Strong & Deadly Futures: building resilience and preventing drug and alcohol use among Aboriginal and Torres Strait Islander and non-Indigenous youth.

PRESENTER: Kylie Routledge

Background
Previous research has found that prevention programs implemented in secondary school can effectively prevent uptake of alcohol and other drugs and have flow-on benefits for social and emotional wellbeing. However, there are currently no school-based wellbeing and drug prevention programs that are culturally-inclusive and effective for Aboriginal and/or Torres Strait Islander students.

Aims
To develop and pilot test a culturally-inclusive, school-based drug and alcohol prevention program for Aboriginal and Torres Strait Islander and non-Indigenous youth.

Methods
Formative consultations were conducted with 42 stakeholders (56% Aboriginal) to inform the scope and methodology for the project, with oversight from an expert advisory group of Aboriginal and non-Indigenous experts in Aboriginal health and drug prevention. To inform the program structure and content, we conducted systematic reviews to identify effective prevention programs for Indigenous youth, and risk and protective factors for substance use. We then partnered with an Indigenous creative agency and students and staff at 4 schools (>50% Aboriginal) to co-develop, beta test and refine the program.

Finally, we pilot tested the program in Year 7 and 8 Health classes in the 4 schools over six weeks to determine feasibility, acceptability and preliminary efficacy. The short timeframe of the study precluded assessment of the program's preventative effects on alcohol, tobacco and cannabis use; however, we hypothesised improvements in alcohol, tobacco and cannabis knowledge and attitudes, and reductions in psychological distress. Efficacy was assessed using multilevel mixed effects regression modelling, using the Benjamini-Hochberg correction for multiple comparisons. Effect sizes were calculated using Cohen’s d.

Results
Students reported finding the program relevant, useful and enjoyable. Teacher feedback indicated the program was easy to implement, appropriate, and that students found it engaging. Students improved significantly in their knowledge of alcohol (p < .001; d = 0.47), tobacco (p < .001; d = 0.25), and cannabis-related (p < .001; d = 0.30) harms from pre- to post-program implementation. Students also demonstrated a significant reduction in psychological distress (p < .001; d = 0.23).
**Implications**

Strong & Deadly Futures is an Australia-first computerised school-based drug and alcohol prevention program that is culturally appropriate for Aboriginal and Torres Strait Islander and non-Indigenous secondary school students. To rigorously test the program’s efficacy a cluster randomised controlled trial is currently being conducted in 24 schools to assess the preventative effects on alcohol, tobacco and cannabis uptake over a 2 year period post-implementation.

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**Kylie Routledge - Biography**

Dr Kylie Routledge is a Research Fellow at the Matilda Centre for Research in Mental Health and Substance Use at the University of Sydney. She manages Strong & Deadly Futures, a cluster randomised controlled trial of a computerised school-based alcohol and drug prevention program for Aboriginal and Torres Strait Islander students. Kylie is also involved with the Positive Choices – Indigenous project, an online portal of culturally appropriate resources to prevent drug-related harms among young Aboriginal and Torres Strait Islander people.
Aboriginal children, women’s health and housing supply – what are the indicators for regional NSW?

PRESENTER: Suzanne Ingram

Background
As anyone working in the health sector knows, housing is a determinant of health. Australia’s Close the Gap policy, established under bipartisan government agreement in 2009, aims to reduce Aboriginal and Torres Strait Islander child mortality as a key measure. One of this measure’s indicators is birthweight. In 2020, the infant mortality rate remains disproportionate: twice that for non-Indigenous children (CtG 2020).

Department of Justice statistics released at the end of 2019 showed that the rates of Aboriginal women and children who are turned away from crisis accommodation has increased across all FACS Districts: Western NSW ranks number 5. Following the 2019 state election, the housing portfolio was removed from under FACS as the state umbrella and placed under the NSW Department of Planning, Industry and Environment (DPIE).

Evidence from research projects in NSW with Aboriginal children and their mothers - the Study of Environment on Aboriginal Resilience and Child Health (SEARCH) project and the Gudaga suite of studies which focused on the Tharawal community in South Western Sydney - shows that maternal vulnerability had a cumulative impact on birthweight.

