaine use ($d=0.66$) compared to polysubstance use ($d=0.42$). The authors concluded that CM is among the more effective approaches to promoting abstinence during the treatment of substance use disorders (Prendergast et al., 2006).

A meta-analytic review by Lussier and colleagues (2006) examined the effectiveness of Voucher-based reinforcement therapy (VBRT), a specific contingency management approach, for the treatment of substance use disorders. VBRT is a treatment intervention for substance use disorders wherein clients receive vouchers or related monetary-based incentives, contingent on satisfying a predetermined therapeutic goal. It was developed initially as a strategy to retain cocaine dependent out-patients in treatment and to establish a period of initial abstinence (Higgins, Delaney, Budney, Bickel, Hughes, Foerg, & Fenwick, 1991). Lussier (2006) conducted a search of the literature using MEDLINE, PsycINFO, PREMEDLINE, Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effect from 1991 to March 2004. The authors identified thirty studies where abstinence from drug use was targeted with a VBRT intervention. Although effect size varied considerably across studies, there was overwhelming evidence of an overall positive effect of VBRT relative to control conditions ($r=0.32$, 95% CI= 0.26-0.38) (Lussier et al., 2006). The author's concluded that the results of this meta-analysis provide further evidence supporting the efficacy of voucher-based reinforcement for treatment of substance use disorders (Lussier et al., 2006).

A recent systematic review by Farronato and colleagues (2013) compared the effectiveness of cognitive-behavioural therapy (CBT) and contingency management (CM) for cocaine dependence, and analysed the potential beneficial effects of combining these psychosocial interventions. The authors searched MEDLINE, EMBASE and the Cochrane Central Register of Controlled Trials up to January 2011 which resulted in the identification of eight studies that met their inclusion criteria. In five studies CM alone was tested against CBT alone or the combination of both. In all five trials CM reduced cocaine use during active treatment and was superior to CBT alone, which did not show a measureable reduction in cocaine use during active treatment. In three of the five studies with follow-up appointments, a positive effect of CGT emerged post-treatment (Farronato et al., 2013). The combination of contingency management plus cognitive behaviour therapy has a positive effect

in two trials, but another three trials found no additive effects. The authors concluded that positive, rapid and enduring effects on cocaine use are seen with contingency management interventions, whereas measurable effects of cognitive-behaviour therapy appear after treatment and are not as reliable as effects with contingency management (Farronato et al., 2013).

Roizen and colleagues (2004) conducted a systematic review to evaluate the effectiveness of community reinforcement approach (CRA) in the treatment of alcohol, cocaine and opioid addiction. A search of the following databases: Biological Abstracts, ERIC, LISA, OSH, Periodical Abstracts, PsycINFO, SERFILE, and Sociological Abstracts, EMBASE, MEDLINE, CINAHL yielded 11 studies of mainly high quality that were included in the systematic review. The authors concluded that there is limited to moderate evidence for the efficacy of CRA with or without medication or contingency management in various substance-related disorders, including alcohol, cocaine and heroin (Roizen et al., 2004).

Powers and colleagues (2008) conducted a meta-analysis on the efficacy of Behavioural Couples Therapy (BCT) for alcohol and drug use disorders. A comprehensive literature search of the following databases: PsycINFO, MEDLINE, and the Cochrane Central Register of Controlled Trials (1966 to May 2007) identified 12 studies that met the authors' final inclusion criteria. Conclusions from the meta-analysis were that BCT outperformed control conditions in all three outcome domains (frequency of use, consequences of use, and relationship satisfaction with time points combined). BCT appears to improve relationship satisfaction first that later leads to reduced drinking and drug use. Brief BCT was as effective as extended packages and larger sample sizes were associated with higher effect sizes increasing the authors' confidence in the findings (Powers et al., 2008).

A meta-analytic review by Vasilaki and colleagues (2006) examined the efficacy of motivational interviewing as a brief intervention for excessive drinking. The authors conducted a literature search in MEDLINE, PsycINFO, Science Direct and Ingenta (between 1983 and 2003) and identified 15 studies that met the selection criteria. The final sample of 15 studies included two different groups: 9 compared brief MI with no treatment and 9 compared brief MI with another treatment. The results of the meta-analysis found that MI was more efficacious than no treatment in reducing alcohol consumption among non-dependent drinkers in the short term (≤ 3 months), MI was more efficacious than an aggregated set of diverse comparison treatments but the authors concluded that it cannot be inferred from the results that MI is more efficacious than any one of the other treatments alone (Vasilaki et al., 2006).

Smedslund and colleagues (2011) conducted a systematic review to assess the effectiveness of motivational interviewing for substance use. The authors searched the Cochrane Library, MEDLINE, EMBASE and PsycINFO as well as 14 other databases as well as reference lists in included studies and reviews. The search resulted in the identification of 59 studies that met the authors' inclusion criteria. The results found that compared to no treatment control MI showed a significant effect on substance use which was strongest at post-intervention and weaker at short and medium follow-up. For long follow-up the effect was not significant. The authors concluded that the results show that people who have received MI have reduced their use of substances more than people who have not received any treatment. However, it seemed that other active treatments, treatment as usual and being assessed and receiving feedback can be as effective as motivational interviewing (Smedslund et al., 2011).

Jensen and colleagues (2011) conducted a meta-analytic review of the effectiveness of motivational interviewing (MI) interventions for adolescent substance use behaviours. A comprehensive literature search of PsycINFO, PUBMED, MEDLINE and ERIC was conducted and a total of 21 peer-

reviewed empirical studies were identified for inclusion in the review. The authors concluded that important results concerning the effectiveness of MI targeting adolescent substance use behaviour emerged from this study. Results indicate that MI interventions for adolescent substance use produced small but significant effect sizes across numerous substance use outcomes, including tobacco, alcohol, cannabis, and illicit drug use; although the absolute value of the aggregate effect size was lower when tobacco-only studies were excluded. Findings from the meta-analysis were particularly noteworthy considering that the majority of interventions (62%) consisted of a single treatment session (Jensen et al., 2011).

A systematic review by Barnett and colleagues (2012) of motivational interviewing for adolescent substance use was conducted after Jensen's (2011) meta-analysis. The main reason for the review was to update existing reviews with recently published adolescent MI interventions, and to expand on Jensen's meta-analysis showing small but consistent effect sizes, to see if differences in intervention format and intervention design have an effect on outcomes as this was not examined in Jensen's work. The authors searched the literature up to January 2012 using the following databases: MEDLINE, PsycINFO as well as reference lists of articles. They identified 39 studies that met their inclusion criteria. The results indicated that 67% of the studies reported statistically significant substance use outcomes. Chi square results showed no significant differences between interventions using feedback or not, or interventions combined with other treatment versus MI alone (Barnett et al., 2012).

Summary

In summary, there is strong support for the efficacy and effectiveness of psychosocial treatment interventions for alcohol and substance use disorders. Psychosocial interventions with existing evidence of their efficacy and effectiveness include contingency management therapies (CM); Cognitive behaviour therapies (CBT); motivational therapies; and behavioural couples therapy (BCT). The effectiveness of any treatment depends on a number of independent variables. In the case of treatment for substance use disorders, important factors include: premorbid patient characteristics; nature and severity of substance misuse; therapist characteristics; and the process of treatment delivery (Raistrick & Tober, 2004).

APPENDIX 3: WITHDRAWAL EVIDENCE BASE

Detoxification refers to the safe discontinuation from a substance of dependence, it usually takes between a few days and a few weeks to complete, depending on the substance being misused, the severity of dependence and the support available to the user (Diaper, Law, & Melichar, 2013). Withdrawal care is not considered a self-contained treatment due to relapse rates being high in the absence of ongoing support. Withdrawal care does not only encompass the physical symptoms of withdrawal, but also the psychological and social needs of the individual (Ritter et al., 2013). The goals of withdrawal care include: interrupting a pattern of heavy and dependent alcohol and other drug use; preventing complications of withdrawal such as seizures or delirium; initiating abstinence and linking to other treatment (Ritter et al., 2013). Withdrawal can occur in a number of settings, these include the user's home, community or outpatient withdrawal clinic, residential withdrawal setting and specialist withdrawal unit. Supervised withdrawal can include medicated and non-medicated withdrawal management.

Amato and colleagues (2010) conducted a Cochrane review to evaluate the effectiveness and safety of benzodiazepines in the treatment of alcohol withdrawal. The authors searched the Cochrane register of clinical trials, PubMed, Embase, CINAHL up to December 2009. Selection criteria included randomized controlled trials examining the effectiveness, safety and risk-benefit of benzodiazepines in comparison with placebo or other pharmacological treatment and between themselves. Sixty four studies met the author's inclusion criteria. The authors concluded that benzodiazepines showed a protective benefit against alcohol withdrawal symptoms, in particular seizures, when compared to placebo and a potentially protective benefit for many outcomes when compared with other drugs (Amato et al., 2010).

Amato and colleagues (2011a) summarised Cochrane reviews that assessed the effectiveness and safety of pharmacological interventions in the treatment of alcohol withdrawal. The authors identified five reviews that met their selection criteria. The outcomes considered were alcohol withdrawal seizures, adverse events and dropouts. The treatments used were sedative benzodiazepines, anticonvulsants, baclofen, GHB and PAN. The results showed that comparing the five treatments with placebo, benzodiazepines performed better for seizures. This was the only treatment with statistically significant findings (Amato et al., 2011a). Benzodiazepines also performed better than antipsychotics for seizures. Results do not provide sufficient evidence in favour of anticonvulsants for the treatment of alcohol withdrawal syndrome (AWS), but anticonvulsants seem to have limited side effects. The authors found that there is not enough evidence of effectiveness and safety of baclofen or GHB (Amato et al., 2011a).

Minozzi and colleagues (2010) conducted a Cochrane review to evaluate the effectiveness and safety of anticonvulsants in the treatment of alcohol withdrawal. The authors searched the Cochrane Drugs and Alcohol Group Register of Trials, PUBMED, EMBASE, CINAHL up until December 2009. The inclusion criteria were randomized controlled trials examining the effectiveness, safety and overall risk-benefit of anticonvulsants in comparison with a placebo or other pharmacological treatment. Fifty-six studies met the inclusion criteria. The authors concluded that there is limited data on anticonvulsants versus placebo for alcohol withdrawal syndrome, while comparisons with other drugs show no clear differences (Minozzi et al., 2010).

