

The National Centre for Clinical Research
on Emerging Drugs

4-4DK74ZN Final Report

06 March 2017 -

15 September 2020

NCCRED

National Centre for Clinical
Research on Emerging Drugs

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1. Executive Summary

NCCRED represents a new direction for the Australian alcohol and other drugs (AOD) sector. Substance use disorders are prevalent – as prevalent as chronic conditions such as diabetes and depression – yet treatment approaches are predominantly decades old and often set apart from the healthcare system. The emergence of methamphetamine use disorder as an important health concern in Australia highlighted a need for flexible response capacity to harness innovative health ideas, test new interventions, and embed effective treatments into Australia’s healthcare system.

NCCRED aims and objectives

The National Centre for Clinical Research on Emerging Drugs (NCCRED; the Centre) was funded by a grant from the Substance Misuse Prevention and Service Improvement Grants Fund as part of the National Ice Action Strategy.

Three objectives were provided in establishing the Centre:

- To develop, implement and disseminate innovative and effective evidence-based treatment interventions that can be applied to the use of methamphetamine in the first instance and then to new and emerging substances;
- To develop and implement a system that allows for a rapid, flexible and collaborative response to emerging substances that are having prevalent, persistent and harmful health and community impacts; and
- To leverage evidence-based intervention methodologies to develop and equip the health and medical research workforce.

To meet these three objectives, NCCRED aimed to collaborate to build the capacity and scope for new clinical research into emerging drugs, generate new evidence, and rapidly translate these findings into best clinical practice. NCCRED facilitates and enhances a national network of best clinical research and practice, responsive to the complex health challenges associated with changing patterns of substance use and harm.

Extent to which aims and objectives have been met

These aims and objectives have been addressed through a comprehensive activity plan executed over the period of July 2017 – September 2020, as detailed in **Section 3** of this report. These activities ensure innovative, evidence-based clinical response to the use of

methamphetamine and other emerging drugs of concern. In line with its priority setting study; the Centre has funded, developed and conducted extensive clinical research into methamphetamine and other new and emerging drugs of concern, collaborating with stakeholders nationally. This research focuses on developing the evidence-base for effective therapeutic and cross-sectoral responses to the persistent harms associated with the use of methamphetamine and new and emerging drugs.

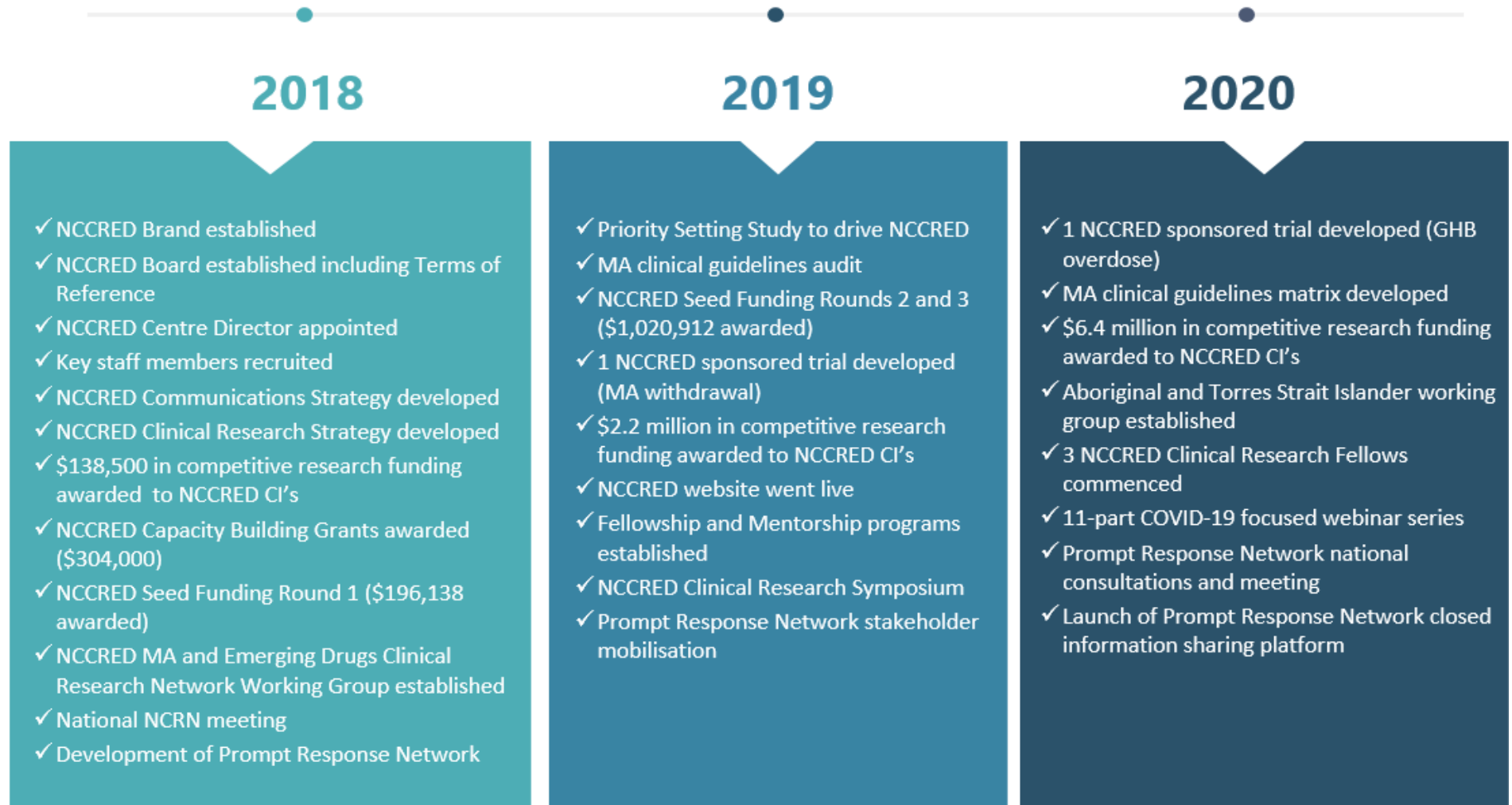
NCCRED has established broad national clinical research networks, including the Methamphetamine and Emerging Drugs Clinical Research Network Working Group; the Prompt Response Network; and the Aboriginal and Torres Strait Islander Working Group. Momentum continues to grow for collaboration across the sector. NCCRED has harnessed this by establishing an annual NCCRED Clinical Research Symposium, to ensure a rapid and flexible collaborative response to the use of emerging drugs of concern. This base of research and established networks, in conjunction with the Centre's Knowledge Translation program, enables evidence-based interventions to be introduced to the workforce, building on the clinical research workforce development aims of the Centre.

NCCRED has demonstrated flexibility and adaptability in its program of knowledge translation, including consumer focused health information in response to emerging drugs of concern (fentanyl, carfentanil); and a dynamic webinar series in response to the 2020 covid-19 pandemic. Reviewing the guidelines for the treatment of methamphetamine treatment, developing and publishing evidence summaries, and responding to gaps with new models of care and contribution to new clinical guidelines have underpinned the knowledge translation focus of the Centre.

The achievements and outcomes in relation to the core contractual activities of the Centre and its delivery of the three aims and objectives, are detailed at length in **Section 3** of this report. A summary of the key achievements for the period of July 2017 – June 2020 is presented in **Figure 1**.

This report is provided to the Australian Department of Health, as a final report on the activities as per the agreement 4-4DK74ZN (schedule Id: 4-4DK74ZQ). This report outlines the progress NCCRED has made for the period of 6th March 2017 (upon contract execution) to 15 September 2020. This report builds on the annual reports submitted in September 2018; September 2019; and September 2020.

Figure 1 – Key Achievements



2. NCCRED 2017-2020

2.1 NCCRED Governance

First funded in 2017, NCCRED was formally established in 2018. NCCRED's activities are delivered through a formal consortium arrangement between the lead organisation, the National Drug and Alcohol Research Centre (NDARC, the University of New South Wales) and the other consortium partners: St Vincent's Health Australia (SVHA); the National Drug Research Institute (NDRI, Curtin University); and the National Centre for Education and Training on Addiction (NCETA, Flinders University). Consortium representatives make up the Executive Committee of the Board, responsible for oversight of the Centre. The Board is chaired by an independent Chair, and comprised of: consortium representatives; members from alcohol and drug sector non-government organisations; consumer organisations; national clinical research network; Aboriginal health; and public sector clinical services. The board membership through the reporting period is detailed in **Appendix A.1**.

NCCRED staff were recruited in 2018, and the Centre has grown with the addition of students and adjuncts. NCCRED staff are detailed in **Appendix A.2**.

2.2 Key achievements

NCCRED's key achievements against contracted activities include:

Generate new evidence-based knowledge that leads to improved treatment and health outcomes

- NCCRED conducted a Clinical Research Priority Setting Study¹ to guide the direction of its clinical research seed funding
- NCCRED supported three existing studies and four new clinical trials through its capacity building and seed funding programs
- NCCRED collaborated successfully with clinical researchers in Australia to achieve \$8.8 million in competitive grants for research in the AoD sector
- NCCRED has launched formative work for a national Prompt Response Network including national consultations and meetings
- NCCRED has supported seven surveillance, early detection and response projects through its seed funding and capacity building grants program
- NCCRED has awarded over \$1.5 million dollars in competitive seed funding to AOD

¹Siefried KJ, Nguyen Q, Ezard N. *An Australian clinical research priority setting study for substance use disorder due to methamphetamine and emerging drugs of concern*. Presented at the Third European Conference on Addictive Behaviours and Dependencies, Lisbon, Portugal, 23-25 October 2019.

clinicians and partnerships between researchers / academics and clinicians

- NCCRED conducted one competitive clinical research capacity building funding round and provided \$304,000.00 in direct clinical research support

Translate evidence-based research outcomes into clinical practice and clinical guidelines and guidance products

- NCCRED partnered with NCETA to conduct an audit of existing methamphetamine treatment guidelines, and developed new clinical resources, such as the guidelines matrix, to enhance uptake of best available guidelines by treatment setting and population, and provide a gap analysis to direct future efforts
- NCCRED produced a clinical guide for the management of methamphetamine use disorder in primary care
- NCCRED contributed to a rapid review of the literature for the treatment of methamphetamine withdrawal and GHB withdrawal for the Ministry of Health, New South Wales which will guide the first update to the clinical guidelines in over ten years²
- In response to drug trends in North America, NCCRED prepared clinical guidance notes for consumers/consumer Groups in case of overdose by fentanyl or carfentanil
- NCCRED co-authored and published the S-Check Model of Care, providing guidance and tools for community-based specialist and non-specialist services to implement a low-threshold brief intervention for people who use methamphetamine and other stimulants
- NCCRED supported, through its seed funding program, steps towards development of three models of care

Conduct health and medical research workforce development for healthcare workers in the AOD and primary healthcare sectors

- NCCRED conducted ICH-GCP and clinical research capacity building training for 40 clinicians and researchers
- NCCRED commissioned NCETA to develop a 3 to 5 years Workforce Development Strategic Framework for AOD clinical researchers
- NCCRED established a website

² Lintzeris N; Sunjic S; Demirkol A; Branezac M; Ezard N; Siefried K; Acheson LS; Bascombe F; Tremonti C; Haber P. 2019. *Management of withdrawal from alcohol and other drugs: an evidence check rapid review brokered by the Sax Institute for the NSW Ministry of Health*. Sax Institute, The New South Wales Ministry of Health brokered by the Sax Institute

- NCCRED produced and hosted an 11-part webinar series, *Adaptive Practices*, about the clinical and community responses to COVID-19 across the AOD sector
- NCCRED launched a clinical research fellowships program, appointing three NCCRED Clinical Research Fellows
- NCCRED established a mentorship program, with three formal and nine informal mentorships provided
- NCCRED facilitated Knowledge Exchange workshops between an academic centre and clinical sites

Facilitate Collaboration

- NCCRED established clinical research partnerships and networks with a range of partners
- NCCRED continues to forge new partnerships to enhance the national clinical research capacity into new and emerging drugs against its strategic aims:
 - The NCCRED Methamphetamine and Emerging Drugs Clinical Research Network Working Group (WG)
 - The NCCRED Aboriginal and Torres Strait Islander Working Group
 - The NCCRED Clinical Reference Group
 - Research collaborations culminating in the successful award of competitive research grants totaling \$8.8 million dollars across sectors and organisations to enhance and develop national clinical research
- NCCRED established a national Methamphetamine and Emerging Drugs Clinical Research Network Working Group which oversaw: the Clinical Research Priority Setting Study; four competitive funding rounds; selection and appointment of the inaugural NCCRED Clinical Research Fellows; and advises NCCRED on its support of and relationship with any future National Clinical Research Network for Australia
- NCCRED's first public national clinical research symposium was held on 10th of November 2019 in Hobart

Evaluate clinical programs

- NCCRED undertook an extensive systematic review of the literature examining pharmacotherapies for methamphetamine dependence / use disorder
- NCCRED provided seed funding support for the development of a clinical data laboratory for methamphetamine use in NSW
- NCCRED developed two proposals partnering with the State and Territory Alcohol and Drug Information Services (ADIS)

- NCCRED participated in the National Treatment Framework consultations and written submissions

2.3 Issues, problems and delays

NCCRED addressed a number of issues, problems and delays arising throughout the project period. There were important delays in project start-up associated with employment of the Centre Director and subsequently the recruitment and appointment of staff who were in position second quarter 2018.

