

# WHRN 2021 Research Symposia



## Webinar series

Tuesday 26 October 2021

Wednesday 10 November 2021

Thursday 25 November 2021

**Symposia Summation & Awards**

Tuesday 7 December 2021

Western NSW Health Research Network Incorporated

Theme - "We are one, but we are so very many: exploring strength in rural diversity".

Proudly funded by the NSW Government



# Programs Abstracts & Speaker Biographies

<b>Tuesday 26 October 2021 Opening Program</b>	<b>4</b>
Keynote – Associate Professor Faye McMillan	4
Learning Space Presenter - Dr Eleanor Williams	4
MC – Lynette Bullen	5
<i>Out here on my own: Understanding resilience of counsellors working publicly in rural and remote New South Wales.</i>	6
Susan Blackmore	6
<i>Reflective Groups for the Reduction of Burnout in Junior Doctors</i>	7
Myles Gutkin	7
<i>How is the region travelling? It could make a difference</i>	8
Peter Simmons	8
<i>Wearing three hats: Clinician, researcher and Aboriginal woman</i>	9
Lynette Bullen	9
<i>Social Media Platforms as a Tool to Communicate Suicidality for Rural Youth</i>	10
Ann-Maree Fardell Hartley	10
<i>Access of Alcohol and Other Drug Intervention in Regional and Rural Australian headspace Centres: The Individual, Organisational and Systemic Barriers and Enablers</i>	11
Nicole Snowdon	11
<b>Wednesday 10 November 2021 Program</b>	<b>12</b>
Keynote - Dr Anthony Brown	12
Learning Space Presenter - Dr Eleanor Williams	12
MC – Nathan Frank	13
<i>Implementing a pilot intervention across eleven sites: Adapting and negotiating multiple challenges</i>	14
Rachel Rossiter	14
<i>“Where do you go? That is the question...” – How do rural women manage unintended pregnancy in the bush?</i>	15
Anna Noonan	15
<i>Individual decision making and experiences with emergency healthcare in rural and remote NSW: Patients presenting with moderate to severe asthma</i>	17
Alannah Stoneley	17
<i>Exploring rural diversity in Emergency Department (ED) presentations during 2014 and 2019 among Australian youth from New South Wales: is there an inland rural effect?</i>	18
Sally Butler	18
<i>Implementing the School- Based Primary Health Care Service in a rural community: learning from the experiences of learning support teams and nurses</i>	19
Catherine Sanford	19
<b>Thursday 25 November 2021 Program</b>	<b>20</b>
Keynote - Professor John Wiggers	20
Learning Space Presenter - Dr Eleanor Williams	20
MC – Bradley Christian	21
<i>Building social histories in rural contexts: the story of a teaching program to improve students' expertise</i>	22
Heather Russell	22
<i>Place based pedagogies in health professional education: a scoping review</i>	23
Tagrid Yassine	23

<i>Development of a framework to promote rural health workforce capability through digital solutions: A qualitative study of user perspectives</i>	24
Sabrina Pit	24
<i>Investigating the Nutrition Dashboard's ability to predict Malnutrition</i>	25
Erin Fisher	25
<i>Intralesional 5-FU: An alternative therapy for non- melanoma skin cancers</i>	26
William Luu	26
<b>Wednesday 10 November – Tuesday 30 November</b>	<b>27</b>
<b>Online ePosterProgram</b>	<b>27</b>
<i>Optimization of Radiotherapy Utilization to improve cancer survival rate in regional NSW</i>	28
Dilli Banjade	28
<i>Perioperative Fasting of Clear Fluids in Elective Surgical Patients in an Australian Regional Centre</i>	30
Olivia Chua and Gowry Simon	30
<i>A telehealth breathing intervention to improve patient outcomes for adults with chronic pain of working age: Patients' perspectives</i>	32
Asta Fung	32
<i>The Impact of Hypnobirthing and Doula Work on Obstetric Anaesthesia and Maternity Care in Bathurst Base Hospital</i>	34
Attila Jonas	34
<i>Digital Tools for Remote Screening and Monitoring of Diabetic Retinopathy in Rural, Remote and Indigenous Australian Communities: A Narrative Review of the Literature</i>	36
Jiyoon Lee	36
<i>Connecting Research, practice and communities using a digital platform known as Rural Health Pro</i>	38
Robyn Ramsden and Erin Press	38
<i>Virtual Art Workshops as a Model of Care: Creative innovations in aged care reduce social isolation and foster diverse rural health networks</i>	40
Kate Smith	40

## Tuesday 26 October 2021 Opening Program

This program brings together a variety of research within a mental health theme.

Time	Speaker	Topic
12.00pm	Lynette Bullen	Webinar commencement
	Lynette Bullen	Acknowledgment of Country
12.05pm	Catherine Hawke <i>Co-Chair WHRN</i>	WHRN 2021 Research Symposia opening and introduction
12.10pm	<b>A/Prof Faye McMillan</b> <i>Deputy National Rural Health Commissioner</i>	<b>Keynote Address – ‘Including the voice of First Nations people in research: What are the lessons learned and why inclusive authorship and genuine Indigenous community engagement is so important.’</b>
12.30pm	Susan Blackmore	Out here on my own: Understanding resilience of counsellors working publicly in rural and remote New South Wales
12.40pm	Myles Gutkin	Reflective Groups for the Reduction of Burnout in Junior Doctors
12.50pm	Peter Simmons	How is the region travelling? It could make a difference
1.00pm	<b>Lynette Bullen</b>	<b>Wearing three hats: Clinician, researcher and Aboriginal woman</b>
1.10pm	Ann-Maree Fardell Hartley	Social Media Platforms as a Tool to Communicate Suicidality for Rural Youth
1.20pm	Nicole Snowdon	Access of Alcohol and Other Drug Intervention in Regional and Rural Australian headspace Centres: The Individual, Organisational and Systemic Barriers and Enablers
1.30pm	<b>Lynette Bullen</b>	<b>Summation and welcome to learning space</b>
1.35pm	Dr Eleanor Williams	Symposia Learning Space
1.55pm	Catherine Hawke	Close and Evaluation

### Keynote – Associate Professor Faye McMillan

@Deputy National Rural Health Commissioner



I am a proud Wiradjuri yinaa (woman) originally from Trangie, NSW, now living and working between rural/regional and urban NSW. In the 2021 Queen's Birthday Honours List I was awarded the Medal (AM) in the General Division of the Order of Australia for "significant service to Indigenous Mental Health, and to tertiary education". Furthermore, in March of 2021, I was named one of two Deputy National Rural Health Commissioners and in 2019 I was honoured to be named as the NSW Aboriginal Woman of the year. I am a Senior Atlantic Fellow for Social Equity (Atlantic Institute), as well as being a Senior Fellow with Advance HE. I am a founding member of Indigenous Allied Health Australia (IAHA) and was a board member of IAHA from 2009-2017 (and chairperson from 2010-2016). I joined UNSW at the start of March 2021 with over 20 years of experience in the Higher Education Sector and over 30 years in the health sector.