Gowing and colleagues (2014) conducted a Cochrane review to assess the effectiveness of interventions involving the use of alpha₂-adrenergic agonists to manage opioid withdrawal. The authors searched the Cochrane central register of controlled trials, MEDLINE, EMBASE, and PsycINFO up until July 2013. Selection criteria included randomised controlled trials comparing alpha₂-adrenergic agonists (clonidine, lofexidine, guanfacine, tizanidine) with reducing doses of methadone,

symptomatic medications or placebo, or comparing different alpha₂-adrenergic agonists to modify the signs and symptoms of withdrawal in participants who were opioid dependent. The authors identified 25 randomised controlled trials that met their inclusion criteria. The results showed that alpha₂-adrenergic agonists were more effective in improving withdrawal in terms of the likelihood of severe withdrawal (risk ratio (RR) 0.32%, 95% confidence interval (CI) 0.18 to 0.57. Completion of treatment was significantly more likely with alpha₂-adrenergic agonists compared with placebo (RR 1.95, 95% CI 1.34 to 2.84). The authors concluded that clonidine and lofexidine are more effective than placebo for the management of withdrawal from heroin or methadone (Gowing et al., 2014).

An earlier Cochrane review by Gowing and colleagues (2009b) assessed the effectiveness of opioid antagonists in combination with minimal sedation to manage opioid withdrawal. The authors searched the Cochrane register of clinical trials, MEDLINE, EMBASE, and PsycINFO up until August 2008. The inclusion criteria were controlled studies of interventions involving the use of opioid antagonists in combination with minimal sedation to manage withdrawal in opioid-dependent participants compared with other approaches or different opioid antagonist regimes. Nine studies met the inclusion criteria for the review. The authors concluded that the quality of the evidence is low but suggests that withdrawal induced by opioid antagonists in combination with an adrenergic agonist is more intense than withdrawal managed with clonidine or lofexidine alone, while the overall severity is less (Gowing et al., 2009b).

A Cochrane review by Gowing and colleagues (2009a) assessed the effectiveness of interventions involving the use of buprenorphine to manage opioid withdrawal. The authors searched the Cochrane Central Register of Controlled Trials, MEDLINE, EMBASE, PsycINFO up until August 2008. The inclusion criteria were randomised controlled trials of interventions involving the use of buprenorphine to modify the signs and symptoms of withdrawal in participants who were primarily opioid dependent. Comparison interventions involved reducing doses of methadone, alpha₂-adrenergic agonists, symptomatic medications or placebo, or different buprenorphine-based regimes. Twenty-two studies were included. The major comparisons were with methadone (5 studies) and clonidine or lofexidine (12 studies). Five studies compared different rates of buprenorphine dose reduction. Severity of withdrawal is similar for withdrawal managed with buprenorphine and withdrawal managed with methadone, but withdrawal symptoms may resolve more quickly with buprenorphine. It appears the completion of withdrawal treatment may be more likely with buprenorphine relative to methadone (RR 1.18; 95% CI 0.93 to 1.49, P = 0.18), although the authors conclude that more studies are required to confirm this. When compared to clonidine or lofexidine, buprenorphine is more effective in ameliorating the symptoms of withdrawal, clients treated with buprenorphine stay in treatment longer (SMD 0.92, 95% CI 0.57 to 1.27, P<0.001), and are more likely to complete withdrawal treatment (RR 1.64; 95% CI 1.31 to 2.06; P = 0.18). The authors concluded that buprenorphine is more effective than clonidine or lofexidine for the management of opioid withdrawal. Buprenorphine may offer some advantages over methadone, in terms of quicker resolution of withdrawal symptoms and possibly slightly higher rates of completion of withdrawal (Gowing et al., 2009a).

Meador (2010) conducted a mixed treatment comparison meta-analysis of methadone, buprenorphine, and alpha₂-adrenergic agonists for opioid detoxification. A systematic search was conducted using the following databases: CENTRAL, CINAHL, EMBASE, HMC, MEDLINE, and PsycINFO. The inclusion criteria included RCTs of opioid dependent participants receiving opioid detoxification using buprenorphine, methadone, clonidine, or lofexidine. Twenty three RCTs were included in the systematic review (and 20 in the meta-analysis). Buprenorphine and methadone were ranked as the most effective methods of opioid detoxification followed by lofexidine and clonidine respectively. The authors concluded that buprenorphine and methadone are more effective than alpha₂-adrenergic agonists for opioid detoxification. In addition, it appears

buprenorphine may be the most effective treatment, however this should be interpreted with caution as the mixed treatment comparisons between methadone and buprenorphine did not show a statistically significant difference (Meader, 2010).

Amato and colleagues (2011b) conducted a Cochrane review to evaluate the effectiveness of any psychosocial plus any pharmacological interventions versus any pharmacological alone for opioid detoxification, in helping clients to complete treatment, reduce the use of substances and improve health and social status. The authors searched the Cochrane Central Register of Controlled Trials, PUBMED, CINAHL, and PsycINFO up until June 2011. Eleven studies met the author's inclusion criteria. The studies considered five different psychosocial interventions and two pharmacological treatments (methadone and buprenorphine). Compared to any pharmacological treatment alone, the association of any psychosocial with any pharmacological was shown to significantly reduce dropouts RR 0.71 (95% CI 0.59 to 0.85), use of opiate during the treatment, RR 0.82 (95% CI 0.71 to 0.93), at follow up RR 0.66 (95% CI 0.53 to 0.82). The authors concluded that psychosocial treatments offered in addition to pharmacological detoxification treatments are effective in terms of completion of treatment, use of opiates, participants abstinent at follow-up and clinical attendance. The authors noted that the evidence produced by the review is limited by the small number of participants included in the studies, nevertheless, they believe it is desirable to develop adjunct psychosocial approaches that might make detoxification more effective (Amato et al., 2011b).

Day and colleagues (2005) assessed the effectiveness of inpatient versus other settings for detoxification for opioid dependence. The authors searched the Cochrane Register of Controlled Trials, MEDLINE, EMBASE, PsycINFO and CINAHL. The selection criteria included any randomised controlled trial comparing inpatient opioid detoxification with other time-limited detoxification programmes (including residential units that are not staffed 24 hours per day, day-care facilities where the patient is not a resident for 24 hours per day, and outpatient or ambulatory programmes). Only one study met the authors' inclusion criteria. The published data allowed the authors to deduce that 7 out of 10 (70%) in the inpatient detoxification group were opioid-free on discharge, compared to 11 out of 30 (37%) in the outpatient group. The authors concluded that there is no good available research to guide the clinician about the outcomes or cost-effectiveness of inpatient or outpatient approaches to opioid detoxification (Day et al., 2005).

Evidence for the effectiveness of detoxification treatments for opiate dependent adolescents

Minozzi and colleagues (2009) conducted a Cochrane review to assess the effectiveness of any detoxification alone or in combination with psychosocial interventions to no intervention, on completion of treatment, reducing the use of substances and improving health and social status in opiate dependent adolescents. The authors searched the Cochrane Central Register of Controlled Trials, MEDLINE, EMBASE, CINAHL up to August 2008. The inclusion criteria were any randomised and controlled clinical trials comparing any pharmacological interventions alone or associated with psychosocial intervention aimed at detoxification compared with no intervention, placebo, other pharmacological intervention or psychosocial intervention in adolescents (13-18 years). Only two studies were identified that met the inclusion criteria. One compared buprenorphine with clonidine for detoxification. No difference was found for drop out (RR 0.45 [95% CI: 0.20 – 1.04]). The other study compared maintenance vs buprenorphine detoxification. For drop out the results were in favour of maintenance treatment (RR 2.67 [95% CI 1.85,3.86]); no difference for use of opiates. The authors concluded that it is difficult to draft conclusions on the basis of two trials with few participants. The two studies included did not consider the efficacy of methadone, which is still the most frequent drug utilized for the treatment of opioid withdrawal. The authors suggest that the lack of evidence may be due to the difficulty in conducting trials with young people due to practical and ethical reasons (Minozzi et al., 2009).

Summary

In summary, benzodiazepines are an effective medication for managing a range of alcohol withdrawal symptoms and preventing alcohol withdrawal seizures (Amato et al., 2010). According to a review by (Amato et al., 2011b) there is insufficient evidence on the effectiveness and safety of baclofen or GHB in the treatment of alcohol withdrawal. In a mixed treatment comparison meta-analysis of methadone, buprenorphine and alpha₂-adrenergic agonists for opioid detoxification which included 23 RCTS, the author found that buprenorphine and methadone are more effective than alpha₂-adrenergic agonists for opioid detoxification (Meader, 2010).

APPENDIX 4: RESIDENTIAL REHABILITATION EVIDENCE BASE

Residential rehabilitation is a longer term treatment option that is abstinence oriented and often based on twelve-step principles (Ritter et al., 2013). Residential treatment is a structured, 24-hour level of care that enables a focus on intensive recovery activities. It aims to help people with substance use disorders and a high level of psychosocial needs become stable in their recovery before engagement in outpatient settings and before return to an unsupervised environment, which may otherwise be detrimental to their recovery process (Reif, George, Braude, Dougherty, Daniels, Ghose, & Delphin-Rittmon, 2014).

