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Yellow Gum Healing

A pilot study of adapted ACE program in an Aboriginal drug and alcohol rehabilitation centre

July 2023

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Background

Aboriginal and Torres Strait Islander people in Australia experience a disproportionate amount of harms linked to the use of alcohol, tobacco and illicit substances. Alcohol use contributes significantly to higher rates of poor mental health, hospitalisation and mortality among Aboriginal people compared with non-Indigenous Australians while substance use is associated with increased risk of suicide, hepatitis C and social issues linked to incarceration, violence and harms to children and families.[1,2]

Higher levels of harm reflect the social disadvantage that many Aboriginal people face and are both a consequence of social determinants of health and a social determinate themselves.[3]

The increased risk of developing dependence on alcohol for Aboriginal people is linked to experiences of colonisation and ongoing trauma. Aboriginal communities are aware of the impacts of alcohol, yet face barriers to seeking help, such as stigma and lack of culturally appropriate treatments.[4]

A review of cannabis use among Aboriginal people highlighted the sociocultural context of substance use as an important factor. Entrenched racism, loss of connection to land and language, and colonisation expose Aboriginal people to social disadvantages that can be associated with substance use. Protective factors for Aboriginal people included positive role models and cultural connections.[5]

Research shows that around 50% of people seeking treatment for alcohol and other drugs (AOD) issues have cognitive impairment.[6] While there has been little research into cognitive impairment in the Aboriginal population, it is established Aboriginal people experience known risk factors such as head injuries, trauma, social disadvantage and comorbidities like high-risk alcohol use and depression.[7] For example, although national-level data on the prevalence of dementia in the Aboriginal population is lacking, some smaller studies have found higher rates of dementia in some Aboriginal populations. One study found the rate of dementia among Aboriginal people aged 60 years and older who lived in urban and regional areas was three times higher than for all Australians.[8]

What is the Alcohol and Drug Cognitive Enhancement (ACE) program?

The Alcohol and Drug Cognitive Enhancement (ACE) program is an evidence-based suite of tools and resources designed for use in alcohol and other drug treatment settings. The suite includes:

- a screening tool to identify people at risk of cognitive impairment
- an assessment tool to identify cognitive impairment
- brief intervention resources for clinicians and clients
- videos to guide implementation
- cognitive remediation group program, manuals and guides.

ACE is a 12-module, 12-hour program that runs over a six-week period. It is designed to improve cognitive functioning, particularly executive functioning (EF), in clients seeking treatment for AOD issues. EF primarily includes functions such as memory, attention, planning and goal setting; problem-solving; and emotional regulation. These are necessary skills for daily life and important to effectively engage in drug and alcohol treatment.

When did the ACE program begin?

The ACE program has been in the making since 2010. It began as a single research project at the WHOS Residential Rehabilitation with involvement from the Advanced Neuropsychological Treatment Services (ANTS) and the University of Wollongong. This led to multiple research projects, involving hundreds of clients across government and non-government residential and non-residential AOD treatment services.

During 2018 and 2019, the Agency for Clinical Innovation (ACI) Drug and Alcohol Network undertook a stepped wedge cluster randomised study with 527 participants across 10 sites in NSW to test the ACE program. In this trial, 14% of participants identified as Aboriginal. The primary measures tested were cognitive functioning and treatment retention.[9]

Baseline cognitive testing revealed that over half (53%) of participants had cognitive impairment, with 40% experiencing moderate to severe impairment.[9]

It is well known that a strong predictor of outcome is retention in treatment, with longer lengths of stay predicting improved treatment outcomes.[10] The results revealed that those who completed the ACE program demonstrated a statistically significant and clinically relevant reduction in EF impairment, from 53% to 27%. Furthermore, participant completion rates for a facility that adopted the ACE program were 2.43 times higher than for those that did not.

Following the success of the trial, the ACE program was recommended to be implemented across NSW AOD treatment services as an adjunct treatment. Another recommendation was a feasibility study with Aboriginal populations.

Feasibility pilot – Yellow Gum Healing

To assess the cultural appropriateness and safety of the ACE program for Aboriginal populations, a feasibility pilot study called 'Yellow Gum Healing' was undertaken in partnership with The Glen, an Aboriginal AOD residential treatment facility on the Central Coast of NSW. It should be noted the feasibility pilot was conducted with a male-only client group, feedback was provided by the only male cultural advisor, participants were both Aboriginal and non-Aboriginal and cultural adaptations were made for a particular geographical area. The study was conducted between May and June 2019 and evaluated on completion.

The Glen

The Glen (at the time of the pilot) was a 35-bed male-only residential treatment facility located on the Central Coast of NSW. Its program is based on Indigenous values and spirituality with an emphasis on the individual and the consequences of the individual's choices. The Glen welcomes people from both Aboriginal and non-Aboriginal backgrounds, with around 60–70% of clients identifying as Aboriginal. The ACE program also ran as a mixed Aboriginal and non-Aboriginal group.

Aboriginal Health Impact Statement

An Aboriginal Health Impact Statement was completed to support the original ACE study design and to ensure effective partnerships, strategies and meaningful engagement with Aboriginal stakeholders and communities.

The Aboriginal Health and Medical Research Council (AHMRC) approved the plan for this study and the evaluation of feasibility at The Glen. Approval was granted contingent on the engagement of a cultural advisor to review and adapt the pilot program to ensure it was culturally safe and appropriate to deliver within an Aboriginal population. This cultural advisor, employed by The Glen, provided oversight of the implementation of the Yellow Gum Healing ACE program. The initial review of the program was done by an Aboriginal Elder.