### Learning Space Presenter - Dr Eleanor Williams

@Victorian Department of Health



Eleanor Williams is a public policy and evaluation professional and was previously the Director of the Centre for Evaluation and Research Evidence at the Department of Health. Eleanor holds a Masters of Public Policy and Management and Masters of Evaluation from the University of Melbourne and has worked in a variety of senior management and executive roles in Government and as a management consultant with KPMG. Eleanor is the current convener of the Victorian Committee of the Australian Evaluation Society and founded the Australian Public Sector Evaluation Network.

## MC – Lynette Bullen

@Western NSW Local Health District



Lynette is a Wiradjuri woman currently undertaking a Health Education and Training Institute (HETI) Rural Research Capacity Building Program through NSW Health. She has worked in drug and alcohol for over 25 years in metropolitan, regional, rural and remote NSW. Lynette is employed at the Involuntary Drug and Alcohol Treatment Unit in Orange as a Senior Drug and Alcohol Clinician.

# Out here on my own: Understanding resilience of counsellors working publicly in rural and remote New South Wales.

**Susan Blackmore**

Susan Blackmore is a Social Worker. She has spent 20 years working in Child Protection in regional areas including 3 years working in Bourke, a remote town in North West NSW. Through her experience of working and living in Bourke she learnt about the challenges of working in rural and remote areas. This prompted her interest in gaining an understanding of how health professionals in similar circumstances had developed ways to meet these challenges. This was the impetus for her to undertake her research project through the Rural Research Capacity Building Program. One of the themes that emerged from the research was that there was limited understanding of the concept of compassion satisfaction and the importance of this to assist in foster resilience for those working in counselling roles. Susan currently works as a Child Protection Counsellor in Orange.

## Abstract submission - Emerging Research

### **Background:**

Professional isolation negatively impacts on recruitment and retention of the allied health workforce in rural and remote areas. This is seen in a high number of vacancies within these roles. This study investigated the experience of counsellors working as sole practitioners in rural and remote towns in Western NSW.

### **Aims:**

The study rationale was to understand the experiences of this workforce, which may lead to improved support and potential retention in these roles. It would be applicable to other allied health workers. The study also aimed to explore the concept of compassion satisfaction to understand how this concept enhances resilience.

### **Methods:**

This qualitative study involved semi-structured individual interviews informed by Appreciative Inquiry methodology. Appreciative Inquiry was chosen for its ability to focus on strengths and identify ways to provide further support. Public health counsellors working as sole practitioners in rural and remote Western NSW, Australia were invited via email to participate in semi-structured, recorded interviews. Interview transcripts were coded independently by two researchers for thematic analysis.

### **Results:**

Five Counsellors and 2 social work students participated in the study. They were consistent with what they identified as challenges to rural and remote roles, particularly professional isolation. They were also able to demonstrate resilience in relation to their unique situation as evidenced by three emergent themes; i) building connection and relationships within their community and with other professionals ii) skills in self-care and iii) acknowledging their role in the client's development of resilience, which they had not previously considered within the scope of 'compassion satisfaction'.

### **Challenges:**

Recruitment and engagement was a challenge for this study. As these are specialised roles there is only a small number of workers in these positions, this means that the target population was small. As reflected across rural health roles in general, a number of roles were vacant and other workers resigned during the recruitment phase. Using a non-direct approach to recruit participants met ethical standards, however impacted on the personal approach to recruitment. Despite these challenges the study produced meaningful results.

### **Implications or Conclusion:**

Counsellors working as sole practitioners were skilled in developing resilience. Future directions for the workforce will revolve around enhanced understanding and application of the concepts of compassion satisfaction. The challenge identified for health services is to facilitate ongoing connections with other professionals. The learnings of this study are likely to be transferable to other rural and remotely located allied health professionals.

### **Authors:**

- Mrs Susan Blackmore, NSW Health, susan.blackmore1@health.nsw.gov.au, Orange, NSW, 2866.
- Dr Tara Walker, Broken Hill University Department of Rural Health, tara.walker@sydney.edu.au, Bourke, NSW, 2840.
- Dr Kerith Duncanson, HETI Rural and Remote Portfolio, kerith.duncanson@health.nsw.gov.au

# Reflective Groups for the Reduction of Burnout in Junior Doctors

**Myles Gutkin**

Myles Gutkin is a Psychiatrist, psychotherapist and researcher working as a clinician in the Orange Community. His main area of research is somatisation and the evaluation of psychotherapy interventions. He is also a group psychotherapist and has been offering reflective groups for case managers for the past four years. In the context of the COVID19 pandemic, he established a reflective group for junior doctors to process and contextualise their experiences with therapist guidance. This evolved into a research project to evaluate its effect on work performance and wellbeing.

## Abstract submission - General Research

### **Background:**

Junior Medical Officers (JMOs) are exposed to many stressful experiences during their clinical training. Research from comparable professions shows that knowledge and skills cannot be effectively implemented under stress unless arousal and emotions are managed to preserve the ability to think and act flexibly. Unregulated chronic stress may accumulate and be amplified by interpersonal conflict, leading to burnout. Stress Inoculation Therapy (SIT) contextualises and normalises arousal and emotions under acute stress. Group analysis (GA) promotes reflective skills to reduce interpersonal conflict and chronic stress. Therapist-led reflective groups for JMOs using SIT and GA may enhance performance and reduce burnout.

### **Aims:**

To investigate the acceptability, tolerability and benefit in wellbeing, function and reduced burnout, of a weekly reflective group intervention for junior doctors.