Before approving any new clinical trials, the Board advised NCCRED to conduct a formal research priority setting exercise. The Board, and the Department, recognised that this would introduce delays in achieving results from any trial activity, and justified the delays by the improved accountability to the sector that would result. Following the appointment of the Clinical Research Lead, the Centre conducted an extensive Research Priority Setting Study (outlined in **Activity B.1**). While this study halted the clinical research activity of the Centre, it enabled NCCRED and the NCCRED Methamphetamine and Emerging Drugs Clinical Research Network Working Group (NCRN WG) to consult nationally with the AoD sector at large, consumers and concerned others, and to build clinical research networks, to ultimately orientate the NCCRED led clinical research and grant funding allocation to high priority areas in the AoD sector. This study enabled NCCRED to maximise its resources toward research that has the highest impact for clinical responses to new and emerging drugs of concern.

Further to this, while there were no Aboriginal and Torres Strait Islander specific activities in the agreement, NCCRED considered this a high priority for the sector. Despite this resulting in delays for delivering specific activities, The Centre, in consultation with Board member Annalee Stearne put together the NCCRED Aboriginal and Torres Strait Islander Working Group, to oversee and direct investment in clinical research in this area. For a full report on Aboriginal and Torres Strait Islander Working Group activities, see **Appendix E.1**.

Developing a shared information system leading to a national Prompt Response Network is a complex endeavour requiring engagement and trust of a range of stakeholders from all jurisdictions. While NCCRED is pleased with the progress towards establishing a closed informal information sharing system during this reporting period, a fully established system incorporating a consumer-facing component is scheduled for the next phase of the endeavour.

Given the scope and population reach of the State and Territory Alcohol and Drug Information Services NCCRED has identified partner ADIS's for a quality improvement

demonstration project. While this activity was stalled in the context of COVID-19 and has not been completed within this reporting period, a new opportunity has arisen to revise the project to incorporate development and dissemination of a series of e-learning modules for AOD clinicians transitioning from face-to-face to telephone-based care in response to COVID-19 to be completed by the end of 2020.

Finally, the COVID-19 pandemic has created considerable delays in all phases of clinical research led and supported by NCCRED. The details of these delays were reported to the Department on 30 April 2020 and as part of the NCCRED Clinical Research Funding Program Progress Report submitted to the Department on 30 September 2020.

Despite these challenges, NCCRED has achieved its outputs and met all its Key Performance Indicators during this reporting period.

2.4 Performance measures

The Australian Government Department of Health (the Department) outlined reporting requirements as part of the funding agreement when NCCRED was established. **Table 1** outlines NCCRED's key performance indicators, all of which have been met in the reporting period. **Table 2** details the project documents deliverable to the Department.

Table 1 - Activity Performance Indicators

No	Performance Indicator Description	Target	Achievement as of 15 September 2020
1	Number of Board of Management Meetings	4 per year	<p>22 meetings in total</p> <ul style="list-style-type: none"> • 2017 (from execution): 3 Board meetings • 2018: 4 Board + 5 Executive Committee meetings • 2019: 3 Board + 4 Executive Committee meetings • 2020 (to 15/9/20): 2 Board +1 Executive Committee meetings <p>(See reporting at Activity A.1)</p>
2	Number of Clinical Trials	At least 2	<ul style="list-style-type: none"> • 4 projects developed by NCCRED, 2 underway and 2 in development phase • 2 trials supported by NCCRED staff in recruitment phase • 5 projects funded through the NCCRED Seed Funding program • 1 project funded through the NCCRED Capacity Building program • Partnered and collaborated on over \$8.8 million in competitive clinical research funding <p>(See reporting at Activity B.1)</p>
3	Number of Seed Funding Rounds	1 per year from 2017/18	<ul style="list-style-type: none"> • 2018:1 round • 2019: 2 rounds <p>(See reporting at Activity B.3)</p>
4	Number of Annual National Symposia	1 per year from 2018	<ul style="list-style-type: none"> • 2018: NCRN WG National Meeting, Sydney • 2019: NCCRED Clinical Research Symposium, Hobart <p>(See reporting at Activity E.4)</p>

Table 2 – Project Documents

Document	Notes	Submission / Publication Date
NCCRED Board Terms of Reference		May 2018
Clinical Research Strategy	Clinical Research Strategy 2018–2020	September 2018
Workforce Development strategy	Developed in partnership with NCETA	September 2020
Clinical Research Fellowship Program		March 2019
Treatment Outcomes Framework	Clinical Research Outcome Measures database compiled	Published February 2020 ³ , and on NCCRED website
Quality Improvement Model	Quality improvement exercise	Rolled into 4-EH8ULDY
Multidisciplinary Mentoring Program	Incorporated into the Clinical Research Strategy (refer above)	September 2018

³ Siefried KJ; Acheson LS; Lintzeris N; Ezard N, 2020, 'Pharmacological Treatment of Methamphetamine/Amphetamine Dependence: A Systematic Review', *CNS Drugs*, <http://dx.doi.org/10.1007/s40263-020-00711-x>

3. Evaluation of Activities

A. Establish NCCRED

A.1 Establish a Board of Management

Following grant execution on 6 March 2017, steps were taken by the consortium members, under the leadership of NDARC, UNSW, to establish the Centre. The Consortium partners oversaw the establishment of the Board, establishment of Terms of Reference for the Board (submitted to the Department on 30 May 2018) and commenced meetings on 5 June 2017.

A collaborative research agreement to establish NCCRED was executed between the consortium members (6 March 2017): UNSW NDARC; NCETA; NDRI; SVHA (submitted to the Department on 5 June 2018).

Funding was originally provided for the Centre of Excellence on the Clinical Management of Emerging Drugs (CECMEDC). The Consortium changed the name to National Centre for Clinical Research on Emerging Drugs (NCCRED) with approval of Department. The new name and the branding and logo generated by THERE Pty Ltd were presented to The Board at the 6 June 2018 meeting. The Board endorsed the "NCCRED" name as the official name for the centre and also chose the current logo as the principal logo.

Prof Margaret Hamilton was appointed Chair of the Board on 1 July 2017 and retired as first independent Chair, 30 June 2020. At the Executive Meeting on 6 May 2020 a new Independent Chair of the Board was approved, Dr Ingrid van Beek, current Conjoint Professor at the Kirby Institute (UNSW), and Hon Research Associate, SESLHD.

The Board met a total of 12 times and the Executive Committee (formed by nominees from each consortium partner) held an additional 10 meetings in the 2017-20 reporting period (Board meeting dates are presented in **Appendix A.3**). Meeting minutes and other documentation are held on file at UNSW.

A.2 Employ a Centre Director

The Centre was established following extensive recruitment processes to select candidates.

- Director: Dr Nadine Ezard, conjoint Professor; seconded from SVHS from 14 March 2018 (0.2 FTE, increasing to 0.5 FTE from 21 May 2018)
- Project Officer: Dr Suzie Hudson on secondment from the Network of Alcohol and Other Drug Agencies (NADA) 0.6 FTE from 1 February 2018 to 30 April 2018 to assist in establishing the centre

Subsequently, the Centre was established through recruiting team members:

- Clinical Research Lead: Dr Krista Siefried appointed April 2018 and commencing 1.0 FTE 7 July 2018
- Knowledge Translation Lead: Ms Florence Bascombe commenced 1.0 FTE 1 April 2019
- Prompt Response Network Research Officer: Dr Sandi Mitchell commenced 1.0 FTE 29 April 2019 to 3 March 2020; to be replaced by Ms Penelope Hill appointed September 2020 and commencing 19 October 2020
- Project Officer: Mr Quoc Nguyen commenced 1.0 FTE 1 June 2018 to 8 October 2019; to be replaced by Ms Jemma Hallen appointed September 2020 and commencing 28 September 2020
- Executive Assistant: Ms Jemma Hallen commenced 1.0 FTE 12 June 2018, to vacate role 28 September 2020. Recruitment in process.
- Medical Writer: Mr Duncan Graham commenced 0.8 FTE 6 January 2020
- Administrative Assistant: Ms Yolanda Harbon commenced 1.0 FTE 20 February 2020 to 11 August 2020

Full current staff bios are available on the NCCRED website: <https://nccred.org.au/about-us/>.

A.3 Develop a clinical research strategy for the Centre

The Clinical Research Strategy 2018-2020 (Version 1.0) was approved by the NCCRED Executive Committee and the NCCRED Board at meetings on the 5 December 2018. This was submitted to the Department on 13 February 2019. On 15 February 2019 the Department requested two minor adjustments, which NCCRED included in the Strategy (Version 1.1) and re-submitted to the Department on 22 February 2019. The 2020-2022 Clinical Research Strategy (Version 2.0) was submitted to the Board in August 2020 for review. Changes from this review were incorporated and The NCCRED Clinical Research Strategy (Version 2.1) was submitted to the Department on 1 September 2020.

A.4 Establish a national NCCRED Clinical Research Network through:

- **the expansion of the Clinical Research Network, currently operating in NSW**
- **establishment of membership criteria**
- **expansion of network services**

The draft terms of reference for the NCCRED Methamphetamine and Emerging Drugs Clinical Research Network (NCRN) were tabled at The Board meeting on 6 June 2018 for discussion. An email call for expressions of interest to be a member of the NCRN was conducted. Key stakeholders from the medical, nursing and allied health workforce, professional bodies, interest groups and the non-governmental sector, were included on the list in addition to consortium partner organisations forwarding to their networks. Eleven expression of interests were received by the 20 July 2018 closing date. A further evaluation of the expression of interests the Board agreed on the composition of the NCRN and the two groups sitting within it: the Clinical Reference Group (CRG) which provides ad hoc review and advice on translational products, and the Working Group (WG). The WG Terms of Reference were accepted by the WG and were approved by the NCCRED Board at their 5 December 2018 meeting. WG membership and meeting dates are outlined in **Appendix A.4**.