Predicted outcomes

Culturally appropriate content was included in the ACE program hoping participants would find the program relevant and meaningful to them, enhancing their engagement with rehabilitation therapy. Enhanced engagement was expected to improve overall program completion rates, which is a key indicator of improved outcomes.

It was expected that the participating in the program would improve participants' EF and they would learn strategies to better manage their emotions, memory, attention span, ability to problem solve and ability to set goals for the future. This, in turn, was expected to increase self-esteem and self-efficacy as the clients plan for and imagine a desired future state.

Method

Co-design of the Aboriginal ACE adaptations

To ensure cultural safety and appropriateness, a co-design method was used to adapt the original ACE program. The co-design process was a collaboration between cultural advisors at The Glen and the ACI Project Team.

The program was developed iteratively, with improvements made based on the feedback that ACI received from facilitators and participants after each module.

There were various adaptations to the ACE program, including addition of Yellow Gum Healing to the program title. These adaptations were suggested by staff members from The Glen (Appendix 1).

Following adaptations were made:

- The program was renamed to 'Yellow Gum Healing'. This is a metaphor for brain regeneration and has been woven throughout the program
- A smoking ceremony was held at program commencement and conclusion
- The program commences with a walk through the bush to commence the story of Yellow Gum Healing. This symbolises looking for yellow gums required for a smoking ceremony

- In the ’three stomps’, analogy of walking through the bush to deter snakes has been embedded. This activity symbolises the three elements of EF:
  - First stomp – how past experiences influence our reptilian brain reactions (e.g. fight or flight)
  - Second stomp – what we choose to do in the present moment based on emotion (our mammalian brain)
  - Third stomp – our future brain. By thinking about our future, we can influence the choices we make in the present moment
- Aboriginal artwork of yellow gum images was commissioned (see Appendix 2)
- Yarning circles were adopted to facilitate learning
- Local traditional tempting food was used for some of the activities
- References to Mother Earth were included throughout
- Culturally relevant case studies were included
- Rugby league sporting references (in particular, the Koori Knockout Challenge) were incorporated into this program.

ACI implementation support

An Aboriginal male facilitator and a non-Indigenous female facilitator from The Glen ran the program for modules one to six, then due to leave arrangements, a second male facilitator co-facilitated the remainder of the program with the original Aboriginal male facilitator.

To maintain fidelity to the original ACE program and ensure staff capability, an ACI implementation manager provided a tailored package of support for the program co-facilitators throughout the pilot. The implementation support package was based on the successful approach used for the original ACE program study. It included:

- two-day ACE facilitator training course (for the original ACE program) in Sydney
- initial site visits by ACI to The Glen before implementation to assess readiness
- provision of a suite of resources required to deliver the program
- twice weekly phone or videoconference meetings with program facilitators to provide:
  - coaching
  - troubleshooting
  - assist in preparation for delivery of the program
  - post program debrief
  - program feedback to incorporate as iterative adaptations
- financial support of $10,000 to backfill the facilitators and fund the Cultural Advisor position.

Evaluation

A program logic diagram (Appendix 3) was developed and amended over the lifetime of the project. This underpinned the evaluation plan (Appendix 4) and was endorsed by the ACE Project Steering Committee, as well as the Aboriginal cultural advisor and Aboriginal group program facilitator.

Five key questions underpinned the evaluation:

1. How feasible was it to deliver the Yellow Gum Healing ACE program in an Aboriginal AOD centre?
2. What level of fidelity was there to the original ACE program?
3. Did the adaptations to the ACE program ensure cultural safety?
4. How scalable is the Yellow Gum Healing ACE program?
5. To what extent was the program effective?

Participants

Before enrolling in the Yellow Gum Healing program, participants attended an information session to ensure they provided informed consent. Seventeen male clients at The Glen gave consent to participate in and complete the program and evaluation (completing a pre- and post-program interview, self-reported questionnaire, cognitive assessment measures and post-program focus group with the researchers).

Researchers

The researchers for the evaluation were two male Aboriginal employees independent from the ACE program and Yellow Gum Healing ACE program development. This was recommended by the Cultural Advisors who felt this would be crucial in providing a sense of cultural safety. One of the Aboriginal male ACI employees also completed the post-program interviews and focus groups with both the group facilitators and participants.

Evaluation methods

Information collated to evaluate the Yellow Gum Healing ACE program was obtained through structured activities with participants and program facilitators. These activities included:

Facilitators debrief sessions (post module)

After each module, the ACI implementation manager led a de-brief with the facilitators. This provided an opportunity to:

- document any feedback or issues (for the ACI to action)
- provide coaching support to facilitators on implementation and module delivery.

Facilitator evaluation form (post session)

After each session, facilitators completed a session evaluation form to document:

- what they felt they did well
- what they felt they could improve for the next session
- suggestions for improving program adaptations
- their perception of the cultural safety of the module
- how confident they felt to deliver the session (via a 5-point rating scale).

Facilitator interviews (post program)

On completion of the program, the independent researchers held interviews with the program facilitators to understand:

- the acceptability and effectiveness of the Yellow Gum Healing ACE program
- implementation feasibility and long-term sustainability of the program.