The housing market has been experiencing major instability for vast numbers of people in western economies. Housing availability and affordability is a stressor for the families of Aboriginal children. By the Close the Gap policy deadline in 2031, the housing undersupply in New South Wales is projected to be 91,000 dwellings if current conditions prevail.

Aims
This analysis asked ‘How does the changing physical and policy landscape in housing impact the decisions women make for themselves and their children?’ and ‘what indicators can be drawn for locations with analogous population profiles?’. It is a big picture look at the landscape to understand what housing support is required for mothers of Aboriginal children.

Methods
Data collected from the ‘Gudaga study’ – a birth cohort of n=149 Indigenous children recruited in 2005-2007, followed to 9½ years. Semi-structured interviews, questionnaires and physical measurements. Data was analysed using SPSS.

Results
Gudaga data shows households with Aboriginal children are in a precarious situation in a market-driven, volatile economy: birth rates at younger age, unfinished education, high unemployment, high smoking prevalence as a contributor to low birth weight, high mobility (moving house) and the biggest complaint: repairs and maintenance.
Implications or take-home message
A clear, sustainable plan needs to develop housing policy for improving health and health related well-being indicators for Aboriginal children and their families.

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Suzanne Ingram - Biography
Suzanne Ingram is an Aboriginal woman of the Wiradjuri and is completing her PhD in health communication at the University of Sydney where she lectures in the Department of Anthropology and the Faculty of Medicine and Health. She is Board Member of the NSW Aboriginal Housing Office and co-leads the Indigenous Health Stream for the Healthy Urban Environments, a Clinical Academic Group under the Sydney Partnership for Health, Education, Research & Enterprise (SPHERE). Suzanne's research focus is analyses of violence against Aboriginal women and children, child development, housing and urbanisation as critical health issues.
Exploring resettlement experiences of people with refugee backgrounds resettled in a regional city

PRESENTER: Deborah Warr

Aims
We discuss a co-produced research project where university- and community-based researchers collaborated to conduct a series of conversations with people with refugee-background who have resettled in Wagga Wagga. Wagga Wagga is one of a number of regional humanitarian resettlement sites across Australia, and around 3,000 people have resettled here since 2006. The project focused on four communities – African, Burmese, Afghan and Ezidi.

Methods
Eight people (four men and four women) from each of the communities were recruited as community researchers (CRs). CRs participated as members of a Project Steering Group and contributed to designing the study, developing recruitment strategies, co-facilitating community group discussions and data analysis. Same-gender community discussions focused on resettlement experiences and health and well-being related issues. CRs are employed as casual research assistants and participated in specially-prepared research training modules.

New approaches for gathering and analysing data were devised to enable participants with limited English to be involved. Picture cards depicting a broad range of issues were created to activate discussions. CRs were closely involved in data analysis by adapting strategies for content and thematic analyses and drawing on their proximal insights into community circumstances.

Insights
The discussions offer rare insights into resettlement experiences among longer- and newly settled residents. As one participant explained: ‘This is the first time we have a chance to explain our situation. The more chances we have to do this, then people will understand our experiences’. They described being satisfied with many aspects of everyday life in Wagga and few expressed intentions to leave. Key health-related issues were caring for people with mental health issues, accessing health services, community attitudes to children with disabilities, access to work and educational opportunities, workplace safety, discrimination and adapting to changing family dynamics following resettlement in Australia. Participants described complex and ambivalent experiences of feeling a sense of belonging to, and disconnection from, the wider community.

Implications
The findings provide detailed and textured accounts of resettlement across different points in time, from the longer-settled African community to the recently resettled Ezidi community. Findings will be used to promote better understanding of people’s needs among health services and other service providers, policy changes to reduce pressures on newly arrived families, and creating opportunities to learn and practice English and build work-related skills. Young people are keen to study at university and need to be included in strategies seeking to grow the rural health workforce.
Deborah Warr – Biography
Deborah Warr is Senior Principal Research Fellow at Three Rivers University Department Rural Health [UDRH] at Charles Sturt University. She is a health sociologist and her current research focuses on an array of health issues in rural community settings, refugee and immigrant health and student learning. She has wide expertise in participatory research methods and commitment to co-designing and co-producing research with organisational and lay community stakeholders. Her published work contributes to theoretical and empirical understanding, methodological debates and research ethics relevant to community-based research.
Implementation advanced radiotherapy technology to improve clinical outcomes in regional set up