### **Methods:**

An initial feasibility trial and exit interview, was followed by a before and after study at a regional teaching hospital. All JMOs were invited to participate in weekly reflective groups based on SIT and GA. Groups lasted for 6-12 months and took place either in person or online. Baseline, end of treatment and long-term measures of wellbeing and burnout, followed by an exit interview were collected for mixed methods analysis.

### **Results:**

A 12-month feasibility trial with 6 participants was well tolerated according to exit interviews. A second, 6-month, before and after study is underway.

### **Implications:**

If the intervention is acceptable, tolerable and effective, the intervention could be offered to other JMOs to reduce the negative effects of stress and improve performance.

### **Authors**

- Dr Myles Gutkin, Orange Health Service, myles.gutkin@health.nsw.gov.au, The Curran Centre, 145-147 March St Orange, 2800.
- Dr Robert Gordon, Australian Association of Group Psychotherapists, rob@robgon.com.au, Melbourne, Victoria, 3128.

## How is the region travelling? It could make a difference

### Peter Simmons

Senior Research Officer, Centre for Rural and Remote Mental Health, University of Newcastle.

Peter is presently exploring impacts of Covid on mental health and wellbeing in rural and remote communities. He specialises in social research including social media analysis for policy advice. He has led more than 20 funded research studies and published more than 60 peer-reviewed papers, conference presentations and book chapters.

**Dr Clifford Lewis**, PhD (he/him/his) is a Marketing academic at Charles Sturt. His research focuses on Place Marketing exploring how destinations can be marketed inclusively to diverse audiences. Prior to academia, Clifford worked as a Senior Consultant in market research consulting on projects related to regional tourism experience and campaign development.

### Abstract submission - General Research

#### Background and aims:

This presentation reflects on potential for active transport such as cycling and walking to contribute to improved mental health and wellbeing in regional NSW.

Over a million NSW people (13%) ride a bike at least weekly. Regional rates are slightly higher (NSW Cycling Participation Survey, 2019). Links between exercise and physical and mental wellbeing are well recognised. Regular bicycle riders frequently report feeling freedom, exhilaration and enjoyment. Studies have found positive links between active commuting travel and psychological wellbeing when compared to car travel (Martin et al 2014), that use of a bicycle is linked to vitality and a range of mental health measures, and walking is associated with high vitality and good perceptions of self-health (Avila-Palencia et al, 2018).

This study aimed to find out how people in regional NSW are using bikes, and what would encourage more riding.

#### Methods:

An online 10 minute survey of 1325 (87% regional/rural, 92% car owners, 80% bike owners) was done in January 2020. More than half the sample were from central western NSW. Email and paid and unpaid Facebook were used extensively to recruit the sample.

#### Results:

The study found very favourable attitudes to bikes, both for communities and for individuals. Ninety percent agreed cycling would improve communities' physical health, 72% said the sight of people on bicycles makes a town seem more desirable. Recreation was the main use (81%) followed by 7% for commuting and 5% for other transport purposes (errands/shopping/visits). More use bikes for commuting in Dubbo than Bathurst or Orange.

Reasons for riding were overwhelmingly related to personal wellbeing: Physical health and fitness (89%), fun and enjoyment (77%), 'clears my head' (56%) and social reasons (41%). Other reasons include environment (30%) and saving money (14%). There was strong desire for more active future mobility, 40% intend to cycle more, 28% to walk more, 15% to use an e-bike more, while 15% will drive cars less. The main encouragements to ride more were more bike paths (76%) and lanes (73%), more motorist displays of respect (71%), better bike signage (64%), and education for motorists on shared road use (63%).

#### Implications:

Findings accord with trends to increased cycling elsewhere in Australia and internationally. Improved regional infrastructure, bike signage, and road sharing education could increase active transport, and enhance physical and mental wellbeing.

Support for normalising active transport may improve population health at little direct cost to individuals.

#### Authors:

- A/Prof Peter Simmons, Centre for Rural and Remote Mental Health, University of Newcastle, [peter.denyersimmons@newcastle.edu.au](mailto:peter.denyersimmons@newcastle.edu.au), CRRMH Bloomfield Hospital Orange, NSW, 2800.
- Dr Clifford Lewis, Charles Sturt University School of Management and Marketing, [cllewis@csu.edu.au](mailto:cllewis@csu.edu.au), CSU School of Management and Marketing, Panorama Ave Bathurst, NSW, 2795



## **Wearing three hats: Clinician, researcher and Aboriginal woman**

**Lynette Bullen**

Lynette is a Wiradjuri woman currently undertaking a Health Education and Training Institute (HETI) Rural Research Capacity Building Program through NSW Health. She has worked in drug and alcohol for over 25 years in metropolitan, regional, rural and remote NSW. Lynette is employed at the Involuntary Drug and Alcohol Treatment Unit in Orange as a Senior Drug and Alcohol Clinician.

### **Abstract submission**

#### **Challenges:**

As a clinician, I noticed so few Aboriginal clients being referred to Involuntary Drug and Alcohol Treatment. This led me to ask, why? So, my journey into the world of research began.

With minimal research skills, in this talk, I reflect on lessons learned as a novice clinician-researcher. Identifying appropriate support structures and expertise was my first lesson. This enabled me to 'learn on the job' when conducting my study.

Next came the ongoing lesson in exploring what literature was available on my topic and what it all meant. Academic support provided by a range of experts, including the Centre of Research Excellence in Indigenous Health and Alcohol (CRE) – helped me navigate the world of literature searches, to weigh up available evidence on my topic, and to critically analyse what was written.

The greatest hurdle for me was to set aside my clinician's hat when analysing the data. Learning to listen to the voices of those being interviewed and not becoming defensive about what was highlighted during the interviews was essential.

Finally, overtime, with detailed and responsive feedback from my mentors, I gained the skills and confidence to learn how to write to an academic audience.

#### **Conclusion:**

Having a research question I wanted answered was the first step out of my comfort zone. This first step has taken me on a research journey which I did not expect or believe was possible. Applying and being accepted into NSW Health Education and Training Institute (HETI): Rural Research Capacity Building Program provided the platform to help me learn about research.

Having a team of strong clinicians and academics behind me has been imperative. My links with the CRE allowed me regular contact with other Aboriginal researchers and research support staff which has greatly increased my knowledge and confidence to undertake research.