Focus groups and interviews (post program)

At the end of the program, participants who finished the program were invited to participate in a focus group (with the researchers, facilitators and cultural advisor) and 1:1 interview with one of the independent researchers. The purpose of the focus groups and interviews was to understand:

- if the adaptations were culturally acceptable, relatable and appropriate
- to what extent the clients felt engaged in the program
- if and how participants were able to use or integrate the strategies learnt during the program in their daily lives.

Participant feedback (post module)

After each module, participants provided anonymous feedback via Group Session Rating Scales (GSRS). These surveys assisted facilitators to adjust their delivery of the modules by understanding:

- the overall engagement level of participants
- how culturally safe participants felt after each session.

Quantitative measures

The following standardised self-report measures were administered pre and post intervention:

- Behavior Rating Inventory of Executive Function – Adult version Global Executive Composite (BRIEF-A GEC)
- PROMIS General Life Satisfaction – Short Form 5a (GLS)
- PROMIS Meaning and Purpose – Short Form 8a (MAP)
- PROMIS General Self-Efficacy – Short Form 4a (GSE)
- PROMIS Cognitive Function – Short Form 6a (CF).

In the absence of any validated Aboriginal-specific patient-reported outcome measures , PROMIS and BRIEF-A GEC were selected as these tools are validated and have standardised reporting measures.

Evaluation measures

Qualitative and quantitative information was gathered throughout and on completion of the Yellow Gum Healing ACE program. This information informed the five key evaluation questions. The list of sub-questions related to each key evaluation question can be found in Appendix 5.

Table 1 outlines the sources for each of the five key evaluation questions.

Table 1. Sources for key evaluation questions

Evaluation question	Evaluation method	Evaluation measure(s)
1. **Feasibility** ***How feasible was it to deliver the Yellow Gum Healing program in an Aboriginal AOD centre?***	• Facilitator evaluation forms on completion of each program module • Weekly debrief sessions between the facilitator and ACI implementation lead • Facilitator interview post program completion with independent researchers	• Descriptive
2. **Fidelity** ***What level of fidelity was there to the original ACE Program?***	• Facilitator evaluation forms on completion of each program module • Weekly debrief sessions between the facilitator and ACI implementation lead	• Evaluative • Evaluated as: low, medium or high fidelity
3. **Cultural safety** ***Did the adaptations to the ACE program ensure cultural safety?***	• 1:1 client interview post-program completion with independent researchers • Focus group with participants post program completion • Weekly debrief sessions between the facilitator and ACI implementation lead • Facilitator interview post program completion with independent researchers	• CATSiNAM developed a cultural safety rubric with a rating scale: low, moderate, high (appendix 4)
4. **Scalability** ***How scalable is the Yellow Gum Healing program?***	• Review of final resources by Aboriginal cultural advisors • Facilitator interview post program completion with independent researchers	• Descriptive
5. **Program effectiveness*** ***To what extent was the program effective?***	• Pre- and post-program questionnaires completed by participants (outcome measures) • 1:1 client interview post program completion with independent researchers (qualitative)	Outcome measures: BRIEF-A GEC, GLS, MAP, GSE, CF • BRIEF-A-75 scale (cognitive impairment international scale)

	• Focus group with participants post program completion (qualitative)	• PROMIS29 (quality of life) • ATOP (Australian Treatment Outcomes Profile) Drug and Alcohol (pre-program only) • Drug and Alcohol Cognitive Impairment Screening Tool (pre-program only) Descriptive information gathered from interviews and focus groups.

CATSiNAM - Congress of Aboriginal and Torres Strait Islander Nurses and Midwives.

* As the size of the cohort of Aboriginal clients who participated in the original ACE was small, stepped wedge randomised cluster study was analysed to better understand the program effectiveness for Aboriginal clients.

Results

Qualitative analysis

The transcripts of the interviews (1:1 with 2 group program facilitators and 17 participants) and focus groups (with program facilitators and participants together) were entered into an NVivo program for qualitative analysis and identification of themes pertaining to the evaluation questions. This task was completed by an Aboriginal staff member. A hybrid of inductive and deductive theory was used to undertake the qualitative analysis as well as application of grounded theory.

Clients reported positive changes in their approach to daily life from participating in the Yellow Gum Healing ACE program.

The other day I had to sign up for community services and I found my posture was very upright and I feel like I've been able to do that, and it helped me make eye contact and my focus. I haven't heard posture spoken about since I was in primary school. So that's something that when I went back and I was in that classroom environment, I felt like my posture was important and it helped me pay more attention to everything that I was taking in.

A recurrent theme that emerged as a challenge to implementation of the program was the lack of time participants felt they had to process their new knowledge within the day-to-day busy schedule of The Glen centre. Participants reported that having more time and space to process the program between the modules would have provided greater opportunity to complete the 'brainwork' or homework, which is a significant part of the program requiring completion in participants' own time.

From the interview and focus group findings, the adapted Yellow Gum Healing ACE program demonstrated a significant benefit to the participants by applying strategies they learned in the program to their daily lives. When asked to provide examples, one participant said:

“...yeah like your goal setting. When I’m waking up and even the night before or in the morning, I just list a set of goals to achieve throughout the day.”

Participants were able to relay examples of how the program had changed the way they reacted to situations from what they had learnt about the functions of the brain and described how they integrated the strategies learnt. One participant recalled applying the ‘Stop and Think’ strategy, which relates to using the ‘inhibitor’, one of the executive functions of the brain:

“I’d always be the first putting my hand up, thinking I knew everything when now, I think a lot more before I say something.”

Quantitative data and analysis

Baseline and follow-up dataset was complete for only five participants (out of 17). Given the small sample size, effect sizes are provided to examine limited efficacy, rather than null hypothesis significance testing.

