saxinstitute

Evidence Check

Workforce recruitment and retention: alcohol and other drug services

An **Evidence Check** rapid review brokered by the Sax Institute for the NSW Ministry of Health. October 2019

An **Evidence Check** rapid review brokered by the Sax Institute for the NSW Ministry of Health.
October 2019

This report was prepared by:

Kylie Bailey, Julia Dray, Eliza Skelton and Mark McEvoy.

October 2019

Enquiries regarding this report may be directed to the:

Principal Analyst
Knowledge Exchange Program
Sax Institute
www.saxinstitute.org.au
knowledge.exchange@saxinstitute.org.au
Phone: +61 2 91889500

Suggested Citation:

Bailey K, Dray J, Skelton E, McEvoy M. Workforce recruitment and retention for alcohol and other drug services: an Evidence Check rapid review brokered by the Sax Institute (www.saxinstitute.org.au) for the NSW Ministry of Health, 2019.

Workforce recruitment and retention for alcohol and other drug services: an Evidence Check rapid review

An **Evidence Check** rapid review brokered by the Sax Institute for Organisation Name.
October 2019

This report was prepared by Kylie Bailey, Julia Dray, Eliza Skelton and Mark McEvoy.

[Logo] [Logo] [Logo]

Contents

Executive summary

Background

The aim of this review is to increase knowledge and understanding of evidence-based approaches that will enable the identification of key strategies to support the recruitment and retention of a skilled Alcohol and Other Drug (AOD) workforce. This review was prepared by Kylie Bailey and Julia Dray with contribution by Eliza Skelton and Mark McEvoy, from the School of Medicine and Public Health, The University of Newcastle.

In 2012, the NSW Government commenced their current health system reform by developing *The Health Professionals Workforce Plan 2012-2022* initiative. The Plan report identified common workforce risks in the health professions that would have an adverse impact on the provision of health services: 1) Ageing workforces, 2) Small workforces, 3) Retirement intentions, 4) New fellow requirements, and 5) Availability of training supervision. [1] Staff recruitment and retention in the AOD sector must be considered when planning for the NSW health workforce. The NSW AOD workforce is composed of: AOD workers, nurses, social workers, doctors, peer workers, needle and syringe program workers, prevention workers, addiction medicine specialists, specialist psychologists, psychiatrists, and Aboriginal Health Workers. Due to an ever-complex workforce, unique barriers exist when planning for recruitment and retention of AOD health professionals.

Alcohol and other drug recruitment and retention barriers

Barriers to recruitment and retention of AOD health professionals in Local Health Districts (LHD)s and non-government organisations (NGO) need to be identified to strengthen this small but critical workforce. Recent literature has identified key barriers to health professional recruitment to the NSW AOD sector including: short duration/ instability/ security of employment; low remuneration packages; stigma of working in the AOD sector; lack of specified advertised AOD positions; and limited training/ qualification pathways. [2]

Many of the above recruitment barriers overlap with reasons for retention difficulties in the NSW AOD workforce. Across the retention related literature, issues most frequently cited by AOD health workers include: burnout/ poor worker well-being; remuneration; rapidly changing work environments; employer support; supervision; and workforce/ professional development. [2-5]

Identification of key strategies to support the recruitment and retention of a skilled AOD workforce

A range of workforce development initiatives have been completed in NSW, nationally, and internationally in countries with AOD workforces comparable to the NSW AOD workforce. However there remains an absence of synthesis of the most recent evidence on successful implementation strategies for workforce recruitment and retention, and the best ways to sustain effective strategies for doctors, nurses and allied AOD health workers employed in LHD or NGO sectors.

Review questions

This review aimed to address two questions: 1: What approaches have been effective in the recruitment and retention of an alcohol and other drug workforce? 2: Based on the effective approaches identified in Question 1, identify priorities for a recruitment and retention strategy for consideration by the NSW Ministry of Health.

Summary of methods

A search strategy was developed utilising terms for variants of alcohol or drug or alcohol and other drugs (AOD) or substance-related disorders, AND health personnel or health services AND workforce or health

workforce. The search strategy was executed across five databases: Medline, Embase, PsycInfo, Cochrane CENTRAL, and PubMed and in Google scholar retaining the first 200 extracts. Additionally, a desktop search was completed of Australian Policy online and websites of relevant peak government and non-government, national and state level.

All searches were limited to literature published in English from the 1 January 2014 until 21 May 2019. To ensure included literature evaluated approaches directly applicable to the NSW setting or scalable across NSW, Australian literature and that conducted in countries comparable to Australia were included (i.e. the UK, Canada, NZ, Netherlands and the USA (with caution due to difference in healthcare model).

Nineteen publications were eligible to be included in the review. Of the 19, 13 related to, or were conducted directly, with the AOD workforce and 6 related to the broader healthcare workforce. Most included publications were conducted in Australia (11 publications), followed by New Zealand (5 publications).

Evidence grading

Quality of evidence was assessed using the National Health and Medical Research Council (NHMRC) levels of evidence and grades for recommendations for guideline developers. [6] The largest proportion of publications (10/15 graded publications) were graded moderate to high quality. The final 5 graded publications were low quality.

The body of evidence was rated excellent for 3 of 5 areas: 1) Consistency in findings across included studies; 2) The potential very large benefit/ positive clinical impact from applying the body of evidence; and 3) Direct applicability to the Australian context. In the final two areas of evidence base and generalisability the evidence was rated good and satisfactory, respectively. The overall level of the evidence was NHMRC evidence grade B. An evidence grade of B means the body of evidence included in this review can be trusted to guide decision making in most situations**.**

Key findings

Question 1: What approaches have been effective in the recruitment and retention of an alcohol and other drugs workforce?

Based upon the workforce literature, the findings and recommendations can be grouped into three themes.

Theme 1. Recruitment

Approaches identified for the theme of recruitment identified the importance of pre-professional education and training, including upskilling the potential future workforce through embedding professional, practical skills based training within tertiary and postgraduate education [7]. Professional education and training was also considered important in developing key competencies for AOD staff [8-11] and training and professional development on AOD evidence-based practices [3, 12]. Professionalisation of the AOD workforce [9, 12] is a specific/ targeted AOD recruitment strategy [13, 14] that includes training and the development of competencies and professional networks [7, 10]; codes of conduct; and best practice guidelines [8, 9]. The literature on health system approaches (i.e. the structure/ framework under which the health work force operates) included reviews of both health system/ level/ phased approaches as well as recovery oriented systems. [15] The reviews identified specific systems recommendations for the recruitment and retention of the AOD workforce, along with funding for AOD positions and workforce growth. [4, 8, 9] The relation of these strategies to recruitment was that implementing each would increase recruitment to the AOD workforce, inclusive of higher skilled/ competent, confident and content professionals.

Theme 2. Retention

Approaches identified for the theme of retention relate to employment conditions including shift work models [5], remuneration and other employment conditions (e.g. job satisfaction and security, work load,

stress and burnout). [3] Worker wellbeing with the aim of preventing staff burnout, stress and vicarious trauma [2, 3] was another approach identified in this literature. The final approach identified was workforce development, which includes, consideration of career pathways, leadership, implementation science, and knowledge dissemination, as well as supervision, mentoring and professional development needs and systems approaches (approaches also noted above for recruitment). [4, 5] Specifically, strategies targeted at improving employment conditions, increasing worker wellbeing and ensuring adequate professional development of people, appear effective due to increased appeal to work in AOD positions. Additionally, such strategies can have a positive flow-on effect on retention by in reducing staff turnover due to improved work conditions, worker wellbeing, ongoing potential to be upskilled and the availability of career advancement/ opportunities.

Theme 3. Retention and recruitment by profession

Findings for the theme of evidence for recruitment and retention strategies by profession must be viewed with caution due to the limited literature on recruitment and retention by profession. For example doctors were mentioned in one study which recommended strategies relating to career/ service aspirations as well as financial incentives. Nurses were included in two evaluation studies, focussing on the effects of changes to quality of patient interactions and alternate staffing models to increase retention. [5, 13] Allied health (social workers), were mentioned in one study about their importance to the AOD sector [16], although recruitment or retention approaches was not mentioned. Pharmacists, dieticians and psychologists were not mentioned in any study.

There were five Australian publications that included Aboriginal Health Workers (AHWs) including two qualitative systematic reviews. Strategies noted to support recruitment and retention of AHWs included increasing opportunities for professional development and recognition, allowance of more flexible work conditions, improved remuneration, increasing culturally safe practices and restructuring tertiary training. [3, 13, 14, 17, 18] Three publications addressed the Australian and New Zealand peer AOD workforce. [10, 11, 19] These publications noted clear value of the peer workforce in the AOD sector and identified improved training and qualifications and increased measures to support peer worker recognition and wellbeing as vital to improving retention and recruitment of this group.

Due to the limited number of publications testing strategies for individual professions within the AOD workforce conclusive recruitment and retention recommendations cannot be made by profession. However, the approaches identified in the previous overall retention and recruitment themes of the report offer some broad direction on effective strategies for AOD workforce recruitment and retention.

Question 2. Based on the effective approaches identified in Question 1, identify priorities for a recruitment and retention strategy for consideration by the NSW Ministry of Health.

A large number of recommendations were made for the NSW AOD sector which were grouped into the three themes identified under Question 1: Recruitment, Retention, and Recruitment and retention by profession, with specific recommendations provided per area discussed within each. Additionally, all 42 recommendations were consolidated into a summary of recommendations. However, as some strategies are consistent across the three themes the 42 recommendations could be further reduced to 14 key recommendations across the three recruitment and retention themes. An overview of the 14 recommendations are below.

Recruitment recommendations

Sixteen recommendations are made across the four identified recruitment related themes: 1) pre-professional and professional education and training (6 recommendations); 2) professionalisation (4 recommendations); 3) health care systems review (4 recommendations); and 4) funding (2

recommendations). The 16 recommendations across the recruitment themes were overlapping and were reduced to 6 strategies to increase health care worker recruitment.

1. Postgraduate AOD scholarships to increase the number of people adequately trained to commence as AOD health care workers
2. Consistent investment through funding into the AOD sector (linked to number 3 below)
3. Creation of specified AOD health worker positions, particularly for allied health, Indigenous and peer workers
4. Appropriate remuneration/ workloads and professional development opportunities to increase appeal for professionals to enter the AOD sector
5. Increase AOD professional development opportunities for non-AOD workers to upskill in competencies required for entry in to the AOD sector
6. Review other funding models that are permanent (rather than short-term and competitive) and that are also more appropriate for the nature of treating addiction (e.g. accounts for relapse in symptoms) which means that the funding is long-term, stable and not outcomes-focussed or driven.

Retention recommendations

Thirteen recommendations were made across the three identified retention related themes: 1) employment conditions (six recommendations), 2) worker wellbeing (five recommendations), and 3) workforce development (two recommendations). Due to recurring strategies across the related publications, the 13 recommendations were reduced to three key strategies. The three strategies are:

1. Increase access to supervision, mentoring and ongoing professional development/ training
2. Ensure appropriate remuneration, workloads and job security to support increased job satisfaction, worker wellbeing and opportunities for career advancement
3. Conduct surveys with NSW LHD and NGO AOD staff (inclusive of under studied professions e.g. allied health) on worker conditions (including workload, job satisfaction, job security, worker safety, and impact on outcomes funding).

Recruitment and retention by professions recommendations:

Seventeen recommendations were made for the four profession groups discussed for Question 1: 1) Doctors (1 recommendation) and nurses (2 recommendations), 2) Allied health workers (2 recommendations, with a focus on social workers and counsellors), 3) Aboriginal Health Workers (8 recommendations), and 4) Peer workers (4 recommendations). However, the 17 recommendations were reduced to 5 (see below).

1. Establish core competencies developed across each profession, drawing upon existing professional networks, such as APSAD, and the College of Addiction. NCETA and senior AOD clinicians (for their own profession) may also be considered for consultation in developing AOD core competencies so that core competencies match profession skill set
2. Professional and career development opportunities created across each profession to increase appeal in working in the AOD sector as well as for career advancement opportunities
3. Continue to monitor the success of New Zealand's recruitment of specialist AOD nurses for identification and consideration of appropriate strategies that could be applied in NSW
4. Investigate successful recruitment/ retention of doctors, psychologists, social workers, dietitians and pharmacists in the AOD sector
5. Consider the needs and employment conditions of peer workers in regard to workload/ role impacting their own recovery to increase retention and recruitment of this group.

Summary of key findings

The above 14 key recommendations are a synthesis of findings from the 19 publications included in this review, representing the most recent (immediately preceding 5 years) and relevant literature relating to strategies that support the retention and recruitment of the AOD workforce. Whilst the recommendations

are well founded in a good quality of evidence from these 19 included publications (Grade B; see Evidence grading above) there was limitations to the type of publications found. There was limited evaluation on recruitment and retention by profession. Additionally, much of the publications synthesised or reiterated past knowledge (e.g. organisational reports, qualitative literature reviews) however did not evaluate specific strategies against quantifiable changes in retention and recruitment outcomes. For example, in the past five years there appears a lack of studies measuring retention and recruitment rates before and after implementing the recommendations as strategies. This limits the conclusions that can be drawn from the publications as the findings lack tangible proof of effect. If study authors or other involved organisations measure recruitment or retention rates before and after trying strategies and find that these rates either increase or decrease after implementing the strategies, this will aid determining whether such strategies can/ do have a positive effect on retention and recruitment. From this evidence decisions can be made around whether the tested strategies should be adapted to have a greater effect or rolled out 'as is' more widely across the AOD sector. It is also evident that the development of innovative approaches (such as using social media and technology based recruitment strategies to engage/ retain health professionals into the AOD sector) have not been trialled in the last five years; or if they have, the findings of these have not been published or communicated to the wider community. Therefore there remains a need for studies of this nature with the AOD workforce.