Although my current research is coming to an end, I have learned so much not only about research process but boosted my abilities to find the answers to my research questions.

Planning is underway to broaden the scope of my research to include those most affected by this contentious topic of involuntary drug and alcohol treatment for Aboriginal people – individuals and their families.

From my own experience, aligned with this year's WHRN theme it certainly takes a village to conduct well designed and thought provoking research. I hope to be able to be a clinician-researcher for many years to come.

#### **Authors**

- Ms Lynette Bullen, Orange Health Service, Mental Health/Drug & Alcohol, lynette.bullen@health.nsw.gov.au, 1502 Forest Road, Orange, NSW, 2800.

# Social Media Platforms as a Tool to Communicate Suicidality for Rural Youth

**Ann-Maree Fardell Hartley**

Annie Fardell Hartley is a dedicated Registered Psychologist and Suicidologist who has been working in rural and remote areas for over 20 years. Annie has worked clinically across all tiers of service provision, as well as being an accredited Psychological Autopsy Investigator and educator. She is currently completing a PhD investigating how rural youth who are experiencing suicidality interact with social media. She is also a committee member and expert advisor for a range of state, national and international suicide prevention associations, including RU OK, Suicide Prevention Australia and the AAS.

## Abstract submission - Emerging Research(er)

### **Background:**

Introduction: Suicide is the number one cause of death for young people aged 15-24 in Australia. Part of preventing imminent youth suicide is the response to a disclosure and meeting the needs of the person in real time, which includes on social media. Social media increases communication opportunities and reduces some of the barriers that marginalised young people may experience, however, little is known about how suicidality translates into online warning signs. One of the major difficulties in communicating about suicidal phenomenon with community is there is not a common language. The objectives of the research are: to understand the styles of communication and reasoning which rural NSW young people experiencing suicidality use when accessing social media platforms, and to identify warning signs and markers that flag risk is imminent.

### **Methods:**

This study utilizes qualitative methods and descriptive statistics. Young people, familial connections and professional treatment providers have been interviewed in relation to their experiences of suicidal social media communication along the continuum, from ideation to the outcome of death by suicide. An online descriptive questionnaire for rural community members has captured experiences of online expressions of suicidality and risk ratings of vignettes to determine community capacity to respond to risk.

### **Emerging Results:**

Emerging themes indicate that young people who have a history of suicidality use social media to engage 'friends' when feeling vulnerable and at risk, with different types of profiles emerging depending on need. Methods of communicating suicidality include memes, 'stories' showing intended means of death, and comments pertaining to current mental state. Communication of suicidality is targeted at peers, not adults they are connected with in real life or via social media. Evidence also suggests communication of suicidality is minimised or not recognised by 'gatekeepers', irrespective of mental health experience.

### **Discussion:**

Warning signs for potential suicidal action by youth may be indicated via social media platforms. The implications are that opportunities for intervention from online connections are possible and welcomed by young people experiencing suicidality, therefore creating an additional avenue in suicide prevention and intervention which needs to be considered at a community and clinical level.

### **Authors:**

- Ms Ann-Maree, Hartley, Charles Sturt University, annmaree.hartley@gmail.com, Dubbo, NSW, 2830.
- Dr Judith Crockett, Charles Sturt University, jcrockett@csu.edu.au, Orange, NSW, 2800.
- Dr Shaun Wang, Charles Sturt University, swang@csu.edu.au, Orange, NSW, 2800.

# Access of Alcohol and Other Drug Intervention in Regional and Rural Australian headspace Centres: The Individual, Organisational and Systemic Barriers and Enablers

Nicole Snowdon

Mrs Snowdon has over 10 years' experience as a social work practitioner in the government and non-government sectors in Western NSW LHD regions. Mrs Snowdon is currently completing her PhD at the National Drug and Alcohol Research Centre, UNSW with a focus on drug and alcohol interventions for young people.

## Abstract submission - General Research

### Background:

Compared to urban young people (YP), YP in rural and regional communities experience a higher prevalence of Alcohol and Other Drug (AOD) related harms, but the utilisation of YP AOD interventions in these communities is low. Integrated youth health care models, such as the Australian headspace model, are appropriately positioned to address AOD related harms, however little is known about the factors impacting access of YP AOD interventions in rural and regional areas. This paper aims to identify the barriers and enablers influencing access of YP AOD interventions in the Australian rural and regional headspace setting, as perceived by YP, their family and friends, and headspace staff.

### Methods:

YP (n = 16), their family and friends (n = 9), and headspace staff (n = 23) and management (n = 7) were purposively recruited in four headspace centres in regional New South Wales, Australia. All participants completed a semi-structured focus groups about their perceptions on AOD interventions. Thematic analysis was employed to iteratively analyse the data.

### Results:

Convergent themes across groups were identified and several barriers to the access of AOD interventions were found: 1) YP were perceived as unable to identify and seek help for at-risk substance use; 2) headspace staff lacked clarity, knowledge and self-efficacy in delivering AOD interventions; and 3) headspace staff and management identified that headspace's early intervention focus was contrary to the complex YP presentations, and YP with AOD concerns were almost exclusively referred out to adult AOD-specific external services. The youth-centric headspace model was an enabler of appropriately engaging YP with an AOD concern.

### Implications:

At the organisational level, clarity in headspace's role in YP AOD interventions is needed. Clinicians require AOD training and support. By increasing the supply of appropriate YP AOD interventions, YP help-seeking and engagement would likely increase.

### Authors:

- Mrs Nicole Snowdon, National Drug and Alcohol Research Centre, University of New South Wales, n.snowdon@student.unsw.edu.au, Orange, NSW, 2800.
- Dr Julaine Allan, School of Health & Society, University of Wollongong, julaine@uow.edu.au, Orange, NSW, 2800.
- Dr Ryan Courtney, National Drug and Alcohol Research Centre, University of New South Wales, ryan.courtney@unsw.edu.au, Sydney, NSW, 2052.
- Prof Anthony Shakeshaft, National Drug and Alcohol Research Centre, University of New South Wales, anthony.shakeshaft@unsw.edu.au, Sydney, NSW, 2052.

## Wednesday 10 November 2021 Program

This program brings together a variety of research within a service access theme.