PRESENTER: Dilli Banjade

Introduction
In Australia, radiotherapy (alone or with chemotherapy) is used for treating 48.3% of notifiable cancer patients and availability of advanced radiotherapy would have better clinical outcome. Cancer patients in remote areas experience poorer outcomes than their metropolitan counterparts with distance being an appreciable barrier to treatment access mainly to advanced techniques.

Problem
At Central West Cancer Care Centre (CWCCC) the utilization rate of Intensity-Modulated Radiotherapy (IMRT) and Volumetric Modulated Arc Therapy (VMAT) was significantly lower compared to other NSW public health services. Stereotactic Ablative Body Radiotherapy (SABR) treatment was not available at CWCCC.

Design
Increase the IMRT/VMAT utilization rate and make SABR treatment available through quality improvement projects with multi-disciplinary collaboration. A driver diagram (Figure 1) was developed to identify the challenges, drivers, change ideas and the aim of the project using recommended quality improvement tools from the clinical leadership program of clinical excellent commission of New South Wales. Key measures for improvement Increase IMRT/VMAT utilisation rate SABR available to CWCCC patients

Strategy for change
A multi-discipline team consists of Radiation Oncologists, Medical Physics Specialists and Radiation Therapists was formed and a project plan was developed to implement each treatment techniques.

Key measures for improvement
Increase IMRT/VMAT utilisation rate SABR available to CWCCC patients

What this study adds?
- State of the art treatment can be implemented in rural settings with a proactive and collaborative team
- Additional staff and/or extensive training are not always required to implement new treatments
- End-to-end testing to ensure safety and treatment quality is a critical part of practitioner confidence in new treatments.

Results
After implementing Breast IMRT, VMAT and SABR treatment, the average IMRT/VMAT utilization rate at increases from 22% to 63% as shown in Figure 2. SABR treatment is also available at CWCCC from 2019. The radiation oncology team is working to further maximise the utilization rate in coming years with the promising data of IMRT/VMAT utilization rate of above 70% as shown in Figure in January 2020.
Conclusion
Strong commitment from a trained team and a collaborative approach is important for the implementation of advanced technology in regional centres.

Note: The results are accepted for publication in Australian Journal of Rural Health (AJRH) as a quality improvement paper

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Dilli Banjade - Biography
Dr Dilli Banjade is Acting Director of Medical Physics in Orange Hospital. He received his PhD in Medical Physics from the University of Science Malaysia in 2002 and has been heavily involved in clinical and research work in Oncology Physics discipline.

He has been proactive in quality improvement and implementing advanced radiotherapy technology as a leader and project manager.

Dr Banjade’s current focus is to innovate and make new radiotherapy technology available to prescribe and treat cancer patients in regional areas of NSW. Recently he has led and completed many quality improvement projects, as a result WNSW LHD patients are receiving state of the art radiotherapy treatment on par with the metropolitan services.

The results of his quality improvement initiatives are recently published in Australian Journal of Rural Health
A stepped wedge trial of efficacy and scalability of a virtual clinical pharmacy service (VCPS) in rural and remote NSW health facilities

PRESENTER: Brett Chambers

Background:
Only 7 of 38 facilities within WNSWLHD receive onsite clinical pharmacy services, resulting in the suboptimal provision of medication review and medication reconciliation. Evaluation of pharmacy services in WNSWLHD reinforced a significant shortage of pharmacy service delivery across rural facilities. An innovative pilot of a virtual pharmacy in four facilities from 2016 to 2018 indicated local feasibility.

Aims:
Develop a research protocol to describe a virtual pharmacy model of care and the evaluation of a virtual clinical pharmacy service (VCPS) to eight rural and remote hospitals.