Gaps in the evidence

Many included publications focussed at a broad whole of workforce levels, or at most at the level of mainstream (overall health or AOD workforces), peer and/ or Aboriginal workforce levels. However here remains a need for more publications including strategies for doctors and allied health professions (e.g. psychologists, counsellors, social workers, dieticians etc.). Additionally, investigations into the role of pharmacists, dieticians and psychologists in the AOD sector and work with CALD populations has been overlooked as neither was not mentioned in any publications. Publications such as that by Roche and Pidd (2010) do offer comment on AOD workforce development by profession, however this evidence is dated and thus remains an important area for update. [20]

Discussion of key findings

The current rapid review sort to locate the most recent evidence (past 5 years) to address two questions:

What approaches have been effective in the recruitment and retention of an alcohol and other drug workforce?

Based on the effective approaches identified in Question 1, identify priorities for a recruitment and retention strategy for consideration by the NSW Ministry of Health, Australia.

Utilising systematic review methodology the authors conducted a rapid review of recent evidence published between 1 January 2014 until the 21 May 2019, resulting in 19 relevant articles published in either Australia (11 publications) or internationally in countries considered comparable to Australia (8 publications) for inclusion in the present evidence synthesis. Evident from this process, there is a body of recent evidence available for guiding the development of strategies to improve retention and recruitment of the AOD workforce in NSW. From the findings of the 19 publications 42 recommendations (Appendix 4, Table 1) were initially identified, which were then condensed to 14 for improving the recruitment and retention of the AOD workforce. The 14 recommendations were summarised under the three recruitment/ retention themes of: Recruitment, Retention, and Recruitment/ retention by profession. The 14 recommendations can be actioned by the NSW Ministry of Health.

The findings are further evident by the release of another relevant document during the write up of the present rapid review (October 2019) i.e. the release of a Northern Territory (NT) Alcohol and Other Drug Workforce Development Strategic Framework (2019-2024) commissioned by the NT Primary Health

Network for completion by National Centre for Education and Training on Addiction (NCETA, Flinders University, South Australia). [21] Within the NT AOD Workforce Development Strategic Framework, 8 recommendations formulated from a needs assessment (literature review, review of data from the 2016 National Drug Strategy Household Survey, and expert consultation process) are outlined. [21] Both the NT and NSW bodies of work were conducted independently, utilising recent evidence, and show considerable alignment in recommendations. Similarly, the recommendations for recruitment and retention strategies proposed in the current report align well with the structure and content of the four levels system approach to AOD workforce development proposed by the Matua Raku in New Zealand. [8, 9] This gives strength to the need and appropriateness of recommendations suggested within each, and the potential for interstate and national extension of such bodies of work.

Whilst it is reassuring to have alignment across the evidence presented in the current report with that of interstate and national bodies of evidence, opportunities remain for ensuring the comprehensiveness of this evidence base (discussed above under 'Summary of Key Findings' and 'Gaps in evidence').

Applicability

As discussed above under Evidence grading (applicability criteria), Summary of key findings, and Gaps in the evidence, the evidence presented in this rapid review was rated excellent for direct applicability to the Australian context with some limitations in relation to comprehensiveness of evidence across all aspects of the NSW AOD workforce. Firstly, the majority of included publications were conducted in Australia (11 of 19; ~58%) and thus relate directly to an Australian AOD workforce context, with synthesised findings therefore most heavily influenced by these publications. Secondly, 13 of 19 (~68%) included publications relate to AOD workers including current AOD professionals, AOD postgraduate students, AOD peer and Aboriginal Health Workers, providing directly relevant evidence towards the formulation of strategies to improve the retention and recruitment of the AOD workforce in NSW. However as noted, publications pertaining to the recruitment and retention of medical and allied health professions to the NSW AOD workforce were absent, and therefore a need to increase this aspect of the evidence-base remains.

Conclusion

Overall across the current body of evidence and equivalent interstate and international bodies of evidence there appears clear, consistent recognition of the unique and complex nature of an AOD workforce. The importance of growing this workforce (recruitment and support of pre-professional AOD workforce) and fostering wellbeing and competency in existing professionals (retention and support of professional AOD workforce) is also evident in the literature. The current review synthesises the existing and most recent evidence (immediately preceding 5 years) to help inform fourteen recommendations to improve recruitment and retention in the NSW AOD sector.

Due to the limitations of this AOD workforce literature, there remains a need to increase evidence pertaining to the recruitment and retention of doctors, nurses, pharmacists, allied health professions (e.g. psychologists, social workers and dieticians), and both the LHD and the NGO AOD workforce. Similarly there remains a need for publications relating to CALD populations. Furthermore, publications using study designs that measure retention and recruitment outcomes before and after implementing proposed strategies (i.e. measure the resulting change or effect of these outcomes) are also warranted. Continual monitoring and evaluation of recruitment and retention of the NSW AOD workforce, inclusive of addressing key reoccurring themes (e.g. remuneration, employment conditions, worker wellbeing, workforce development) will be vital to ensuring the effectiveness of any newly established or revitalisation of existing workforce development frameworks. Additionally, the opportunity exists to develop and test new and innovative approaches to recruitment/ retention, such as using social media and technology-based strategies to engage/ retain health professions into the AOD sector.

Background

This review aims to increase knowledge and understanding of evidence-based approaches that will enable the identification of key strategies to support the recruitment and retention of a skilled NSW Alcohol and Other Drug (AOD) workforce. This review was prepared by Drs Kylie Bailey and Julia Dray with contribution from Dr Eliza Skelton and A/Prof Mark McEvoy, from the School of Medicine and Public Health, The University of Newcastle.

In 2012, the NSW Government commenced their current health system reform by developing *The Health Professionals Workforce Plan 2012-2022* initiative. This plan aims to reform the NSW health system so that it can address: an ageing population; an increase in chronic illness presentations; the variable distribution of the patient population across NSW; and the reducing labour pool of health professionals. As part of this workforce initiative, NSW Health invests $12.4 million each year to recruit a workforce that meets the health needs of the community. The focus of the current health workforce plan mostly addresses staffing deficits among doctors and nurses. [(1)]

The Health Professionals Workforce Plan 2012-2022 report identified common workforce risks that would have an impact on the provision of health services. The risks are: ageing workforces; small workforces; retirement intentions; new fellow requirements; and availability of training supervision. [(1)] The issue of changes in fellow requirements is not isolated to staff specialists, as other health professions (including allied health) are affected by changes to the Australian Health Professional Registration Association (AHPRA) registration requirements.

Recruitment and retention of staff in the AOD sector must be considered when planning for the NSW health workforce. The NSW AOD workforce is composed of: AOD workers, nurses, social workers, doctors, peer workers, needle and syringe program workers, prevention workers, addiction medicine specialists, specialist psychologists, psychiatrists, and Aboriginal Health workers (AHWs).

Due to an ever-complex workforce unique barriers exist for recruitment and retention in the AOD workforce. This may be due to many factors, including: the stigma attached to working in the AOD field by the community and within the health care profession; increasing demand on AOD services and therefore increased need to continue to upskill and retain a large AOD workforce;, and the vast metropolitan, regional and rural geographic distribution of the NSW population. Another unique consideration is that the NSW AOD workforce is employed both in Local Health Districts (LHDs) and in Non-Government Organisations (NGOs) which are typically not-for-profit services. This creates considerable discrepancies in incentives to obtain and retain employment across AOD organisations.

Alcohol and other drug recruitment and retention barriers

Barriers to recruitment and retention of AOD health professionals in LHDs and NGOs need to be identified to strengthen this small but critical workforce. To identify the unique needs of this workforce, staff surveys are useful to highlight existing gaps and vulnerabilities. Statistics on the AOD health workforce within LHDs are not available, however in 2018 a survey was published by NCETA on the characteristics and wellbeing of the NSW non-government AOD workforce. [(2)] This survey highlights some of the barriers to recruitment and retention of AOD health workers, which are reviewed below.

Recruitment barriers

Six key barriers to health professional recruitment to the NSW AOD sector are identified in the literature thus far. Some of these barriers also overlap with retention in the NSW AOD workforce.

1. Short employment duration (72% of AOD staff in NGOs were employed for <5 years)
2. Instability of employment (58% permanently employed) and poor job security
3. Low remuneration packages (typically ranging from $50-70K per annum)
4. Stigma with working with AOD patient population
5. Not specified AOD positions advertised
6. Limited training and qualification pathways (40% have undergrad/ postgrad. qualifications). [2]

Retention barriers

In the NCETA 2018 survey staff in NSW AOD NGOs identified ten key themes that contributed to staff turnover:

1. Ageing workforce, with 60% of AOD health professionals aged 40 years and over
2. Short employment duration (72% employed for <5 years)
3. Instability of employment (58% permanently employed) poor job security
4. Low satisfaction with job and remuneration ($50-70K)
5. Vicarious trauma, high stress and emotionally taxing work, leading to burn out and staff turnover
6. Isolation and safety for outreach workers
7. Lack of connection between teams within the organisation
8. Stigma from the community for working with AOD patients
9. Rapidly changing work environments and challenging working conditions
10. Limited or no access to supervision, mentoring or professional development supports. [2]

Across the wider literature, issues most frequently cited include: burnout/ poor worker well-being; remuneration; rapidly changing work environments; employer support; supervision; and workforce/ professional development. [2-5]

Identification of key strategies to support the recruitment and retention of a skilled AOD workforce

A range of workforce development initiatives has been completed within NSW, nationally, and internationally in countries with AOD workforces comparable to the NSW AOD workforce. However there remains an absence of synthesis of the most recent evidence on successful implementation and sustainability strategies for workforce recruitment and retention for medical and allied AOD health professionals employed in LHD or NGO sectors.

Methods

Question 1. What approaches have been effective in the recruitment and retention of an alcohol and other drugs workforce?

Systematic review methodology

To answer Question 1 the University of Newcastle research team completed a rapid review of grey and academic, peer-reviewed literature utilising systematic review methodology.

Search strategy

A search strategy was developed utilising terms for variants of alcohol or drug or alcohol and other drugs (AOD) or substance-related disorders, AND health personnel or health services AND workforce or health workforce. Various more complex search strategies were piloted incorporating filters for study design (e.g. comparative studies, cohort, randomised controlled, evaluation), profession (e.g. nurses, Aboriginal Health workers, social workers, doctors, psychologists etc.) and type of intervention strategy (e.g. Fly In Fly Out (FIFO), leadership, quality improvement, guidelines, policies, financial incentives, succession planning) however these returned very large volumes of studies which lacked relevance to the current question. Intervention strategy was incorporated into the screening inclusion and exclusion criteria for the review. The search strategy was executed across five databases: Medline, Embase, PsycInfo, Cochrane CENTRAL, and PubMed. The search strategy was also executed in Google scholar with the first 200 returns extracted.

A desktop search was performed of: Australian Policy Online and websites of the following relevant peak, government and non-government, national and state organisations: NCETA (Flinders University, South Australia); National Drug and Alcohol Research Centre (NDARC, UNSW, Australia), National Drug Research Institute (NDRI, Curtin University, WA), the Network of Alcohol and Other Drugs Agencies (NADA, Sydney, Australia), Victorian Alcohol and Drug Association (VAADA, Victoria, Australia), Turning Point National Addiction Treatment Centre (Victoria, Australia), NSW Health (NSW, Australia), Matilda Centre for Research in Mental Health and Substance Use (the Matilda Centre, Sydney University, Australia), Dovetail (Queensland, Australia), Western Australian Network of Alcohol and Other drug Agencies (WANADA, WA, Australia), Australasian Professional Society on Alcohol and other Drugs (APSAD), and Matua Raki National Addiction Workforce Development (NZ).

All searches were limited to literature published in English from 1 January 2014 until the 21 May 2019. To ensure included literature evaluated approaches directly applicable to the NSW setting and approaches that may be scalable across NSW, Australian literature and that conducted in comparable countries were included: UK, Canada, NZ, Netherlands and the US (with caution due to difference in healthcare model).

Study selection process

Retrieved records were exported into Endnote. Duplicates were removed and the remaining records uploaded into Covidence. [22] At both the title/ abstract and full text screening levels, two reviewers independently screened publications against pre-specified screening criteria (Appendix 1) and discussed any conflicts to achieve consensus on publications eligible for inclusion. Details of included studies were extracted by the lead author and cross checked for accuracy by the second author for inclusion in the table of publications (Appendix 3).

Inclusion and exclusion criteria

All types of literature published in English were eligible for inclusion. This included both peer reviewed publications and grey literature including local guidelines, policies, white papers, published academic

manuscripts, editorials, commentaries, books, dissertations etc. For all other inclusion and exclusion criteria a screening guideline was developed following PICO organisation (Appendix 1).

Included studies

Nineteen publications met criteria for inclusion. A flowchart of the selection process is included as Appendix 2. Of the 19 studies, 13 related to or were conducted directly with the AOD workforce and 6 within a broad health workforce. Nine studies included findings related to AOD workers (including 1 study relating to AOD postgraduate students), 4 to AHWs, 3 to doctors and nurses (e.g. broad/ rural health workforce), 3 to peer workers, 1 included findings specific to social workers and no studies included other allied health professions (e.g. psychologists, dieticians) or pharmacists. The large majority of included publications were conducted in Australia (11), with 5 in NZ, 1 in Scotland, 1 in the USA, and 1 review including evidence from a single study conducted in Taiwan. A summary table of the included publications is included as Appendix 3.

Evidence grading

Quality of evidence was assessed using the National Health and Medical Research Council (NHMRC) levels of evidence. [6] The quality of evidence could be graded for 15 of the 19 included publications. Four were not applicable for an evidence grading as they were grey literature (i.e. descriptions of competences, workforce development strategies/ plans, and descriptive book chapter). The largest proportion of graded publications (10/15, 67%) were graded moderate to high quality (highest levels of evidence). The final 5 were low quality. Once individual publications were graded for quality of evidence, the overall quality of evidence was determined by combining ratings across 5 areas: 1) evidence base, 2) consistency, 3) clinical impact, 4) generalisability, and 5) applicability. Based on the ratings of these 5 areas an overall grade was determined.

The body of evidence was rated excellent for 3/5 areas: 1) consistency in findings across included studies, 2) the potential very large benefit/ positive clinical impact from applying the body of evidence, and 3) direct applicability to the Australian context. In the final two areas, evidence base and generalisability, the evidence was rated good and satisfactory, respectively. As 67% of graded publications were of moderate to high quality evidence (highest levels), and 3 out of 5 component scores were rated excellent (highest level) the overall level of the evidence was NHMRC evidence grade B. An evidence grade of B means the body of evidence included in this review can be trusted to guide decision making in most situations, see Table 1.