Reif and colleagues (2014) conducted a literature review to examine the effectiveness of residential rehabilitation. The authors argue that the examination of the effectiveness of residential treatment for people with substance use disorders is challenged by lack of a clear definition of service methods, treatment duration and treatment standards. The objectives of the review were to describe models and components of residential treatment for substance use disorders, rate and discuss the level of evidence of existing studies, and describe the effectiveness of the service on the basis of the research literature (Reif et al., 2014). The authors reviewed the literature published between 1995 through 2012, using PubMed, PsycINFO, and Applied Social Sciences Index. The literature search identified eight research reviews that largely overlapped in the studies they included. The reviewed studies focused on adult participants with co-occurring mental and substance misuse disorders (three reviews), inpatient populations (two reviews) and therapeutic communities (three reviews). The authors further evaluated seven individual RCTs that compared some version of residential treatment to a control condition and 14 quasi-experimental studies. The effects of residential treatment were mixed, with some studies indicating positive findings and others showing no significant differences in outcomes between clients in residential treatment settings and those in other types of settings (Reif et al., 2014). In quasi-experimental studies, individuals receiving residential treatment had less methamphetamine use and crime (Brecht, Greenwell, von Mayrhauser, & Anglin, 2006), higher treatment completion rates and longer treatment rates (Hser, Evans, Huang, & Anglin, 2004), and reduced suicide attempts during treatment (Ilgen, Jain, Lucas, & Moos, 2007) compared with individuals receiving outpatient treatment.

Individuals with co-occurring mental and substance use disorders in integrated residential treatment settings had reduced illicit drug and alcohol use, improved psychiatric domains, higher reported quality of life, and improved social and community functioning than those in treatment as usual (Brunette, Mueser, & Drake, 2004; Cleary, Hunt, Matheson, & Walter, 2009; Drake, O'Neal, & Wallach, 2008). Although the literature was inconsistent with other studies showing no significant differences between individuals receiving residential treatment and those receiving treatment in comparison conditions on outcomes such as abstinence from drug use, psychosocial variables, and reduced drug use (McKay, Alterman, McLellan, Snider, & O'Brien, 1995; Rychtarik, Connors, Whitney, McGillicuddy, Fitterling, & Wirtz, 2000; Witbrodt, Bond, Kaskutas, Weisner, Jaeger, Pating, & Moore, 2007).

The authors concluded that on the basis of eight reviews and 21 individual studies not included in prior reviews, the level of evidence for residential treatment for substance use disorders was rated as moderate. Results for the effectiveness of residential treatment compared with other types of treatment for substance use disorders were mixed. Findings suggested either an improvement or no difference in treatment outcomes (Reif et al., 2014).

A specific type of residential treatment setting is a therapeutic community (TC). Therapeutic communities offer a drug-free environment in which people with substance use problems live together in an organised and structured way in order to promote change and make it possible for

them to lead a drug-free life (Broekaert, Kooyman, & Ottenberg, 1993). The key distinctive characteristic of the TC is the use of the community itself as a fundamental change agent ('community as method') (De Leon, 1997). There are a number of defining features of this approach, including the use of a range of structured activities in which both staff members and residents are expected to participate and the use of peers as role models who set a positive example and demonstrate how to live according to the TC's philosophy and value system.

Previous research has demonstrated that stable, long-term treatment in TCs results in substantial reductions in substance use, injecting, overdose, needle sharing, crime and psychopathology (Darke, Williamson, Ross, & Teeson, 2006; Gossop, Marsden, Stewart, & Treacy, 2002). A study by Darke (2012) aimed to determine the association between baseline characteristics, drug use and psychopathology on length of stay, treatment completion and early separation in drug free therapeutic communities. The longitudinal follow up study of 191 treatment admissions to *We Help Ourselves* drug free treatment services found that the median length of stay was 39 day. Clients who had previously completed a TC program, were in better physical health and had no history of imprisonment were retained in treatment longer, on average, than other clients. One-third (34%) of clients successfully completed the program. Male clients and those who reported fewer stressful life events at admission were more likely than others to do so (Darke et al., 2012). Factors *not* related to treatment outcomes were of interest. Neither psychopathology nor primary problem drug were related to retention, dropout or completion. Although the study cannot answer whether clients with a poor profile will do better in a TC than other treatment modalities, it clearly suggests that a poorer baseline profile will not affect the chances of treatment success within the TC setting (Darke et al., 2012).

Review of the effectiveness of therapeutic communities

Over the last decade five reviews have been published on the effectiveness of drug-free therapeutic communities (De Leon, 2010; Magor-Blatch, Bhullar, & Thomson, 2014; Malivert, Fatseas, Denis, Langlois, & Auriacombe, 2012; Smith, Gates, & Foxcroft, 2006; Vanderplasschen, Colpaert, Autrique, Rapp, Pearce, Broekaert, & Vandeveld, 2013). The Cochrane review by Smith et al. (2006) examined the evidence for the effectiveness of therapeutic communities for substance related disorders. The authors searched the Cochrane Central Register of Controlled Trials, MEDLINE, EMBASE, PsycINFO and CINAHL for randomised controlled trials comparing TC with other treatments, no treatment or another TC. They identified seven studies that were included in the review. The authors' concluded that there is little evidence that TCs offer significant benefits in comparison with other residential treatment, or that one type of TCs is better than another in terms of drug use-related outcomes and retention in treatment. Prison TC may be better than prison on its own or mental health treatment programmes to prevent re-offending post-release for in-mates (Smith et al., 2006). The review was based on limited number of studies, some of which had notable methodological limitations.

De Leon (2010) challenged the claim that because of the insufficient RCT-based research on the effectiveness of TCs, the effectiveness of this treatment modality has not been 'proven' and therefore conducted a non-exhaustive but comprehensive, review of the North American literature on TCs from the following research evidence: (1) field effectiveness studies that consist of the large-scale multi-modality surveys as well as uncontrolled 'case studies' of single programmes; (2) controlled/comparison studies of single programmes that also include TCs modified for special populations (e.g. criminal justice, mentally ill); and (3) published statistical meta-analytic studies involving TCs (De Leon, 2010). The evidence from these sources supported the effectiveness of TCs. Multiple field effectiveness studies demonstrated the relationship between retention in TC treatment and positive treatment outcomes. An analysis of eight controlled trials, of which seven were RCTs, demonstrated that TC treatment outcome was significantly better in terms of drug use,

legal involvement and employment outcomes than a non-TC control condition. De Leon (2010) concludes that there is compelling evidence that the TC for substance use disorders is an *evidence-based* treatment. The evidence supports the hypothesis that the TC is an *effective* treatment for substance abuse and related disorders.

Malivert (2012) conducted a systematic review of the effectiveness of therapeutic communities for substance related disorders. Twelve studies met their inclusion criteria. Studies of prison TC were excluded as the authors wanted to include homogenous TC programs based on voluntary admissions and they considered the inclusion of TC in prison would represent a potential source of bias. Reported treatment completion rates varied widely across the studies (9% to 56%) with programme cessation occurring most often during the first 15-30 days of treatment. Follow-up assessments ranged from 6 months after start of TC to 6 years after discharge. All studies showed a decrease in substance use during the program and after discharge, however, during the following-up period, 21-100% of subjects had used substances or met criteria for relapse and 20-33% of subjects reported having a new addiction treatment. Like Smith's (2006) findings, treatment retention was the most predictive factor of abstinence at follow-up. The authors concluded that the results document positive substance use outcomes of TC programs supported by a significant decrease in substance use during TC and depending on the length of the treatment period. However, due to the methodological limitations of the studies, the impact on substance use outcome after TC treatment remains unknown and needs to be further assessed. They suggest that longer-term rigorous follow-up of TC clients after discharge, along with direct comparisons of their outcomes with those of ambulatory treatment clients, is required to inform allocation of limited drug treatment resources (Malivert et al., 2012).

Vanderplasschen (2013) conducted a systematic review of therapeutic communities and their effectiveness from a recovery-oriented perspective. The authors searched ISI Web of Knowledge, PUBMED, and DrugScope up to December 31, 2011. Thirty papers were met the selection criteria which were based on 16 original studies. The studies in this review included both randomized controlled trials and quasi-experimental studies. The results found that two out of three studies showed significantly better substance use and legal outcomes among TC participants, and five studies found superior employment and psychological functioning. Length of stay in treatment and participation in subsequent aftercare were consistent predictors of recovery status (Vanderplasschen et al., 2013). The authors' concluded that TCs can promote change regarding various outcome categories.

Magor-Blatch (2014) recently published a systematic review of studies examining the effectiveness of therapeutic communities. The authors conducted a systematic search of the literature published between 2000 and 2012 using PsycINFO, Academic Search Complete and PubMed Complete databases. Inclusion criteria included studies investigating quantitative outcomes of residential TC treatment for adults substance users, with outcome measures for substance-use, criminal activity, mental health and/or social engagement. Eleven studies met the inclusion criteria. The authors concluded that consistent with previous systematic reviews of TCs, outcomes varied across studies but indicated that TCs are generally effective as a treatment intervention, with reductions in substance-use and criminal activity, and increased improvement in mental health and social engagement in a number of studies reviewed (Magor-Blatch et al., 2014).

Evidence of the effectiveness of residential rehabilitation for adolescents with substance use disorder
Tripodi (2009) conducted a systematic review of the effectiveness of residential treatment centres for substance-abusing adolescents. The author conducted a comprehensive search of the following databases: ERIC, PsycINFO, and MEDLINE and found eight studies that met their criteria. Out of the four most rigorous studies reviewed, two found significant differences between the treatment and

comparison groups. Of the remaining studies, despite having strong selectivity bias, only one found significant differences between treatment and comparison groups, and it was for females only at the one-year follow-up (Tripodi, 2009).