Time	Speaker	Topic
12.00pm	Nathan Frank	Webinar commencement
	Nathan Frank	Acknowledgment of Country
12.05pm	Catherine Hawke	WHRN 2021 Symposia opening and introduction
12.10pm	Dr Anthony Brown <i>Director, Health Consumers NSW</i>	Keynote address: Involving health consumers and community members in health research
12.30pm	Rachel Rossiter	Implementing a pilot intervention across eleven sites: Adapting and negotiating multiple challenges
12.40pm	Anna Noonan	"Where do you go? That is the question..." – How do rural women manage unintended pregnancy in the bush?
12.50pm	Alannah Stoneley	Individual decision making and experiences with emergency healthcare in rural and remote NSW: Patients presenting with moderate to severe asthma
1.00pm	Nathan Franks	MC comment
1.10pm	Sally Butler	Exploring rural diversity in Emergency Department (ED) presentations during 2014 and 2019 among Australian youth from New South Wales: is there an inland rural effect?
1.20pm	Catherine Sanford	Implementing the School-Based Primary Health Care Service in a rural community: learning from the experiences of learning support teams and nurses
1.30pm	Nathan Frank	Summation and welcome to learning space
1.35pm	Dr Eleanor Williams	Symposia Learning Space
1.55pm	Catherine Hawke	Close and Evaluation

### Keynote - Dr Anthony Brown

Executive Director @Health Consumers NSW



Dr Anthony Brown is the Executive Director of Health Consumers NSW, the peak body for patient and health consumers in NSW. Health Consumers NSW assists health consumers, health services and health researchers to work in partnership, to create a more patient-centred health system. Before joining HCNSW Anthony was Manager for the Men's Health Information and Resource Centre, at Western Sydney University, where he led research projects investigating the social determinants of men and boys' health, as well as men's engagement with health, community, and aged care services. His PhD explored retired men's engagement with their communities.

### Learning Space Presenter - Dr Eleanor Williams

@Victorian Department of Health



Eleanor Williams is a public policy and evaluation professional and was previously the Director of the Centre for Evaluation and Research Evidence at the Department of Health. Eleanor holds a Masters of Public Policy and Management and Masters of Evaluation from the University of Melbourne and has worked in a variety of senior management and executive roles in Government and as a management consultant with KPMG. Eleanor is the current convener of the Victorian Committee of the Australian Evaluation Society and founded the Australian Public Sector

Evaluation Network.

## MC – Nathan Frank



Nathan Frank is a proud Tubba-Gah Maing, Wiradjuri man from Dubbo in NSW with extensive experience in Indigenous Social and Emotional Wellbeing and Financial Inclusion. He has been fortunate to have worked in many remote communities across Australia in previous positions as the Manager of the Bila Muuji Drug and Alcohol Network, Senior Coordinator of the High-Risk Remote Aboriginal Mental Health Training Program and within the policy team at the NSW Aboriginal Land Council. He is the current Chairperson of the Tubba-Gah Maing Wiradjuri Aboriginal Corporation, an Artist and Designer whose works have been featured in many exhibitions. Nathan has recently completed a Graduate Diploma in Indigenous Health Promotion-SEWB at the University of Sydney.

## Implementing a pilot intervention across eleven sites: Adapting and negotiating multiple challenges

Rachel Rossiter

Rachel is a Registered Nurse and a Senior Academic in the School of Nursing, Paramedicine and Healthcare Sciences at Charles Sturt University. As an academic and a researcher, her work focuses on building registered nurse capacity for advanced nursing practice in a range of different contexts. Some of these projects focus specifically on neurological conditions such as Parkinson's disease, and the translation of evidence-based practice into effective health care delivery.

### Abstract submission - Emerging Research(er)

#### Background:

Neurodegenerative movement disorders such as Parkinson's disease (PD) result in progressive physical and cognitive deterioration severely impacting on an individual's quality of life. For those living in rural and remote areas, limited access to specialist services markedly increases adverse events and reduces quality of life (QoL). Improved QoL for people living with PD and their carers has been demonstrated when a Movement Disorder Nurse Specialist (MDNS) provides high-level assessments and coordination of a multi-disciplinary team. Current nurse-led models are based in metropolitan or large regional areas. In 2020, Western NSW Primary Health Network (WNSW PHN) and Charles Sturt University (CSU) commenced a 3-year MDNS pilot recruiting a nurse from each of eleven regional, rural, and remote sites in Western NSW. The pilot provides capacity building activities, industry memberships, mentoring and support to develop a community of practice and enable extensive networking increasing both access to and quality of specialized nurse-led care in primary care settings. These strategies may also increase retention of nurses committed to their communities by increasing access to a career working at an advanced practice level.

#### Aims:

To develop and implement a movement disorder nurse-led model of care to provide quality safe and effective care in rural and remote settings.

To evaluate the project capturing data to enable comparison between sites, measure service delivery, impact on hospital admissions and effectiveness to support sustainability and replication in other settings.

#### Methods:

Development and implementation of the pilot is informed by the principles of implementation science, the Consolidated Framework for Implementation Research and international and Australian research focused on nurse-led models of care for people with PD. An advisory committee of stakeholders from health services, the peak body, a person with PD and a carer and specialist movement disorders nurses support the design and implementation. A realist evaluation comprising a co-authored case-study for each site (nurse and researcher) combined with collection of qualitative and quantitative data is underway.

#### Challenges:

Multiple challenges have confronted project leaders, researchers, and nurse participants to date, including limited internet access for on-line activities, identifying existing assessment tools and aligning data collection across different services, staffing shortages with participants shifted at short notice to fill service gaps and COVID-19.

#### Implications:

Allocate time to active and ongoing problem-solving. Flexibility, adaptability, and rapid pivoting to alternative options for capacity building is essential when undertaking a multi-site project in rural and remote settings.

#### Authors:

- A/Prof Rachel Rossiter, School of Nursing, Paramedicine & Healthcare Sciences, Charles Sturt University, rrossiter@csu.edu.au, Leeds Parade, Orange NSW, 2800.
- Ms Michele Pitt, Western New South Wales Primary Health Network, michele.pitt@wnswphn.org.au, PO Box 714 Broken Hill, NSW, 2880.
- Ms Alison Stoker, Western NSW Primary Health Network, Alison.Stoker@wnswphn.org.au, 1B Cameron Place, Orange, NSW, 2800.