Key achievements of the WG:

- Established (2018) and reviewed (2019) the WG Terms of Reference
- Acted as the expert advisory panel for the NCCRED Clinical Research Priority Setting Study
- Panel Review of NCCRED Clinical Research Funding (Reported on in Section B.3) including:
 - Review of six Clinical Research Capacity Building Grant applications, and recommendation of three of these for funding
 - Review of eight Clinical Research Seed Funding Round 1 applications, and recommendation of three of these for funding
 - Review of eighteen Clinical Research Seed Funding Round 2 applications, and recommendation of five of these for funding
 - Review of twenty-four Clinical Research Seed Funding Round 3 applications, and recommendation of seven of these for funding
- Review of the results of the research priority setting study survey, and participation as the expert panel for ranking priorities through a consensus process
- Provided a smaller working group who oversaw the assessment of the competitive application process including review of seven Clinical Research Fellowship applications and recommended appointment of three NCCRED Clinical Research Fellows (Reported on in Section D.3)
- Provided recommendations for a scoping paper and consultative process towards the development of a National Clinical Research Network (implemented in June 2019 due to COVID19 delays)

B. Generate knowledge

B.1 Establish and support clinical trials focussing on the development of scalable and cost-effective treatment options including but not limited to:

- **multi-site trials**
- **intervention development**
- **development of an online tool for methamphetamine users**

To guide the research activities of NCCRED, the Board, with support of the Department, recommended a research priority setting study be conducted, acknowledging the delays to outputs that this would introduce. The NCCRED research priority setting study was conducted in the first quarter of 2019. The study surveyed the Australian community to seek feedback on clinical research priorities in methamphetamine and emerging drug use. These were reviewed by the NCRN WG and using a consensus and ranking approach the top clinical research priorities were identified. The results of the survey were tabled at the NCCRED Board meeting on 28 March 2019. The results of the priority setting study established the following research priorities:

For methamphetamine clinical research;

1. Overcoming barriers to intervention uptake (e.g. at time of crisis in emergency departments or primary health care)
2. Pilot pharmacotherapy trials for adults seeking treatment
3. Effective communication strategies to consumers on available treatments and the evidence-based options

For emerging drugs of concern clinical research;

1. Fixed-site community located drug checking / pill testing (connected to an early warning system)
2. Feasibility of social media and other creative opportunities to alert consumers and reduce harm
3. Clinical research into GHB overdose prevention and withdrawal management (ranked equally for third highest scoring priority)
4. Early warning system/shared information system – pooling and sharing of information – and its impact on reducing harm (ranked equally for third highest scoring priority)

In response to the study findings, research proposals have been generated by NCCRED and submitted to the NCCRED Board for approval of funding to implement the projects:

- A pilot study of lisdexamfetamine versus placebo for the treatment of

methamphetamine withdrawal

- Feasibility and effectiveness study of novel strategies to alert consumers to acute drug related events of clinical and public health concern
- A trial of an inter-sectoral information sharing network for timely alerts of acute drug related events of concern
- Preventing GHB overdose, a pilot study

The priority setting study was presented at the 3rd European Conference on Addictive Behaviours and Dependencies (Lisbon, October 2019) and at the APSAD Scientific Alcohol and Drug Conference (Hobart, November 2019).

NCCRED has established partnerships during the development of two multi-centre studies: treatment of methamphetamine withdrawal with lisdexamfetamine (protocol submitted to HREC 2020; submitted as an NHMRC proposal 2019); and GHB overdose prevention among LGBTQ populations (submitted ARC Linkage Grant 2020 with partners AIDS Council of NSW (ACON), Thorne Harbour Health (THH), WA AIDS Council (WAAC)).

NCCRED has positioned itself to build clinical research networks and partnerships in order to focus on new treatment technologies, modes of delivery and treatment design, in line with its Clinical Research Strategy. NCCRED has supported and established clinical trials that are sector and Centre relevant, and in line with the Clinical Research Strategy, expand scope for research on emerging drugs of concern, in particular GHB.

NCCRED conducted an active search and open expression of interest for existing trials to support. It has provided in-kind and capacity building funding support to the lisdexamfetamine for methamphetamine dependence multi-site randomized controlled trial (LiMA; ANZCTR Reference: [ACTRN12617000657325](https://www.anzctr.org.au/Trial/Registration/TrialRegistration.aspx?ACTRN12617000657325)); and in-kind support to a trial of a self-administered early intervention smartphone app with an online sample of people who use methamphetamine ([S-Check App](#)); and in-kind and seed funding support to a novel intervention for methamphetamine use in Aboriginal Communities (NIMAC), the “We can do this” online therapeutic intervention, led by Prof James Ward (NCR2SF18).

NCCRED supported four clinical trials through its seed funding program: An open-label pilot study of sub-anaesthetic ketamine for methamphetamine abuse in young people (Gillinder Bedi, NCR2SF04); A pilot randomised controlled trial (RCT) of personalised approach bias modification for methamphetamine use disorder (Victoria Manning, NCR2SF10); Feasibility and efficacy of Goal Management Training for methamphetamine dependence in residential rehabilitation settings (Antonio Verdejo-Garcia, NCR3SF10); and an open label pilot study of intranasal oxytocin for methamphetamine withdrawal in women (Shalini Arunogiri,

NCR3SF18).

The NCCRED team has extended the scope and capacity of national clinical research by:

- Collaborating on \$8.8 million in successful competitive research funding (**Appendix B.1a**)
- Co-authored 20 scientific publications relevant to NCCRED's aims (**Appendix B.1b**)
- NCCRED staff have presented a total of 13 conference papers and posters nationally and internationally (**Appendix B.1c**)

B.2 Detect new and emerging drugs of concern by:

- **developing and implementing a warning system**
- **using existing epidemiological and monitoring methods and toxicology analysis**

The Viability of an Early Warning System (ViEWS) project was a feasibility study aimed at using a range of data sources to develop an early warning system for patterns of drug use and related problems. The project was conducted by NDARC independently of NCCRED. Investigators on the ViEWS project and other interested State-based investigators held a preliminary teleconference on the 25th July 2018 to discuss the coordination of a new National Prompt Detection and Rapid Response Network. The intention of the network was to collect real-time data on emerging drugs and provide this information to clinicians to enable prompt treatment responses, to inform and prepare the workforce of any emerging drug trends. The vision of the Prompt Detection and Rapid Response Network was created in line with a website similar to the 'ProMed' website (promedmail.org) currently used for the notification of infectious diseases.

In 2018-19, under the stewardship of NCCRED, a national Prompt Response Network (PRN) was developed. The Prompt Response Network Research Fellow, Dr Sandi Mitchell, was appointed in April 2019, staying in the position until March 2020. Dr Mitchell's incumbent Ms Penny Hill will start on 19th October 2020. An outline for the Prompt Response Network was prepared, and a summary of the Prompt Response Network's aims, expected outcomes, and proposed model and reach has been established. Two research proposals have been developed by NCCRED in response to the clinical research priority setting study results that closely align with the work of the Prompt Response Network (see above B.1).

NCCRED has enhanced and increased reach of information sharing and engagement across multiple sectors through its development of the Prompt Response Network (PRN). The aim, model and summaries of its development have been presented nationally and

internationally with the aim to engage in dialogue with partners, other stakeholders and collaborators:

- St Vincent's Hospital Research Week (Sydney, September 2019)
- the 3rd European Conference on Addictive Behaviours and Dependencies (Lisbon, October 2019)
- the National Drug and Alcohol Research Centre Symposium (Sydney, October 2019)
- the NCCRED inaugural symposium (Hobart, November 2019)
- APSAD Scientific Alcohol and Drug Conference (Hobart, November 2019)

NCCRED has conducted extensive national consultation with all levels of the AOD sector in order to refine and enhance the PRN in all States and Territories (for a full list of participants across all jurisdictions, Appendix B.2). Jurisdictional representatives across government, forensics, public health, ambulance services and consumer organisations attended these meetings which occurred at State level, via zoom (due to SARS-CoV-2 restrictions).

Following these, key stakeholders from each state were invited to participate in a national consultation on 2nd September 2020. These consultative discussions provided an opportunity to identify the successes and challenges of regional programs already operating with similar goals and objectives, perceived challenges for a national network, and how a national network can complement and improve upon current programs. The national consultation demonstrated the considerable demand for both a closed network and consumer facing messaging, and support for the project across jurisdictions.

NCCRED has supported seven surveillance, early detection and response projects through its seed and capacity building grants program: Emerging Drug Network of Australia (EDNA, Jessamine Soderstrom); sentinel surveillance for emerging illicitly manufactured fentanyl use in an inner-city opioid agonist treatment service (Craig Rodgers); feasibility, consumer acceptability and behavioural outcomes associated with take-home fentanyl test strips (Rachel Sutherland); South Australian drug early warning system - Emergency Department admission blood psychoactive testing (Peter Stockham); rapid translation of forensic data from police drug seizures into clinical alerts to improve public health (Monica Barrett); detection of fever via wearable thermometers: an early intervention strategy to reduce the risk of drug-related toxicity at music festivals (Andrew Dawson); risk communication for people who use MDMA/'ecstasy' and related drugs (Amy Peacock).

B.3 Establish a seed funding research program, using information and analysis from emergency departments, telephone helplines and international organisations that will:

- **enable clinical research to be embedded within ongoing clinical practice across multiple settings**
- **develop evidence-based treatments and treatment models in response to prevalent, persistent and harmful emerging substances**
- **monitor and evaluate innovative new treatment interventions**
- **be supported by program / grant guidelines**

The NCRN WG was established with a view to provide expert advice on research projects, and to provide independent oversight of the NCCRED grant process. The first meeting was held on 30 October 2018 was to review the NCCRED Clinical Research Seed Funding applications and the NCCRED Clinical Research Capacity Building applications and make recommendations to the NCCRED Board for funding. Meetings are prepared and organised by NCCRED staff who act as secretariat and are independently chaired by Professor Robert Ali. NCCRED staff prepared the program documentation, drafting and submitting to The Board an application form, selection criteria, and proposed scoring for use in rating and selecting applications for seed funding projects. These documents were generated in collaboration with the WG, who commented on all documents and suggested revisions to the program and documents. In addition, a funding agreement template (i.e. a contract) was drafted for use following selection. Once final approvals (by DoH Commonwealth and the NCCRED Board) were granted for the proposed NCCRED budgets, NCCRED advertised the Round 1 external seed funding opportunities.

The first round of Seed Funding opened for competitive applications on 25 September 2018 and closed on 28 October 2018. Applications were promoted and advertised on the NCCRED website and by NCCRED partners and consortium organisations. Newsletters were sent to the NCCRED mailing list. Eight applications were received, they were reviewed by the WG on 30 October 2018. The WG recommended that three applications be funded and this was ratified by the Board at their meeting on 05 December 2018. Total grant funding awarded in Round 1 Seed Funding: \$196,137.50.

The second round of Seed Funding opened for competitive applications on 18 January 2019 and closed on 15 April 2019. Applications were promoted and advertised on the NCCRED website and social media, and by NCCRED partners and consortium organisations. Newsletters were sent to the NCCRED mailing list. Eighteen applications were received, they were reviewed by the WG on 04 June 2019. The WG recommended that five

applications be funded, and this was ratified by the Board at their meeting on 11 July 2019. Total grant funding awarded in Round 2 Seed Funding: \$381,982.83.

The third round of Seed Funding opened for competitive applications on 15 May 2019 and closed on 15 August 2019. Applications were promoted and advertised on the NCCRED website and social media, and by NCCRED partners and consortium organisations. Newsletters were sent to the NCCRED mailing list. Twenty-four applications were received, they were reviewed by the WG on 4 September 2019. The WG recommended that seven applications be funded, and this was ratified by the Board at their meeting on 26 September 2019. Total grant funding awarded in Round 3 Seed Funding: \$636,690.50.

B.4 Provide specialised research support to clinician researchers, to facilitate their research capacity and value-add to existing clinical research

NCCRED Capacity Building Grants opened for competitive applications on 25 September 2018 and closed on 28 October 2018. Applications were promoted and advertised on the NCCRED website and by NCCRED partners and consortium organisations. Newsletters were sent to the NCCRED mailing list. Seven applications were received, including for the two investigator-initiated non-commercially sponsored clinical trials for methamphetamine dependence previously identified by NCCRED. Applications were reviewed by the NCRN WG on 30 October 2018. The WG made recommendations that were ratified by the Board at their meeting on 05 December 2018. Total grant funding awarded in Capacity Building Grants: \$304,000.00.

NCCRED provided specialised research support to multi-disciplinary clinical researchers as part of the Seed Funding rounds, to facilitate their research capacity and value-add to existing clinical research. This support included informal mentorships, facilitating links between clinicians with experienced researchers. This linked to NCCRED's mentorship program, which facilitated new partnerships by linking clinicians and academics to develop research proposals. These partnerships resulted in six partnerships between clinicians and researchers. (See further reporting at **Activity D.4**).