APPENDIX 5: ORIGINAL DASP MODEL CARE PACKAGES LIST

Drug Type	Age group	Care packages
ALCOHOL	12 TO 17 YEAR OLDS	<p>Brief intervention</p> <p>Moderate intervention</p> <p>Return to country</p> <p>Psychosocial interventions without relapse prevention pharmacotherapies – standard</p> <p>Psychosocial interventions without relapse prevention pharmacotherapies – complex</p> <p>Withdrawal management - home based – standard - without relapse prevention pharmacotherapies</p> <p>Withdrawal management - daily outpatient – standard with relapse prevention pharmacotherapies</p> <p>Withdrawal management - residential – standard – with withdrawal pharmacotherapies (includes respite)</p> <p>Non-residential rehabilitation – day program – 25 days – standard</p> <p>Residential rehabilitation – 18 week stay</p>
ALCOHOL	18 TO 64 YEAR OLDS	<p>Brief intervention</p> <p>Moderate intervention</p> <p>Return to country</p> <p>Psychosocial interventions without relapse prevention pharmacotherapies – standard</p> <p>Psychosocial interventions - with relapse prevention pharmacotherapies – standard</p> <p>Psychosocial interventions– without relapse prevention medications – complex</p> <p>Psychosocial interventions– with relapse prevention medications – complex</p> <p>Withdrawal management - home based – standard - without relapse prevention pharmacotherapies</p> <p>Withdrawal management - daily outpatient – standard without relapse prevention medications</p> <p>Withdrawal management - daily outpatient – standard with relapse prevention pharmacotherapies</p> <p>Withdrawal management - daily outpatient – complex – with relapse prevention pharmacotherapies</p> <p>Withdrawal management - residential – standard – with relapse prevention pharmacotherapies medications</p> <p>Withdrawal management – residential - complex with relapse prevention pharmacotherapies</p> <p>Non-residential rehabilitation – day program – 25 days – standard</p>

Drug Type	Age group	Care packages
		<p>Residential rehabilitation 8 week stay</p> <p>Residential rehabilitation – 13 week stay (8 weeks stage 1 treatment as a resident, 5 weeks stage 2 treatment + 13 weeks ongoing care)</p> <p>Residential rehabilitation – 26 week stay (8 weeks stage 1 treatment as a resident, 9 weeks stage 2 treatment + 9 weeks stage 3 treatment and 13 weeks of ongoing care)</p>
ALCOHOL	65 YEARS +	<p>Brief intervention</p> <p>Moderate intervention</p> <p>Psychosocial interventions without pharmacotherapies - standard</p> <p>Psychosocial interventions – with relapse prevention pharmacotherapies - standard</p> <p>Psychosocial interventions – without relapse prevention pharmacotherapies - complex</p> <p>Psychosocial interventions – with relapse prevention pharmacotherapies - complex</p> <p>Withdrawal management – home based – standard – without relapse prevention pharmacotherapies</p> <p>Withdrawal management – daily outpatient – standard without relapse prevention pharmacotherapies</p> <p>Withdrawal management – daily outpatient –standard with relapse prevention pharmacotherapies</p> <p>Withdrawal management – daily outpatient – complex – with relapse prevention pharmacotherapies</p> <p>Withdrawal management – residential – standard – with relapse prevention pharmacotherapies</p> <p>Withdrawal management – residential – complex with relapse prevention pharmacotherapies</p> <p>Non-residential rehabilitation – day program – 25 days - standard</p> <p>Residential rehabilitation 8 week stay</p> <p>Residential rehabilitation – 13 week stay (8 weeks stage 1 treatment as a resident, 5 weeks stage 2 treatment + 13 weeks ongoing care)</p> <p>Residential rehabilitation – 26 week stay (8 weeks stage 1 treatment as a resident, 9 weeks stage 2 treatment+ 9 weeks stage 3 treatment and 13 weeks of ongoing care)</p>
CANNABIS	12 TO 17 YEAR OLDS	<p>Brief intervention</p> <p>Moderate intervention</p> <p>Return to country</p> <p>Psychosocial interventions – standard</p> <p>Psychosocial interventions - complex</p> <p>Withdrawal management – daily outpatient - standard</p> <p>Withdrawal management – residential – standard (includes respite)</p>

Drug Type	Age group	Care packages
		Residential rehabilitation – 18 week stay
CANNABIS	18 TO 64 YEAR OLDS	<p>Brief intervention</p> <p>Moderate intervention</p> <p>Return to country</p> <p>Psychosocial interventions - standard</p> <p>Psychosocial interventions - complex</p> <p>Withdrawal management – daily outpatient - standard</p> <p>Withdrawal management – residential - standard</p> <p>Residential rehabilitation – 13 week stay (8 weeks stage 1 treatment as a resident, 5 weeks stage 2 treatment + 13 weeks ongoing care)</p>
CANNABIS	65 YEARS +	No care packages
AMPHETAMINE	12 TO 17 YEAR OLDS	<p>Return to country</p> <p>Psychosocial interventions– without relapse prevention pharmacotherapies – complex</p> <p>Withdrawal management - daily outpatient – standard with relapse prevention pharmacotherapies</p> <p>Withdrawal management – residential - complex with relapse prevention pharmacotherapies</p> <p>Residential rehabilitation – 13 week stay (8 weeks stage 1 treatment as a resident, 5 weeks stage 2 treatment + 13 weeks ongoing care)</p>
AMPHETAMINE	18 TO 64 YEAR OLDS	<p>Return to country</p> <p>Psychosocial interventions – without relapse prevention pharmacotherapies – complex</p> <p>Withdrawal management - daily outpatient – standard with relapse prevention pharmacotherapies</p> <p>Withdrawal management – residential - complex with relapse prevention pharmacotherapies</p> <p>Residential rehabilitation – 13 week stay (8 weeks stage 1 treatment as a resident, 5 weeks stage 2 treatment + 13 weeks ongoing care)</p>
AMPHETAMINE	65 YEARS +	No care packages
ILLICIT OPIOIDS	12 TO 17 YEAR OLDS	<p>Return to country</p> <p>Patients registered in illicit opioids treatment programs – illicit opioids substitution treatments – complex</p> <p>Psychosocial interventions – complex</p> <p>Withdrawal management - daily outpatient– complex</p> <p>Withdrawal management - residential– complex</p> <p>Rehabilitation – day program – 25 days – standard</p> <p>Residential rehabilitation – 18 week stay</p> <p>Residential rehabilitation – 17 week stay, 13 weeks of aftercare, 13 week of exit program/out client - methadone to abstinence residential</p>

Drug Type	Age group	Care packages
		(MATR) Residential rehabilitation – 17 week stay, 13 weeks of aftercare, 13 week of exit program/out client - residential treatment for illicit opioids dependence stabilisation program (RTOD)
ILLICIT OPIOIDS	18 TO 64 YEAR OLDS	<p>Patients registered in illicit opioids treatment programs – illicit opioids substitution treatments – standard</p> <p>Patients registered in illicit opioids treatment programs – illicit opioids substitution treatments – complex</p> <p>Psychosocial interventions – standard</p> <p>Psychosocial interventions – complex</p> <p>Withdrawal management - daily outpatient– standard</p> <p>Withdrawal management - daily outpatient– complex</p> <p>Withdrawal management – residential – standard</p> <p>Withdrawal management – residential – complex</p> <p>Rehabilitation – day program – 25 days – standard</p> <p>Residential rehabilitation 8 week stay</p> <p>Residential rehabilitation – 13 week stay (8 weeks stage 1 treatment as a resident, 5 weeks stage 2 treatment + 13 weeks ongoing care)</p> <p>Residential rehabilitation – 26 week stay (8 weeks stage 1 treatment as a resident, 9 weeks stage 2 treatment + 9 weeks stage 3 treatment and 13 weeks of ongoing care)</p> <p>Residential rehabilitation – 17 week stay, 13 weeks of aftercare, 13 week of exit program/out client - methadone to abstinence residential (MTAR)</p> <p>Residential rehabilitation – 17 week stay, 13 weeks of aftercare, 13 week of exit program/out client - residential treatment for illicit opioids dependence stabilisation program (RTOD)</p>
ILLICIT OPIOIDS	65 YEARS +	<p>Return to country</p> <p>Patients registered in illicit opioids treatment programs – illicit opioids substitution treatments – complex</p> <p>Psychosocial interventions – complex</p> <p>Withdrawal management - residential– complex</p> <p>residential rehabilitation – 18 week stay</p> <p>Residential rehabilitation – 17 week stay, 13 weeks of aftercare, 13 week of exit program/out client - methadone to abstinence residential (MTAR)</p> <p>Residential rehabilitation – 17 week stay, 13 weeks of aftercare, 13 week of exit program/out client - residential treatment for illicit opioids dependence stabilisation program (RTOD)</p>
BENZODIAZ EPINE	12 TO 17 YEAR OLDS	No care packages

Drug Type	Age group	Care packages
BENZODIAZ EPINE	18 TO 64 YEAR OLDS	<p>Mild – moderate</p> <p>Benzodiazepine long term patient care package - complex – outpatient stabilisation by 6 months</p> <p>Benzodiazepine long term patient care package - complex – outpatient stabilisation after 6 months</p> <p>Benzodiazepine long term patient care package - complex – inpatient stabilisation by 6 months</p> <p>Benzodiazepine long term patient care package - complex – inpatient stabilisation after 6 months</p>
BENZODIAZ EPINE	65 YEARS +	<p>Mild – moderate</p> <p>Benzodiazepine long term patient care package - complex – outpatient stabilisation by 6 months</p> <p>Benzodiazepine long term patient care package - complex – outpatient stabilisation after 6 months.</p> <p>Benzodiazepine long term patient care package - complex – inpatient stabilisation by 6 months</p> <p>Benzodiazepine long term patient care package - complex – inpatient stabilisation after 6 months</p>

APPENDIX 6: DETAILS OF THE CALCULATION METHODS FOR THE ABORIGINAL CARE PACKAGE RESOURCES

Each of the extra elements was added to the model with an activity staff-member assigned to the element. For example, the “return to country/community” is assigned to an ATOD worker; therefore an extra line is added to the model with the activity name “return to country” and ATOD worker assigned as the activity staff. We include the time in minutes that it will take to deliver this element and the model will calculate the cost.

Mild intervention

Assessment

- 3 x 30 min screening and brief intervention
- 1 x 30 min consultation with primary carer or other family member
- 4 x 15 min referral phone
- 3 x 2 x 60 min transport (for mild intervention) (70% of clients) = 4.2 x 60 min = 252 minutes

Tobacco intervention

- 12 min per person for the brief intervention in the mild care package (41 smokers/100 people = $0.41 \times 30 \text{ min} = 12 \text{ min per person}$) (41% for mild)
- Staff time to prescribe varenicline or bupropion or NRT patches: 7 min

For 100 people in the Mild Group the breakdown for the Tobacco Intervention is based on:

- 59% are non-smokers and receive no intervention at all
- 16.4% receive brief intervention of 30 mins only
- 20.5% receive brief intervention of 30 minutes and NRT patches 3 for months
- 3.9 % receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months.
- 0.2% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months.