## “Where do you go? That is the question...” – How do rural women manage unintended pregnancy in the bush?

Anna Noonan

Anna is a rural PhD candidate with the SPHERE Centre for Research Excellence and the University of Sydney Central Clinical School. Anna is exploring the experiences of rural and remote women in accessing their preferred sexual and reproductive health services with a specific focus on abortion. Anna has a multidisciplinary tertiary background, with a Bachelor of Media and Communications (Journalism), Bachelor of International Studies (Latin America) from UTS and a Master of Public Health from the University of Sydney. After a decade working in human rights and international development, a summer internship at the World Health Organisation’s Maternal and Child Health Unit in Geneva in 2010 inspired a career shift into the University sector. Since then, Anna has worked in strategic research and education initiatives in the fields of arts, social sciences, planetary health and — most recently — rural health for the University of Sydney. Anna lives and works on Wiradjuri country in Orange NSW.

### Abstract submission - Emerging Research(er)

#### **Background:**

Decriminalisation of abortion and policy rhetoric about comprehensive reproductive health for all women exists in all states and territories in Australia. Yet rural women are still 1.4 times more likely than urban women to experience unintended pregnancies. Management of unintended pregnancies across rural settings faces new challenges including COVID19-related travel restrictions, compounded by pervasive issues such as chronic workforce shortages and limited healthcare accessibility. What is currently missing is clear information about what consumers - rural women themselves - experience, expect and need to manage unintended pregnancies in diverse rural contexts.

#### **Aims:**

This rurally-led study aims to explore the experiences rural NSW women in managing unintended pregnancies, to provide much needed evidence about consumer experiences and preferences in accessing reproductive health care in rural settings.

#### **Methods:**

This study employs semi-structured qualitative interviews with women from a range of rural locations across Central to Far West NSW. Recruited through community networks and social media, rural women of all ages and backgrounds share their stories and the impact of rurality on their decision making and access of health services. Data collected from interviews is audio-recorded, transcribed and is being analysed for themes using the Framework Method.

#### **Results:**

At this stage of the research, approximately half the interviews have been conducted and thematic analysis is underway. All current participants (n = 9) managed an unintended pregnancy in rural NSW in the past 5 years, with over half (n= 5) obtaining a termination. The mean age of participants is 30 years, and 55% of participants live in outer regional or remote locations. Further results for this study are pending as the research is currently being conducted and will be updated at the Conference.

#### **Challenges:**

Service provision models that seek to meet the needs of rural women should not only be informed by national and international evidence of what works elsewhere. They should equally be informed by original research on the particularities of rural settings and acknowledgement of the range of geographic complexities encompassed in what we understand as “rural”. Recruiting participants from rural areas, and about an already taboo topic are two of the major challenges in this research study.

**Conclusions:**

By giving rural women an opportunity to voice their experiences, expectations and preferences in managing unintended pregnancies, this research can help inform health service design and delivery in ways that better meet rural women's needs.

**Authors:**

- Ms Anna Noonan, University of Sydney, [anna.noonan@sydney.edu.au](mailto:anna.noonan@sydney.edu.au), Orange NSW, 2800.
- Associate Professor, Georgina Luscombe, The University of Sydney, [georgina.luscombe@sydney.edu.au](mailto:georgina.luscombe@sydney.edu.au), Orange, NSW, 2800.
- Professor Kirsten Black, The University of Sydney, [kirsten.black@sydney.edu.au](mailto:kirsten.black@sydney.edu.au), c/o Central Clinical School, NSW, 2006.
- Professor Jane Tomnay, The University of Melbourne, [jtomnay@unimelb.edu.au](mailto:jtomnay@unimelb.edu.au), Melbourne, VIC, 3052



# Individual decision making and experiences with emergency healthcare in rural and remote NSW: Patients presenting with moderate to severe asthma

Alannah Stoneley

Alannah is a 3rd year Bachelor of Paramedicine (Honours) student who has a deep interest in rural health and providing equity in access to emergency health services. After completing her degree, she hopes to gain a job as a paramedic whilst also continuing her research into rural health and being an advocate for those living in rural and remote locations. Her recent research involved interviewing participants who have had to access emergency healthcare in rural and remote NSW due to a moderate to severe asthma attack and based off her results will talk about patients reported levels of satisfaction in accessing emergency healthcare and explore the role of health literacy and past experiences on the decision to access this care.

## Abstract submission - Emerging Research(er)

### Background:

11% of the Australian population is affected by asthma, making it one of the greatest contributors to respiratory illness. 74.1% of those reside in regional and remote locations making it important to investigate the impact of living in these areas on patients' decision making to access emergency health care due to a moderate to severe asthma attack. This research investigated when and why individuals decided to access emergency healthcare and how they felt about their experiences when accessing emergency healthcare.

### Aim:

To explore the factors which impact the decision making of individuals to seek emergency healthcare due to a moderate to severe asthma attack in rural and remote NSW.

### Methods:

This study utilised a qualitative interpretative design to collect data through conducting semi-structured interviews involving 12 participants. During these interviews, participants were asked about how, and when they accessed emergency healthcare in rural and remote NSW, what motivated them to call for an ambulance as well as the impact of any self- management strategies they used. Inclusion criteria involved participants aged 18 years and above who had accessed emergency healthcare for a moderate to severe asthma exacerbation within the last 5 years, in a location which scored an MM3 or above on the Modified Monash Model.

### Results:

Thematic analysis led to 4 main themes regarding the topic. These themes included the access and availability of emergency healthcare resources in these areas, how the individual's education and experience with asthma influenced their decision to access emergency healthcare, the cost that accessing emergency healthcare can have to society and emergency healthcare staff as well as the financial cost of accessing this care and lastly the travel time it takes for ambulances to reach their patients compared to the distance that the patients would have to travel to reach the hospital. The focus for this presentation will be on the patients reported levels of satisfaction and confidence in emergency healthcare in both the prehospital and in-hospital environment and will also explore the role of education and health literacy on their decision to access emergency healthcare.

### Challenges:

Challenges faced throughout this project include being under the strict time frames of an honours degree as well as participants requiring good internet access for the interviews.

### Implications:

There are multiple factors which affect individual's decision making when accessing emergency healthcare in rural and remote Australia in the event of a moderate to severe asthma attack.