Average age of participants was 29.8 years, and all participants were male and Australian born, except for one who was born in New Zealand. Four participants identified as Aboriginal or Torres Strait Islander. English was the first language of all participants. One participant was in a de facto relationship while the rest were single. Participants were in treatment for an average of 51.6 days (42.7; range 14–105).

Main substances of use were methamphetamine/MDMA/opiates, methamphetamine/alcohol, MDMA/cocaine/ketamine, methamphetamine/heroin and alcohol, respectively. The average age of onset of polysubstance use was 15.6 years.

All participants reported a history of mental health diagnoses, with all reporting a history of depression, four reporting a history of anxiety, three reporting a history of post-traumatic stress disorder and three reporting a history of psychosis. Three participants had received pharmacological treatment for a mental health condition and four had undergone counselling.

Mean baseline ACE Screening Questionnaire score was 5 (2.6), with four participants screening positive for cognitive impairment risk on this tool. Baseline T-scores for the GLS, MAP, GSE and CF were 38.5 (9.5), 42.8 (9.4), 42.2 (7.4) and 35.7 (8.9), respectively. Mean BRIEF-A GEC was 68.2 (15.3).

There was a large effect size for a reduction in BRIEF-A GEC T-scores (Cohen’s d = -1.1). Similarly, there were large effects for all other quantitative outcome measures: GLS (Cohen’s d = 1.3), MAP (Cohen’s d = 0.95), GSE (Cohen’s d = 0.96) and CF (Cohen’s d = 0.84).

Discussion

Utilisation of the ACE Screening Questionnaire found 80% of participants screened positive for cognitive impairment risk (noting the small sample size of n=5). In comparison, ACE Screening Questionnaire results from the initial study completed over 2018–2019 revealed that over half (53%) of participants were found to have cognitive impairment.

Both clients and facilitators mentioned time pressures related to participating in and running the ACE Yellow Gum Healing program, specifically related to the busy daily schedule at The Glen. Facilitators mentioned at times clients with lower literacy levels struggled with homework and writing tasks.

Consideration may be required to ensure clients have sufficient time to reflect on learnings and complete required homework activities. Further alterations to writing tasks and homework could be considered.

Facilitator feedback was that the metaphor Yellow Gum Healing worked well and it 'sets the tone' and clients could relate to examples used such as walking through the bush. Feedback from the Cultural Advisor noted that cultural adaptations were developed for a male-only client group and feedback on the program was from male cultural advisors. Feedback was positive in that adaptations could translate across area/nations, meaning scalability of the program is feasible.

Conclusion

The aim of the Yellow Glen Healing ACE program feasibility pilot was to develop an adapted ACE program that was culturally appropriate and acceptable for Aboriginal populations, test the delivery of this program and provide recommendations for delivering ACE within Aboriginal populations across NSW.

Through working together collaboratively and respectfully, an authentic partnership was developed over time between the ACI project team and the team at The Glen, which enabled the co-design and implementation of a culturally adapted, appropriate and effective version of the ACE program for this local context, with participants stating *"It was a good program. I enjoyed it"* and *"I looked forward to it every time I was doing this"*. After the feasibility pilot, the program has continued to be successfully delivered by The Glen.

For scale up and spread of this program, it is expected that further adaptations to the ACE program will be required, to recognise the centrality of culture to health and wellbeing. The Yellow Gum Healing ACE program adaptation provides a model that can be used by other services to adapt the ACE resources in a way that reflects their local nation and culture.

Both the research and this feasibility pilot highlight the importance of programs being developed in partnership with the Aboriginal community to ensure treatment options are appropriate and cultural values are incorporated.[4,5] Consideration could be given to further exploration of the use of patient-reported measures in addition to the use of ATOP (Australian Treatment Outcomes Profile) for drug and alcohol.

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Appendices

Appendix 1: Adaptations made to ACE program for Aboriginal Yellow Gum Healing

Overall adaptations

- Smoking ceremony using Yellow Gum leaves at start of program
- Yellow Gum metaphor for the brain regeneration
- Yarning circles
- Use of storytelling; a way for participants to go on a journey through storytelling in a way they could understand
- Walks through the bush
- References to Mother Earth throughout the program
- Use of culturally relevant examples and case studies, e.g. sporting examples
- Design of artwork - Yellow Gum

Changes to modules and reference to slide number for PowerPoint presentations:

Module 1: (slide 19)

The Three Brains: some of the old fellas in the bush would stomp on the ground three times to vibrate the ground to let the snakes know they are there to give the snakes time to move.

1. Walking through the bush looking for Yellow Gum - scanning risks of **right now.**
2. Walking through the bush looking for Yellow Gum - scanning risks of **right now** and nearly got bitten by snake last time walking in the bush **Past.**
3. Walking through the bush looking for Yellow Gum - Scanning risks of **right now** and nearly got bitten by snake last time walking in the bush; **Past** and plan not to get bitten in the **Future.**

1) Reptilian brain - Present
2) Limbic System - Past
3) Neocortex - Future

Module 2: (slide 5)

Learning and Memory: Aboriginals would tell stories to remember things of what has happened, what others did and then looked at how we used these stories to help us in the future.