The SARS-CoV-2 pandemic interrupted the research projects funded through the NCCRED Clinical Research Seed Funding program. On 30 April 2020, NCCRED wrote to the government outlining the delays to projects. Further updates on the progress of projects and fellowships funded through the NCCRED Clinical Research Funding programs were provided to the government as part of the NCCRED Clinical Research Funding Program Progress Report on 30 September 2020.

A full list of NCCRED Capacity Building Grant recipients and Seed Funding Grant recipients was sent to the Department on 30 September 2020 as part of the NCCRED Clinical Research Funding Program Progress Report and is also available at <http://nccred.org.au/generate/nccred-clinical-research-seed-funding/>.

C. Translate Research

C.1 Undertake an audit of existing treatment guidelines to:

- **consolidate existing resources,**
- **identify resource gaps**

In June 2018, NCCRED partnered with NCETA, an NCCRED consortium partner organisation, to conduct a rapid audit of current national and international clinical guidelines for methamphetamine use disorder. Following this, NCCRED commissioned NCETA to appraise the available guidelines, taking the commonly used AGREE standard for evaluation of clinical practice guidelines and developing a fit for purpose method for appraisal, mapping the guidelines according to the treatment setting and population groups the guidelines addressed. This useful resource can inform the development of future guidelines targeted to address the settings and populations at greatest need, whilst serving as a resource for clinicians to find guidelines based on the best level of evidence and appropriate treatment setting. The audit was peer-reviewed by members of the NCCRED Clinical Reference Group (CRG, membership information available in Appendix C.1). The review of Australian clinical guidelines for methamphetamine use disorder can be found on the NCCRED website and incorporates the audit of international and national guidelines (<https://nccred.org.au/translate/matrix/>).

C.2. Develop clinical practice guidelines

NCCRED produced a new clinical guide for the management of methamphetamine use disorder in primary care, published on 12 June 2020. These were adapted from guidance provided to general practitioners in South East Sydney on the Health Pathways network (with permission). Available in print form and online, and disseminated through our social media networks and newsletters, the clinical guide has been expanded on, providing clinicians with screening tools, evidence-based management advice for treatment and withdrawal and directs clinicians and clients to useful resources, including details for all AoD intake teams nationally and State-specific AoD information services (<https://nccred.org.au/translate/guidance-notes-methamphetamine/>).

NCCRED contributed to the evidence base for the first AOD withdrawal guidelines review for

the NSW Ministry of Health, the first review performed in over ten years published in September 2019: Management of withdrawal from alcohol and other drugs: an evidence check rapid review brokered by the Sax Institute for the NSW Ministry of Health, Sax Institute (Lintzeris N; Sunjic S; Demirkol A; Branezac M; Ezard N; Siefried K; Acheson LS; Bascombe F; Tremonti C; Haber P (https://www.saxinstitute.org.au/wp-content/uploads/20.08_Evidence-Check_Management-of-withdrawal-from-alcohol-and-other-drugs.pdf)).

C.3 Produce decision-aid tools for clinicians

As part of the review of Australian Clinical Guidelines for methamphetamine use disorder conducted by NCETA on behalf of NCCRED in FYE 2019, a matrix of Australian methamphetamine-related guidelines was developed whereby 27 clinical guidelines are mapped according to population type of treatment setting required. The matrix was turned into an online decision aid tool (the 'matrix'), which enables clinicians working across all clinical settings to identify the best quality Clinical Practice Guidelines for their treatment area and population type, as appraised against contemporary guideline criteria. All guidelines are available to download as a PDF from the NCCRED website (<https://nccred.org.au/translate/matrix/>).

In response to drug trends in North America, NCCRED has prepared clinical guidance notes for consumers or consumer groups in case of overdose by fentanyl or carfentanyl. NCCRED consulted with the Naloxone National Reference Group (NNRG) and the guidance notes are available both online and in print form. The consumer guidance notes include contact details for State-specific AoD Information Services and AoD intake teams nationally, all of whom accept self-referrals (<https://nccred.org.au/translate/fentanyl/>) (<https://nccred.org.au/translate/carfentanyl/>).

NCCRED identified supporting State and Territory Alcohol and Drug Information Services (ADIS) telephone advice as one of its priorities. ADIS telephone counsellors are often the first contact point for those who use methamphetamine and their families seeking information, advice and referral. Through the establishment of a steering committee made up of representative from most ADIS states and territories, a proposal for a methamphetamine-related training needs analysis to be conducted at the national level with subsequent development of training materials and evaluation. Due to SARS-CoV-2 this steering committee took a reprieve (with approval from the NCCRED board) but have now been re-initiated and a protocol is under development. The results of this analysis will form the development of clinical decision aid tools based on evidence-informed resource gaps.

NCCRED conducted a comprehensive assessment of the research literature on pharmacotherapy for amphetamine/methamphetamine dependence to inform treatment guidelines and future research directions. A Clinical Research Treatment Outcomes Framework was developed through a published systematic review and an online matrix created. For clinicians working with, and prescribing care to clients with amphetamine/methamphetamine dependence, this online resource references the tools or scales used to measure clinical outcomes and provides links to the publications validating the scales or to the scales themselves (<https://nccred.org.au/translate/methamphetamine-clinical-resources/outcome-measures/>).

C.4 Disseminate guidelines and decision-aid tools via:

- **electronic platforms such as websites and phone applications**
- **integration into training programs**

The [methamphetamine clinical guide](#), review of Australian [methamphetamine-related clinical guidelines](#) and associated [matrix](#), [Clinical Research Treatment Outcomes Framework](#) and [fentanyl](#) and [carfentanil](#) guidance materials are all available on the NCCRED website in both interactive formats and available to download for print. They have also been disseminated through informal discussion on webinars, AOD network newsletters and social media.

C.5. Establish an information website and produce regular updates such as webinars and podcasts

NCCRED engaged THERE Pty Ltd to brand NCCRED with the provision of naming options, a logo and other publicity materials and develop the website. This was presented to The Board at the 6 June 2018 meeting. The Board opted on the “NCCRED” name as the official name for the centre and also chose the following as the principal logo. The website went live in December 2018. The website was then redesigned and updated with THERE in July 2020 and this new version is now live.

NCCRED has a presence on Twitter which updates key stakeholders on the Centre’s work and directs them for more information to the website.

NCCRED newsletters were sent to 1,085 subscribers. In the reporting period, 26 newsletters went out to subscribers.

NCCRED, in partnership with NCCRED consortium partner organisation SVHS and supported by NCCRED consortium partner organisation NDARC, launched a webinar series (11 webinars, April – July 2020): Adaptive Practices: A webinar series about the clinical and

community responses to SARS-COV-2 across the Alcohol and other Drugs (AOD) sector. This is available online. (<https://nccred.org.au/collaborate/webinars/>). **Appendix C.2** lists the series topics, presenters, and viewers.

One Webinar was produced (November 2019) through Insight and viewed by 425 attendees to date. This is available online: (<https://nccred.org.au/collaborate/webinars/>).

C.6. Identify and disseminate current models of best practice / clinical excellence in service delivery

NCCRED, in partnership with NCCRED consortium partner organisation SVHA, published the St Vincent's Hospital Sydney S-Check model of care. The S-check model of care provides guidance and tools for community-based specialist and non-specialist services to implement a low-threshold brief intervention for people who use methamphetamine and other stimulants and who are not yet receiving treatment. Implemented broadly, the Model has the potential to increase reach of interventions and promote earlier treatment seeking. The S-Check Model of Care was peer-reviewed by members of the CRG for clinical utility and other feedback prior to publishing in December 2019 (<https://nccred.org.au/translate/models-of-care/>).

A running register of translational products and their publications dates is available in **Appendix C.3**.

D. Develop clinical research workforce

⁴ See footnote

D.1 Provide support for health professionals in the form of AOD training, education and information resources, clinical supervision, support and mentoring (which may be remote) opportunities

NCCRED fostered collaborative partnerships between St Vincent's Hospital Sydney and the National Centre for Drug and Alcohol Research (NDARC). The intention was to link academics with clinicians and develop clinical research projects. An introductory workshop was held on 27 September 2018 and was followed by a project specific development

⁴ Many of the elements in Centre Activity D are integrated through fellowships, mentorships, training, workforce development and the centralised support systems and networks at NCCRED.

meeting on the 14 February 2019. At this meeting, four research projects were refined to advance to a funding application stage. This pilot program was scaled up for implementation at other universities and clinical organisations.

NCCRED has conducted three Good Clinical Practice (ICH-GCP) training sessions (24 June 2019, 30 August 2019, 25 February 2020) attended by 40 attendees (clinicians and non-clinicians). GCP training is essential for anyone involved in clinical trials and in clinical research as it provides the fundamentals for the conduct of ethical research. NCCRED has provided training and certification to clinicians and academics in the Drug and Alcohol Sector as a key element to its research education agenda. The 40 participants have received Transcelerate-accredited certification which is internationally recognised and valid for up to 3 years.

Also see Reporting at **Activity D.3** – Structured Research Training Program below.

The website continues to advertise the availability of mentorship facilitated by NCCRED, and interested individuals are able to upload their requests through the website for further information and to be contacted by a mentor or NCCRED staff.

D.2 Implement the Workforce Development Strategy including:

- **identifying training needs and education resources**
- **development of AOD training and education resources in conjunction with clinicians**

NCCRED commissioned consortium partner organisation NCETA to develop a 3 to 5 years Workforce Development Strategic Framework for AOD clinical researchers. The development of the Strategy involved consultations with a wide range of key stakeholders both within the AOD sector and other clinical research areas with experience in increasing research capacity within their own sector. The project commenced later than the contract dates due to administrative delays within each overseeing organisation. The deliverable timeline for this project was as follows:

- Consultation paper completed
- Call for written submissions open June-July 2019
- Face to face consultations will be undertaken June-August 2019
- Draft report prepared by end of September and the final report by end of October 2019

The consultation paper and call for submission was found on the NCCRED Website, NCETA

website and 'Drug and Alcohol Connections' online newsletter.

http://nceta.flinders.edu.au/workforce/projects_and_research/workforce-development-strategy/

<http://connections.edu.au/projects/methamphetamine-and-emerging-drugs-clinical-researcher-workforce-development-strategy>

The finished report was tabled at the NCCRED Board meeting on 12 August 2020. NCCRED has since prepared a document outlining their achievements against the objectives of the Strategy to date, and future planning based on the Strategic Directions outlined in the framework. The Workforce Development Strategy was submitted to the Department on 1 September 2020.

D.3 Develop a Clinical Research Fellowships program

In 2018, NCCRED developed the clinical research fellowship program for the AoD sector, referencing existing models in Australia and from overseas. The Clinical Research Fellowship program overview, advice to applicants, and application was approved by the WG at their meeting on 12 March 2019 and approved at the 28 March 2019 Board meeting. Fellowship applications opened on the 15 May 2019 and closed on the 30 June 2019. The fellowship program was advertised on the NCCRED website and social media and promoted through partner organisations. Seven fellowship applications were received. The NCRN WG nominated a sub-committee of five of its members to oversee the interview and recommendation of fellows. Fellowships were offered in July 2019 with placements commencing in the first quarter of 2020. Clinical Research Fellowship contracts were submitted to the Department on 26 November 2019 and approved by the Department on 17 December 2019. Three NCCRED Clinical Research Fellowships were awarded with placements which commenced in February 2020. The Fellows were inducted and introduced to NCCRED stakeholders by the Director and Chair at the Strategic Planning Meeting in February 2020. A list of current Clinical Research Fellows and their projects was sent to the Department on 30 September 2020 as part of the NCCRED Clinical Research Funding Program Progress Report and is also available at <http://nccred.org.au/generate/nccred-fellowships/>.

A structured Research Training Program for NCCRED Clinical Research Fellows was conducted by NCCRED in collaboration with partners at UNSW and SVHA, enhancing the clinical research skills and capacity of the Fellows. Training included: ICH-GCP training; biostatistics; Australian research context, library resources (effective search strategies,

Endnote, resource availability).