Table 1. Matrix to summarise the evidence base quality rating

Component	Evidence Quality Rating	
Evidence base	B: Good	Several (42%) level 1 studies, however often utilising qualitative synthesis with minimal assessment of risk of bias and some reference to limited number and quality of studies as final evidence base.
Consistency	A: Excellent	Consistency of findings across included publications.
Clinical Impact	A: Excellent	Very large possible benefit/ positive clinical impact to AOD workforce.
Generalisability	C: Satisfactory	Evidence not representative of full AOD workforce e.g. limited/ no studies for rural and Aboriginal AOD workforce and allied health workforce (e.g. psychologists, social workers) etc.
Applicability	A: Excellent	Directly applicable to Australian context.
Overall grade	B: Good	Body of evidence can be trusted to guide practice in most situations.

Question 2. Based on the effective approaches identified in Question 1, the reviewer is asked to identify priorities for a recruitment and retention strategy for consideration by the NSW Ministry of Health.

Synthesis of findings

Findings from Question 1 were synthesised into key themes outlining evidence-based strategies to support recruitment and retention of the AOD workforce. The synthesised findings from Question 1 were then interpreted to form a set of recommendations towards improved recruitment and retention of the NSW AOD workforce.

Findings

Question 1. What approaches have been effective in the recruitment and retention of an alcohol and other drugs workforce?

There have been a number of investigations into the recruitment and retention of the health workforce [e.g. 8, 12, 14, 15, 17, 18, 23], with a range of workforce development approaches and recommendations made. Relevant workforce literature could be found for the broad health workforce [5, 13-16, 18] and specifically for the AOD workforce [2-4, 7-12, 17, 19, 23, 24], with specific literature relating to the Aboriginal Health [14, 18], Aboriginal AOD workforce [3, 17], rural health workforce [13, 15], and AOD peer workforce. [10, 11, 19]

Based on the workforce literature, the findings and recommendations can be grouped into three themes:

1. Recruitment including: pre-professional and professional education and training; professionalisation; health care systems review (such as recovery oriented, system/ level phase approaches); and funding.
2. Retention including: employment conditions, worker wellbeing, and workforce development (incl. consideration of supervision, mentoring, professional development needs and systems approaches).
3. Evidence for recruitment and retention strategies by profession including: doctors and nurses, allied health personnel, AHWs, and peer workforce.

Theme 1. Recruitment

Various approaches to improving and increasing recruitment of professionals in the AOD and broader health workforce were identified. One workforce development approach was pre-professional upskilling of the potential future workforce through the embedding of professional, practical skills based training within tertiary and postgraduate education. [7] Other approaches to increasing recruitment of professionals to the AOD workforce included: developing key competencies in alcohol and other drugs for AOD staff [8-11], professionalisation of the AOD workforce [9, 12], and training and professional development for health staff on AOD evidence-based practices. [3, 12]

Recruitment strategies also related to a review of health systems (i.e. the underlying structure or frameworks under which the health work force operates) that included system/ level/ phase approaches and recovery oriented systems [15] which identified specific/ targeted AOD worker recruitment strategies [13, 14] along with increased funding for AOD positions/ workforce growth. [4, 8, 9] The relation of these strategies to recruitment was that implementing each would increase the AOD workforce, inclusive of highly skilled, competent and confident professionals.

Five key areas for AOD recruitment: pre-professional and professional education and training; professionalisation; healthy systems; AOD specific recruitment strategies; and funding considerations are discussed in more detail below.

Pre-professional and professional education and training

A number of publications on AOD workforce development identify pre-professional education and training as an essential feature of workforce recruitment. However, these recommendations are usually in the context of system changes (see System Approaches sections below). From the current literature review, two studies reported specific recommendations. The first study, a report on workforce development in Western Australia recommended: 1) inclusion of alcohol and other drug core competencies in tertiary training programs; 2) student placements to enhance worker readiness into the sector; 3) a register of AOD training that includes accreditation details,; and 4) coordination of AOD sector input into training and capacity building. [23] Student placements were also recommended by Gwynne et al. to improve work readiness. [13]

The second study by Adams et al. [7], evaluated an AOD postgraduate training program in two New Zealand universities over a ten year period to determine the effectiveness of formal tertiary training to increase the number of AOD health care workers. The study found that over the ten-year period, 345 postgraduate students completed the training, an outcome directly increasing the NZ AOD workforce in that time. Adams et al. recommended that undergraduate health care training remain general, but that tertiary education include an overlay of postgraduate education to enable specialisations in the AOD field. [7] They attributed the success of the pre-professional undergraduate training program to a range of factors including:

- Teaching strategies that were practice oriented
- Government investment in AOD training
- Parallel emergence of professional bodies (e.g. professional colleges and AOD networks) and registration systems (e.g. AHPRA)
- Collaborative and cooperative relationships across agencies such as government, education providers, and the AOD health/ service industry. [7]

Other outcomes from the NZ postgraduate AOD training initiative were the forming of the NZ AOD workforce development agency, Te Pou o Te Whakaaro Nui (Te Pou). Te Pou's role is to manage AOD sector-related learning goals through engagement and consultation with the AOD sector .[7].Additionally, the collaboration led to the development of the Skills Matter program. [7]

Professionalisation of the AOD workforce

Professionalisation of the workforce includes training and the development of competencies and professional networks [7, 10], code of conduct and best practice guidelines. [8, 9] In Australia, professionalisation of the AOD workforce is present through AOD training and professional networks. However, such networks are mostly for nursing (e.g. Drug and Alcohol Nursing Association) and staff specialists/ general practitioners (e.g. College of Addiction). Other AOD worker networks include, the Australasian Professional Society on Alcohol & Other Drugs (APSAD) and State networks such as The Network of Alcohol and other Drugs Agencies (NADA; NSW), Queensland Network of Alcohol and Other Drug Agencies (QNADA), Victorian Alcohol and Drug Association (VADA), and The Western Australian Network of Alcohol & Other Drug Agencies (WANADA).

Challenges to the professionalisation of the AOD workforce include variations in both training programs (accredited and non-accredited) and competencies across registered professionals (e.g. doctors and nurses); allied health; and for both Aboriginal [17] and peer workers. [11, 19] Additionally, as mentioned above, qualifications have become increasingly academic and less applied, thus challenging the work readiness of students/ those new to the workforce [2] and negatively impacting the professionalisation of the AOD workforce. Relatedly, 52% of addiction services are provided by NGOs, and 47% of that NGO workforce are in clinical roles that require at least a level 7 qualification (e.g. a bachelor degree) which includes addiction practitioners, registered nurses and counsellors. [8, 9]

Review of health care systems

Work in the AOD field is sometimes stigmatised. [11] While some health professionals are comfortable and/ or passionate about working with AOD populations, there remains a need for strategies to recruit more health students and other professionals into the AOD field. The literature suggests that health care systems can increase recruitment to the AOD field by enhancing workplace support and planning for professional and career development. [4] Strategies for increasing health care recruitment to rural and remote areas may be applicable to the AOD field. For example: scholarships, grants, higher salaries, loan repayment schemes and student placements [13, 15]. However, these options need to be evaluated for applicability to the AOD field. [11, 15]

The NCETA an internationally recognised workforce development research centre in South Australia [10, 16] recommends a multi-faceted health care systems approach to:

- Enhance the professionalisation of the workforce
- Reach agreement on future directions
- Create, drive and implement workforce planning
- Improve performance
- Enhance service quality and outcomes
- Enhance career development options; and optimise implementation of evidenced based practice
- Improve role clarity, inclusive of recognition that the role of the specialist workforce is not only to provide specialist services, but also to support non-specialists
- Incorporate a strategy for Workforce Development (WFD) that: utilises a systems approach and goes beyond training and education, involves consultation processes with the AOD workforce and professional bodies, and addresses the needs of specialist AOD workers. [12]

Further systems changes that can enhance recruitment to the AOD workforce in Australia and noted in the literature include: ensuring evidenced-based organisational policies and models of care and leadership in place [4, 16, 23] and effective information management, knowledge transfer/ dissemination strategies and implementation science. [4] Other health system models to enhance AOD recruitment and retention incorporate the above strategies, their recommended models are reviewed in more detail below.

Recovery orientated

Alcohol and Drug Partnerships (ADP) and the Recovery Oriented Systems of Care (ROSC) approach have been adopted in Scotland. [16] ADPs are a multi-agency groups comprised of local police, the local city council, Community Safety and Fire and Rescue. ADPs are commissioned by the Scotland Government to be evidence-based, person-centred and recovery focussed treatment to the community. There are 30 ADPs across Scotland with the role of focussing on recovery however, most ADPs have been slow to take up the ROSC concept. The Scottish Government aims for ROSC to be delivered by a competent AOD workforce, and that the ADPs will be trained and given an action plan to help identify the needs of the AOD workforce. The workforce needs identified by the ADPs will be used to develop planning outcomes for the AOD workforce. [16] The ADP and ROSC approach is currently being implemented and is not yet evaluated.

System level/ phase approaches

Three phases

Roche and Roger recommend a systems change approach for workforce development that addresses the three levels: individual**,** organisational and structural**.** They further recommend that workforce development should consider: worker well-being; workforce planning; leadership and management; worker recruitment and retention; effective learning environments; and training. [4]

1. Individual (bottom-up): Resources and education and training programmes to enhance individual workers' knowledge and skills. Effectiveness is dependent upon organisational culture and may have barriers for implementation of training skills.
2. Organisational: Includes internal organisation systems: such as addressing impediments to worker recruitment and retention; adequate workplace support and professional and career development, particularly effective clinical supervision, teamwork, leadership, mentoring and education and training; evidenced-based.
3. Structural: Includes integrated human services and highlights the limitations of siloed models of care, coupled with changing expectations of clients, the broader community and funders regarding partnerships and client inclusion. Structural changes also include a multidisciplinary approach. [4]

Three levels approach

After a review of the literature, the Western Australian Network of Alcohol and Other Drug Agencies (WANADA) recommended a three levels approach: individual**,** organisational and systems in developing the AOD workforce. For each level, WANADA recommends 21 strategies: 8 individual level, 6 organisational level; and 7 systems level. [23] Research dissemination of AOD early and brief intervention effectiveness is also recommended by WANADA, so that the AOD sector can use data effectively to inform meaningful and timely responses to current AOD trends in the community. [23] The three levels and their 21 strategies are summarised below.

1. Individual: The eight strategies focus on AOD staff learning core competencies and counselling guidelines, developing cultural competencies, training and professional development, develop and maintain a training register and student placements to be offered to enhance workforce readiness. Other recommendations include collegiality and networking, leadership and co-ordination of sector input into training and capacity building.
2. Organisational: The six strategies for recruitment are to focus on worker support/ wellbeing, leadership and succession planning. Develop funding strategies to support long term recruitment and retention initiatives, particularly for drug and alcohol staff in regional and rural areas. Recruitment strategies are also needed to increase Aboriginal workers that include role matching and culturally grounded interventions. Strategies to embed effective evidence-based support to staff, including clinical supervision need to be developed. Organisations need to support worker wellbeing, so strategies to measure well-being should be developed.
3. Systems: The seven strategies include the development of coordinated structured cross-community sector capacity building in partnerships with other relevant community strategies, which will also enhance sector engagement. Encourage the measurement of partnership effectiveness to support collaboration planning based on consumer and community need. Implement sector and consumer informed strategies to address stigma and discrimination. [23]

Four levels approach

The four levels approach to developing an AOD workforce was successfully implemented in New Zealand. [8, 9] The four levels include: skills/ training development of the addiction workforce; an AOD workforce development organisation; the development and training of a peer workforce; and the development and training of an AOD Indigenous workforce. As per NCETA, Matua Raki recommends that the human services system (e.g. justice, health, educators, social care) should be an important part of the AOD workforce. The four levels are discussed further below:

1. Addiction practitioner associations: includes the development and updating of AOD guidelines, AOD practitioner code of conduct, and practice competencies for the AOD sector.
2. Matua Raki National Addiction Workforce Development Centre (characteristics of passion, commitment and excellence): initiatives to encourage entry to addiction sector, movement within the sector, education, training in evidence-based practices, skills, attitudes, rewards, competent, culturally sensitive, and the associated infrastructure. Workforce objectives and targets, including at least 50% of the employed addiction workforce with specialist post-graduate alcohol and drug qualifications. Matua Raki focussed on: advanced practice addiction nurses; best practice implementations (guidelines and best practice advice); coexisting problems ('dual diagnosis'); early intervention (across primary health, social and community services); professional development (a suite of trainings); supporting the peer and consumer workforces; Therapeutic Communities, and the Substance Addiction (Compulsory Assessment and Treatment) Act. Which recognises the need for workforce development initiatives. Matua Raki also provide a suite of evidence-based training for the specialist addiction workforce in relation to capacity testing, cognitive impairment and working with families and have a range of further trainings planned to commence.

3. Lived experience: Development to occur through training opportunities such as, Diploma/ Bachelor of Alcohol and Other Drug Studies. Competencies developed for peer workers. Training for family members is also considered under this level as the family are viewed as a natural workforce.
4. Maori population: Includes the role of supporting parents, children, family and whanau (extended family). Skills and training at this level also need to involve cultural competency. [8, 9]

Funding

Consistent funding is another consideration related to retention, and also has the flow on effect on delivering effective AOD use care. Static or reduced funding has been shown to adversely affect the recruitment of qualified and experienced health professional staff [8, 9]. Another important consideration for funding is that the cost ratio of substance use treatment compared to no funding has been reported as 7:1, favouring substance use treatment. [4]

Theme 1 summary

Recent literature on workforce development supports the current knowledge about the recruitment barriers in the AOD sector. The literature adds to current knowledge through evaluation of existing recruitment strategies that have been mostly implemented in Scotland and New Zealand. Presently, Scotland is evaluating their Recovery Oriented Systems of Care (ROSC). This is very different to the New Zealand model for increasing a competent AOD workforce. So far, there are mixed results with the uptake of the ROSC approach in Scotland due to the roll out being dependent upon the training/ action plans of the regionally-specific Alcohol and Drug Partnership (ADP) groups. Thus, there is uncertainty whether the use of ADPs is an effective way of increasing AOD worker recruitment and retention.