### Authors:

- Ms Alannah Stoneley, Charles Sturt University, alannah2910@hotmail.com, Lithgow, NSW, 2790.
- Ms Clare Sutton, Charles Sturt University, Csutton@csu.edu.au, Bathurst, NSW, 2795,
- Dr Judith Anderson, Charles Sturt University, juanderson@csu.edu.au, Bathurst, NSW, 2795.

# Exploring rural diversity in Emergency Department (ED) presentations during 2014 and 2019 among Australian youth from New South Wales: is there an inland rural effect?

**Sally Butler**

Sally is currently finishing a Master of Biostatistics with the University of Sydney. She resides in the Central West and now works at the CSU School of Rural Medicine. Her research interests are broad and include rural health, service provision, health workforce and education and training.

## Abstract submission – Emerging Research(er)

### **Background: & aim(s)**

Rural diversity is an important predictor of primary healthcare accessibility and health outcomes. Evidence indicates that the pattern of health service use among Australian youth varies according to location. In Australia, geographic areas are classified as major city, inner regional, outer regional, remote or very remote with no distinction made between coastal and inland rural areas. Compared to inland populations, coastal rural populations show higher physical activity levels, lower mortality rates and easier access to primary healthcare providers. Studies suggest that rates of low-urgency emergency department (ED) presentations are higher in rural than in metropolitan areas. Our study aims to characterise ED presentations in 2014 and 2019 among youth residing in New South Wales (NSW), focussing on inland and coastal regional variations.

### **Methods:**

State-wide ED data for youth aged 10 to 24 years will be obtained from the NSW Ministry of Health for 2014 and 2019. Local Government Areas of residence will be classified as major city, coastal regional (i.e. inner and outer regional areas within 50 kilometres of the coast), inland regional or remote/very remote. Regression modelling will explore the contribution of rural diversity to ED presentation rates among NSW youth.

### **Expected outcomes:**

We hypothesise that the pattern of ED presentations among NSW youth will differ by geographic region and that rates of low-urgency presentations will be higher among inland than coastal regional youth. We also hypothesise that ED presentation rates will be higher in 2019 than in 2014, especially for inland regional areas.

### **Challenges:**

We anticipate challenges associated with data cleaning and coding due to large sample sizes, missing data and reporting inconsistencies between and within the 2014 and 2019 datasets. The proportion of EDs that are represented in the two datasets is also expected to differ. Significant bushfires during the final quarter of 2019 may need to be accounted for in the final results.

### **Implications:**

Our results will contribute to an understanding of health service utilisation among NSW youth to support the planning and delivery of targeted health services and the development of appropriate health preventative strategies across a diversity of rural contexts.

### **Authors:**

- Mrs Sally Butler, University of Sydney, School of Rural Health (Dubbo/Orange), sallyyeobutler@gmail.com, Cumnock, NSW, 2867.
- Dr Julie Tall, Health Intelligence Unit, Western NSW Local Health District, Julie.Tall@health.nsw.gov.au, Orange, NSW, 2800.
- Dr Georgina Luscombe, University of Sydney, School of Rural Health (Dubbo/Orange), georgina.luscombe@sydney.edu.au, Orange, NSW, 2800.
- Mr Daniel Belshaw, Western NSW Primary Health Network, daniel.belshaw@wnswphn.org.au, Orange, NSW, 2800.

# Implementing the School- Based Primary Health Care Service in a rural community: learning from the experiences of learning support teams and nurses

Catherine Sanford

Catherine Sanford is a part-time research officer and PhD candidate at the Broken Hill University Department of Rural Health, The University of Sydney. She holds degrees in health science and public health and has worked in rural health and Aboriginal health in clinical, community, and research roles.”

## Abstract submission – Emerging Research(er)

### Background:

Changes in public health profiles and moves toward inclusive models of education have led to significant numbers of students in mainstream schools with special health needs. Australian Early Development Census data indicates that 21.8% of children who started school in 2015 had established or emerging special healthcare needs. In disadvantaged communities, this figure was 27.1%. Addressing these needs requires collaboration between health professionals, educators, and families. Integrated models of school-based health care can facilitate this collaboration, however little evidence exists to guide their implementation.

The School-Based Primary Health Care Service (SB-PHCS) is an integrated model of care that was established in Broken Hill, far west NSW. The Service embeds registered nurses with school learning support teams (LSTs) to increase service access and improve health and education outcomes for students. Learning support teams are comprised of executive and specialist teachers who work with students, parents and carers, classroom teachers, and other professionals to identify and assist students who need extra support at school.

### Aims:

This study explores nurses’ and LSTs’ experiences of implementing the SBPHCS and aims to contribute to the evidence guiding the implementation of integrated models of school-based health care. This contribution to the evidence is timely given NSW’s recent investments in school health services, including Wellbeing Health In-Reach Nurses, social workers, and additional psychologists.

### Methods:

This qualitative study included six focus groups with LST members (n=22) and one focus group with nurses working in the service (n=4). Focus groups incorporated activity-oriented questions about the roles, challenges, and the future development of the SB-PHCS. Focus group transcripts were analysed using framework analysis.

### Results:

The thematic framework consisted of three main themes: role clarity, people and culture, and systems and processes. Low role clarity and a lack of certainty around systems and processes were challenges to program implementation, whilst a collaborative culture, the involvement of key school staff and flexibility in work processes, facilitated the integration of the nurses into the school teams.

### Implications:

We recommend others embarking on similar initiatives provide clarity about the roles of new school-based health professionals but plan to adapt the roles to fit context. Involving key stakeholders early in service development and understanding school systems and processes may facilitate a shared understanding of the new roles, improve the fit of services to school contexts, and enhance service acceptance.

### Authors:

- Mrs Catherine Sanford, Broken Hill University Department of Rural Health, The University of Sydney, catherine.sanford@sydney.edu.au, Broken Hill, NSW, 2880.
- Dr Emily Saurman, Saurman, Broken Hill University Department of Rural Health, The University of Sydney, emily.saurman@sydney.edu.au, Broken Hill, NSW, 2880.
- Prof. Sarah Dennis, The University of Sydney, sarah.dennis@sydney.edu.au, Sydney, NSW, 2006.
- Prof. David Lyle, Broken Hill University Department of Rural Health, The University of Sydney, david.lyle@health.nsw.gov.au, Broken Hill, NSW, 2880.