- Automatic Memory/ Past- Snake
- Episodic Memory/ present- scanning for risks
- Prospective Memory/ Future- Finding Yellow Gum

Same analogy with walking through the bush looking for Yellow Gum

Module 3: (slide 129)

Attention: Walking in the bush looking for yellow gum whilst looking out for snakes scenario could be used for this module

- Focus Attention - Be sure to look out for snakes
- Sustained Attention - focusing on scanning for snakes etc.
- Attention span- scanning for snakes

Divided Attention - Walking through the bush to find Yellow Gum and being conscious of snakes and being aware of other nasties, even remembering where to go etc.

Module 4: (slide 15)

Introduction to Executive Function: General discussion

- What are the Executive Functions?
- What does a group of Elders do in a community?
- What does a team of trainers on a football team do?

Module 5:
Introduction to Executive Functions II

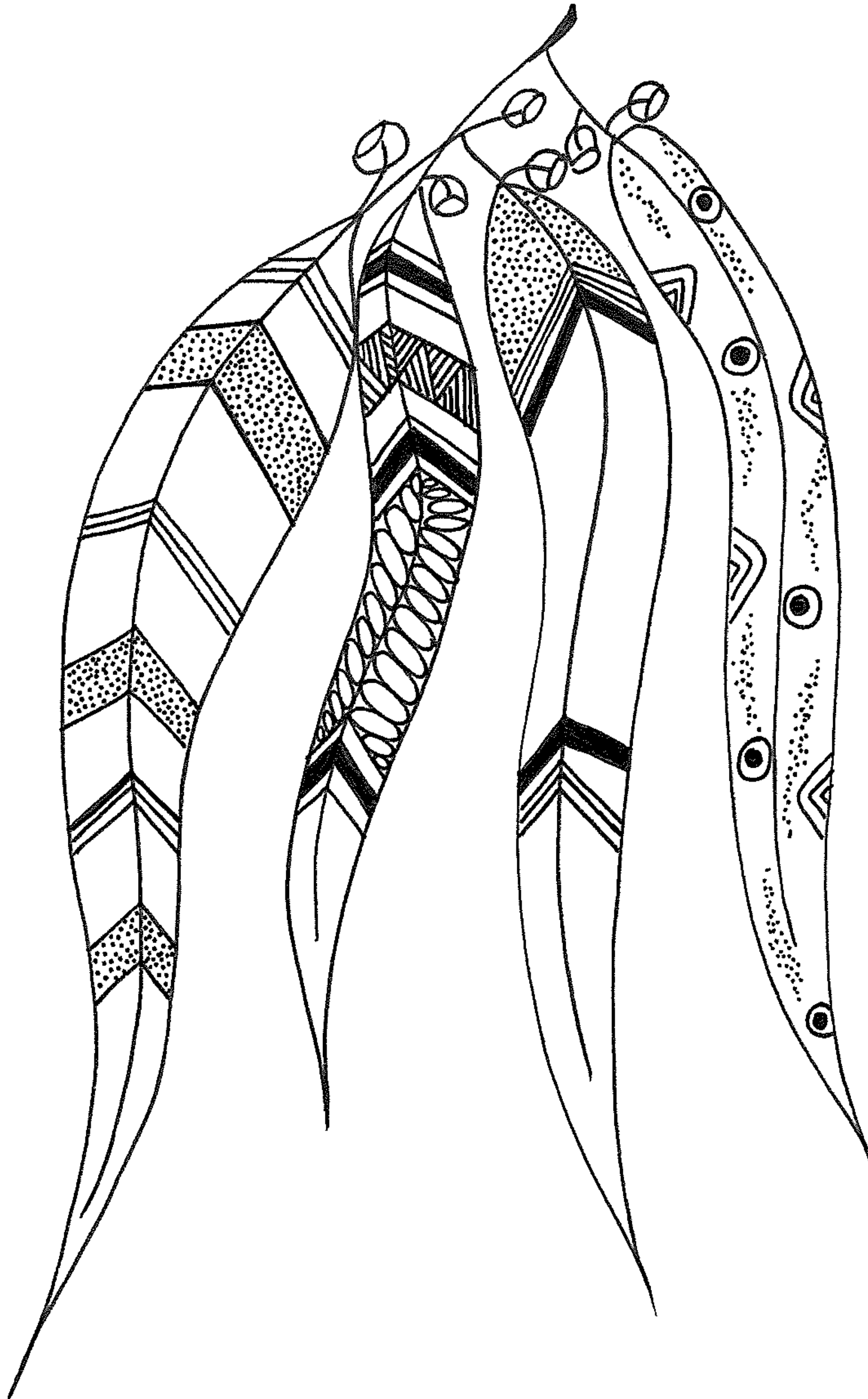
- Slide 10 - Use analogy of Father meeting Mother on horizon
- Slide 17- Elders in the community

Module 6-11:
Module 6 (slide 16)