New Zealand has shown that with strategic government funding and policy, increases in the recruitment of appropriately trained AOD health professionals can be successfully achieved. The approaches focussed on providing AOD training at the postgraduate level, with the aim of enhancing worker readiness by including practice-oriented teaching and work placements. Other successful strategies implemented in New Zealand are streamlining core competencies in the training of AOD workers through professional networks, and investing in an AOD workforce development organisation, Matua Raki.

Of interest, the Scottish approach of ADPs is similar to that of the Australian Federal Government's Primary Health Network strategy. Additionally, in Australia, we already have existing postgraduate training courses, professional networks (e.g. Addiction College, DANA and APSAD) and an AOD workforce development organisation – NCETA. However, based on the success of the New Zealand AOD workforce recruitment and retention approaches, NSW could further enhance AOD workforce recruitment strategies by:

- Developing AOD workforce core competencies by profession
- Involving professional networks, senior AOD healthcare workers (for each profession) and NCETA, in the development of core competencies
- Investing in practice-oriented training (incl. postgraduate training) as well as funding for work placements
- Establishing tertiary scholarships for AOD specialisation training
- Utilising NCETA's recommendations to draw upon the AOD workforce to help form evidence-based policies
- Establishing continued funding that attracts qualified AOD staff.

Theme 2. Retention

Retention approaches identified from the literature review were: shift work models [5], employment conditions/ remuneration [3], worker wellbeing [2, 3] and supervision/ mentoring/ professional development (PD). [4, 5] Retention strategies included are for health professionals, Aboriginal and Indigenous workers (such as Maori) [3, 17-19], and peer workers. [2, 9, 23] Strategies outlined within the literature consistently focussed on worker wellbeing with the aim of preventing staff burnout, stress and vicarious trauma. Employment conditions including: career pathways; leadership; implementation science; knowledge dissemination and systems approaches (also noted for recruitment) were reported throughout included publications as opportunities to improve retention of AOD workers. [4] Retention in the rural health workforce found similar themes of: clinical experience, skills and qualifications; access to PD including supervision and peer support; and interpersonal communication, cultural competence and team connectedness. [13]

Based on the literature, retention themes can be grouped into: Employment conditions (incl. remuneration, job security and satisfaction); Worker wellbeing; and Workforce development (incl. PD and training, supervision and mentorship, and systems approaches).

Strategies targeted at improving employment conditions, increasing worker wellbeing and ensuring adequate PD, appear effective in improving recruitment rates of new staff (new graduates as well as experienced health professionals from other fields) due to increased appeal to work in the related positions. Additionally, such strategies can have a positive flow on effect to the related outcome of retention by assisting in reducing turnover of existing staff due to improved work conditions, worker wellbeing, the potential to continue to be upskilled, and the availability of career advancement opportunities.

Employment conditions

A number of studies have directly asked AOD workers about their work conditions. [2, 5] Butler et al. conducted 11 in-depth interviews with AOD therapeutic community organisation workers and found that employment conditions were poor including safety and disconnection between teams, particularly by outreach workers. [24] AOD workers also reported that employment conditions and expectations placed barriers to accessing supervision and support, with AOD outreach workers reporting feeling socially disconnected from the organisation. Poor AOD worker wellbeing (e.g. job insecurity, low job satisfaction, exposure to violence, increasing patient complexity/ multi-morbidity, work stress and burnout) adversely impacts at the organisational level through absenteeism and staff turnover. [5] Poor job security was noted to be affected by organisations relying on competitive, outcomes focussed government funding. [2, 5] Poor remuneration and limited access to professional development, supervision/ support and high workloads are other employment conditions that affect retention. [2]

Worker wellbeing

Worker wellbeing recommendations are informed by surveys of the AOD workforce. [2, 24] One survey explored the wellbeing of 11 AOD workers employed in a therapeutic community. [24] Participants were an average age of 53 years, which indicates an ageing workforce however, this is older than might be seen in other AOD settings. [24] The staff in this survey reported positive experiences and aspects of working in an AOD role including the rewarding nature of the work and seeing following positive recovery pathways. [24] They stated that they particularly valued supervision (especially one-on-one supervision) and reported it as the most important strategy that an organisation can do to improve worker wellbeing. The challenges in working in AOD therapeutic communities include vicarious trauma, emotionally stressful work, isolation and safety of outreach workers, and lack of connection with other team members which was particularly so for outreach staff. [24] AOD staff in this survey recommended: that worker wellbeing would improve with a four-day (35 hr) work week; and an increase from four to six weeks annual leave to recover from work stress. [24]

Another survey, conducted by Roche et al. explored the wellbeing of 294 AOD NGO workers. [2] It found 66% of the workforce are women, 60% are aged 40 and older, and 72% have been employed in their current role less than 5 years. [2] The majority of the AOD workers reported positive: quality of life; moderate to high levels of resilience; engagement with others; job satisfaction; and confidence in their work. [2] The survey also found that although 58% were employed in permanent positions many reported feeling a high level of job insecurity, with one quarter of participants unsure of continued employment in the following 12 months. [2] It found that 48% of the workers had no professional qualifications, less than 50% received supervision and 11% received mentoring. There was also high dissatisfaction with aspects of their working conditions (incl. poor remuneration; $50-70k pa.). A large proportion felt workloads were too high, that client complexity/ multi-morbidities was increasing, and that their job was stressful and cognitively demanding, with 49.7% thinking about leaving their job. [2] The survey also found that retention was adversely affected by: occupational exposure to violence; stigma associated with working with AOD clients; recurring service restructuring; insecure funding that is outcomes focussed; and a lack of resourcing of upskilling and PD. [2] Pay disparities across occupations, and varying titles across employment sectors [2] also affect retention. Additionally, insufficient co-worker/ line management support and limited supervision, with management inadequately trained nor supported affects worker wellbeing, increases work absenteeism and negatively impacts on retention.

Overall, the two surveys found that the AOD sector can be highly rewarding, with many workers reporting high levels of job satisfaction from helping people, participating in "meaningful" work and making a positive contribution to society. Nevertheless, AOD workers may also experience considerable work-related demands and challenges which have the potential to lead to burnout and poor wellbeing. Vicarious trauma from working with a complex client/ patient is commonly raised by AOD workers. [2, 24] However, staff report that a protective barrier to burnout is a combination of workplace supports (e.g. supervision) which support staff coping strategies [24].

Workforce development

Comment on workforce development is intertwined throughout the above discussion of employment conditions and worker wellbeing and has large cross over with approaches to pre-professional and professional workforce development. The review of systems approaches is discussed in detail under the previous theme of recruitment and therefore these are not discussed in equal detail again here. In brief, workforce development appears a continual theme relevant to both the recruitment and retention of the AOD workforce and includes consideration of a range of factors: career pathways, leadership, implementation science, and knowledge dissemination, as well as supervision, mentoring and professional development needs [4, 5] and systems approaches (approaches noted above for recruitment).

Theme 2 summary

The findings of Theme 2 are consistent with current knowledge that workforce retention is improved by funding that allows for mentoring/ supervision, PD, access to training, and appropriate remuneration/ workload. Findings of this literature review also indicate a negative impact on worker retention of the current funding approach to the AOD sector. Funding approaches that are competitive, short-term and outcomes focussed result in high worker stress and burn out, which results in staff absenteeism and increased staff turnover. NSW Ministry of Health could further improve AOD workforce recruitment and retention strategies by:

- Surveying current NSW AOD health workers on the effects of the current funding strategy on job satisfaction, workloads, staff absenteeism and staff turnover
- Reviewing current funding models for both LHD and NGO AOD organisations
- Exploring other funding models that have a broader perspective of AOD treatment/ service delivery success, than reducing patient symptoms. This is especially important to the AOD sector, due to the

complexity of the patient population and addiction being a chronically relapsing disorder, and therefore stability, and consistency of funding to sustain the workforce and treatment avenues for patients is vital.

Theme 3. Evidence for retention and recruitment strategies by profession

Doctors and nurses

The recent literature on the recruitment of medical professionals mostly focuses on nurses. One study reported that doctors are motivated by career and service aspirations, as well as financial incentives. [13] However, it did not evaluate these retention and recruitment motivations across medicine and nursing. Nurses are reported to be the largest component of the health workforce worldwide. [5] One study reported that nurses are retained through relationships with colleagues and communities, as well as with appropriate management approaches. [13] Another study explored management strategies and identified that primary nursing (based on the therapeutic relationship with the patient) approaches may increase retention. [5] This study also found that the shift model implemented by the employer affected staff turnover, with self-staffing shift models potentially increasing nursing retention. [5] However the research on the effects of nursing practice and shift models on recruitment and retention are very limited. [5]

Allied Health

Only one study, based in Scotland, included allied health workers in the AOD sector. In Scotland, social workers are employed to support AOD patients and their families. [16] Their role is to complete AOD assessments, provide information and work in partnership with specialist AOD services. [16] However, in the UK there are concerns about the competence of social workers in AOD presentations, which is contributed to by limited or no AOD content in their tertiary training. [16] The authors note workforce development as increasingly important in the UK, and related workforce development strategies with the introduction of a Recovery Orientated System of Care (ROSC) approach. The authors further suggest the need for a detailed review of AOD competency/ expertise/ skills, as well as for broader retention and recruitment strategies/ policies, and the interrelatedness of each area, however did not evaluate these. [16] No evaluations of approaches to recruitment and retention of social workers, psychologists, counsellors, pharmacists or other health staff (e.g. dieticians) in the AOD field could be located.

Aboriginal workers

All publications reviewing evidence relating to Aboriginal workers in the AOD and the broader health workforce were conducted in Australia. [3, 13, 14, 17, 18] Across the publications consistent themes were identified as linked to attrition and included: racism; poor secondary education; stress; responsibility to their community; team isolation; cultural training; limited access to employment related training/ CPD opportunities; and poor experience in the workforce reducing overall engagement with education, training and employment. [3, 13, 14, 17, 18]

A recent comprehensive systematic review published in 2019 by Deroy and Schutze, reviewed 26 papers for factors supporting retention of Aboriginal health and wellbeing staff in Aboriginal health services. [14] Findings indicated that retention improved when Aboriginal workers received supervision, experienced strong managerial leadership, teamwork and collaboration, support from peers (e.g. to debrief), and felt culturally safe. Deroy and Schutze also found factors which increased the likelihood of retention of Aboriginal staff including: opportunities for PD and recognition in various forms (e.g. of workload, cultural knowledge Aboriginal workers bring to the role, ability to work autonomously, financial remuneration of high-pressured work); flexible work conditions and improvements to pay. Pressure to work with people with complex case histories, despite not having adequate training was a risk for retention. The authors note that Aboriginal staff are fundamental to the health and other workforces. [14]

Similarly, a 2018 systematic review of factors affecting retention of the Aboriginal workforce by Lai et al. identified a series of challenges to retention such as: work conditions (including environment, workload, low salary, poorly documented roles and responsibilities); ties to community however stress with responsibility to community; and lack of career development/ limited career pathways and CPD opportunities. [18] Recommendations to improve retention of Aboriginal workers consisted of: improving the supportive feel of workplaces inclusive of culturally safe practices and clear communications; restructuring tertiary training to increase pre-professional preparedness to enter the workforce; and improved documentation and understanding of roles, expectations and related responsibilities; and a review remuneration inclusive of recognition of qualifications. [18]

Peer workers

Three AOD peer worker articles were identified as relevant and are based on the Australian and New Zealand peer work force. [10, 11, 19] All three articles valued the peer worker contribution to the AOD sector however identified areas for consideration and development, such as the variation in training and qualifications for peer workers. [11] These areas for development are grouped under workforce and organisation planning, and consideration of the needs of peer workers.

At the planning level, peer worker roles need to have consistent competencies to adhere to as well as consistent training programs and qualifications. [10, 11, 19] The Western Australia Peer Supporters Network recommends 13 competencies for peer support workers: 7 specific workforce competencies, 3 peer worker competencies and 3 consumer advisor competencies. Peer support workforce development would benefit from setting targets which include: development of ethics and boundary guidelines for peer workers; peer worker tools [10]; best practice guidelines [11]; role descriptions and line management for peer workers. [10]

Organisations that employ the peer workforce will need to ensure clear job descriptions and consider recruitment criteria for their roles. [10] Organisations will also need to review policy for their peer workers and consider consumer advocacy. [10, 11] Policy reviews for peer workers also need to address issues of stigma; a common issue for this group. [11] Consideration of career growth, career pathway and training and specific supervision needs of this workforce is essential. [10, 11] The Western Australian Peer Supporters Network recommends a 3-tiered peer worker structure that includes: peer worker (supports the patient); peer manager (supports peer staff); and peer leader (supports the organisation). [19] Particular remuneration considerations for this workforce at the planning level include flexible working conditions, access to supervision and training [10] and improved pay levels. [11]

Some workers in the AOD workforce are in recovery themselves, particularly in therapeutic communities, and thus need their own strategies. [24] Peer support workers need to be able to have self-care and relapse prevention strategies included in their worker conditions. [19] Due to the nature of both the work in the AOD field and their own recovery, they are particularly vulnerable to vicarious trauma. [24] As per health professionals, training and supervision have been found to be most useful to this workforce population. [10]

Theme 3 summary

The current literature is limited across health care professions, with the exception of peer workers and Indigenous workers. Most of the AOD workforce and recruitment and retention literature was for nurses, followed by doctors and social workers. The role of psychologists in the AOD was briefly mentioned, while pharmacists (despite their role in the dispensing of opiate replacement therapy) and dieticians was overlooked. The current literature has clear guidelines for the development of AOD peer workers in Australia and internationally, Aboriginal workers from publications conducted in Australia, and AOD nurses from work underway in New Zealand which has had some success with improved recruitment for this profession. NSW Ministry of Health could further improve the AOD workforce recruitment strategy by:

- Investigating potential recruitment/ retention strategies for AOD staff specialists/ addiction doctors
- Reviewing the effectiveness of current recruitment strategies for AOD nurses
- Ensuring access to mentoring/ supervision for AOD doctors and nurses (an existing practice for AOD allied health professionals)
- Creating designated AOD positions for allied health, with a focus on psychologists (treatment) and social workers (case management)
- Including pharmacists, psychologists and social workers in the AOD sector and considering the specific training needs of these professions
- Giving further consideration to the role of dieticians in the AOD sector (e.g. to prevent alcohol-related brain damage in alcohol misusing patients)
- Training, supervision/ mentoring and CPD for Indigenous AOD workers and NGO health care workers
- Forming paid peer consultation groups for AOD services and organisations to access for guidance with improving service and treatment delivery
- Providing access for non-AOD health care workers to AOD training through CPD or tertiary postgraduate qualifications
- Mandating and providing opportunity for Indigenous and CALD cultural competency training for AOD workers.