Methods:
A review of the trials registry and a literature search occurred to examine current standards of practice for delivery of inpatient pharmacy services via telehealth. Project governance and research committees were established. A mixed-methods study design was developed to evaluate the virtual pharmacy service, including:

• A stepped wedge cluster randomised trial design using routinely collected data from patients’ electronic medical records. Primary outcomes include the number of medication reconciliations completed on admission and discharge. Secondary outcomes include length of stay, falls and 28-day readmissions. Cost-effectiveness analysis and cost-benefit analysis will also be conducted.

• A patient experience measure survey will compare patient experience compared to face-to-face pharmacy services.

• A pre and post medication adherence questionnaire will also be used to identify patient responses to the virtual service.

• Focus groups will investigate implementation from hospital staff perspectives at each site.

Results:
The Greater Western Human Research Ethics Committee and the Aboriginal Health and Medical Research Council has ethically evaluated and approved this research protocol. The study protocol was published in

BMC Health Services Research and the study registered with Australian New Zealand Clinical Trials Registry. Project planning, workflow mapping, stakeholder engagement, change management, implementation activities and the data collection described in the protocol are now underway and due to be completed in June 2021.
Implications:
Through the use of telehealth technologies, this project will demonstrate the integration of hospital pharmacist’s unique skill sets into healthcare over large geographical areas. Through the implementation of the research protocol and evaluation of data collected, we aim to demonstrate the efficacy, scalability and acceptability of virtual pharmacy. Further, this research can improve access to hospital pharmacy services, provide a model for virtual pharmacy delivery in rural and remote locations and inform best practice. We intend to publish the results in open access peer-reviewed academic journals.

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Brett Chambers Biography

Brett Chambers is a clinical pharmacist with over a decade of experience in the rural and remote hospital setting. Brett is the implementation lead on the Virtual Clinical Pharmacy Service coordinating the research evaluation and the clinical service. Brett has worked across a number of sites in FWLHD and WNSWLHD in various roles including clinical pharmacy, health projects, the Rural eMeds implementation and eMeds application support. Brett has a passion for medication safety, electronic medication management, rural health and virtual healthcare.
Dubbo Community Aged Care Forum

PRESENTER: Cathy Rogers

Background and aim
In keeping with the theme of the symposium, this abstract provides a tested and effective model for researchers who are seeking authentic partnerships in their research project. It attracted a large number of community members from a diverse range of ages, genders and cultures with outcomes being significant and meaningful, giving the participants a sense of agency and ownership while contributing to the Royal Commission into aged care quality and safety.

Method
The event, attended by 51 local people, provided community members with a voice in the Royal Commission which aims to examine the quality of care provided to older Australians and the challenges inherent with supporting increased numbers of Australians with dementia, disabilities and delivering aged care services in rural and regional Australia.

It was coordinated by staff from The Three Rivers University Directed Rural Health and the School of Nursing, Midwifery and Indigenous Health at Charles Sturt University. The event was promoted throughout the community through aged care services, radio, flyers and word-of-mouth. The participants who attended the event were community members, local healthcare professionals and academics and the outcome was a community submission to the Royal Commission into aged care quality and safety.

Results
The event was evaluated and responses indicated that the community felt they ‘had ample opportunity to contribute their views on aged care’ and ‘the forum was an effective way to contribute local experiences to the Royal Commission’. Living in a rural community has different barriers, challenges and outcomes due to location, accessibility and affordability both for clinicians and the community and the forum was a platform for the people from Dubbo and surrounding areas to articulate their realities.

The submission included themes evolving from community. The draft submission was taken to one of the local Aboriginal Elders group who attended the night to verify that the content was an accurate reflection of discussions. The final version of the submission was sent back to all of the community members who attended on the night and provided their email address for follow-up.

Outcome
This presentation will articulate the strategies used in bringing the Dubbo community together to have a voice about the provision of aged care services in their town, provide an overview of the themes emerging from the discussion and outline the impacts of the forum, providing a model for future researchers when seeking the authentic voice of a rural community.

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Team Biographies

Cathy Rogers
Cathy is a Lecturer in Rural Health (Clinical Educator) with the Three Rivers UDRH and has been a Lecturer in Nursing and Midwifery for the past 20 years at Charles Sturt University. Cathy is a Registered Nurse and Registered Midwife and most of her clinical practice is in rural areas. She is passionate about rural issues surrounding health professional students, clinical placements and workplace learning. She is committed to furthering educational opportunities for health professional students in rural and remote areas of Australia.