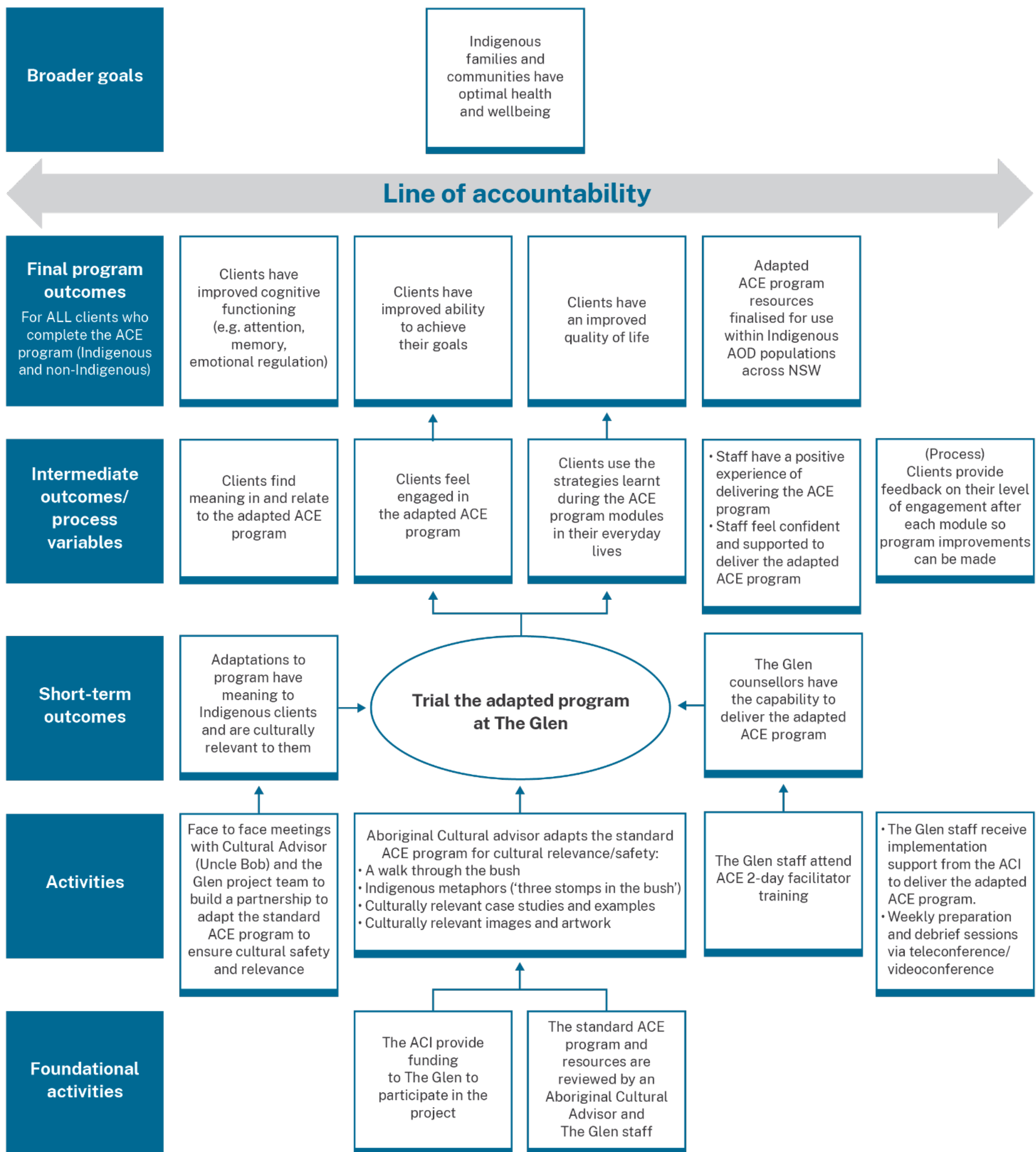
1. Walking through the bush looking for Yellow Gum - scanning risks of right now.
2. Walking through the bush looking for Yellow Gum - scanning risks of right now and nearly got bitten by snake last time walking in the bush - Past
4. Walking through the bush looking for Yellow Gum - Scanning risks of **right now** and nearly got bitten walking in the bush Past and plan not to get bitten in the Future.

1) Reptilian brain - Present
2) Limbic System - Past
3) Neocortex - Future

Appendix 2: Artwork



Appendix 3: Program logic



Appendix 4: Evaluation plan and matrix

KEY	Data sources	Responsibility for collection	Method of Collection	Analysis	Any ethical issues?	Comments
1. PROGRAM EFFECTIVENESS: a. To what extent did we realise the program outcomes? (evaluative) b. What changes occurred in terms of realising the intended effects? (descriptive) c. How did these changes vary for indigenous and non-indigenous clients (if at all)? (Descriptive) d. Why did the changes occur? (Causal)	**PRE/POST PROGRAM QUESTIONS:** - BREIF – A – 75 item scale (Cognitive Impairment international scale) - PROMIS29 – 23 questions related to QOL, self-esteem/ self-efficacy, positive affect selected, for question set re: patient reported outcomes. - ATOP Drug and Alcohol (Pre only) - Demographics - age, education (Pre only) - DCST – Drug and Alcohol Cognitive Impairment	**Responsibility for collection** **Pre Program:** David Follent - 2 x days to undertake interviews with participants to undertake questionnaires (both indigenous group and non-indigenous group) (30-40 min) pre and post program **Post Program Focus groups:** David Follent to run focus groups for indigenous and non – indigenous	**Pre Program:** One on one interviews + written questionnaires – assistance provided if required for those with literacy challenges **Post program:** Focus groups – 1 hour for clients Short post program survey for clients Interviews with both facilitators – 1hour	**Quantitative Analysis:** Jamie Berry will analyse the quantitative data and provide summary **Qualitative analysis:** Phil Orcher, David Follent and Antoinette Sedwell will analyse the focus group interviews using thematic analysis and coding. - **Aim to use NVivo and undertake training to do so**	1. Literacy support for clients Have a counsellor or RA to support completion 2. Clients may want an elder or someone present whilst undertaking interview – arrange with The Glen 3. Consent completed + information sheets updated. 4. The Glen and ACE S.C. to endorse evaluation plan.	**Example Questions for focus groups/interviews with clients:** How were things for you before the program? 1. Have there been any changes since being part of the program? 2. If so, what sort of changes? *3.* If not, why not? *Compared to how you were before the program –* 1. What were the things that assisted in making changes to day-to-day tasks more manageable? *4.* Could you describe days where things might be a little harder to manage?