Question 2. Based on the effective approaches identified in Question 1, identify priorities for a recruitment and retention strategy for consideration by the NSW Ministry of Health.

Priorities are grouped into the three themes identified under Question 1: 1) Recruitment, 2) Retention, and 3) Recruitment and retention by profession. Specific recommendations per theme are discussed by topic areas identified within each theme.

Recommendations for recruitment strategies (Theme 1)

Building on the recommendations made throughout Question 1, detailed recruitment recommendations for Theme 1 in the NSW AOD sector are provided under the four areas of: 1) pre-professional and professional education and training; 2) professionalisation,; 3) health care systems review; and 4) funding. Additionally, at the end of Theme 1 a summary of six key strategies are recommended to NSW Ministry of Health.

Pre-professional and professional education and training recommendations:

- Increase government investment in AOD training and address stigma associated with working in the AOD sector
- Action greater development of AOD pre-professional education and training including incorporation of practice-oriented content embedded in curriculum
- Incorporate AOD core competencies and practice-oriented skills into the curriculum of relevant tertiary courses
- Enhance student placement programs to increase readiness to enter the AOD workforce [13, 23]
- Coordinate AOD sector input into training and capacity building [23]
- Consider use of strategies applied to increase the rural workforce including scholarships, grants, higher salaries, loan repayment schemes and student placements.

Professionalisation recommendations

- Resolve variation in AOD professionalisation, standardise core competencies, and identify and streamline the professionalisation needs of the AOD workforce
- Develop and enhance career development options [12]
- Increase opportunities for, and inclusion of, professional training and/ or CPD that relates to practice oriented and targeted AOD specific qualifications

- Increase targeted/ AOD specific role advertisements and stimulate workforce growth through availability of an increased number of targeted AOD roles.

Health care systems review recommendations

- Utilise a multi-faceted health systems approach such as the three phases (individual, organisational and structural) as proposed by NCETA, Australia [4, 12] and the four level (skills/ training, AOD workforce development organisation (e.g. NCETA; peer and Indigenous workforce) proposed by Matua Raki NZ [8]
- Coordinate sector input in to training and capacity building, and collegiality, leadership and networking within the sector [23]
- Ensure parallel emergence of professional bodies (such as professional colleges and AOD networks), registration systems (e.g. AHPRA)
- Build collaborative and cooperative relationships across agencies such as government, education providers, and the AOD health/ service industry.

Funding recommendations

- Increase funding available to create new and extend existing roles, within the AOD workforce
- Address the restricting of pay scales, income discrepancies, and acknowledgement of qualifications mentioned throughout theme 1 Recruitment.

Six key strategy recommendations for recruitment

Based on the synthesis of findings from the 19 publications included in this literature review, 6 key strategies are recommended to increase NSW AOD workforce recruitment. These six strategies are:

1. Postgraduate AOD scholarships to increase the number of people adequately trained to commence as AOD health care workers
2. Consistent investment through funding into the AOD sector (linked to number 3 below)
3. Creation of specified AOD health worker positions, particularly for allied health, Indigenous and peer workers
4. Appropriate remuneration/ workloads and professional development opportunities to increase appeal for professionals to enter the AOD sector
5. Increase AOD professional development opportunities for non-AOD workers to upskill in competencies required for entry in to the AOD sector
6. Review other funding models that are permanent (rather than short-term and competitive) and that are also more appropriate for the nature of treating addiction (e.g. accounts for relapse in symptoms) which means that the funding is long-term, stable, and not outcomes-focussed or driven.

Recommendations for retention strategies (Theme 2)

Retention recommendations for the NSW AOD sector are grouped under the three related themes identified in Question 1. The three retention themes focus on: 1) employment conditions, 2) worker wellbeing and 3) workforce development. Detailed recommendations identified for these three retention themes are provided below. Additionally, at the end of Theme 2, a summary of three key strategies are recommended to NSW Ministry of Health.

Employment condition recommendations

- Review, restructure and provide appropriate and equal remuneration
- Increase access to, and opportunities for, supervision and professional development
- Improve job security by increasing length of contracts, and number of permanent positions.
- Reduce workload through increasing the number of advertised AOD specific roles.
- Relating to improvements to job security and also to funding – review alternate funding models which would enable organisations to rely less on competitive, outcomes focussed government funding (2, 5)
- Work to improve safety and connections between teams, particularly for outreach workers.

Worker wellbeing recommendations

- Ensure outreach AOD workers have targeted wellbeing and risk-management strategies [24]
- Ensure supervision is provided, in various forms including 1:1, peer and group [24]
- Address the clear need for expanded worker and management support strategies (such as clinical supervision, mentoring and professional development)
- Review and amend appropriate remuneration (recurring recommendation)
- When adopting and executing the recommendations provided throughout this report, ensure priority strategies to effectively address the above identified challenges of working in the AOD workforce such as burn out, stress, vicarious trauma, excessive workload, stigma. [2]

Workforce development recommendations

- Increase career pathways and communication/ advertisement of these to pre-professional and professional AOD workforce [4, 5]
- Ensure strong leadership within the AOD sector, workforce and individual organisations.

As noted in addressing Question 1, workforce development is intrinsically linked to many if not all themes that have arisen in the current rapid evidence review. Therefore, the above recommendations for employment conditions, worker wellbeing, pre-professional and professional education and training, and the review of systems approaches all relate as recommendations for workforce development, stand to support this theme, and are therefore not repeated here.

Three key strategy recommendations for retention

Based on the recent surveys and studies included in this literature review, three key strategies are recommended to increase health care worker retention. The three strategies are:

1. Increase access to supervision, mentoring and ongoing professional development/ training
2. Ensure appropriate remuneration, workloads and job security to support increased job satisfaction, worker wellbeing and opportunities for career advancement
3. Conduct surveys with NSW LHD and NGO AOD staff (inclusive of under studied professions e.g. allied health) on worker conditions (incl. workload, job satisfaction, job security, worker safety, and impact on outcomes funding).

Recommendations for recruitment and retention strategies by profession (Theme 3)

Recruitment and retention recommendations for the NSW AOD sector are grouped under four professional groups discussed above for Question 1: 1) Doctors and nurses, 2) Allied health workers, 3) Aboriginal health workers, and 4) Peer workers. Detailed recommendations identified for these professional groups are provided below. Additionally, at the end of Theme 3, a summary of five key strategies are recommended to NSW Ministry of Health.

Doctors and nursing recommendations:

- Identify the full medical profession AOD workforce (i.e. in addition to nurses)
- Investigate recruitment and retention of doctors and nurses in the AOD field. Roche and Pidd have reviewed recruitment by profession, which may offer appropriate strategies for the NSW Ministry to review and consider. [20] However this evidence is outdated and remains an important area to revise.
- Consider funding opportunities to extend and/ or adapt and evaluate the use of evidence-based strategies identified for other professions/ workforces with this group, this may include surveys or qualitative work (e.g. focus groups and interviews to first quantify this workforce in Australia and secondly co-design possible effective strategies to improve recruitment and retention to the AOD sector).

Allied health workers recommendations:

- Investigate rates of recruitment and retention in the AOD field for allied health (including social workers, psychologists, counsellors and other allied health professionals)
- As for doctors and nurses, consider funding opportunities to extend and/ or adapt and evaluate the use of evidence-based strategies identified for other professions/ workforces with this worker group.

Aboriginal workforce recommendations

- Increase access (consider funding back fill) to workplace training, seminars, and CPD for Aboriginal workers to increase Aboriginal workers competency and number in the force [23]
- Increase training to develop cultural competency of non-Aboriginal workers [23]
- Develop strategies for increased Aboriginal recruitment with a focus on role matching, culturally grounded interventions, and development and promotion of culturally appropriate models of care, to increase Aboriginal representation in the workforce and recognition of cultural value brought to the workforce by Aboriginal workers [17, 23]
- Improve consistency of job titles, flexibility of work conditions, and clarity in expectations/ role descriptions [3, 14, 17, 18]
- Improve recognition of cultural value brought to the role by Aboriginal workers and improve understanding of culturally safe work environments [3, 14, 17, 18]
- Increase salaries inclusive of addressing discrepancies in pay/ award conditions [3, 14, 17, 18]
- Improve access to, and provision of, supervision [3, 14, 17, 18]
- A national representative body (such as proposed by the former NIDAC) would appear valuable to support Aboriginal AOD workers in Australia. [17]

Peer worker recommendations:

- Streamline accredited peer training and qualifications [11]
- Develop clear, consistent peer competencies and best practice guidelines for AOD peer workers [10, 11, 19]
- Improve clarity of and opportunities for both career progression and supervision/ mentorship [10, 11]
- Consider application of a three-tier AOD peer roles of peer worker (supports the patient); peer manager (supports peer staff); and peer leader (supports the organisation) to increase the opportunities for the peer workforce. [19]

Five key strategy recommendations for retention and recruitment by profession

This literature review showed limited to no current research on recruitment/ retention strategies by profession. The exception to this was for Aboriginal and Peer AOD workers, where there is a reasonable number of publications regarding these two particular workforces. Due to the limited studies and evidence, the following five strategies are recommended with caution.

1. Establish core competencies developed across each profession, drawing upon existing professional networks, such as APSAD, DANA and the College of Addiction. NCETA and senior AOD clinicians (for their own profession) may also be considered for consultation in developing AOD core competencies so that core competencies match profession skill set
2. Professional and career development opportunities created across each profession to increase appeal in working in the AOD sector as well as for career advancement opportunities
3. Continue to monitor the success of New Zealand's recruitment of specialist AOD nurses for identification and consideration of appropriate strategies that could be applied in NSW
4. Investigate successful recruitment/ retention of doctors, psychologists, social workers, dietitians and pharmacists in the AOD sector
5. Consider the needs and employment conditions of peer workers in regards to workload/ role impacting their own recovery to increase retention and recruitment of this group.

Summary of key findings

The above 14 key recommendations are a synthesis of findings from the 19 publications included in this review, representing the most recent (immediately preceding 5 years) and relevant literature relating to strategies that support the retention and recruitment of the AOD workforce. Whilst the recommendations are well founded in a good quality body of evidence from these 19 included publications (Grade B; see 'evidence grading' above) there was limitations to the type of publications found. There was limited evaluation on recruitment and retention by profession. Additionally, many of the publications synthesised or reiterated past knowledge (e.g. organisational reports, qualitative literature reviews) however they did not evaluate specific strategies against quantifiable changes in retention and recruitment outcomes. For example, in the past five years, there appears to be a lack of studies measuring retention and recruitment rates before and after implementing the recommendations as strategies. This limits the conclusions that can be drawn from the publications as the findings lack tangible proof of effect. Studies which compare recruitment or retention rates before and after implementing strategies, would aid in determining whether such strategies can/ do have a positive effect on retention and recruitment. From this evidence decisions can be made around whether the tested strategies should be adapted to have a greater effect or rolled out 'as is' more widely across the AOD sector.

These studies are difficult to complete, require long term funding and the embedding of research in service delivery/ research-service partnerships, as well as long term follow-up and data systems or processes that enable the accurate collection of relevant figures/ statistics. This review was of the previous 5 years of literature, and it is possible that older studies of this nature exist, however there remains a need for up to date evaluations in this area.

It is also evident that development of innovative, new approaches (such as using social media and technology based recruitment strategies to engage/ retain health professionals into the AOD sector) have not been trialled in the last five years, or if they have, the findings of these have not been published or communicated to the wider community. Therefore there remains a need for studies of this nature with the AOD workforce.

Gaps in the evidence

Additionally, many included publications focussed at a broad whole of workforce levels, or at most at the level of mainstream (overall health or AOD workforces), peer and/ or Aboriginal workforce levels. In Australia, research related to Aboriginal workers provided comprehensive recommendations to support this group stemming from four publications, two being qualitative systematic reviews and therefore representative of high levels of evidence. However, publications addressing work with CALD populations was scarce, as were publications considering doctors and allied health professions (e.g. psychologists, dieticians, counsellors and social workers). In particular, there was no literature that specifically considered the role of dieticians and pharmacists in the AOD sector.

These gaps in the recent evidence meant that the located literature was insufficient to draw out more specific recommendations per profession. Thus, this review cannot make targeted recommendations for doctors, psychologists, counsellors, social workers, dieticians or pharmacists as individual. Publications such as Roche and Pidd do offer comment on AOD workforce development by profession, however such evidence is approaching 10 years since publication and thus remains an important area for update. [20]

Discussion

The current rapid review sought to locate the most recent evidence (past 5 years) to address two questions:

1: What approaches have been effective in the recruitment and retention of an alcohol and other drug workforce?

2: Based on the effective strategies identified in Question 1, identify priorities for a recruitment and retention strategy for consideration by the NSW Ministry of Health, Australia.

Using systematic review methodology the authors conducted a rapid review of evidence published from 1 January 2014 until 21 May 2019, resulting in 19 relevant articles, published in Australia (11 articles) or internationally (8 articles) for inclusion in the evidence synthesis. Evident from this process, there is a body of recent evidence available for guiding the development of strategies to improve retention and recruitment of the NSW AOD workforce. From the findings of the 19 publications 42 recommendations were identified (see Appendix 4, Table 1). These were then condensed to 14 recommendations for improving the recruitment and retention of the AOD workforce summarised under 3 themes which can be actioned by the NSW Ministry of Health: Recruitment, Retention, and Recruitment/ retention by profession.