The Fellowships Program, now called the Scholarships Program, is ongoing. The next offered program, advertised in Oct 2020, will be offered in conjunction with Seed Funding. One round will be targeted specifically to Indigenous applicants; the other round will be targeted towards Allied Health Services and Nursing but will be available to all clinicians. Scholarship applications will need to have a developed project application developed with a supervisor.

D.4 Develop and implement a multidisciplinary mentoring and training program

In addition to the structured training programs reported on at Activities C.5, D.1, and D.3, NCCRED has facilitated formal and informal mentorship opportunities. These have also been folded into other activities. Across the NCCRED Clinical Research Seed Funding rounds, NCCRED staff provided informal mentorship to applicants, providing advice on application layout, research methods, statistics resources, etc. In addition, NCCRED provided mentorship linkages to prospective applicants who responded to the NCCRED mentoring opportunity associated with the funding program. This program facilitated six partnerships between clinicians seeking an opportunity to be partnered with an academic to work together on developing their research ideas into a funding proposal. NCCRED discussed the needs of prospective applicants who expressed an interest in the mentorship program, and then discussed the relevant needs with academic researchers suitable for provision of the mentorship (i.e. based on skillset, therapeutic area of research). NCCRED invited the mentor and mentee to develop a partnership by linking them to facilitate development of the NCCRED funding proposals. In addition, NCCRED has formalised a mentorship program for the NCCRED Clinical Research Fellowship program. All fellows were partnered by NCCRED with a mentor external to their project and organisation, who is relevant to their topic, for the duration of their fellowship and their research projects. A list of current Clinical Research Fellows and their mentors was sent to the Department on 30 September 2020 as part of the NCCRED Clinical Research Funding Program Progress Report. Furthermore, NCCRED staff provide formal mentorship and education by way of Research and Higher Degree by Research supervision through the Faculty of Medicine at UNSW.

E. Facilitate collaboration

E.1 Establish and formalise partnerships across sectors including but not limited to:

- **Primary Health Networks (PHNs)**
- **Colleges of Emergency Medicine, General Practitioners, and Rural and Remote Medicine**
- **the Chapter of Addiction Medicine**
- **NGO treatment providers through the State- based NGO Peak Bodies**
- **State Ministers and Departments of Health**

Over the course of the reporting period NCCRED has established a range of formal and informal partnerships with a host of health organisations, Universities, research centres and institutes, and hospitals nationally. These partnerships have been formalised through successful grant applications to ARC, NHMRC, The NSW Ministry of Health TRGs and other grant schemes to conduct research into emerging drugs of concern and to translate this research effectively. The partnerships have also been forged through NCCRED Clinical Research Seed Funding, and Clinical Research Capacity Building Grants, The NCCRED Clinical Research Fellowships/Scholarships program, the NCRN, the PRN and now the Aboriginal and Torres Strait Islander Working Group, which was established through ongoing consultation led by NCCRED Board member Annalee Stearne. The working group had two meetings in late 2019 before activities were put on hold due to SARS-CoV-2. Consultation resumed in August 2020 (for full report on Aboriginal and Torres Strait Islander Working Group activities, see **Appendix E.1**). Additionally, NCCRED formalised its partnership with the Australian Indigenous Health InfoNet with a Letter of Agreement in 2018.

E.2 Build on and extend the National Clinical Research Network

Refer to reporting at **Activity A.4**.

E.3 Build on existing relationships across the AOD sector and related fields

Over the course of the reporting period NCCRED has been building an extensive national contact list (n=1,085), which the Centre has updated every month through newsletters (n=26). Those on the mailing list include individuals with personal email addresses, State-based health care providers, the tertiary education sector and those from non-government organisations. The newsletters keep Centre stakeholders up to date with Centre research, possibilities for collaboration and involvement, news and developments. All historical newsletters are available on the NCCRED website: <https://nccred.org.au/contact-us/>.

E.4 Organise an annual national symposium

NCCRED convened a national NCRN WG meeting in Sydney on 30 October 2018. The NCCRED National Symposium 'Collaborate, Generate, Translate: Research meets clinical practice in methamphetamine and emerging drugs' was held on 10 November 2019 in Hobart, prior to the annual Australasian Professional Society of Alcohol and other Drugs (APSAD) conference. The symposium attracted 71 attendees, with a total of 11 presentations. The program for the day and, full presentations are available on the NCCRED website: <https://nccred.org.au/collaborate/nccred-symposium/>.

F. Contribute to evaluation

F.1 Develop a treatment outcomes framework to improve the evaluation of clinical innovations

Over the course of the reporting period, this activity was continuously integrated into other activities, particularly Activities B and C and on national and State initiatives. In line with this, A Clinical Research Treatment Outcomes Framework was developed through a published systematic review. NCCRED conducted a comprehensive assessment of the research literature on pharmacotherapy for amphetamine/methamphetamine dependence to inform treatment guidelines and future research directions. A systematic review of 43 randomised controlled trials enrolling 4065 participants and assessing 23 pharmacotherapies for amphetamine/methamphetamine dependence was undertaken, included analysis of clinical research outcomes and measures. Outcomes and measures to assess them varied widely, making it difficult to synthesise the data; pharmacotherapies were most often assessed in defined or biased populations, and study completion rates were low. To guide further national and international research and clinical practice in the pharmacotherapeutic treatment of methamphetamine dependence, the outcomes and measures to assess them that were used in all reviewed studies were included in the publication in CNS Drugs in April 2020 (<https://link.springer.com/article/10.1007%2Fs40263-020-00711-x>). Further work has also been undertaken to provide an online matrix to ensure that the data are easily accessible for clinicians, these data been adapted for a clinical resource on the NCCRED website to be disseminated more broadly the sector:

<https://nccred.org.au/translate/methamphetamine-clinical-resources/outcome-measures/>.

Additionally, NCCRED has provide contributions to the International Consortium for Health Outcome Measures (ICHOM) and their ICHOM Standard Set for Addiction, including disorders related to substance use and addictive behaviours

(<https://www.ichom.org/portfolio/addiction/>)

F.2 Develop and implement a quality improvement model in consultation with existing services including but not limited to:

- **ensuring appropriate data collection and reporting systems are in place**
- **setting up mechanisms to ensure continuous monitoring and performance reporting is undertaken and supported**

NCCRED has identified State and Territory Alcohol and Drug Information Services (ADIS) as a priority area of clinical care. ADIS telephone counsellors are often the first contact point for those who use methamphetamine and their families seeking information, advice and referral in the treatment of methamphetamine. NCCRED prepared a proposal and is subsequently developing a protocol for a methamphetamine-related training needs analysis to be conducted at the national level with subsequent development of training materials and evaluation. A steering committee made up of representatives from most ADIS states and territories has been established, but took a reprieve due to the impact of the SARS-CoV-2 pandemic (with approval from the NCCRED board). Work re-commenced on this project in September 2020.

In the wake of the SARS-CoV-2 pandemic, NCCRED became aware of the challenges faced by AOD clinicians with respect to the changing nature of clinical care delivery (from face-to-face to telephone-based). NCCRED have partnered with ADIS NSW to develop a set of e-learning modules teaching the key Micro skills associated with telephone-based care delivery within the AOD sector and for particular clients, such as those seeking treatment or advice for methamphetamine. This project will include formal measurement and evaluation processes and the modules will be distributed to any clinicians working in the sector.

F.3. Participate in and contribute to any short or long term national treatment frameworks as stipulated by the Department

NCCRED has supported national treatment frameworks and initiatives. NCCRED prepared a submission to the National Treatment Framework Initiative (submitted 16 July 2019), and participated in the following meetings:

- 31 October 2018: National Forum to develop the National Treatment Framework (Rydges, Sydney Australia)
- 11 February 2019: Development of a National Treatment Framework for the drug and alcohol treatment system Focus Group (NSW Ministry of Health, North Sydney Australia)

NCCRED has made the following submissions:

- March 2019: Australian National Audit Office Performance Audit – National Ice Action Strategy Rollout
- April 2019: The Australian Commission of Safety and Quality in Health Care – The National Clinical Trials Governance Framework
- May 2019: NSW Government Special Commission of Inquiry into the Drug ‘Ice’

4. Future Directions

NCCRED has demonstrated success in its establishment phase. Experiences from the 2017-20 period are being leveraged to grow the Centre’s practice-relevant outcomes over 2020-22. NCCRED continues to increase its brand recognition and expand its collaborative network. Learnings from the priority setting study have improved consumer engagement and NCCRED is expanding projects that focus on consumer input and engagement. NCCRED will continue to bring together stakeholders in an NCRN for Australia and build on the work begun with the Aboriginal and Torres Strait Islander Working Group. The adaptive response to COVID-19 will leverage quality improvement work through participating ADIS’. NCCRED will continue to build the Prompt Response Network and establish consumer-facing detection and response capacity for emerging drugs of concern. NCCRED will generate new information through its clinical trial activity and through expanded research collaboration and capacity building, and translate new evidence and information through guidance materials and education through webinars and podcasts. NCCRED looks forward to its continued collaboration to generate new evidence and translate evidence to clinical practice across the Australian AOD sector.

Appendices

Appendix A.1: Board Members

- **NCCRED Chair**
 - Conjoint Professor Ingrid van Beek AM (June 2020 – present)
 - Professor Margaret Hamilton AO (July 2017 – June 2020)
- **NCCRED Board members**
 - Professor Michael Farrell (consortium member: NDARC)
 - Conjoint A/Professor Anthony Schembri AM (consortium member: SVHA)
 - Professor Simon Lenton (consortium member: NDRI)
 - Professor Ann Roche (consortium member: NCETA)
 - Conjoint Professor Adrian Dunlop (State / government local health network / service member: Hunter New England Health)
 - Conjoint Professor Nicholas Lintzeris (Clinical Research Network member: NSW Drug and Alcohol Clinical Research and Improvement Network [DACRIN])
 - Ms Annalee Stearne (Aboriginal research member: NDRI)
 - Mr Robert Stirling (NGO member: Network of Alcohol and Other Drug Agencies [NADA])
 - Ms Melanie Walker (Consumer Representative member: Australian Injecting and Illicit Drug Users League [AIVL])

Appendix A.2: NCCRED Team

- **NCCRED staff as of 15 September 2020:**
 - Conjoint Professor Nadine Ezard, Director
 - Dr Krista Siefried, Clinical Research Lead and Deputy Director
 - Ms Jemma Hallen, Executive Assistant and Project Officer
 - Ms Florence Bascombe, Knowledge Translation Lead
 - Mr Duncan Graham, Medical Writer

- **Students, Conjoint and Adjunct as of 15 September 2020:**
 - Mr Liam Acheson, PhD Candidate
 - Mr Duran Cox, Conjoint Associate Lecturer and Indigenous Lecturer
 - Dr Suzie Hudson, Adjunct Lecturer
 - Dr Edward Mullen, Adjunct Lecturer and 2020 NCCRED Clinical Research Fellow
 - Dr Andrew Kozman, Adjunct Lecturer and 2020 NCCRED Clinical Research Fellow
 - Dr Adam Rubenis, Adjunct Lecturer and 2020 NCCRED Clinical Research Fellow
 - Ms Helen O'Neill, SVHA Inclusive Health Foundation sponsored NCCRED Research Officer (SVHM)

Appendix A.3: Board and Executive Committee Meeting Dates

Executive Committee Meetings

- 16th May 2018
- 6th June 2018
- 23rd August 2018
- 2nd November 2018
- 5th December 2018
- 28th March 2019
- 11th July 2019
- 12th September 2019
- 13th November 2019
- 6th May 2020

Board Meetings

- 5th June 2017
- 15th September 2017
- 4th December 2017
- 14th March 2018
- 6th June 2018
- 23rd August 2018
- 5th December 2018
- 28th March 2019
- 11th July 2019
- 26th September 2019
- 27th February 2020
- 12th August 2020

Appendix A.4: NCCRED Methamphetamine and Emerging Drugs Clinical Research Network Working Group Membership and Meeting Dates