	Screening Tool – takes 2 mins (pre-program only)	**GSRS** – collected by Chris and Gemma (program facilitators post each module) and scanned and emailed back to Megan James at ACI for evaluation and to form basis of debriefs and improvements. **Facilitators** to time each session to assess impact of any increase in module length through adding adaptations (i.e. walks in the bush/smoking ceremonies etc).	**During program:** Weekly GSRS for clients to complete + additional questions on cultural relevance and safety? Weekly facilitator evaluation forms and interviews- Megan Interview with facilitators weekly and post program **Focus groups -** run focus groups post program (1 hour) as a yarning circle, conversational *- Get consent to audio record all focus groups to be transcribed.*		5. *Debrief for RA built in to data collection schedule pre and post program to ensure RA psychological /emotional safety **	*Compared to how you were before, has this program made difference to your:* *- life skills?* *- ability to:* *-plan ahead?* *- visualise a future you want?* *- Better tolerate distractions/temptation (give examples?)* *- Pay attention and remember things? Any examples of this?* - Focus group allows the clients to discuss reflect and build on each other's thoughts

2. FEASIBILITY: **To what extent were the adaptations to the ACE program culturally relevant, meaningful to clients and appropriate?** (Evaluative) a. Do any changes if any need to be made for the clients to feel culturally safe? b. To what extent were clients engaged in the program? (evaluative) c. What enhanced engagement? (Descriptive) c. for staff and clients - How feasible was it to deliver the program with the indigenous adaptations (i.e. walks	**Engagement:** participant GSRS's collected after each session for inclusiveness/engagement/safety **Attendance sheet** /drop-out rate **Relevance:** Focus groups post program – What things in the program stood out for you? What did you relate to? What has helped you? **Facilitators delivery:** Weekly interviews with Facilitators + Facilitator	**Facilitators:** Interviews with facilitators post program by David Follent/ Megan weekly debrief delivery and elaborate on the Facilitator evaluation responses. David F. to run focus groups x 2 post program (2 groups of 10) and redo questionnaires with clients + survey on cultural safety and changes experienced/experience of the program. - Based on learnings each week from GSRS/FE's	GSRS + additional questions Focus Group for clients and interview for staff (x2) Develop questions from Facilitator Evaluations (after each module) then create focussed questions for interviews from analysis Megan – draft rubric and seek feedback – create short survey for clients post program module 12, to assess cultural safety/relevance – create focus group questions from the analysis of this survey data.			**- Seeking feedback from clients on cultural safety – 'the presence or absence of cultural safety is determined by the recipients of care not the care giver'** CULTURAL SAFETY and Cultural relevance and engagement: 3. In your words, how would you describe cultural safety? What does it 'look like' when you see it? 4. In your words, how would you describe cultural relevance and appropriateness 5. Are these the words you would use to describe these terms? 6. If not, what are the terms you use and why? Also consider that these questions will provide differing views. The interviewer should be

outside, smoking ceremony etc) (Evaluative) *d. Do any changes need to be made to implementation? (Action)* *including ACI support and resources/tools.*	Evaluations and interview post program		Create Rubric to evaluate cultural relevance and safety of program overall – high/moderate/poor/detrimental – use info gained from the focus groups/interviews to complete rubric?			open to exploring individual perceptions and where or who they may have obtained this understanding **See draft RUBRIC below* to assess the programs cultural safety, relevant and engagement - *can we give this rubric to the clients as a questionnaire, after their last module is completed OR when David does the post questionnaires with them in person??*** **In focus groups - Show the Aboriginal artwork that was included in the resources** – *What did you think of the artwork?* *What are your thoughts on using the yellow gum tree healing as a*

						metaphor for the ACE program? *What was the impact of the smoking ceremony at the beginning of the program?* *What did you think about the smoking ceremony at the beginning of the program?* *(*This is a cultural process that many people use. I am not sure why this question would be asked. Ask about the importance of a smoking ceremony. Without assuming it is standard practice, do they use them often and in what context?) **Question for the Glen staff:** Are there any other suggestions you have to modify the program or to help you deliver the program?

						How feasible was it to run the ACE Program Structure (i.e. 2 x modules a week for 1 hour x 6 weeks, with 2 x facilitators) within your current program at The Glen? What would have made it easier for you/for clients? What structure would make it sustainable?
2. FIDELITY: To what extent did the adaptations to the program remain consistent with the key learnings and key messages in the Standard Program? (Evaluative)	**Post Program** Focus Group with indigenous clients/non indigenous clients who received the adapted program	- David Follent - interview facilitators post program/ - Megan assess fidelity to standard program each week in weekly debrief Time each session to assess impact of any increase in module length through adding adaptations (i.e. walks in the bush/smoking ceremonies etc).				**Questions for The Glen Staff:** What changes did you make to any of the modules, to enhance engagement/delivery of the key message or the program?
3. **SCALABILITY:** What needs to happen to scale up and spread this program? (Action)	**Post program:** Review of the final resources by Aboriginal Advisors,	Ant/David/Phil/for key contacts who could review the final version of the adapted program to	Ask them to read/ seek feedback via interview or provide a	Information collated and assessed by Phil/David/Antoinette		Aboriginal communities are not homogenous. They are very diverse 1. How could the program resources