The findings are further supported by the release of a Northern Territory Alcohol and Other Drug Workforce Development Strategic Framework (2019-2024) commissioned by the NT Primary Health Network and completed by NCETA [21] during the write up of the present rapid review (October 2019). The Framework outlines 8 recommendations formulated from a needs assessment (literature review, review of data from the 2016 National Drug Strategy Household Survey, and expert consultation process). [21] The recommendations focus on: improved understanding of the NT AOD workforce; improvements to recruitment and retention; greater support of the rural and remote, and Aboriginal AOD workforces; improved intersectoral collaboration; enhanced access to education and training, clinical supervision and mentoring opportunities; and support of innovations in practice. [21]

Recommendations arising from this recent NT work align closely to the findings of the current rapid review which proposes recommendations to improve recruitment and retention of the NSW AOD workforce across 8 themes of: pre-professional and professional education and training; professionalisation of the AOD workforce; review of health care systems approaches; funding; employment conditions; worker wellbeing; workforce development; and recruitment and retention by profession (doctors and nurses, allied health, AHWs, and peer workers). The NT and NSW bodies of work, conducted independently, utilising recent evidence, and showing considerable alignment in recommendations, give strength to the need and appropriateness of recommendations suggested within each, and the potential for interstate and national extension of such work.

Similarly, recommendations for recruitment and retention strategies proposed in the current report align well with the structure and content of the four levels system approach proposed by the Matua Raku (NZ). [8, 9] In this approach, level one involves skills/ training development of the addiction workforce and strategies to address stigma of working in the AOD sector, employment conditions, remuneration and consistent funding. [8, 9] The second level includes the development of an AOD workforce development organisation - Matua Raki in New Zealand and NCETA in Australia. [8, 9] The third level includes development of the peer workforce including training, career pathways, remuneration, and consideration of recovery and work load. [8, 9] Finally, the fourth level focuses on development of the AOD Indigenous workforce. [8, 9]

Whilst it is reassuring to have alignment across the evidence presented in the current report with interstate and national bodies of evidence, opportunities remain for ensuring the comprehensiveness of this evidence base (discussed under Summary of key findings and Gaps in evidence).

The current review identified many qualitative syntheses or reviews that combine evidence to formulate recommendations, however there was limited formal evaluation of strategies; a lack of studies measuring retention and recruitment rates before and after implementing the recommendations as strategies.

Additionally, there remains a need for publications addressing work with CALD populations and for doctors, pharmacists and allied health professions (e.g. psychologists, counsellors, social workers and dietitians). Earlier publications, such as Roche and Pidd (2010) offer comment on AOD workforce development by profession [20], however such evidence is approaching ten years of age and thus is an important area for update.

Applicability

As discussed above under Evidence grading (applicability criteria), Summary of key findings, and Gaps in the evidence the evidence presented within this rapid review was rated excellent for direct applicability to the Australian context however with some limitations in relation to comprehensiveness of evidence across all aspects of the NSW AOD workforce.

Firstly, the majority of included publications were conducted in Australia (11 of 19; ~58%) and thus relate directly to an Australian AOD workforce context, with synthesised findings therefore most heavily influenced by these publications.

Secondly, 13 of 19 (~68%) included publications relate to AOD workers including current AOD professionals, AOD postgraduate students, AOD peer and AHWs, providing directly relevant evidence towards the formulation of strategies to improve the retention and recruitment of the AOD workforce in NSW. However as noted, publications pertaining to the recruitment and retention of doctors, nurses, pharmacists and allied health professions (e.g. psychologists, counsellors, social workers and dieticians) to the NSW AOD workforce were absent, and therefore a need to increase this aspect of the evidence-base remains.

Conclusion

The literature included in this rapid review confirms previously known barriers to recruitment and retention in the NSW AOD workforce. Overall across the current body of evidence and equivalent interstate and international bodies of evidence there appears clear, consistent recognition of the unique and complex nature of an AOD workforce. The importance of growing this workforce (recruitment and support of pre-professional AOD workforce) and fostering wellbeing and competency in existing professionals (retention and support of professional AOD workforce) is also evident in the literature. The current review adds to the existing evidence to help inform recommendations to improve recruitment and retention in the NSW AOD sector.

Based upon the literature, three themes of AOD workforce recruitment/ retention were identified. The three themes were:

1. Recruitment
2. Retention
3. Recruitment/ retention by profession.

A total of 14 key recommendations were drawn from this literature.

Due to the limitations of this AOD workforce literature, there remains a need to increase evidence pertaining to the recruitment and retention of doctors, nurses, pharmacists, allied health professions (e.g. psychologists, social workers and dieticians), and both the LHD and the NGO AOD workforce. Similarly there remains a need for publications relating to CALD populations.

Furthermore, publications using study designs that measure retention and recruitment outcomes before and after implementing proposed strategies (i.e. measure the resulting change or effect of these strategies on such outcomes) are also warranted. Continual monitoring and evaluation of recruitment and retention of the NSW AOD workforce, inclusive of addressing key reoccurring themes (e.g. remuneration, employment conditions, worker wellbeing, workforce development) will be vital to ensuring the effectiveness of any newly established or revitalisation of existing workforce development frameworks. Additionally, the opportunity exists to develop and test new and innovative approaches such as (such as using social media and technology-based recruitment strategies to engage/ retain health professionals into the AOD sector).

References

1. NSW Ministry of Health. The Health Professionals Workforce Plan 2012-2022: Revised 2015. North Sydney, NSW: NSW Ministry of Health; 2015. p. 1-36.
2. Roche A, Kostadinov V, Hodge S, Duraisingam V, McEntee A, et al. Characteristics and wellbeing of the NSW non-government AOD Workforce. Adelaide, South Australia: National Centre for Education and Training on Addiction, Flinders University.; 2018.
3. Ella S, Lee KK, Childs S, Conigrave KM. Who are the New South Wales Aboriginal drug and alcohol workforce? A first description. Drug & Alcohol Review. 2015;34(3):312-22.
4. Roche A, Roger N. Workforce development: An important paradigm shift for the alcohol and other drugs sector. Drugs: Education, Prevention and Policy. 2017;24(6):443-54.
5. Butler M, Schultz TJ, Halligan P, Sheridan A, Kinsman L, et al. Hospital nurse staffing models and patient and staff related outcomes. Cochrane Database of Systematic Reviews. 2019(4).
6. National Health and Medical Research Council. NHMRC levels of evidence and grades for recommendations for guideline developers. Canberra, ACT, Australia: National Health and Medical Research Council; 2009.
7. Adams PJ, Sellman D, Newcombe D, Adamson S, White S, et al. Postgraduate alcohol and other drug practitioner training in New Zealand: Significant influences. Journal of studies on alcohol and drugs. 2017;78(3):468-74.
8. Nelson A. Addiction workforce development in Aotearoa New Zealand. Drugs: Education, Prevention and Policy. 2017;24(6):461-8.
9. Nelson A. Workforce development and professionalization. The SAGE Handbook of Drug & Alcohol Studies: Social Science Approaches. 2016:302.
10. Te Pou o Te Whakaaro Nui. Service user, consumer and peer workforce A guide for planners and funders. Aukland, New Zealand: Te Pou o Te Whakaaro Nui; 2014.
11. Chapman S, Blash L, Mayer K, Spetz J. Emerging Roles for Peer Providers in Mental Health and Substance Use Disorders. American Journal of Preventive Medicine. 2018;54(6 Supplement 3):S267-S74.
12. National Centre for Education Training on Addiction. National alcohol and other drug workforce development strategy 2015–2018: A sub-strategy of the National Drug Strategy 2010–15. Canberra, Australia; 2014.
13. Gwynne K, Lincoln M. Developing the rural health workforce to improve Australian Aboriginal and Torres Strait Islander health outcomes: a systematic review. Australian Health Review. 2017;41(2):234-8.
14. Deroy S, Schutze H. Factors supporting retention of aboriginal health and wellbeing staff in Aboriginal health services: a comprehensive review of the literature. International Journal for Equity in Health. 2019;18(1):70.
15. Grobler L, Marais BJ, Mabunda S. Interventions for increasing the proportion of health professionals practising in rural and other underserved areas. Cochrane Database of Systematic Reviews. 2015(6).
16. Johnston L, Burton G. What is this thing called workforce development? A Scottish perspective. Drugs: Education, Prevention & Policy. 2017;24(6):455-60.
17. Lee KSK, Freeburn B, Ella S, Wilson S, Harrison K, et al. Supporting the Aboriginal alcohol and other drug workforce in New South Wales, Australia. Drug & Alcohol Review. 2017;36(4):523-6.
18. Lai G, Taylor E, Haigh M, Thompson S. Factors affecting the retention of Indigenous Australians in the health workforce: a systematic review. International journal of environmental research and public health. 2018;15(5):914.
19. WA Peer Supporters Network. The Peer Workforce Report: Mental Health and Alcohol and Other Drug Services. Western Australia, Australia; 2018. Available from: http://www.comhwa.org.au/wapsn.

20. Roche A, Pidd K. Alcohol and Other Drugs Workforce Development Issues and Imperatives: Setting the Scene. Flinders University, Adelaide, South Australia: National Centre for Education and Training on Addiction (NCETA); 2010.
21. Roche A, Trifonoff A, Fischer J. Northern Territory Alcohol and Other Drug Workforce Development Strategic Framework. Flinders university, South Australia: National Centre for Education and Training on Addiction (NCETA); 2019.
22. Veritas Health Innovation. Covidence systematic review software. Melbourne, Australia: Available at www.covidence.org; 2019. Available from: www.covidence.org.
23. Western Australian Network of Alcohol and other Drug Agencies. Comprehensive Alcohol and other Drug Workforce Development in Western Australia. Perth, Western Australia, Australia: Western Australian Network of Alcohol and other Drug Agencies (WANADA); 2017.
24. Butler M, Savic M, Best DW, Manning V, Mills KL, et al. Wellbeing and coping strategies of alcohol and other drug therapeutic community workers: a qualitative study. Therapeutic Communities: The International Journal of Therapeutic Communities. 2018;39(3):118-28.

Appendices

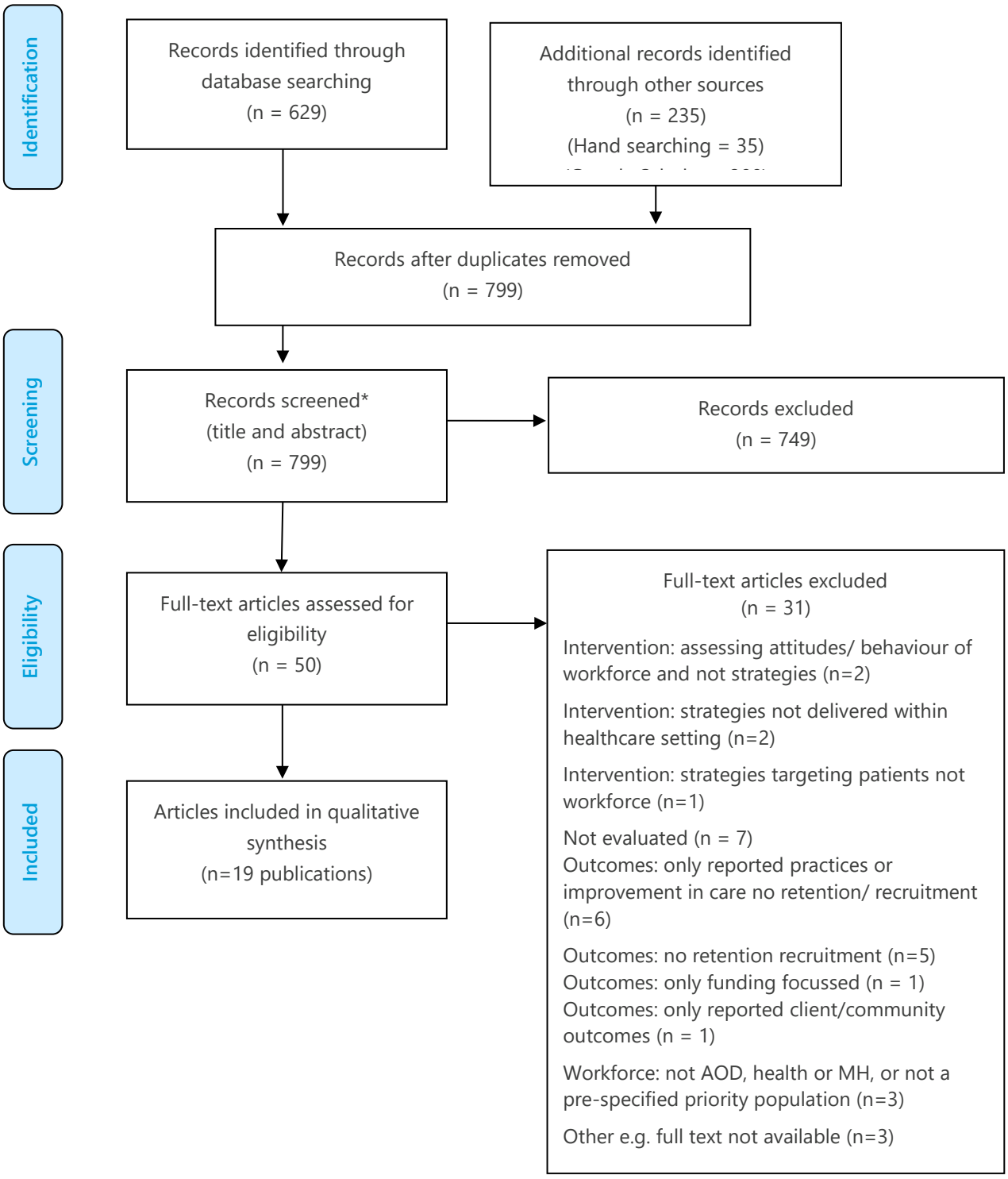
Appendix 1. Study screening guideline detailing inclusion and exclusion criteria