% receiving intervention medication	medication	duration covered by this prescribing (days)	tablets/ patches used over period	doses per day	average no. of doses per person
A	B	C	D	E = D / C	F = A* C * E
20.5%	NRT patches	90	90	1.0000	18.450
3.9%	bupropion/Zyban 1	16	29	1.8125	1.131
3.9%	bupropion/Zyban 2	45	90	2.0000	3.510
3.9%	bupropion/ZYBAN	61	119	1.9508	4.641
0.2%	varenicline/Champix 1a	14	25	1.7857	0.049
0.2%	varenicline/Champix 1b	14	28	2.0000	0.056
0.2%	varenicline/Champix 2	28	56	2.0000	0.112
0.2%	varenicline/Champix 3	28	56	2.0000	0.112
0.2%	varenicline/CHAMPIX	84	165	1.9643	0.329

12 x 60 min (PHC worker) therefore: $0.41 \times 12 = 4.92 = 4.92 \times 60 \text{ min} = 295.2 \text{ minutes}$

12 x 2 x 60 min transport (70% of clients) = $24 \times 70\% = 16.8$

(41% of mild receive tobacco intervention) therefore: $0.41 \times 16.8 = 6.92 \times 60 \text{ min} = 415.2 \text{ minutes}$

Total transport = $4.2 + 6.92 = 11.09 \times 60 \text{ min} = 667.2 \text{ minutes}$

Total intervention cost: \$1,507

Moderate intervention

Assessment

1 x 30 min primary carer assessment and referral
 3 x 30 min monitoring by primary carer
 1 x 30 min liaison between primary carer, psychologist/MBS providers
 4 x 30 min screening and brief intervention
 4 x 15 min care coordination
 4 x 15 min supported referral
 5 x 2 x 60 min transport (70% of clients) = $0.70 \times 10 = 7 \times 60 \text{ min} = 420 \text{ minutes}$

Relapse prevention pharmacotherapies

Prescription medicines

Prescription medicines applies to 50% in the moderate intervention: (Acamprosate (15%); Naltrexone (35%))

Therefore out of 100 people 15 get Acamprosate and 35 get Naltrexone. Total doses per day (15 x 3 tablets = 45 doses per day of Acamprosate) and (35 x 3 = 105 doses of Naltrexone). Therefore total doses 180 days = $45 \times 180 = 8,100$ (Acamprosate) and $105 \times 180 = 18,900$ (Naltrexone).

As this is averaged out in the model per 100 people (Average dose over 100 people = $8,100/100 = \mathbf{81}$ (Acamprosate). Average dose over 100 people = $18,900/100 = \mathbf{189}$ (Naltrexone), this means that the average person is prescribed 81 doses of Acamprosate and 189 doses of Naltrexone.

2 x 1 x 30 min medical assessment
 2 x 5 min bloods/diagnostic testing
 2 x 2 x 15 min information/education re: medications
 9 x 30 min medical review and prescribing
 2 x 2 x 15 min case conference
 2 x 2 x 15 min referral/transfer of care/care coordination
 9 x 30 min outreach/health worker support at the consultation
 9 x 60 min transport (70% of clients) = $9 \times 0.7 = 6.3 \times 60 \text{ mins} = 378 \text{ minutes}$

Individual psychosocial intervention

1 x 75 min assessment
 5 x 50 min psychosocial intervention
 6 x 2 x 60 min transport (70% of clients) = $12 \times 0.70 = 8.4 \times 60 \text{ mins} = 504 \text{ minutes}$

Tobacco intervention

21 min per person for the brief intervention in the moderate care package (70 smokers/100 people = $0.7 \times 30 \text{ min} = 21 \text{ min per person}$) (70% for moderate)
 Staff time to prescribe varenicline or bupropion or NRT patches: 7 minutes
 12 x 60 min (PHC worker) = $12 \times 0.70 = 8.4$

For 100 people in the Moderate Group the breakdown for the Tobacco Intervention is based on:

- 30% are non-smokers and receive no intervention at all

- 28% receive brief intervention of 30 mins only
- 35% receive brief intervention of 30 minutes and NRT patches 3 for months
- 6.72 % receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months.
- 0.28% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months.

% receiving intervention medication	medication	duration covered by this prescribing (days)	tablets/ patches used over period	doses per day	average no. of doses per person
A	B	C	D	E = D / C	F = A* C * E
35.00%	NRT patches	90	90	1.0000	31.500
6.72%	bupropion/Zyban 1	16	29	1.8125	1.948
6.72%	bupropion/Zyban 2	45	90	2.0000	6.048
6.72%	bupropion/ZYBAN	61	119	1.9508	7.996
0.28%	varenicline/Champix 1a	14	25	1.7857	0.069
0.28%	varenicline/Champix 1b	14	28	2.0000	0.078
0.28%	varenicline/Champix 2	28	56	2.0000	0.157
0.28%	varenicline/Champix 3	28	56	2.0000	0.157
0.28%	varenicline/CHAMPIX	84	165	1.9643	0.461

Return to Country

180 min (20% of clients) = 36 min

2 x 60 min transport (70% of clients) = 2*070= 1.4*0.20 = 0.28 x 60 min = 16.8 min

Assertive Follow-up

6 x 30 min face to face visits

6 x 30 min phone contact

6 x 2 x 60 min transport (70% of clients) = 8.4 x 60 mins = 504 minutes

Total transport = 8.4 + 8.4 + 6.3 + 7 = 30.1 x 60 min = 1,806 minutes

Total intervention cost: \$7,862

Psychosocial interventions – with relapse prevention medications – complex

Assessment

2 x 75 min clinical assessment

2 x 30 min complex case conference

2 x 15 min transfer/referral of care/follow up

2 x 2 x 60 min transport (70% of clients) = 4*0.70 = 2.8 x 60 mins = 168 minutes

Individual – Psychosocial interventions – complex

2 x1 x 15 min intake

2 x 1 x 75 min assessment

2 x 5 x 60 min 1:1 psychosocial intervention/family/supporter

2 x 1 x 15 min case conference

2 x 2 x 30 min transfer of care/discharge/care coordination

16 x 2 x 60 min transport (70% of clients) = 32*0.70 = 22.4 x 60 mins = 1,344 minutes

Group/Family – Psychosocial interventions-

1 x 30 min screening/brief assessment and orientation

6 x 60 min group sessions (assume 2 x staff for 8 participants) therefore x 2 (12 x 60 min group sessions)

6 x 20 mins preparation for family sessions

7 x 2 x 60 min transport (70% of clients) = $14 \times 0.70 = 9.8 \times 60 \text{ mins} = 588 \text{ minutes}$

Relapse Prevention Pharmacotherapies – complex

Prescription medicines applies to 100%: Acamprosate (40%); Naltrexone (60%)

Therefore out of 100 people 40 get Acamprosate and 60 get Naltrexone. Total doses per day (40 x 3 tablets = 120 doses per day of Acamprosate) and (60 x 3 = 180 doses of Naltrexone). Therefore total doses 180 days = $120 \times 180 = 21,600$ (Acamprosate) and $180 \times 180 = 32,400$ (Naltrexone).

As this is averaged out in the model per 100 people (Average dose over 100 people = $21,600/100 = \mathbf{216}$ (Acamprosate). Average dose over 100 people = $32,400/100 = \mathbf{324}$ (Naltrexone), this means that the average person is prescribed 216 doses of Acamprosate and 324 doses of Naltrexone.

2 x 1 x 30 min medical assessment

2 x 5 min bloods/diagnostic testing

2 x 2 x 15 min information/education re: medications

9 x 30 min medical review and prescribing

2 x 2 x 15 min case conference

2 x 2 x 15 min referral/transfer of care/care coordination

9 x 30 min outreach/health worker support at the consultation

9 x 60 min transport (70% of clients) = $9 \times 0.7 = 6.3 \times 60 \text{ mins} = 378 \text{ minutes}$

Case management and support – complex

2 x 1 x 75 min case management assessment

2 x 3 x 60 min family/carer/partner engagement

2 x 3 x 60 min implementation of case management and support

2 x 2 x 60 min case conference

2 x 1 x 60 min discharge/referral/transfer of care/follow up

16 x 2 x 60 min transport (70% of clients) = $32 \times 0.70 = 22.4 \times 60 \text{ mins} = 1,344$

Tobacco intervention

30 min per person for the brief intervention

Staff time to prescribe varenicline or bupropion or NRT patches: 7 mins

For 100 people in the Severe Group the breakdown for the Tobacco Intervention is based on:

- 37% receive brief intervention of 30 mins only
- 55% receive brief intervention of 30 minutes and NRT patches 3 for months
- 7.71 % receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months.
- 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months.