NCRN WG – Members

- Prof Robert Ali (Chair) – Adelaide University
- Dr Michael Christmass – Next Step Drug and Alcohol Services
- Dr Michael Doyle – University of Sydney
- Carrie Fowlie – Alcohol Tobacco and Other Drug Association ACT
- Dr Shaun Greene – Victorian Poisons Information Centre
- Prof Paul Haber – The University of Sydney
- Michelle Hall – D&A Services Newcastle
- Dr Jeremy Hayllar – Metro North
- Dr Will Liaw – Drug and Alcohol Services South Australia
- Prof Daniel Lubman – Turning Point
- Jo Lunn – We Help Ourselves
- Jack Nagle – Real Drug Talk

NCRN WG – Meeting dates

- 30th October 2018
- 12th March 2019
- 4th June 2019
- 10th July 2019 (Clinical Research Fellowship Application review) - subcommittee
- 4th September 2019 (Seed Funding Review Allocation)
- 10th November 2019 (Terms of Reference discussed and reviewed)

Appendix B.1a: Competitive Research Funding Awarded 2017-20

The Australian National Health and Medical Research Council (NHMRC) (\$6,308,023)

App ID	Grant Title	Funding	Initiative	First Year	NCCRED Staff Roles	Other Investigators
APP1180284	A managed alcohol program for Australia	\$557,797	Partnership Projects	2019	NE: CIA KS: AI	Stockwell, Haber, Baldry, Day, Dobbins, Peacock, Pauley, Lintzeris, Dolan
APP1171781	Implementation of time-limited parenteral hydromorphone in people with treatment-resistant injecting opioid use disorder: feasibility, acceptability, and cost	\$1,302,457	Partnership Projects	2019	NE: CID KS: CIF	Bell, Ritter, Treloar, Roberts
APP1183744	Better data on methamphetamines and other drugs among Indigenous Australians to inform policy and practice	\$2,614,769	Ideas Grant	2019	NE: AI	Lee, Wilson, Conigrave, Chikritzhs, Hayman, Dawson, Ali, Conigrave, Fitts
APP1160245	Test the effectiveness of VNPs for smoking cessation for AOD clients who have already stopped tobacco smoking during a short inpatient withdrawal admission, following discharge	\$1,833,000	Project Grant	2019	NE: AI	Bonevski, Baker, Manning, Gartner, Walker, Segan, Oldmeadow, Bauld, Dunlop

Other: public and industry (\$2,435,590)

App ID	Project Title	Funding Organisation	First Year	Years	Funding	Role	Other Investigators
N/A	Extension of LiMA study	St Vincent's Health Australia Inclusive Health Program	2020	1	\$103,970	NE: CIA	Ali, Dunlop, Lintzeris, White, McKetin, Bruno, Carr, Dolan
N/A	Treatment of Hospitalised Inpatients for Hepatitis C (TOPIC)	St Vincent's Health Australia Inclusive Health Program	2019	1	\$153,057	NE: CIC	Matthews, Dore, Rodgers, Hickey
N/A	Vaporised Nicotine Products in Gorman Unit	St Vincent's Clinic Foundation	2019	1	\$24,216	NE: CIA	Agrawal, Casperson, Steele, Day, Austin, Bonevski, Hachigo, Malone
TRGS #26	A trial of the effectiveness of vaporised nicotine products (VNPs) for smoking cessation amongst NSW opiate agonist treatment (OAT) clients	NSW Ministry of Health	2019	1	\$997,904	NE: CID	Dunlop, Bonevski, Lintzeris, Gartner, Oldmeadow, Searl, Nean, Ward, McLennan, Haber
N/A	Big data and machine learning: Using routinely-collected data in hospital settings to identify people with problematic alcohol use	NDARC, The University of New South Wales	2019	1	\$40,000	NE: CIB KS: CID	Peacock, Lintzeris, Brett, Leung, Malone, Acheson
N/A	Optimising retention in Opioid Agonist Therapy: A retrospective evaluation	NDARC, The University of New South Wales	2019	1	\$40,000	NE: CIE KS: CIH	Gibbs, Rodgers, Shakeshaft, Farnbach, Ezard, Cherry, Acheson
N/A	Feasibility, consumer acceptability and behavioural outcomes associated with take-home fentanyl test strips	NDARC, The University of New South Wales	2019	1	\$40,000	NE: CIH KS: AI	Sutherland, Peacock, Barratt, Bruno, Rodgers, Steele, Page, Ezard

TRGS #33	The Hub Project: An innovative model to address lack of rural access to specialist alcohol and drug treatment using mixed face to face and telehealth support	New South Wales Government Ministry of Health - Office for Health and Medical Research	2019	2	\$503,724	NE: CIA KS: CIH	Acheson, Brett, Dunlop, Kay-Lamkin, Lee, Liu, Shakeshaft
N/A	Feasibility and efficacy of the S-Check App: A harm reduction and early intervention smartphone application for methamphetamine use	NSW Health AOD Innovation grant	2018	2	\$339,740	NE: CIA	Kay-Lambkin, Herman, Malone, Middleton, Clifford, Lambert
N/A	Optimising clinical outcomes for people who inject drugs	St Vincent's Health Australia Grant Scheme	2018	1	\$49,785	NE: CIA	Clifford, Murray, Harrod, Brener
N/A	SUSI: Substance use and sex index, a new tool to measure behaviour change	St Vincent's Health Australia Grant Scheme	2018	1	\$40,500	NE: CIA	Bruno, Rodgers, Clifford
N/A	S-check app - a novel intervention for people who use methamphetamine	St Vincent's Health Australia Inclusive Health Innovation Funds	2017	1	\$53,000	NE: CIA	Kay-Lambkin, Herman, Malone, Middleton, Clifford, Lambert
N/A	Medication funding for lisdexamfetamine for the treatment of methamphetamine dependence, a dose-escalation trial	SVHS Curran Foundation	2017	1	\$45,000	NE: CIA	Ali, Dunlop, Lintzeris, White, McKetin, Bruno, Carr, Dolan
N/A	International Travel Scholarship	Gilead Sciences	2017	1	\$4,694	KS: CIA	N/A

Appendix B.1b: Peer-Reviewed Publications

Publications

- Reilly R, Wand H, McKetin R, Quinn B, **Ezard N**, Dunlop A, Conigrave K, Treloar C, Roe Y, Gray D, Stephens J, Ward J; on the behalf of the NIMAC Community Researchers and Partner Sites. *Survey methods and characteristics of a sample of Aboriginal and Torres Strait Islander and non-Indigenous people who have recently used methamphetamine: the NIMAC survey* [published online ahead of print, 2020 Jun 22]. *Drug Alcohol Rev.* 2020;10.1111/dar.13085. doi:10.1111/dar.13085
- Dunlop A, Lokuge B, Masters D, Sequeira M, Saul P, Dunlop G, Ryan J, Hall M, **Ezard N**, Haber P, Lintzeris N, Maher L. *Challenges in maintaining treatment services for people who use drugs during the COVID-19 pandemic.* *Harm Reduct J.* 2020;17(1):26. Published 2020 May 6. doi:10.1186/s12954-020-00370-7
- Siefried KJ**, Acheson LS, Lintzeris N, **Ezard N**. *Pharmacological Treatment of Methamphetamine/Amphetamine Dependence: A Systematic Review.* *CNS Drugs.* 2020;34(4):337-365. doi:10.1007/s40263-020-00711-x
- Lintzeris N, Monds LA, Bravo M, Read P, Harrod ME, Gilliver R, Wood W, Nielsen S, Dietze PM, Lenton S, Shanahan M, Jauncey M, Jefferies M, Hazelwood S, Dunlop AJ, Greenaway M, Haber P, **Ezard N**, Malcom A. *Designing, implementing and evaluating the overdose response with take-home naloxone model of care: An evaluation of client outcomes and perspectives.* *Drug Alcohol Rev.* 2020;39(1):55-65. doi:10.1111/dar.13015
- Bajis S, Grebely J, Hajarizadeh B, Applegate T, Marshall AD, Harrod ME, Byrne J, Bath N, Read P, Edwards M, Gorton C, Hayllar J, Cock V, Peterson S, Thomson C1 Weltman M, Jefferies M, Wood W, Haber P, **Ezard N**, Martinello M, Maher L, Dore GJ; *Hepatitis C virus testing, liver disease assessment and treatment uptake among people who inject drugs pre- and post-universal access to direct-acting antiviral treatment in Australia: The LiveRLife study.* *J Viral Hepat.* 2020;27(3):281-293. doi:10.1111/jvh.13233
- Reilly R, McKetin R, Wand H, Butt J, Smout M, **Ezard N**, Conigrave K, Clark Y, Quinn B, Treloar C, Gray D, Dunlop A, Roe Y, Ward J. *A Web-Based Therapeutic Program (We Can Do This) for Reducing Methamphetamine Use and Increasing Help-Seeking Among Aboriginal and Torres Strait Islander People: Protocol for a Randomized Wait-List Controlled Trial.* *JMIR Res Protoc* 2019;8(7):e14084. DOI: 10.2196/14084
- Ramachandran, A; Nino M; Javakhishvili, J; Karachevsky, A; Kharchenko, N; Shpiker, M; **Ezard, N**; Roberts, B; Fuhr, D C. *Alcohol use among conflict-affected persons in Ukraine: risk factors, coping and access to mental health services.* *Eur J Public Health.* 2019;29(6):1141-1146. doi:10.1093/eurpub/ckz117
- Miller P, Droste N, Egerton-Warburton D, Caldicott D, Fulde G, **Ezard N**, Preisz P, Walby A, Lloyd-Jones M, Stella J, Sheridan M, Baker T, Hall M, Shakeshaft A, Havard A, Bowe S, Staiger P.K, D'Este C, Doran C, Coomber K, Hyder S, Barker D, Shepherd J. *Driving change: A partnership study protocol using shared emergency department data to reduce alcohol-related harm.* *Emerg Med Australas.* 2019;31(6):942-947. doi:10.1111/1742-6723.13266
- Lintzeris N, Sunjic S, Demirkol A, Branezac M, **Ezard N**, **Siefried K**, **Acheson L**, **Bascombe F**, Tremonti C, Haber P. Management of withdrawal from alcohol and other drugs: and evidence check rapid review brokered by the Sax Institute (www.saxinstitute.org.au) for the NSW Ministry of Health, 2019.

- Siefried KJ**, Kerr S, Richardson R, Mao L, Rule J, McAllister J, de Wit J, Carr A. *Socioeconomic and psychosocial factors are associated with poor treatment outcomes in Australian adults living with HIV: a case-control study*. *Sex Health*. 2019; 16(6):548-553.
- Ezard N**, Dunlop A, Hall M, Ali R, McKetin R, Bruno R, Phung N, Carr A, White J, Clifford B, Liu Z, Shanahan M, Dolan K, Baker A, Lintzeris N. *LiMA: a study protocol for a randomised, double-blind, placebo controlled trial of lisdexamfetamine for the treatment of methamphetamine dependence*. *BMJ Open*. 2018;8(7):e020723. Published 2018 Jul 19. doi:10.1136/bmjopen-2017-020723
- Ezard N**, Cecilio ME, Clifford B, Baldry E, Burns L, Day CA, Shanahan M, Dolan K. *A managed alcohol program in Sydney, Australia: Acceptability, cost-savings and non-beverage alcohol use*. *Drug Alcohol Rev*. 2018;37 Suppl 1:S184-S194. doi:10.1111/dar.12702
- Brener L, Lea T, Rance J, Wilson H, Bryant J, **Ezard N**. *Providing a model of health care service to stimulant users in Sydney*. *Drugs: Education, Prevention and Policy*. 2018;25(2): 130-137. doi: 10.1080/09687637.2016.1221061
- Ezard N**, Webb B, Clifford B, Cecilio ME, Jellie A, Lea T, Rodgers C, Ruth S, Bruno R. *Substance Use and Sex Index (SUSI): First stage development of an assessment tool to measure behaviour change in sexualised drug use for substance use treatment studies*. *Int J Drug Policy*. 2018;55:165-168. doi:10.1016/j.drugpo.2018.03.020
- Barratt MJ, Bruno R, **Ezard N**, Ritter A. *Pill testing or drug checking in Australia: Acceptability of service design features*. *Drug Alcohol Rev*. 2018;37(2):226-236. doi:10.1111/dar.12576
- Atkinson JA, Knowles D, Wiggers J, Livingston M, Room R, Prodan A, McDonnell G, O'Donnell E, Jones S, Haber PS, Muscatello D, **Ezard N**, Phung N, Freebairn L1, Indig D, Rychetnik L, Ananthapavan J, Wutzke S; *Alcohol Modelling Consortium*. *Harnessing advances in computer simulation to inform policy and planning to reduce alcohol-related harms*. *Int J Public Health*. 2018;63(4):537-546. doi:10.1007/s00038-017-1041-y
- Lo J, Patel P, Shultz JM, **Ezard N**, Roberts B. *A Systematic Review on Harmful Alcohol Use Among Civilian Populations Affected by Armed Conflict in Low- and Middle-Income Countries*. *Subst Use Misuse*. 2017;52(11):1494-1510. doi:10.1080/10826084.2017.1289411
- Bonomo Y, **Ezard N**, Reynolds A. *Role of physicians in the management of substance use disorders*. *Intern Med J*. 2017;47(2):158-161. doi:10.1111/imj.13345
- Grebely J, Lamoury FMJ, Hajarizadeh B, Mowat Y, Marshall AD, Bajis S, Marks P, Amin J, Smith J, Edwards M, Gorton C, **Ezard N**, Persing D, Kleman M, Cunningham P, Catlett B, Dore GJ, Applegate TL; LiveRLife Study Group. *Evaluation of the Xpert HCV Viral Load point-of-care assay from venepuncture-collected and finger-stick capillary whole-blood samples: a cohort study*. *Lancet Gastroenterol Hepatol*. 2017;2(7):514-520. doi:10.1016/S2468-1253(17)30075-4
- Malone V, **Ezard N**, Hodge S, Ferguson L, Schembri A, Bonevski B. *Nurse provision of support to help inpatients quit smoking*. *Health Promot J Austr*. 2017;28(3):251-254. doi:10.1071/HE16082