Table 1. Study screening guideline detailing inclusion and exclusion criteria

PICO Criteria	Inclusion and exclusion criteria
Participants	**Of priority for inclusion:** • AOD workforce/ workers/ professionals working with AOD populations • AOD workforce include (but possibly not limited to): AOD workers, nurses, social workers, doctors, peer workers, needle and syringe program workers, prevention workers, addiction medicine specialists, specialist psychologists and psychiatrists, lay health professionals. **Other professions/ sectors:** At title/ abstract screening to enable assessment of quantity of AOD specific/ relevant articles all records that meet all inclusion criteria however do so for different workforces should be kept in for full text screening e.g.: • Mental health professional • Health personnel/ workforce/ sector. Where there is insufficient evidence to answer the review question from literature in the AOD sector, evidence from another health sector will be included. This will be reassessed during level 2 full text screening. **Priority populations:** Where approaches have been developed or outcomes reported for priority groups these should be included: Aboriginal people, people from low SES backgrounds, people in rural and remote areas, and people from CALD backgrounds. **Professional role:** Approaches may be reported by profession or role where relevant e.g. approaches to improve recruitment of registered nurses for AOD positions **Exclude:** Anything not targeting health professionals/ workforce e.g. articles where the focus study population is AOD clients, carers of AOD clients etc.
Intervention	**Type:** 'Intervention' may consist of **strategies to:** • Reduce attrition/ increase retention • Increase recruitment. **"Approaches" can include (but are not limited to):** succession planning; financial incentives; nonfinancial incentives; training and mentoring support; alternative models of service delivery or workforce structure e.g. using staff in different roles; fly-in fly-out (FIFO) models; registration or accreditation of AOD workforce; promotion of AOD workforce in relevant training programs; professional structure that supports placements in AOD roles; capability frameworks; tertiary education approaches to upskill future AOD workforce; and consider appropriateness of strategies making changes to AOD workforce environment. **Number of strategies:** There is no limit/ minimal number of strategies the articles must include. **Facilitator:** There are no limits on who designs/ delivers the strategies e.g. researchers, health professionals, community members **Evaluation:** Only evaluated approaches are of interest. However, where there is insufficient evidence to answer the review question, evidence that is medium or weak e.g. a study which suggests an intervention is promising but requires more rigorous research or that is equivocal/ conflicting should be included. **Exclude:**

PICO Criteria	Inclusion and exclusion criteria
	• Strategies that are not evaluated or not delivered or trialled within a healthcare setting with healthcare professionals e.g. business, law, engineering, environmental, researchers, academics etc. • Studies only assessing the experience or attitudes of the workforce and not evaluating a strategy to assist or change these.
Comparator	There are no comparator restrictions – all study designs should be considered for inclusion. **Types of evidence to be included:** The review should include evidence sourced from: • The peer reviewed literature (e.g. Searches of have been completed of relevant databases: Cochrane, Medline, PsycInfo, Embase) • Grey literature (e.g. searches have been conducted of agency reports, international organisation reports, guidelines, Australian Policy Online (grey database 2014-2019 refs) and first 200 exports from Google Scholar) • Including local guidelines, policies, white papers, published academic manuscripts, editorials, commentaries, books dissertations etc.
Outcome	**Priority outcomes are:** • Reduce attrition • Increase recruitment of AOD workforce. **Other outcomes:** Due to differentiation in terms used to describe retention and recruitment or that relate to these priority outcomes, research team discretion is required to keep in all alternate but relevant outcomes which may not use the exact words of retention and recruitment and may include however are not explicitly restricted to: • Upskilling • Reduction of stress/ burnout • Job satisfaction • Implications for workforce projections • Reform • Early retirement • Outcomes matching all strategies listed under 'Approaches' above e.g. registration/ accreditation, trialling staff in different roles, FIFO. **Data collection/ measure format:** Data can be collected via any collection method (e.g. self-report, observation, or objective measures) **No restriction on direction of effect** – both effective and ineffective strategies should be included. "Effective" refers to approaches which have demonstrated improved recruitment and retention of staff. **Exclude** Records that report only: • The practices of health professionals (not strategies to improve working conditions, retention or recruitment rates) • Client/ patient/ community outcomes e.g. change in health behaviour/ prevalence of AOD use, treatment options or treatment uptake.

Appendix 2. Study selection flow diagram (PRISMA)



*Criteria for exclusion are detailed in App. 1, Table 1. Briefly publications were excluded if they did not include: 1) the AOD workforce/ workers/ professionals working with AOD populations as participants; 2) an 'intervention' or strategies to reduce attrition/ increase retention and/ or increase recruitment of this workforce,; and 3) assessment of outcomes relating to attrition, retention, or recruitment of this workforce. Any type of evidence was eligible for inclusion (e.g. peer reviewed publications, grey literature, reports, guidelines, etc).

Figure 1. PRISMA Study flow diagram

Appendix 3. Table of included studies

Table 1. Table of Included alcohol and other drug workforce studies

Author, Year	Title	Study type	NHMRC grade	Population, Setting	Findings/ recommendations
15 of 19 publications included in the grading of evidence					
AOD Workforce					
Adams JP. et al. (2016)	Postgraduate Alcohol and Other Drug Practitioner Training in New Zealand: Significant Influences	Case study	IV	345 post-graduate students, attending AOD program at two New Zealand Universities (University of Otago; University of Auckland)	Identified key components: • Specialised post-graduate learning overlaying generic undergraduate training. • Core commitment to practice orientated teaching. • Investment in training by government bodies. • Ongoing collaboration/ co-operation between government, education providers, and AOD registration and professional bodies. Primary outcome(s): • 345 students obtained AOD specialist qualifications over 10 years. • Te Pou – Skills Matter: program linking funding with improved set of AOD sector learning goals. • Matua Raki – National AOD workforce development centre formed in mid 2000s.
Butler M. et al. (2018)	Wellbeing and coping strategies of alcohol and other drug therapeutic community workers: a qualitative study	Qualitative study	IV	11 in-depth interviews with, AOD therapeutic community organisation workers, Australia	Examination of strategies for AOD worker wellbeing. Primary themes found: • Challenges of working in AOD: vicarious trauma; isolation and safety of outreach; lack of connection between teams especially for outreach workers; work related stress and burn out; emotionally stressful work. • Individual strategies for coping/ wellbeing. • Employment conditions and low job satisfaction. • Work conditions preventing access to supervision. • Protection/ organisational level support of worker wellbeing: Staff supervision a protection and being allowed to talk about work stress. Organisational support. Six weeks annual leave. Work conditions.

					• Possible need for targeted strategies for 'at risk' teams or groups of workers alongside organisation-wide strategies.
Roche A. et al. (2018)	Characteristics and wellbeing of the NSW non-government AOD Workforce	Cross-sectional survey	II	294 AOD Workers, NSW NGO AOD Workforce, Australia	Demographic profile of AOD workforce: • 66% are women; 60% are 40+ years; 40% 20-39 years; (72%) in current role <five years & 38% current role for less than one year; 68% employed full time; 58% in permanent positions; 48% have no professional qualifications & 40% with qualifications. • Less than half receive supervision and 11% mentoring. • Most earned $50,001-$70,000, with high dissatisfaction regarding remuneration levels. • High level of job insecurity with1/4 unsure of continued employment in the following 12 months. (53%) the sample worked in urban locations, (32%) in regional, 14% in rural, and 1% in remote areas. "Satisfied" (42%) or "very satisfied" (24%) working in the NGO AOD sector. Findings re: AOD worker wellbeing: • Rates of daily tobacco use higher than the national average, with almost a quarter reported drinking alcohol at risky levels 1-4 times per week. • Prescription drug use in the past 3 months (including pain medication, heroin and opioids) was reported by 15% of respondents. • 40% of respondents indicated that they had lived experience, compared to just 12% who were employed in a lived experience role. • The majority of participants reported positive quality of life and moderate-high levels of resilience, engagement, job satisfaction, and confidence, with burnout rare.

					• A large proportion felt workloads were too high and found their job to be stressful and cognitively demanding. • Dissatisfaction with some aspects of working conditions, including their remuneration. • 103 (49.7%) agreed or strongly agreed that they were thinking about leaving their job. Challenges to working in the AOD field: • Can be highly rewarding, with many workers reporting gaining high levels of job satisfaction from helping people, participating in "meaningful" work, and making a positive contribution to society. Nevertheless, AOD workers may also experience considerable work-related demands and challenges which have the potential to lead to burnout and poor wellbeing. • Difficulties recruiting and retaining staff in the context of a worldwide shortage of health and welfare workers • The need to work across sectors (e.g. primary care, corrections, social services) • Recurring service restructuring • Outcomes - (rather than inputs- or outputs-) focussed funding • Increased occupational exposure to violence • Stigma associated with providing services to AOD clients • Lack of resourcing for professional development and upskilling • Management being inadequately trained and supported to carry out their role • Pay disparities depending on occupation/ professional title and employment in different sectors • Insufficient co-worker and line manager support and absent/ limited clinical supervision • Qualifications that have become increasingly academic and less applied, challenging the 'work readiness' of students/ those new to the workforce.

					• Increasing complexity and multi-morbidities. Recommendations: • A clear need for expanded worker and management support strategies (such as clinical supervision, mentoring and professional development) emerged. • Review and amendment of appropriate remuneration. • Strategies to effectively address the above identified challenges of working in the AOD workforce.
Roche A and Roger N. (2017)	Workforce development: An important paradigm shift for the alcohol and other drugs sector	Qualitative synthesis	I	Qualitative description of systems approach to AOD workforce development, Australia	• A systems approach is broad and comprehensive, targeting individual, organisational and structural factors, rather than just addressing the immediate education and training of individual workers. • Worker well-being; workforce planning; leadership and management; worker recruitment and retention; effective learning environments; and training. Three phases: 1) Individual (bottom-up): resources and education and training programmes to enhance individual workers' knowledge and skills. Effectiveness is dependent upon organisational culture and may have barriers for implementation of training skills. 2) Internal Systems: Addressing impediments to worker recruitment and retention; adequate workplace support and professional and career development, particularly effective clinical supervision, teamwork, leadership, mentoring and education and training; evidenced-based organisational policies and models of care that enhanced client outcomes; and clear staff roles and functions. Effective information management. 3) Integrated human services: Limitations of siloed models of care, coupled with changing expectations of clients, the broader

					community and funders regarding partnerships and client inclusion. Prompted a multidisciplinary approach. Recommendations: • The level of funding is a pivotal factor influencing the extent and quality of services provided. The efficacy and cost effectiveness of substance use treatment have been well established. Every $1 invested in this treatment provides returns of $7 (Ettner et al. 2006). Nevertheless, there are substantial shortfalls in available treatment. In Australia for example, approximately 200,000 people receive AOD treatment in any one year and between 200,000 and 500,000 additional people would seek treatment if it were available. • Effective innovation dissemination requires the synthesis and dissemination of research findings and an understanding and application of implementation science. It entails widespread acceptance that the innovation will optimise patient/ client outcomes, while reducing the risk of unnecessary or harmful treatment (Buchan, Sewell, & Sweet, 2004). • Dissemination and training ideas: Educational meetings Educational outreach. Prompts and reminders. Audit and feedback. Implementation science. • Other strategies included: CPD (Davis et al. 2003); systematic reviews of research findings (Grimshaw et al. 2002); and implementing behaviour change interventions that targeted a particular practice (Michie et al. 2005).
Western Australian Network of Alcohol and other Drug Agencies	Comprehensive Alcohol and other Drug Workforce Development in Western Australia	Report formed through research and expert consultation synthesis	I	Alcohol and Other Drug workforce, Australia	3 parts to AOD WFD, with 21 recommendations across: *Individual Development* (8 strategies/ recommendations): 1. Incorporation of alcohol and other drug core competencies into the curriculum of relevant tertiary courses. 2. Aboriginal training to increase Aboriginal workers and develop cultural competency of non-Aboriginal workers. 3. Enhance student placement program to enhance readiness.

(WANADA) (2017)					4. Expand MH Commission AOD volunteer counsellor program. 5. Develop and maintain detailed register of training opportunities (incl. identify which accredited, provider and access). 6. Coordinate sector input in to training and capacity building, and collegiality, leadership and networking within the sector. 7. Review and update counselling guidelines in collaboration with the sector. 8. Resource coordination of localised training in WA regions. *Organisational Development* (6 strategies): recruitment, worker support/ wellbeing, leadership and succession planning, 9. Develop funding strategies to support long term recruitment and retention initiatives. 10. Develop recruitment and retention strategies to support regional engagement in the sector 11. Develop strategies for increased Aboriginal recruitment with a focus on role matching and culturally grounded interventions 12. Develop strategies to ensure effective clinical/ practice supervision is embedded into organisations, enhance the application of evidence-based practice and support worker wellbeing. 13. Review worker wellbeing resources and promote an appropriate tool that would enable organisations to better plan and implement worker wellbeing strategies informed by regular reviews. 14. Establish a coordinating body for AOD drug service users in WA, to support co-production and co-design with consumers and family members. *Systems Development* (7 strategies) efficient and effective workforce that responds to AOD issues. 15. Coordinate structured cross-community sector capacity building in partnerships with other community peaks.

					16. Develop communication strategies specifically promoting research evidence of AOD brief and early intervention effectiveness. 17. Enhance cross-sector engagement through promotion of individual and community successes resulting from AOD interventions specific to co-occurring issues. 18. Encourage the measurement of partnership effectiveness to support collaboration planning based on consumer and community need. 19. Implement sector and consumer informed strategies to address stigma and discrimination. 20. Use data effectively to inform timely responses to current trends in the community. 21. Ensure national AOD data and outcomes development meaningfully incorporates a WA context.
Aboriginal AOD workforce					
Ella S. et al. (2015)	Who are the New South Wales Aboriginal drug and alcohol workforce? A first description	Cross-sectional survey	II	51 Aboriginal AOD Workers, NSW, Australia	Demographics of workforce sample: NGO (60.8%) vs Gov't; (39.2%) employed; 2/3 Male; 56.9% aged 30-49 years. Employment conditions: • 4 different salary awards. • 8 different employment titles. • Under 1/3 did not receive supervision, with NGO staff less likely to receive supervision. • Half of workers felt too much was expected of them. • Over half received $50K or less pa. Recommendations to improve retention: Address discrepancies in pay/ award conditions; CPD; improve access to workplace training (consider back fill) and supervision; improve clarity of position descriptions.
Lee KS. et al. (2017)	Supporting the Aboriginal alcohol and other drug workforce in New	Commentary in Australia	IV	Aboriginal AOD Workforce, Australia	Aboriginal AOD Network Agencies: • The Remote Alcohol and Other Drugs Workforce Program (NT) • WA. Network of Alcohol and Drug Agencies • Drug and Alcohol Services S.A. • The Queensland Indigenous Substance Misuse Council.