% receiving intervention medication	medication	duration covered by this prescribing (days)	tablets/ patches used over period	doses per day	average no. of doses per person
A	B	C	D	E = D / C	F = A* C * E
55%	NRT patches	90	90	1.0000	49.500
7.71%	bupropion/Zyban 1	16	29	1.8125	2.2359
7.71%	bupropion/Zyban 2	45	90	2.0000	6.9390
7.71%	bupropion/ZYBAN	61	119	1.9508	9.1749
0.29%	varenicline/Champix 1a	14	25	1.7857	0.0725
0.29%	varenicline/Champix 1b	14	28	2.0000	0.0812
0.29%	varenicline/Champix 2	28	56	2.0000	0.1624
0.29%	varenicline/Champix 3	28	56	2.0000	0.1624
0.29%	varenicline/CHAMPIX	84	165	1.9643	0.4785

12 x 60 min (PHC worker)

Return to Country

180 min (20% of clients) = 36 min

2 x 60 min transport (70% of clients) = 2*0.70 = 1.4*0.20 = 0.28 x 60 min = 16.8 min

Ongoing care

12 x 90 min group counselling (assume 2 staff and 8 participants per group) therefore 2 x 12 = 24 (24 x 90 min group counselling)

12 x 60 min 1:1 counselling

24 x 2 x 60 min transport (70% of clients) = 48*.70 = 33.6 x 60 mins = 2,106 minutes

Assertive follow up – complex

12 x 60 min face to face visits

12 x 2 x 60 min transport (70% of clients) = 24*0.70 = 16.8 x 60 mins = 1,008 minutes

Total transport = 2.8 + 22.4 + 9.8 + 6.3 + 22.4 + 33.6 + 16.8 = 114.1 x 60 mins = 6,846 minutes

Total intervention cost: \$19,010

Withdrawal outpatient – Complex with relapse prevention pharmacotherapies

Assessment – complex

2 x 75 min clinical assessment

2 x 30 min complex case conference

2 x 15 min transfer/referral of care/follow up

2 x 2 x 60 min transport (70% of clients) = 4*0.70 = 2.8 x 60 mins = 168 minutes

Withdrawal Management – daily outpatient

1 x 60 min development of care plan

1 x 30 min intake assessment (Withdrawal Management)

1 x 30 min medical assessment and prescribing

2 x 40 min assessment (Withdrawal Management)

7 x 30 min review
 2 x 10 min brief interventions to coincide with dispensing events or reviews
 1 x 30 min medical consult
 1 x 30 min referral/ transfer of care/ follow up
 1 x 30 min case conference
 1 x 40 min dispensing time per patient
 8 x 2 x 60 mins transport (70% of clients) therefore $16 \times 0.70 = 11.2 \times 60 \text{ mins} = 672 \text{ minutes}$

1 x 20 min medical consult
 1 x 60 min psychosocial intervention 1:1
 1 x 30 min case conference (simple)
 1 x 30 min referral /transfer of care / follow up

Individual - Psychosocial interventions – complex –

2 x 1 x 15 min intake
 2 x 1 x 75 min assessment
 2 x 5 x 60 min 1:1 psychosocial intervention/family/supporter
 2 x 1 x 15 min case conference
 2 x 2 x 30 min transfer of care/ discharge / care coordination
 16 x 2 x 60 min transport (70% of clients) = $32 \times 0.70 = 22.4 \times 60 \text{ mins} = 1,344 \text{ minutes}$

Group/Family – Psychosocial interventions

1 x 30 min screening / brief assessment and orientation
 6 x 60 min group sessions (assume 2 x staff for 8 participants) therefore 12 x 60 min
 6 x 20 mins preparation for family sessions
 7 x 2 x 60 min transport (70% of clients) = $14 \times 0.70 = 9.8 \times 60 \text{ mins} = 588 \text{ minutes}$

Pharmacotherapies – complex – ongoing for 6 months

Prescription medicines

Prescription medicines applies to 100% (Acamprosate (40%); Naltrexone (60%))
 Therefore out of 100 people 40 get Acamprosate and 60 get Naltrexone. Total doses per day (40 x 3 tablets = 120 doses per day of Acamprosate) and (60 x 3 = 180 doses of Naltrexone). Therefore total doses 180 days = 120 x 180 = 21,600 (Acamprosate) and 180 x 180 = 32,400 (Naltrexone).
 As this is averaged out in the model per 100 people (Average dose over 100 people = $21,600/100 = 216$ (Acamprosate). Average dose over 100 people = $32,400/100 = 324$ (Naltrexone), this means that the average person is prescribed 216 doses of Acamprosate and 324 doses of Naltrexone.

2 x 1 x 30 min medical assessment
 2 x 5 min bloods/diagnostic testing
 2 x 2 x 15 min information/education re: medications
 9 x 30 min medical review and prescribing
 2 x 2 x 15 min case conference
 2 x 2 x 15 min referral/transfer of care/care coordination
 9 x 30 min outreach/health worker support at the consultation
 9 x 60 min transport (70% of clients) = $9 \times 0.7 = 6.3 \times 60 \text{ mins} = 378 \text{ minutes}$

Case management and support – complex

2 x 1 x 75 min case management assessment
 2 x 3 x 60 min family / carer/partner engagement
 2 x 3 x 60 min implementation of case management and support

2 x 2 x 60 min case conference

2 x 1 x 60 min discharge/ referral/ transfer of care / follow up

16 x 2 x 60 min transport (70% of clients) = $32 * 0.70 = 22.4 \times 60 \text{ mins} = 1,344 \text{ minutes}$

Tobacco intervention

30 min per person for the brief intervention

Staff time to prescribe varenicline or bupropion or NRT patches: 7 min

For 100 people in the Severe Group the breakdown for the Tobacco Intervention is based on:

- 37% receive brief intervention of 30 mins only
- 55% receive brief intervention of 30 minutes and NRT patches 3 for months
- 7.71 % receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months.
- 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months.

% receiving intervention medication	medication	duration covered by this prescribing (days)	tablets/ patches used over period	doses per day	average no. of doses per person
A	B	C	D	E = D / C	F = A* C * E
55%	NRT patches	90	90	1.0000	49.500
7.71%	bupropion/Zyban 1	16	29	1.8125	2.2359
7.71%	bupropion/Zyban 2	45	90	2.0000	6.9390
7.71%	bupropion/ZYBAN	61	119	1.9508	9.1749
0.29%	varenicline/Champix 1a	14	25	1.7857	0.0725
0.29%	varenicline/Champix 1b	14	28	2.0000	0.0812
0.29%	varenicline/Champix 2	28	56	2.0000	0.1624
0.29%	varenicline/Champix 3	28	56	2.0000	0.1624
0.29%	varenicline/CHAMPIX	84	165	1.9643	0.4785

12 x 60 min (PHC worker)

Return to Country

180 min (20% of clients) = 36 min

2 x 60 min transport (70% of clients) = $2 * 0.70 = 1.4 * 0.20 = 0.28 \times 60 \text{ min} = 16.8 \text{ min}$

Ongoing care

12 x 90 min group counselling (assume 2 staff and 8 participants per group) therefore $2 \times 12 = 24$ (24 x 90 min group counselling)

12 x 60 min 1:1 counselling

24 x 2 x 60 min transport (70% of clients) $48 * 0.70 = 33.6 \times 60 \text{ mins} = 2,016 \text{ minutes}$

Assertive follow up –complex

12 x 60 min face to face visits

12 x 2 x 60 min transport (70% of clients) = $24 * 0.70 = 16.8 \times 60 \text{ mins} = 1,008 \text{ minutes}$

Total transport = $2.8 + 11.2 + 22.4 + 9.8 + 6.3 + 22.4 + 33.6 + 16.8 = 125.3 \times 60 \text{ mins} = 7,518 \text{ minutes}$

Total intervention cost: \$21,160

Withdrawal management – residential – complex – with relapse prevention pharmacotherapies

Assessment – complex

- 2 x 75 min clinical assessment
- 2 x 30 min complex case conference
- 2 x 15 min transfer/ referral of care/ follow up
- 2 x 2 x 60 min transport (70% of clients) = $4 \times 0.70 = 2.8 \times 60 \text{ min} = 168 \text{ minutes}$

Withdrawal Management – residential

- 1 x 5 min diagnostic testing
- 1 x 30 min development of care plan
- 1 x 15 min assessment (intake)
- 1 x 75 min assessment
- 1 x 45 min medical assessment
- 1 x 40 min dispensing per patient
- 5 x 90 min group sessions (assume 2 staff and 5 participants per group) (therefore $5 \times 2 = 10$, $10 \times 90 \text{ min}$)
- 5 x 30 min reviews nursing
- 2 x 15 min medical review
- 2 x 60 min discharge planning sessions
- 2 x 30 min referral /transfer of care / follow up (eg 1 x 30 min for discharge, 1 x 30 min phone calls)

- 1 x bed cost for family member/ support person (50% of clients): therefore add 0.5 to RR1 Residential Rehabilitation overnight bed component in column AM (noting that this care package does not have RR, but we use this field as it's the most appropriate bed cost available).
- For the overnight FTE (2 staff instead of 1); in the bed based staffing overnight DT change from 0.26 staff per detox bed (1 in 5) to 0.4 (1 in 2.5).
- 2 x 60 min transport (70% of clients) = $1.4 \times 60 \text{ mins} = 84 \text{ minutes}$

Individual - Psychosocial interventions – complex

- 2 x 1 x 15 min intake
- 2 x 1 x 75 min assessment
- 2 x 5 x 60 min 1:1 psychosocial intervention/family/supporter
- 2 x 1 x 15 min case conference
- 2 x 2 x 30 min transfer of care/ discharge / care coordination
- 16 x 2 x 60 min transport (70% of clients) = $32 \times 0.70 = 22.4 \times 60 \text{ mins} = 1,344 \text{ minutes}$

Group/ Family - Psychosocial interventions

- 1 x 30 min screening / brief assessment and orientation
- 6 x 60 min group sessions (assume 2 x staff for 8 participants) (therefore $6 \times 2 = 12$)
- 6 x 20 mins preparation for family sessions
- 7 x 2 x 60 min transport (70% of clients) = $14 \times 0.70 = 9.8 \times 60 \text{ mins} = 588 \text{ minutes}$

Case management and support – complex

- 2 x 1 x 75 min case management assessment
- 2 x 3 x 60 min family / carer /partner engagement
- 2 x 3 x 60 min implementation of case management and support
- 2 x 2 x 60 min case conference
- 2 x 1 x 60 min discharge/ referral/ transfer of care / follow up

16 x 2 x 60 min transport (70% of clients) = 32*0.70 = 22.4 x 60 mins = 1,344 minutes

Pharmacotherapies – complex

Prescription medicines

Prescription medicines applies to 100%: Acamprosate (40%); Naltrexone (60%)

Therefore out of 100 people 40 get Acamprosate and 60 get Naltrexone. Total doses per day (40 x 3 tablets = 120 doses per day of Acamprosate) and (60 x 3 = 180 doses of Naltrexone). Therefore total doses 180 days = 120 x 180 = 21,600 (Acamprosate) and 180 x 180 = 32,400 (Naltrexone).

As this is averaged out in the model per 100 people (Average dose over 100 people = 21,600/100 = **216** (Acamprosate). Average dose over 100 people = 32,400/100 = **324** (Naltrexone), this means that the average person is prescribed 216 doses of Acamprosate and 324 doses of Naltrexone.