Jayne Lawrence
Jayne is a Registered Nurse and a Registered Midwife, the majority of her experience is in rural NSW. She has a passion for achieving better health outcomes in regional and rural areas. In her current role with the Three Rivers UDRH she has the opportunity to establish and provide curriculum, support and mentoring to clinicians and health professional students to advance their education and practice. Her passion is for improving health outcomes for Aboriginal and Torres Strait Islander communities and growing the rural health workforce.

Dr Elyce Green
Elyce Green is a registered nurse currently working as a Virtual Care Manager in the Murrumbidgee Local Health District. She is passionate about promoting health equality in rural and remote areas and has spent her nursing career working in various acute care specialties in rural hospitals. Elyce also works as part of the Rural Health Education team at Three Rivers University Department of Rural Health.

Associate Professor Maree Bernoth
Associate Professor Maree Bernoth was a Registered Nurse working with older people in residential care and in the community. She has held academic positions in the School of Nursing, Midwifery and Indigenous Health at Charles Sturt University and has made a number of submissions to the Royal Commission into Aged Care Quality and Safety. She holds positions with the Institute for Land Water and Society, the Australasian Association of Gerontology, the NSWNA Aged Care Reference Group and is Chair of the Murrumbidgee Primary Health Network Aged Care Consortium.
Co-designing a student mobile dentistry placement in rural aged care and community mental health settings – evaluating impact for sustainability

PRESENTER: Sarah Hyde

Background & Aims
Oral healthcare in community and residential care settings is a public health issue that impacts the social, economic, and wellbeing of our most vulnerable population groups – elderly, Indigenous, rural, homeless, and those living with mental illness. This is compounded by limited access to outreach dental services in rural residential aged care and the national rural dental workforce shortage.

We collaborated with residential aged care providers and disability services to design a learning experience involving portable dentistry. The intention was to increase student capability and reduce stigma in working with vulnerable population groups; and to concurrently positively impact the oral health of residents and provide access to a treatment that would otherwise not be possible or identified.

Methods
Final year dental students committed eight days each to the project over a five week period. This occurred as part of a shared placement model between public and not for profit providers, where students were released from their LHD placement component to spend two days per week at a not for profit service treating patients in aged care or with a mental illness or disability in the towns of Wagga and Canowindra. A case study approach is being used to evaluate site specific impact and overall student learning and self-perceptions using mixed methods.

Results
At the time of submission, one placement block had been partially completed in an aged care facility in Canowindra. 30 patients (18 F, 12 M), mean age 79, were screened by four students working in pairs over two days. This screening revealed a variety of oral health complaints ranging from a full scale and clean, OPG required to a full mouth debridement and extractions needed, resulting in 25 referrals for further treatment.

The placement had just started when COVID-19 hit, and so only two visits have occurred. The placement recommences mid-July. Our available data is therefore limited to a snapshot of the experience. Many new procedures and risk management strategies had to be devised for this new model of education and service delivery.

Take-home message
The identification of so many unmet needs in such a short placement highlights the potential impact of this project. Further investigation will reveal if flexible models of care delivery, integrating both service and education, are a viable option for addressing a variety of unmet needs within these population
groups, and leveraging the potential for digital health and innovation in the process.

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Sarah Hyde – Biography

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Sarah is Senior Lecturer in Rural Health with Three Rivers University Department of Rural Health (UDRH) at CSU based in Orange. In this role Sarah leads a team of rural health academics and clinical educators across the Western and Murrumbidgee regions of the CSU footprint to source and support high quality rural clinical placements across 16 disciplines.

Sarah has worked in health professions education for 19 years at both undergraduate and postgraduate levels, specialising in curriculum design, learning in the clinical environment, problem based learning, evaluation, and self-regulated learning, all driven by a socio-cultural epistemology. Sarah has expertise in both qualitative and quantitative methodologies and is collaborating on a number of inter-university projects surrounding the idea of rurality and the role of context in curriculum and learning.