How might this program be scaled up and spread? (descriptive)	from ACI and from other regions Other Aboriginal rehab sites	assess for scale up /spread.	questionnaire to complete			be locally and culturally contextualised to other Aboriginal communities? 2. What would need to change? 3. *Could they be used within other Aboriginal nations or lands?*

Table to evaluate cultural safety of Aboriginal ACE program:

Rating	Cultural relevance and safety of the program – use CATSINaM definitions on cultural safety for assessment (i.e. of the adaptations)
Highly effective	All or most the examples and activities in the program were: • Relevant to me • applied to my situation • I felt comfortable with • I found meaningful • I understood
Moderately effective	SOME of the examples and activities in the program applied to my situation, was relevant to me, made me feel comfortable.
Poor	Only a few examples or activities in the program were relevant to me, applied to my situation, made me feel comfortable.
Detrimental	I did not relate to the program examples and could not apply the activities to my situation. I feel that I am worse off for doing this program.

CATSINaM definition of Cultural Safety

The concept of cultural safety was developed in a First Nations' context and is the preferred term for midwifery and nursing. Cultural safety is endorsed by the Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM), which emphasises that cultural safety is as important to quality care as clinical safety. However, the "presence or absence of cultural safety is determined by the recipient of care, it is not defined by the caregiver" (CATSINaM, 2014, p. 9).

Cultural safety is a philosophy of practice that is about how a health professional does something, not [just] what they do…. It is about how people are treated in society, not about their diversity as such, so its focus is on systemic and structural issues and on the social determinants of health. Cultural safety represents a key philosophical shift from providing care regardless of difference, to care that takes account of peoples' unique needs. It requires nurses and midwives to undertake an ongoing process of self-reflection and cultural self-awareness, and an acknowledgement of how a nurse's/midwife's personal culture impacts on care.

In relation to Aboriginal and Torres Strait Islander health, cultural safety provides a decolonising model of practice based on dialogue, communication, power sharing and negotiation, and the acknowledgment of white privilege. These actions are a means to challenge racism at personal and institutional levels, and to establish trust in healthcare encounters (CATSINaM, 2017b, p. 11).

In focusing on clinical interactions, particularly power inequity between patient and health professional, cultural safety calls for a genuine partnership where power is shared between the individuals and cultural groups involved in health care. Cultural safety is also relevant to Aboriginal and Torres Strait Islander health professionals. Non-Aboriginal nurses and midwives must address how they create a culturally safe work environment that is free of racism for their Aboriginal and Torres Strait Islander colleagues (CATSINaM, 2017a).

References

- CATSINaM, 2014, *Towards a shared understanding of terms and concepts: strengthening nursing and midwifery care of Aboriginal and Torres Strait Islander peoples*, CATSINaM, Canberra.
- CATSINaM, 2017a, *Position statement: Embedding cultural safety across Australian nursing and midwifery*, CATSINaM, Canberra.
- CATSINaM, 2017b, *The Nursing and Midwifery Aboriginal and Torres Strait Islander Health Curriculum Framework (Version 1.0)*, CATSINaM, Canberra.

Appendix 5: Key evaluation questions

1. To what extend was the Program effective?

a. To what extent did we realise the program outcomes? (evaluative)

b. What changes occurred in terms of realising the intended effects? (descriptive)

c. How did these changes vary for Aboriginal and non-Aboriginal clients (if at all)? (Descriptive)

d. Why did the changes occur? (Causal)

2. How feasible is it to deliver the Aboriginal adapted program in an Aboriginal AOD Centre?

a. To what extent were the adaptations to the ACE program culturally relevant, meaningful to clients and appropriate? (Evaluative)

b. Do any changes if any need to be made for the clients to feel culturally safe?

c. To what extent were clients engaged in the program? (evaluative)

d. What enhanced engagement? (Descriptive)

e. for staff and clients - How feasible was it to deliver the program with the indigenous adaptations (i.e.: walks outside, smoking ceremony etc) (Evaluative)

f. Do any changes need to be made to implementation? (Action) including ACI support and resources/tools.

3. What level of fidelity was there to the original ACE Program?

a. To what extent did the adaptations to the program remain consistent with the key learnings and key messages in the Standard Program? (Evaluative)

b. Post Program- Focus Group with clients who received the adapted program

c. Review of the adaptations by subject matter expert (Jamie Berry)

4. How scalable is the adapted ACE Program?

a. What needs to happen to scale up and spread this program? (Action)

b. How might this program be scaled up and spread? (Descriptive)

c. Post program: Review of the final resources by Aboriginal Advisors, from ACI and from other regions, other Aboriginal rehab sites

Appendix 6: Cultural safety rubric

The below Cultural Safety Rubric was developed on the premise 'presence or absence of cultural safety is determined by the recipient of care, it is not defined by the caregiver'; Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM, 2014).

Cultural Safety Rubric

Rating	Cultural relevance and safety of the adapted ACE program
Highly effective	All or most the examples and activities in the program were: - Relevant to me - applied to my situation - I felt comfortable with - I found meaningful - I understood
Moderately effective	SOME of the examples and activities in the program applied to my situation, was relevant to me, made me feel comfortable.
Poor	Only a few examples or activities in the program were relevant to me, applied to my situation, made me feel comfortable.
Detrimental	I did not relate to the program examples and could not apply the activities to my situation. I feel that I am worse off for doing this program.