2 x 1 x 30 min medical assessment

2 x 5 min bloods/diagnostic testing

2 x 2 x 15 min information/education re: medications

9 x 30 min medical review and prescribing

2 x 2 x 15 min case conference

2 x 2 x 15 min referral/transfer of care/care coordination

9 x 30 min outreach/health worker support at the consultation

9 x 60 min transport (70% of clients) = 9*0.7 = 6.3 x 60 mins = 378 minutes

Tobacco intervention

30 min per person for the brief intervention

Staff time to prescribe varenicline or bupropion or NRT patches: 7 min

For 100 people in the Severe Group the breakdown for the Tobacco Intervention is based on:

- 37% receive brief intervention of 30 mins only
- 55% receive brief intervention of 30 minutes and NRT patches 3 for months
- 7.71 % receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months.
- 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months.

% receiving intervention medication	medication	duration covered by this prescribing (days)	tablets/ patches used over period	doses per day	average no. of doses per person
A	B	C	D	E = D / C	F = A* C * E
55%	NRT patches	90	90	1.0000	49.500
7.71%	bupropion/Zyban 1	16	29	1.8125	2.2359
7.71%	bupropion/Zyban 2	45	90	2.0000	6.9390
7.71%	bupropion/ZYBAN	61	119	1.9508	9.1749
0.29%	varenicline/Champix 1a	14	25	1.7857	0.0725
0.29%	varenicline/Champix 1b	14	28	2.0000	0.0812
0.29%	varenicline/Champix 2	28	56	2.0000	0.1624
0.29%	varenicline/Champix 3	28	56	2.0000	0.1624
0.29%	varenicline/CHAMPIX	84	165	1.9643	0.4785

12 x 60 min (PHC worker)

Return to Country

180 min (20% of clients) = 36 min

2 x 60 min transport (70% of clients) = $2 \times 0.70 = 1.4 \times 0.20 = 0.28 \times 60 \text{ min} = 16.8 \text{ min}$

Ongoing care

12 x 90 min group counselling (assume 2 staff and 8 participants per group) therefore $2 \times 12 = 24$ (24 x 90 min group counselling)

13 x 60 min 1:1 counselling

24 x 2 x 60 min transport (70% of clients) = $48 \times 0.70 = 33.6 \times 60 \text{ mins} = 2,016 \text{ minutes}$

Assertive follow up

12 x 60 min face to face visit

12 x 2 x 60 mins transport (70% of clients) = $24 \times 0.70 = 16.8 \times 1,008 \text{ minutes}$

Total transport: $2.8 + 1.4 + 22.4 + 9.8 + 22.4 + 6.3 + 33.6 + 16.8 = 115.5 \times 60 \text{ min} = 6,930 \text{ minutes}$

Total intervention cost: \$23,001

Day Program – 25 Days – Standard

Assessment – complex

2 x 75 min clinical assessment

2 x 30 min complex case conference

1 x 60 min transfer/ referral of care/ follow up

2 x 2 x 60 min transport (70% of clients) = $4 \times 0.70 = 2.8 \times 60 \text{ mins} = 168 \text{ minutes}$

Withdrawal Management – outpatient

1 x 60 min development of care plan

1 x 30 min intake assessment (Withdrawal Management)

1 x 30 min medical assessment and prescribing

2 x 40 min assessment (Withdrawal Management)

7 x 30 min review

2 x 10 min brief interventions to coincide with dispensing events or reviews

1 x 30 min medical consult

1 x 30 min referral/ transfer of care/ follow up

1 x 30 min case conference

1 x 40 min dispensing time per patient

8 x 2 x 60 mins transport (70% of clients) therefore $16 \times 0.70 = 11.2 \times 60 \text{ mins} = 672 \text{ minutes}$

Group or Individual Psychosocial interventions

25 x 60 min group counseling (assume 2 staff and 8 participants) (therefore $25 \times 2 = 50$)

5 x 60 min 1:1 counselling

Group or Individual Psychosocial interventions

25 x 90 min group counseling (assume 2 staff and 8 participants) (therefore $25 \times 2 = 50$)

Group or Individual Psychosocial interventions

25 x 120 min group activity (assume 2 staff and 8 participants) (therefore 25 x 2 = 50)

Group or Individual Psychosocial interventions

25 x 120 min group activity (assume 2 staff and 8 participants) (therefore 25 x 2 = 50)

25 x 2 x 60 min transport (70% of clients) = 50*0.70 = 35 x 60 mins = 2,100 minutes

Case management and support – complex

2 x 1 x 75 min case management assessment

2 x 3 x 60 min family / carer/partner engagement

2 x 3 x 60 min implementation of case management and support

2 x 2 x 60 min case conference

2 x 1 x 60 min discharge/ referral/ transfer of care / follow up

16 x 2 x 60 min transport (70% of clients) = 32*0.70 = 22.4 x 60 mins = 1,344 minutes

Tobacco intervention

30 min per person for the brief intervention

Staff time to prescribe varenicline or bupropion or NRT patches: 7 mins

For 100 people in the Severe Group the breakdown for the Tobacco Intervention is based on:

- 37% receive brief intervention of 30 mins only
- 55% receive brief intervention of 30 minutes and NRT patches 3 for months
- 7.71 % receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months.
- 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months.

% receiving intervention medication	medication	duration covered by this prescribing (days)	tablets/ patches used over period	doses per day	average no. of doses per person
A	B	C	D	E = D / C	F = A* C * E
55%	NRT patches	90	90	1.0000	49.500
7.71%	bupropion/Zyban 1	16	29	1.8125	2.2359
7.71%	bupropion/Zyban 2	45	90	2.0000	6.9390
7.71%	bupropion/ZYBAN	61	119	1.9508	9.1749
0.29%	varenicline/Champix 1a	14	25	1.7857	0.0725
0.29%	varenicline/Champix 1b	14	28	2.0000	0.0812
0.29%	varenicline/Champix 2	28	56	2.0000	0.1624
0.29%	varenicline/Champix 3	28	56	2.0000	0.1624
0.29%	varenicline/CHAMPIX	84	165	1.9643	0.4785

12 x 60 min (PHC worker)

Return to Country

180 min (20% of clients) = 36 min

2 x 60 min transport (70% of clients) = 2*0.70 = 1.4*0.20 = 0.28 x 60 min = 16.8 min

Ongoing care

12 x 90 min group counselling (assume 2 staff and 8 participants per group) therefore $2 \times 12 = 24$ (24 x 90 min group counselling)

12 x 60 min 1:1 counselling

24 x 2 x 60 min transport (70% of clients) = $48 \times .70 = 33.6 \times 60 \text{ mins} = 2,016 \text{ minutes}$

Assertive follow up

12 x 60 mins face to face visit

12 x 2 x 60 mins transport (70% of clients) = $24 \times 0.70 = 16.8 \times 60 \text{ mins} = 1,008 \text{ minutes}$

Total transport = $2.8 + 11.2 + 35 + 22.4 + 33.6 + 16.8 = 121.8 \times 60 \text{ mins} = 7,308 \text{ minutes}$

Total intervention cost: \$19,110

Residential Rehabilitation – 13 week stay

Assessment

2 x 75 min clinical assessment

2 x 30 min complex case conference

1 x 60 min transfer/referral of care/follow up

2 x 2 x 60 min transport (70% of clients) = $2.8 \times 60 \text{ mins} = 168 \text{ minutes}$

Withdrawal Management

1 x 30 min development of care plan

1 x 15 min assessment (intake)

1 x 75 min assessment

1 x 45 min medical assessment

1 x 40 min dispensing per patient

5 x 90 min group sessions (assume 2 staff and 5 participants per group) (therefore $5 \times 2 = 10$)

5 x 30 min reviews nursing

2 x 15 min medical review

2 x 60 min discharge planning sessions

2 x 30 min referral /transfer of care / follow up

(eg 1 x 30 min for discharge, 1 x 30 min phone calls)

1 x bed cost for family member/ support person (50% of clients): therefore add 0.5 to RR1

Residential Rehabilitation overnight bed component in column AQ.

For the FTE (2 staff instead of 1) – this is changed in the parameters work sheet of DASP Model in bed based staffing overnight RR1 change from 0.05 to (1 in 20) to 0.1 (1 in 10); in the bed based staffing overnight DT change from 0.26 staff per detox bed (1 in 5) to 0.4 (1 in 2.5).

2 x 60 min transport (70% of clients) = $1.4 \times 60 \text{ mins} = 84 \text{ minutes}$

25 days of Outpatient support and Preadmission

1 x 120 min of incoming telephone calls

1 x 90 min telephone assessment (legal, health)

1 x 90 min face to face assessment (local) 20%

1 x 30 min travel (worker) 20%
 2 x 60 min administration regarding admission
 2 x 90 min worker liaison with government agencies eg Centrelink, Department of Housing

Admission

4 x 60 min total admission time which includes:
 Orientation, check/search, urinary drug screen
 1 x 60 min transport (70% of clients) = $0.70 \times 60 \text{ mins} = 42 \text{ minutes}$

Urinary Drug Screen

1 x 20 min UDS

Week 1 and 2 of program

2 x 12 x 90 min group therapy (assume 2 staff and 13 participants per group) (therefore 12 x 2)
 2 x 10 x 90 min group psycho education (assume 2 staff and 13 participants per group) (therefore 10 x 2)
 2 x 2 x 60 min 1:1 counselling
 2 x 3 x 60 min care planning (history taking, genograms, psychometric testing, collection/entry)
 2 x 5 x 120 min psychosocial activity (work and recreation) (assume 2 staff and 8 participants) (therefore 5 x 2)
 2 x 20 min routine review
 2 x 90 min family engagement (family days)
 2 x 17 x 90 min peer support activity (assume 2 staff and 15 participants) (specific cultural engagement activity, (cultural processes and Aboriginal ways of working are immersed within Aboriginal services and their programs) (therefore 17 x 2)
 2 x 1 x 90 min medical care/ clinical/dental/legal intervention
 2 x 1 x 5 min drug screening
 2 x 2 x 60 min transport (medical/clinical/legal appointments) (70% of clients) = $2.8 \times 60 \text{ mins} = 168 \text{ minutes}$
 2 x 1 x 60 min transport (family/community days and cultural days) (applies to 30%) = $0.6 \times 60 \text{ mins} = 36 \text{ minutes}$
 2 x 3 x 60 min crisis/trauma management (clients and staff)(applies to 20%)
 Overnight staffing per place (assume 2 staff and 20 residents)
 For the FTE (2 staff instead of 1) – this is changed in the parameters work sheet of DASP Model in bed based staffing overnight RR1 change from 0.05 to (1 in 20) to 0.1 (1 in 10); in the bed based staffing overnight DT change from 0.26 staff per detox bed (1 in 5) to 0.4 (1 in 2.5).