Appendix B.1c: Conference Presentations

Presentations

Ezard N, Keynote Speaker, *'Responding to emerging drugs of concern in Australia'*, APSAD, Hobart, Australia, 2019

Ezard N, Session Chair, Methamphetamine, APSAD, Hobart, Australia, 2019

Ezard N, *'New Directions in the treatment of methamphetamine use disorder'*, NDARC Annual Symposium, Sydney Australia, 2019

Ezard N, Session Chair, *'Emerging Drugs and Associated Risks'*, NDARC Annual Symposium, Sydney Australia, 2019

Sunjic S, Demirkol A, Branezac M, **Ezard N**, **Siefried KJ**, **Acheson LS**, **Bascombe F**, Tremonti C, Haber PS, Lintzeris N. *Are we detoxing the right people, in the right setting and in the right way? A rapid review of the literature on withdrawal management*. Paper 66, In: Drug and Alcohol Review (November 2019), 38(Suppl 1): S4-S109. Proceedings of the Australasian Professional Society on Alcohol and other Drugs (APSAD) Scientific Conference; 2019 Nov 10-13; Hobart, AU.

Black E, Deacon RM, Mills L, Dunlop A, **Ezard N**, Bruno R, Shakeshaft A, Farrell M, Holmes J, Cretikos MA, Montebello M, Reid D, Childs S, **Siefried KJ**, Mammen K, Lintzeris N. *Characteristics and treatment outcomes of the drug treatment population in New South Wales: focus on amphetamine type stimulants*. Paper 92, In: Drug and Alcohol Review (November 2019), 38(Suppl 1): S4-S109. Proceedings of the Australasian Professional Society on Alcohol and other Drugs (APSAD) Scientific Conference; 2019 Nov 10-13; Hobart, AU.

Siefried KJ, **Nguyen Q**, **Ezard N**. *An Australian clinical research priority setting study for substance use disorder due to methamphetamine and emerging drugs of concern*. Presented at: Lisbon Addictions 2019: The third European Conference on Addictive Behaviors and Dependencies; 2019 Oct 23-25; Lisbon, POR

Ezard N, **Acheson LS**, **Siefried KJ**, Leicester OM, Rodgers C, Malone V, Clifford B, Bruno R. *Substance use sex index (SUSI): a new behavior change assessment tool*. Presented at: Lisbon Addictions 2019: The third European Conference on Addictive Behaviors and Dependencies; 2019 Oct 23-25; Lisbon, POR

Ezard N, Session Chair, Methamphetamine, APSAD, Auckland New Zealand, 2018

Ezard N, Get Involved in Australia's new National Centre for Clinical Research on Emerging Drugs, APSAD, Auckland New Zealand, 2018

Ezard N, Panel discussant, *'Pleasures and risks of crystal methamphetamine use among gay and bisexual men in Australia: from research to practice and policy application'*; ASHM, Sydney Australia, 2018

Hamilton M, **Ezard N**, keynote National Centre for Clinical Research on Emerging Drugs of Concern, NADA Conference, Sydney Australia, 2018

Ezard N. *'Substance use among refugees and conflict-displaced populations'*. International Medicines in Addiction, Sydney, Australia, 2017

Posters

Siefried KJ, Nguyen QA, Ezard N, Christmass M, Ali R, The National Centre for Clinical Research on Emerging Drugs Methamphetamine and Emerging Drugs Clinical Research Network Working Group. *A rapid clinical research priority setting study for substance use disorder due to methamphetamine and emerging drugs of concern in Australia*. Paper 272, In: Drug and Alcohol Review (November 2019), 38(Suppl 1): S4-S109. Proceedings of the Australasian Professional Society on Alcohol and other Drugs (APSAD) Scientific Conference; 2019 Nov 10-13; Hobart, AU.

Nguyen QA, Middleton P, Herman D, Li K, Grundy E, Li E, **Siefried KJ**, Malone V, Kay Lambkin F, **Ezard N**. *What's in an app? Incorporating an automated consent procedure to recruit those who use methamphetamine to a harm reduction and early intervention smartphone-based application clinical trial*. Paper 180, In: Drug and Alcohol Review (November 2019), 38(Suppl 1): S4-S109. Proceedings of the Australasian Professional Society on Alcohol and other Drugs (APSAD) Scientific Conference; 2019 Nov 10-13; Hobart, AU.

Peacock A, Bruno R, Barratt M, Sutherland R, Hughes C, Gibbs D, Grigg J, Uporova J, Karlsson A, Kelly G, Dietze P, Salom C, Lenton S, Degenhardt L, Farrell M, **Ezard N**, 2019. *Drug checking and other harm reduction behaviours reported by people who use ecstasy: Findings from the Ecstasy and Related Drugs Reporting System*, Poster at the Australasian Professional Society on Alcohol & other Drugs, Hobart, Australia

Acheson L, Murray E, Clifford B, **Siefried KJ, Ezard, N**, Matthews G, 2019. '*Optimising care for people who inject drugs: a retrospective medical record review of staphylococcus aureus bacteraemia treatment*', Poster at the Australasian Professional Society on Alcohol & other Drugs, Hobart, Australia

Bruno R, Leicester O, Acheson L, Malone V, Clifford B, **Siefried KJ**, Rodgers C, **Ezard N**, 2019. '*Substance Use and Sex Index (SUSI): Validation of a behaviour change assessment tool*', Poster at the Australasian Professional Society on Alcohol & other Drugs, Hobart, Australia

Ezard, N Siefried KJ, Mitchell S, Peacock A, on behalf of the Prompt Response Network, 2019. '*Towards a prompt response network for Australia: coordinated and rapid communication of information about events of concerns related to emerging substances*', Poster at Lisbon Addictions Conference, Lisbon, Portugal

Ezard N, Dunlop AJ, Clifford B, Bruno R, **Siefried KJ**, Carr A, Lintzeris N. *Safety of oral lisdexamfetamine in adults with methamphetamine dependence: a dose-escalating phase-2 study*. Paper number 67 presented at: The College on Problems of Drug Dependence 81st Annual Scientific Meeting; 2019 Jul 15-19; San Antonio, USA.

Siefried KJ, Peacock A, **Ezard N** on behalf of the Prompt Response Network, 2019. '*Towards a prompt response network for Australia: coordinated and rapid communication of information about events of concerns related to emerging substances*', Poster at New Psychoactive Substances conference, Maastricht, Netherlands

Carr M, Martin SJ, Foster R, Finlayson R, Rule J, Smith DE, de Wit J, Carr A, **Siefried KJ**. *STI incidence and risk factors in HIV-infected adults on antiretroviral therapy (ART) in the PAART study*. Paper number 40 presented at: The Australasian Sexual Health Conference and HIV&AIDS Conference; 2019 Sep 16-19; Perth, AU.

Appendix B.2: Prompt Response Network Regional and National Stakeholder Consultation Attendees

Jurisdiction	Name	Position
ACT	Philip Hull	Senior Policy Officer, ACT Health
	Jude Byrne	National Project Coordinator, AIVL
	Dr Anna Olsen	Senior Fellow, Social Foundations of Medicine ANU
	A/Prof Malcolm McLeod	Research School of Chemistry ANU
	Lauren Bradley	Senior Policy Manager, AIVL
	Chris Gough	Manager, CAHMA
	David McDonald	Director, Social Research & Evaluation
QLD	Chantelle Miller	Manager, Mental Health and Alcohol and Other Drug Branch
	Cameron Francis	Team Leader, Dovetail
	Dr John Osborne	Senior Drug and Alcohol Policy Officer, QLD Health
	Dr Peter Culshaw	Chief Chemist, Forensic Chemistry
	Rebecca Lang	CEO, QNADA
	Sean Popovich	Treatment Services Support Manager, QNADA
	Mark Stephenson	Chief Chemist, Forensic Toxicology, Coronial Services
	Jeff Buckley	Director, Insight
	Margo Watson	A/Inspector, Drug and Alcohol Coordination Unit, QPS
Karen Blakey	Senior Chemist, Illicit Drug Group, Forensic Chemistry Police Service Stream	
SA	Andrew Camilleri	Assistant Director Science & Support, Forensic Science SA
	Peter Stockham	Forensic Scientist, Toxicology, Forensic Science SA
	A/Prof Robert Ali	Discipline of Pharmacology School of Medicine, University of SA
	Anne Rathjen	Senior Drug Analyst, Serious and Organised Crime Branch, South Australia Police
	Jon Halliday	Acting District Chief Inspector, South Australia Police
	Michael White	CEO SANDAS
	Stephen Lymb	Manager, Population Programs. Drug and Alcohol Services South Australia
	Richard Bade	Analytical Chemistry and Waste Water projects, University of SA

NSW	Prof Andrew Dawson	Clinical Director, NSW Poisons Information Centre A/Director, Clinical Safety and Quality, Centre for Alcohol and Other Drugs, NSW Ministry of Health
	Dr Catherine Francis	
	Robin Auld	Senior Epidemiologist / Manager, Clinical Quality and Safety, Centre for Alcohol and Other Drugs, NSW Ministry of Health
	Daniel Madeddu	
Jared Brown	Executive Director, Centre for Alcohol and Other Drugs, NSW Ministry of Health Manager of Toxicity Surveillance at Centre for Population Health	
NT	Peter Burnheim	CEO AADANT Principal Policy Officer, Public Health Directorate, Department of Health Northern Territory Government Harm Reduction Coordinator, Northern Territory AIDS and Hepatitis Council,
	David Decolongon	
	Peter Sidaway	
	Kat Byron	Health Promotion Manager, Sexual Health and Blood Borne Virus Unit, Top End Health Service, Department of Health Health Promotion Officer, Wellbeing and Preventable Chronic Diseases Division, Menzies School of Health Research Director, Addiction and Clinical Forensic Medicine, Alice Springs Hospital Senior Policy Officer, Mental Health and Alcohol and Other Drugs Branch in Department of Health
	Tessa Wallace	
	Jennifer Delima	
Arabella Ward		
WA	Prof Simon Lenton	Director NDRI Emergency Physician at Royal Perth Hospital and Coordinating EDNA Senior Workforce Development Officer, Alcohol, Other Drug and Prevention Services, Mental Health Commission Harm Reduction W.A
	Dr Jessamine Soderstrom	
	Grace Oh	
	Paul Dessauer	Manager Workforce Development Alcohol, Other Drug and Prevention Services, Mental Health Commission W.A. Government Department of Health Research Assistant and Toxicologist - funded by NCCRED
	Judi Stone	
	Neil Keane	
Jennifer Smith		