	South Wales, Australia				• Aboriginal Drug and Alcohol Network in NSW: Offers CPD, conference, community. Beneficial elements: • Facilitate collaboration; Aboriginal representation in key roles; seminars/ professional development opportunities; development and promotion of Aboriginal cultural models of care; mailing lists; state-wide representation of profession. Conclusion: A national representative body (such as proposed by the former NIDAC) would appear valuable to support Aboriginal AOD workers in Australia.
AOD Peer workforce					
Chapman SA. et al. (2018)	Emerging Roles for Peer Providers in Mental Health and Substance Use Disorders	Case study	IV	194 individuals from 29 organisations, expert interviews, four states of USA.	• Identify and assess best practice for peer workers. • A favourable policy environment along with individual champions and consumer advocacy organisations were positively associated with robust programs. • Peer provider training and certification requirements vary. • Issues of stigma remain. • Peer providers are low-wage workers with limited opportunity for career growth and may require workplace accommodations to maintain their recovery. • Three-tiered peer specialist classification. • Peer workers opportunity to reduce shortages in a rapidly growing workforce.
Te Pou o Te Whakaaro (2014)	Service user, consumer and peer workforce A guide for planners and funders	Qualitative synthesis (details of methods limited)	IV	Peer worker considerations for planners and funders, New Zealand	• Potential National Developments: Competencies needed; poor planning and funding; requires description of ethics and boundaries for peer workers; peer supervision; qualification; peer practice tools; and career pathways. • Potential planner and funder developments: Explicit targets, funding and contracts for increasing the peer workforce are needed. Tailored

					accountabilities to suit the nature and values of peer services. Further investment in the peer workforce. • Potential service developments: prepare sector for increased peer worker roles; clearer job descriptions; adjust recruitment criteria and processes; flexible work conditions; peer colleagues and line management for peer workers, and provision of supervision and training.
Health workforce					
Butler M. et al. (2019)	Hospital nurse-staffing models and patient- and staff-related outcomes (Review)	Cochrane Review	I	6769 hospital-based nurses, across 19 included studies conducted in hospital settings in Australia, Netherlands, USA, UK, Canada	• Shift models can impact nursing retention. Self-staffing may increase nursing retention. • Uncertain whether primary nursing or staffing models reduces turnover. • Primary nursing (nursing based on the therapeutic relationship with the patient) may increase retention. • Higher nurse to patient ratio and reduced use of agency nurses did not seem to affect nurse retention. • GRADE analysis of quality of evidence: Very low due to limited amount and quality of existing studies for inclusion.
Johnston L and Burton G. (2017)	What is this thing called workforce development? A Scottish perspective	Qualitative synthesis	I	AOD workforce, Scotland	ROSC: Recovery Orientated System of Care ADP: Alcohol & Drug Partnerships • ROSC, health and social care integration and focus on the connectivity between services, there has been a greater need for treatment services and agencies to work in partnership with sectors who do not have a primary role in supporting those affected by AOD but who may come into contact with such individuals. • Move to ROSC has been slow. • The role of supporters/ volunteers has become increasingly prominent in the AOD sector and is recognised as important by the Scottish Govt. They must be skilled and trained to become a part of the AOD workforce.

					• ROSC Community Addiction Nurses are best placed to meet the needs of clients. • Social workers are expected to be able to undertake AOD screenings/ assessments, give out drug and alcohol advice and carry out partnership working with specialist alcohol or drug services. Social workers lack preparedness in being able to identify AOD problems and don't feel equipped for working with drug or alcohol issues post qualification. • Individual level in terms of learning and development but also systemically by supporting ADPs to create ''environments and systems that support the full range of workforce development strategies' • The approaches used by the WDP are not just relevant for the specialist AOD workforce but are also relevant for wider partners. This ensures that workforce development can be planned in a more holistic and integrated way with the hope that the lives of those affected by AOD can be improved. • Leadership in supporting change towards workforce development activity, improved clarity of roles, supportive organisational policies and systems, understanding of recovery/ ROSC and demonstration of appropriate values, attitudes, knowledge and skills to support ROSC. • 'Organisational policies and procedures, supportive colleagues/ supervisors, training/ professional development opportunities, workload and funding.'' • Transitioning towards a systems approach means less silo working which can be hard to achieve.

					• One of the first things to typically cease when budgets are constrained is workforce development activity including supervision and support, education and training.
Rural health workforce					
Grobler L. et al. (2015)	Interventions for increasing the proportion of health professionals practising in rural and other underserved areas	Cochrane Review	I	1 interrupted time-series study from Taiwan.	Included paper primary findings: • The implementation of a National Health Insurance scheme (1995) made medical care more affordable for all Taiwanese citizens in both urban and rural areas. This may have led to better geographical distribution of health professionals. • Certainty of the evidence assessed to be very low. • Limited reliable evidence of effective interventions to increase proportion of health professions practising in rural and underserved areas. High quality, well designed studies are needed.
Gwynne K and Lincoln M. (2017)	Developing the rural health workforce to improve Australian Aboriginal and Torres Strait Islander health outcomes: a systematic review	Systematic review	I	26 papers, Australia	Findings by profession: • Doctors motivated by career and service aspirations, as well as financial incentives. • Nurses are retained through relationships with colleagues and communities and management approaches. • Allied health professionals appreciate the challenge and diversity of work roles in rural communities and personal factors associated with rural living. • Aboriginal workers attrition is linked to: Racism, poor secondary education, stress, responsibility to their community, team isolation, cultural training, no access to training, poor experience in the workforce reduces engagement with education, training and employment. • "Longevity in the present review fell into three broad categories: (1) clinical experience, qualifications and skills; (2) access to professional development, supervision and peer support; and (3) interpersonal communication, cultural competence and perceived connectedness"

					• Recommendations for effective service design and effective student placements.
Aboriginal Health Workforce					
Deroy S and Schutze H. (2019)	Factors supporting retention of Aboriginal health and wellbeing staff in Aboriginal health services: a comprehensive review of the literature	Qualitative literature review	I	26 papers, Aboriginal health and wellbeing workers, Australia	Key themes for supporting retention of Aboriginal health and wellbeing staff: • Retention improved when Aboriginal workers felt culturally safe; received supervision; strong managerial leadership, teamwork and collaboration; support from peers (e.g. to debrief); opportunity for professional development; recognition and recognition (e.g. of workload, ability to work autonomously, financial remuneration of high-pressured work). • Reduced retention: Pressure to work with complex cases that does not match training. • Employment conditions: flexible work and improvements to pay rates. • Aboriginal staff fundamental to health workforce. • Recognition of significant cultural knowledge Aboriginal workers bring to roles.
Lai GC. et al. (2018)	Factors affecting the retention of Indigenous Australians in the health workforce: a systematic review	Qualitative literature review	I	15 publications, Aboriginal health workforce, Australia	Challenges of health workforce: Work environment, heavy workloads, low salary, poorly documented/ understood roles and responsibilities. Lack of career and CPD opportunities. Ties to community retained but stress with community responsibility. Limited career pathways. Recommendations for retention: • Supportive workplace; culturally safe, clear communication; improve understanding and documentation of scope of work role and responsibility, and re-examine appropriate remuneration inclusive of recognition of qualifications. • Restructure tertiary training to increase preparedness of students for work.

4 of 19 grey literature publications NOT included in the Grading of evidence					
AOD workforce					
National Centre for Education Training on Addiction; Inter-governmental Committee on, Drugs (2014)	National alcohol and other drug workforce development strategy 2015–2018: A sub-strategy of the National Drug Strategy 2010–15	National AOD workforce developme nt strategy	N/A	AOD workforce, Australia	Recommended required actions: • Utilise a multi-faceted approach; • Enhance the professionalisation of the workforce; • Reach agreement on future directions; • Create, drive and implement workforce planning; • Improve performance; • Enhance service quality and outcomes; • Enhance career development options; and Optimise implementation of evidenced based practice. • Improve role clarity. The role of the specialist workforce is not only to provide specialist services, but also to support non-specialists. • Strategy for Workforce development (WFD): system approach that goes beyond training and education. Involves consultation process. Needs of specialist AOD workers. • Actions to refresh ageing professional workforce/ ensure the next generation of the workforce is skilled and retained.
Nelson A. (2016) Nelson A. (2017)	Addiction workforce development in Aotearoa New Zealand	Book chapter/ Consolidate d peer-publication	N/A	An overview of the AOD WFD and Professionalisation interventions in New Zealand.	4 key areas: 1) Maori Addiction practitioner association: status, guidelines, code of conduct, practice competencies. 2) Matua Raki National Addiction Workforce Development Centre (characteristics of passion, commitment and excellence): initiatives to encourage entry to addiction sector, movement within the sector, education, training in evidence-based practices, skills, attitudes, rewards, competent, culturally sensitive, and the associated infrastructure. Workforce objectives and targets, including at least 50% of the employed addiction workforce with specialist post-graduate alcohol and drug qualifications. • Focussed on: advanced practice addiction nurses; best practice implementations (guidelines and best practice advice); coexisting

					problems (''dual diagnosis''); early intervention (across primary health, social and community services); professional development (a suite of trainings); supporting the peer and consumer workforces; Therapeutic Communities, and the Substance Addiction (Compulsory Assessment and Treatment) Act. • Human services system (justice, health, educators, social care) identified as an important part of the AOD workforce by (NCETA). • Implementation of the Substance Addiction (Compulsory Assessment and Treatment) Act (legislation) – recognition of the need for workforce development initiatives in relation to its implementation. Matua Raki provide a suite of evidence-based training for the specialist addiction workforce in relation to capacity testing, cognitive impairment and working with families and have a range of further trainings planned to commence. 3) Lived experience: Training, Diploma/ Bachelor of Alcohol and Other Drug Studies. Competencies in peer workers. Family as natural workforce. 4) Maori (Indigenous) population: supporting parents/ children/ family/ whanau; cultural competency. Services and retention challenges: • Fifty-two percent of addiction services are provided by non-government organisations (NGO's), and 47% of that NGO workforce are in clinical roles, requiring at least a level 7 qualification (usually an undergraduate degree) including as addiction practitioners, registered nurses and counsellors. • Diverse ethnicities; recruitment and retention issues; service and workforce challenges (including increased demand for services; increased complexity; static or reduced funding and recruiting qualified and experienced staff); knowledge and skill level (for

					example, working with new technologies); cross sector relationships and wait list management. Recommendations: • Need for continued support and promotion of the peer and consumer workforce (including due consideration for appropriate salary structures); recognising families and communities as part of the ''natural workforce'' that may also require development; developing a workforce that has the skills and expertise for working in and developing continuing care and community engagement initiatives; promotion of addiction knowledge and skills in a variety of non-specialised core qualifications (e.g. social work, nursing) and a continued focus on cultural competence as a core skill across the addiction workforce. • Continued collection of consistent high-quality workforce data; leadership development with a focus on innovation; collaboration and partnership working across sectors and professions; inter-professional workforce development opportunities and preparing the workforce for changes resulting from innovation and technology.
AOD peer workforce					
Western Australian Peer Supporters Network (2018)	The Peer Workforce Report: Mental Health and Alcohol and Other Drug Services	Descriptive report of competencies	N/A	Peer workers, NZ	• 7 workforce competencies; 3 specific peer worker competencies; 3 consumer advisor competencies. • Self-care considerations. • Relapse considerations. • 3 roles: Peer worker (supports patients); Peer manager (supports peer staff); and Peer leader (supports the organisation).

Appendix 4. Summary of recommendations

Table 1. Summary of the 42 recommendations

Recruitment	Retention	Recruitment and retention
Improve: • Pre-professional training: student placements, core competences/ practice-oriented embedded content in tertiary education. • Professional training/ capacity building: access, opportunity and AOD sector input. • Professionalisation of AOD workforce. Increase: • Government investment in AOD training. • AOD specific role advertisements/ number of targeted roles. Ensure: • Parallel emergence of professional bodies (such as professional colleges and AOD networks; national AOD body/ Aboriginal AOD body), registration systems (e.g. AHPRA). • Collaborative and cooperative relationships across agencies such as government, education providers, and the AOD health/ service industry.	Improve: • Job security: ↑ length of contracts/ number of permanent positions • Workload • Access to and opportunities for professional development and supervision (multiple forms) • Connections between teams Ensure: • For outreach workers: improved safety and connection to teams, and targeted wellbeing and risk management strategies.	Improve: • Remuneration: review, restructure. Provide appropriate and equal pay scales, acknowledge qualifications (reoccurring recommendation). • Collegiality, leadership and networking within the sector. • Funding: consider alternate models to current competitive, outcomes focussed government funding, and increase available funding for new roles plus extension of existing roles. • Career pathways and standardised qualifications inclusive of clear communication/ advertisement of these to pre-professional and professional workforce. Ensure: • Priority strategies to effectively address worker wellbeing: including stigma, burnout, stress, experience of vicarious trauma, and excessive workload. • Strong leadership within the AOD sector, workforce and individual organisations. Utilise: • A multifaceted systems approach: e.g. NCETA, AU, 3 phases [4, 12], or Matua Raki, NZ, 4 levels. [8] By profession: • Doctors, nurses and allied health: Investigate/ create opportunities to identify, consult with and support health professions working in the AOD sector. • Aboriginal workers: Adoption of strategies to grow and support the Aboriginal workforce inclusive of culturally safe environments, improved understanding

		of cultural value, support of wellbeing and improved employment conditions, and a nationally representative body. • Peer workers: accredited training and qualifications, competencies/ best practice guidelines, career progression, supervision/ mentorship and three-tier roles.