Weeks 3, 4, 5, and 6 of program

2 x 2 x 60 min court support (2 x court visits in 3 months 20% of clients, court reports 60% of clients)
 4 x 1 x 90 min family engagement
 4 x 10 x 90 min group therapy (assume 2 staff and 13 participants per group) (therefore 10 x 2)
 4 x 10 x 90 min group psycho education (assume 2 staff and 13 participants per group) (therefore 10 x 2)
 4 x 2 x 60 min 1:1 counselling
 4 x 1 x 75 min care/treatment planning (relapse prevention)
 4 x 15 x 120 min psychosocial activity (work and recreation) (assume 2 staff and 8 participants)

4 x 1 x 40 min routine review
 4 x 17 x 90 min peer support activity (assume 2 staff and 15 participants) (specific cultural engagement activity (cultural processes and Aboriginal ways of working are immersed within Aboriginal services and their programs) (therefore 17 x 2)
 4 x 1 x 60 min medical/legal consultation (off site)
 4 x 1 x 60 min transport (clinical, legal) (70% of clients) = 2.8 x 60 mins = 168 minutes
 2 x 2 x 60 transport (family/community days and cultural days) (30% of clients) = 1.2 x 60 mins = 72 minutes
 Overnight staffing per place (assume 2 staff and 20 residents)
 For the FTE (2 staff instead of 1) – this is changed in the parameters work sheet of DASP Model in bed based staffing overnight RR1 change from 0.05 to (1 in 20) to 0.1 (1 in 10); in the bed based staffing overnight DT change from 0.26 staff per detox bed (1 in 5) to 0.4 (1 in 2.5).

Weeks 7 and 8 of program

2 x 1 x 90 min family engagement
 2 x 5 x 90 min group therapy (assume 2 staff and 13 participants per group) (therefore 5 x 2)
 2 x 10 x 90 min group psycho education (assume 2 staff and 13 participants per group) (therefore 10 x 2)
 2 x 2 x 60 min 1:1 counselling
 2 x 2 x 75 min care/treatment planning
 2 x 15 x 120 min psychosocial activity (work and recreation) (assume 2 staff and 8 participants) (therefore 15 x 2)
 2 x 1 x 40 min routine review
 2 x 17 x 90 min peer support activity (assume 2 staff and 15 participants) specific cultural engagement activity (cultural processes and Aboriginal ways of working are immersed within Aboriginal services and their programs) (therefore 17 x 2)
 2 x 1 x 60 min transport (clinical, legal) appointments (70% of clients) = 1.4 x 60 mins = 84 minutes
 1 x 2 x 60 min transport for Family/community days and cultural days (30% of clients) = 0.6 x 60 mins = 36 minutes
 2 x 2 x 20 min medical/legal consultation (off site)
 1 x 60 min housing preparation for end of program; transport
 Overnight staffing per place (assume 2 staff and 20 residents)

For the FTE (2 staff instead of 1) – this is changed in the parameters work sheet of DASP Model in bed based staffing overnight RR1 change from 0.05 to (1 in 20) to 0.1 (1 in 10); in the bed based staffing overnight DT change from 0.26 staff per detox bed (1 in 5) to 0.4 (1 in 2.5).

Vocational Education, Training and Employment (VETE)

2 x 90 min x 8 weeks writing CV, mock interviews, attending TAFE (trade), pre-employment training
 5 x 4 hours per week x 8 weeks active on the job learning

Weeks 9, 10, 12, 12 and 13 of treatment

5 x 1 x 90 min family engagement
 5 x 10 x 90 min group therapy (assume 2 staff and 13 participants per group) (therefore 10 x 2)
 5 x 10 x 90 min group psycho education (assume 2 staff and 13 participants per group) (therefore 10 x 2)
 5 x 2 x 60 min 1:1 counselling

5 x 1 x 75 min care planning
 5 x 15 x 120 min psychosocial activity (work and recreation) (assume 2 staff and 8 participants)
 (therefore 15 x 2)

5 x 1 x 40 min routine review
 5 x 17 x 90 min peer support activity (assume 2 staff and 15 participants)
 5 x 1 x 40 min medical consultation
 Overnight staffing per place (assume 2 staff and 20 residents)

For the FTE (2 staff instead of 1) – this is changed in the parameters work sheet of DASP Model in bed based staffing overnight RR1 change from 0.05 to (1 in 20) to 0.1 (1 in 10); in the bed based staffing overnight DT change from 0.26 staff per detox bed (1 in 5) to 0.4 (1 in 2.5).

Discharge and transfer of care

2 x 60 min total discharge/ transfer of care time which includes:
 Exit survey, exit pack
 1 x 60 min transport (70% of clients) = .70 x 60 mins = 42 minutes

Start 13 weeks ongoing care – in community or in transitional accommodation

6 x 60 mins FACS family/child restorative programs

12 x 4 x 60 min specific group cultural engagement activity (2 staff and 15 participants) (therefore 12 x 2)

6 x 2 x 60 min transport (family/community days and cultural days) (30% of clients) = 3.6 x 60 mins = 216 minutes

13 x 30 min case management
 12 x 1 x 60 min transport (clinical, legal appointments) (70% of clients) = 8.4 x 60 mins = 504 minutes

13 x 30 relapse prevention/ budgeting skills
 13 x 75 min 1:1 counselling
 13 x 90 min group counselling (assume 2 staff and 10 participants per group) (therefore 13 x 2)
 13 x 60 mins pre- employment training (assume 1 staff: 1 participant)
 13 weeks of Exit Program/Out client in community
 13 x 90 min group counselling (assume 2 staff and 5 participants per group) (therefore 13 x 2)
 13 x 30 min 1:1 counselling
 13 x 20 min case management
 26 x 2 x 60 min transport (70% of clients) = 36.4 x 60 mins = 2,184 minutes

For transitional accommodation clients: applies to 35% of clients: 12 x 7 nights accommodation (at bed-day rate): therefore add 0.35 to RR1 Residential Rehabilitation overnight bed component in column AQ.

Tobacco intervention

30 min per person for the brief intervention
 Staff time to prescribe varenicline or bupropion or NRT patches: 7 min

For 100 people in the Severe Group the breakdown for the Tobacco Intervention is based on:

- 37% receive brief intervention of 30 mins only

- 55% receive brief intervention of 30 minutes and NRT patches 3 for months
- 7.71 % receive 30 mins of brief intervention and varenicline (Champix- TM) for 3 months.
- 0.29% receives 30 mins of brief intervention and bupropion (Zyban- TM) for 2 months.

% receiving intervention medication	medication	duration covered by this prescribing (days)	tablets/ patches used over period	doses per day	average no. of doses per person
A	B	C	D	E = D / C	F = A* C * E
55%	NRT patches	90	90	1.0000	49.500
7.71%	bupropion/Zyban 1	16	29	1.8125	2.2359
7.71%	bupropion/Zyban 2	45	90	2.0000	6.9390
7.71%	bupropion/ZYBAN	61	119	1.9508	9.1749
0.29%	varenicline/Champix 1a	14	25	1.7857	0.0725
0.29%	varenicline/Champix 1b	14	28	2.0000	0.0812
0.29%	varenicline/Champix 2	28	56	2.0000	0.1624
0.29%	varenicline/Champix 3	28	56	2.0000	0.1624
0.29%	varenicline/CHAMPIX	84	165	1.9643	0.4785

Return to Country

180 min (20% of clients) = 36 min

2 x 60 min transport (70% of clients) = 2*070= 1.4*0.20 = 0.28 x 60 min = 16.8 min

Assertive Follow-up

12 x 60 mins face to face visit

12 x 2 x 60 mins transport (70% of clients) = 16.8 x 60 mins = 1,008 minutes

Total transport: 2.8 + 1.4 + 0.70 + 2.8 + 0.6 + 2.8 + 1.2 + 1.4 + 0.6 + 0.7 + 3.6 + 8.4 + 36.4 + 16.8 = 80.2 (therefore 80.2 x 60 minutes = 4,812 minutes).

Total cost: \$59,009

APPENDIX 7: TRAINING AND WORKFORCE DEVELOPMENT COSTS

We used public information about training costs to derive average costs for mainstream services to engage in the training and workforce development. A number of different cultural awareness and cultural competency training programs are listed on the Australian Indigenous HealthInfoNet (<http://www.healthinfonet.ecu.edu.au/key-resources/courses-training>). We took the costs from this site, with advice from the EAG about which programs were well regarded.

Cultural awareness training

Name of training program	Length of program	Cost per agency (assume 20 staff to be trained)
Aboriginal Health College	Not specified	\$7,000
Bundiyarra	1 day	\$330.00 x 20 = \$6,600
Indigenous Cultural Awareness Training Kangan Institute	1 day	\$2,000

It appears that on average cultural awareness training takes one day and the cost per agency (assuming 20 staff to be trained) ranges between \$2,000 and \$7,000. We took an average of \$4,500.

Cultural competency training

The same method was followed for the costs of cultural competency training.

Name of training program	Length of program	Cost per agency
CSD culturally speaking	2 days	\$895 x 20 = \$17,900
MH and suicide PREVENTION courses (Indig Psych Services) Tracey Westerman		\$1650 or \$1250 per person X 20 = \$33,000
Marumali for non-Aboriginal service providers	2 days	\$2,250 (per person) x 20 = \$45,000
Poche Centre, Flinders University	3 days	\$1200 (2012 prices) per person X 20 = \$24,000
Working together: journey towards cultural competence: Australian Indigenous Psychological Association	unspecified	No cost data available

An average of \$30,000 was used as the main estimate for the costs of cultural competence training per organisation, per annum.