VIC	Prof Paul Dietze	Program Director, Behaviours and Health Risks. Burnet Institute
	Dr Monica Barratt	Vice Chancellor's Senior Research Fellow, Social and Global Studies Centre, RMIT University
	Dr Shaun Greene	Emergency Medicine Physician and Clinical Toxicologist, Austin Health
	Sione Crawford	CEO, Harm Reduction Victoria
	Tom Lyons	Principal Policy Officer, DHHS
	Penny Hill	Research Assistant/PhD Candidate, Burnet Institute
	Sam Biondo	CEO, VAADA
	A/Prof Suzanne Nielson	Deputy Director, Monash Addiction Research Centre
	Alan Eade	Chief Paramedic Officer, Safer Care Victoria
	Debbie Scott	Strategic Lead Population Health Research, Turning Point
Stephanie Tzanetis	DanceWize Program Coordinator Harm Reduction Victoria Management Team	
David Wrobel	Operations Manager, Colbrow Medics	
TAS	A/Prof Raimondo Bruno	University of Tasmania
	Dr Jackie Hallam	Policy Manager, ATDC
	Myff Briggs	Coordinator Needle and Syringe Program, Population Health Tasmania
	Sylvia Engels	Manager Policy Development, Mental Health Alcohol and Drug Directorate Tasmania
	Erin Langford	Manager Policy Development & Research Services, Department of Police, Fire & Emergency Management
Sophie Stanwix	Drug Policy Officer, Policy Development & Research Services, Department of Police, Fire & Emergency Management	
Implementation and Evaluation Committee	Florence Bascombe	Knowledge Translation Lead, NCCRED
	A/Prof Raimondo Bruno	University of Tasmania
	Prof Paul Dietze	Program Director, Behaviours and Health Risks. Burnet Institute
	Prof Nadine Ezard	Director, NCCRED
	Prof Simon Lenton	Vice Chancellor's Senior Research Fellow, Social and Global Studies Centre, RMIT University
Dr Suzie Hudson	Clinical Director NADA, and consultant NCCRED	
Dr Amy Peacock	Senior Research Fellow, NDARC	
Krista Siefried	Deputy Director, NCCRED	

Key
National Stakeholder attendee
Regional Stakeholder attendee

Appendix C.1: NCCRED Clinical Reference Group Membership

- Sean Hynes – QulHN (Therapeutic Services Manager)
- Ben Steele – Will2Evolve (Sole Trader)
- Anna McKenry – Karralika (Clinical Services Director)
- Carol Dawes – Cerenian House (CEO)
- Belinda Volkov – SDECC (Clinical Program Coordinator)
- Nadeem Siddiqui – Winnungag Aboriginal Health Service (Executive Director Clinical Services)
- Melanie Armitage – Clinical Toxicology Unit (CTU) at PAH (Toxicology Registrar)
- Dr Richard O'Regan – Next Step Drug and Alcohol Services (Director Clinical Services)
- Angela O'Connor – Women and Newborn Drug and Alcohol Service (WANDAS) (Clinical Midwifery Consultant)
- Sharyn Amos – Australian Primary Health Care Nurses Association (APNA) (Credentialed Drug and Alcohol Nurse)
- Anne Walshe – Justice Health & Forensic Mental Health Network (ACN) (Drug & Alcohol Transitional Nurse Practitioner)
- Nicole Yade – Lou's Place (General Manager)
- Julaine Allan – Lives Lived Well (National Research Manager)
- Jennifer Harland – ASSIST Program, DASSA-WHO Collaborating Centre (Senior Project Officer)
- Hollie Wilson – Metro North (Director)
- Sandra Sunjic – ACN – Justice Health & Forensic Mental Health Network (Manager D&A Strategic Operations)
- Brendan Quinn – Burnett (Research Fellow)
- Victoria Manning – Turning Point
- Shaolini Arunogiri – Turning Point

Appendix C.2: Adaptive Practices Webinar Series

Adaptive Practices: A webinar series about the clinical and community responses to COVID-19 across the Alcohol and other Drugs (AOD) sector		
Date	Webinar	Views
24 th April	Transitioning to telehealth: providing critical service at a distance Featuring: Dr Elizabeth Knock	289
1 st May	Worker wellbeing and best practice in AOD care Featuring: Dr Suzie Hudson	207
8 th May	Micro skills for AOD professionals working from home Featuring: Jennifer Blundell	118
15 th May	Real drug talk: connecting consumers in isolation Featuring: Jack Nagle	93
22 nd May	Supporting families as we shutdown Featuring: Tony Trimmingham	53
29 th May	Effects of isolation on the Aboriginal and Torres Strait Islander community Featuring: Duran Cox & Scott Daley	103
12 th June	The Emerging Drug Network of Australia (EDNA) Project Featuring: Dr Jessamine Soderstrom	67
19 th July	Avoiding the drop zone: GHB use after isolation Featuring: Jack Freestone	43
26 th June	COVID-19 and changes in key research cohorts Featuring: Dr Amy Peacock, Prof. Paul Dietze & A/Prof Garrett Prestage	33
3 rd July	LGBTI Health: Changes during COVID-19 Featuring: Nicky Bath	33 (post live-stream data only)
10 th July	General Practice: the frontline of the AOD sector & COVID-19 Featuring: Dr Rob Page	30 (post live-stream data only)

The webinars are available to watch online: <https://nccred.org.au/collaborate/webinars/>

Appendix C.3: Knowledge Translation Products

Title	Publication Date	Authors	Available from
A Review of Australian Clinical Guidelines for Methamphetamine Use Disorder	June 2019	Anne Roche, Kirsten Ryan, Jane Fischer, Roger Nicholas	https://nccred.org.au/wp-content/uploads/2019/09/2019-01_NCCRED_A-review-of-the-Clinical-Guidelines-for-Methamphetamine-Use-Disorder.pdf
Management of withdrawal from alcohol and other drugs: an evidence check rapid review brokered by the Sax Institute for the Ministry of Health	September 2019	Nick Lintzeris, Sandra Sunjic, Apo Demirkol, Mira Branezac, Nadine Ezard, Krista Siefried, Liam Acheson, Florence Bascombe, Chris Tremonti, Paul Haber.	https://www.saxinstitute.org.au/wp-content/uploads/20.08_Evidence-Check_Management-of-withdrawal-from-alcohol-and-other-drugs.pdf
Treating the hype: Supports and treatment responses for people impacted by methamphetamine use (webinar)	November 2019	Suzie Hudson, Florence Bascombe	http://nccred.org.au/translate/webinars/#Treating_the_hype_Supports_and_treatment_responses_for_people_impacted_by_methamphetamine_use
St. Vincent's S-Check Clinic Model of Care	December 2019	Felicity Sullivan, Florence Bascombe, Nadine Ezard	https://nccred.org.au/wp-content/uploads/2019/12/2019-02_NCCRED_S-checkModelofCare.pdf
Clinical guide for the management of methamphetamine use disorder in primary care (online)	February 2020	Florence Bascombe, Nadine Ezard	https://nccred.org.au/translate/guidance-notes-methamphetamine/
Carfentanil – Consumer guidance note (online)	March 2020	Florence Bascombe, Nadine Ezard	http://nccred.org.au/translate/emergingdrugs/consumer-alerts/
Fentanyl – Consumer guidance note (online)	March 2020	Florence Bascombe, Nadine Ezard	http://nccred.org.au/translate/emergingdrugs/consumer-alerts/
Clinical guide for the management of methamphetamine use disorder in primary care (print)	April 2020	Florence Bascombe, Nadine Ezard	https://nccred.org.au/wp-content/uploads/2020/10/NDR5521_NCCRED_Methamphetamine_A5-Booklet_FA.pdf

Title	Publication Date	Authors	Available from
Adaptive Practices: A webinar series about the clinical and community responses to COVID-19 across the Alcohol and other Drugs (AOD) sector	April – July 2020	Nadine Ezard, Graham Duncan, Jemma Hallen and guest speakers	http://nccred.org.au/translate/webinars/
Australian Methamphetamine-related Clinical Guidelines Matrix – by treatment setting and population type	June 2020	Florence Bascombe, Anne Roche, Kirsten Ryan, Jane Fischer, Roger Nicholas	https://nccred.org.au/translate/matrix/
A Workforce Development Strategy for Clinical Researchers in Emerging Drugs to June 2022	July 2020	NCETA/NCCRED	Internal document, submitted to Department 2020
Carfentanil – Consumer guidance note (print)	July 2020	Florence Bascombe, Nadine Ezard	https://nccred.org.au/wp-content/uploads/2020/10/NDR5556_NCCRED-A5-Roll-Fold_Carfentanil_Brochure_DIGITAL.pdf
Fentanyl – Consumer guidance note (print)	July 2020	Florence Bascombe, Nadine Ezard	https://nccred.org.au/wp-content/uploads/2020/10/NDR5556_NCCRED-A5-Roll-Fold_Fentanyl_Brochure_DIGITAL.pdf
A Matrix of Clinical Research Treatment Outcomes for amphetamine/methamphetamine dependence	September 2020	Krista Siefried, Liam Acheson, Nicholas Lintzeris, Nadine Ezard	https://nccred.org.au/translate/methamphetamine-clinical-resources/outcome-measures/#Clinical_research_treatment_outcomes_and_measures_for_methamphetamine_dependence

Appendix E.1: Aboriginal and Torres Strait Islander Working Group

Aboriginal and Torres Strait Islander Working Group was established through ongoing consultation led by Annalee Stearne.

Aboriginal and Torres Strait Islander Working Group summary 15 September 2020

Background

The NCCRED Aboriginal and Torres Strait Islander Working Group (WG) was formed in 2019 as part of the NCCRED Aboriginal and Torres Strait Islander Action Plan. The brief provided at the time was for the ATSIWG to support the research activities of NCCRED through:

- Consultation with Indigenous stakeholders on research priorities
- Consultation with these representatives as to:
 - How to undertake research that involves the Indigenous community / in the Indigenous community
 - How best to report findings back to the Indigenous community
 - Emphasis of Indigenous inclusion in the Fellowship and Mentorship programs

In late 2019, Ms Annalee Stearne (board member of NCCRED) agreed to chair the WG with Dr Sandi Mitchell as facilitator. The WG have met three times since inception, in September and November 2019 and August 2020. Meetings were suspended due to the impact of SARS-CoV-19, and during this period Ms Florence Bascombe replaced Dr Mitchell in facilitating the group. In August 2020 the group agreed to a program of NCCRED Clinical Research Scholarships that would be open only for clinicians, nurses and allied health workers identifying as Aboriginal and Torres Strait Islander. Applications will follow a 2-step process, with applicants completing an expression of interest form to be reviewed by the WG. Successful applicants will then receive mentoring from the WG to develop their research idea into a full application to be awarded in December 2020. Applications for the program open on October 2nd.

Representation

New South Wales	Queensland
Mr Duran Cox (DC) – Aboriginal Counsellor SVHS Drug and Alcohol Service	Mr Wayne Williams (WW) – University of Queensland
Dr Liesa Clague (LC) – University of Sydney	A/Prof Maree Toombs (MT) – University of Queensland
Dr Michael Doyle (MD) – University of Sydney	

Victoria	Western Australia
Ms Gaby Bruning (GB) – Victorian Aboriginal Community Controlled Health Organisation	Ms Annalee Stearne (AS) – NCCRED Board, NDRI
	Ms Sharynne Hamilton (SH) – Banksia Hill Project/PhD Candidate

South Australia	Northern Territory
Dr Rachel Riley (RR) – SAHMRI	<i>Consultation underway</i>
Mr Jimmy Perry – Aboriginal Drug and Alcohol Council (SA)	

Tasmania	Australian Capital Territory
<i>Consultation underway</i>	<i>Consultation underway</i>