## Thursday 25 November 2021 Program

This program brings together a variety of research within a workforce theme.

Time	Speaker	Topic
12.00pm	Bradley Christian	Webinar commencement
		Acknowledgment of Country
12.05pm	Bradley Christian	WHRN 2021 introduction
12.10pm	Professor John Wiggers Director @Health Research and Translation and Population Health, Hunter New England Local Health District	Keynote address:
12.30pm	Heather Russell	Building social histories in rural contexts: the story a teaching program to improve students' expertise
12.40pm	Tagrid Yassine	Place based pedagogies in health professional education: a scoping review
12.50pm	Sabrina Pit	Development of a framework to promote rural health workforce capability through digital solutions: A qualitative study of user perspectives
1.00pm	Bradley Christian	MC comment
1.10pm	Erin Fisher	Investigating the Nutrition Dashboard's ability to predict Malnutrition
1.20pm	William Luu	Intralesional 5-FU: An alternative therapy for non-melanoma skin cancers
1.30pm	Bradley Christian	Summation and welcome to learning space
1.35pm	Dr Eleanor Williams	Symposia Learning Space
1.55pm	Bradley Christian	Close and Evaluation

### Keynote - Professor John Wiggers

Director @Health Research and Translation and Population Health, Hunter New England Local Health District



Professor John Wiggers is a population health researcher, practitioner and policy maker. As a Professor in the School of Medicine and Public Health, he leads an integrated team of researchers and research practitioners involved in implementation research relating to the prevention of tobacco and alcohol-related harms and the prevention of obesity. As Director of Hunter New England Population Health, he leads the delivery of population health services to the 880,000 residents of the Hunter New England Region of NSW. Professor Wiggers, in various positions in the NSW Ministry of Health and other organisations, has contributed to the development of various policies and programs relating to the prevention of tobacco and alcohol-related harms and overweight and obesity.

### Learning Space Presenter - Dr Eleanor Williams

@Victorian Department of Health



Eleanor Williams is a public policy and evaluation professional and was previously the Director of the Centre for Evaluation and Research Evidence at the Department of Health. Eleanor holds a Masters of Public Policy and Management and Masters of Evaluation from the University of Melbourne and has worked in a variety of senior management and executive roles in Government and as a management consultant with KPMG. Eleanor is the current convener of the Victorian Committee of the Australian Evaluation Society and founded the Australian Public Sector Evaluation Network.

## MC – Bradley Christian

@western NSW Local Health District



Brad is the Director of Research for the WNSWLHD and is also the Deputy Director of the Australian Centre for Integration of Oral Health. He is a dentist with formal public health and epidemiology qualifications, including a PhD in health services research. Brad has both Australian and international experience in leading/managing large primary research studies and health programs in rural/remote/regional settings. Brad has participated in prestigious international public health learning experiences – the Dental Public Health Residency at the National Institutes of Health, USA and a three-month internship at the World Health Organization, Geneva. He currently supports the

WHO as a technical expert on oral health as part of the development of a framework to integrate non-communicable disease management into primary care.

# Building social histories in rural contexts: the story of a teaching program to improve students' expertise

Heather Russell

Heather is an academic GP at the School of Rural Health based in Orange. The School of Rural Health is a multi-professional academic unit which undertakes rural health research, builds rural research capacity and supports medical students on extended rural placement. Heather has particular interests in medical education, health of rural populations and chronic disease care. Heather and a team of like-minded clinicians and educators have developed a teaching program designed to improve health and medical students' expertise in building social histories with rural patients.

## Abstract submission - Emerging Research(er)

### Background:

Patients' stories are at the heart of every clinical encounter. A good social history can assist practitioners to understand people's lives and build stronger therapeutic relationships. This is particularly important for rural patients who face unique social, economic, cultural, and environmental factors which influence their health and wellbeing. Understanding these factors enables practitioners to provide individualised care and improve rural patient outcomes. Despite this, social history education is minimal and rural health is frequently taught exclusively at the population level.

### Methods:

A blended learning module was developed to improve students' expertise in building social histories in rural contexts. Specifically, the program focussed on enhancing students' knowledge of the social determinants of health and translating that knowledge to the individual care of rural patients. Medical students at the School of Rural Health, University of Sydney, have been involved in the pilot of the program.

### Results:

An innovative learning package consisting of an online module, face to face workshop and evidence-based guide to social histories in rural contexts was collaboratively developed by experienced rural clinicians and an educational designer at the School of Rural Health, University of Sydney. A pilot workshop undertaken with a group of medical students based at the School of Rural Health indicated a relatively rudimentary understanding of the social determinants of health in rural contexts at baseline. Students' growth in understanding was evident after undertaking, presenting, and reflecting on a social history in a rural context.

### Challenges:

Students, particularly those in their later years of study have a tendency for proximal development and may be somewhat reluctant to further develop skills they perceive to have been previously mastered. Presenting the learning material in a novel format has been important to overcome these issues. Evaluation of this learning program will be key to determining its effectiveness. An evaluation of the program is planned for 2022.

### Implications:

Students based in rural settings require formal instruction and support to build their expertise in social histories. The social histories learning module developed by the School of Rural Health, University of Sydney, offers opportunities for interprofessional learning, can be applied in multiple rural settings, and extended to postgraduate learning including hospital and community based medical, nursing, and allied health practitioners.

### Authors:

- Dr Heather Russell, School of Rural Health, University of Sydney, heather.russell@sydney.edu.au, Orange, NSW, 2800.
- Ms Lisa Hampshire, School of Rural Health, University of Sydney, lisa.hampshire@sydney.edu.au, Orange, NSW, 2800.
- Dr Alice Henschke, School of Rural Health, University of Sydney, alice.henschke@sydney.edu.au, Orange, NSW, 2800.
- Dr Jayne Crew, School of Rural Health, University of Sydney, jayne.crew@sydney.edu.au, Orange, NSW, 2800.
- A/Professor Catherine Hawke, School of Rural Health, University of Sydney, catherine.hawke@sydney.edu.au, Orange, NSW, 2800

## Place based pedagogies in health professional education: a scoping review

Tagrid Yassine

Health professional curriculum has been a focus of Tagrid's work since 2009. She has worked largely with universities, but also with the New South Wales Department of Health, as well as medical colleges, to develop and renew health curricula at undergraduate and postgraduate levels. Her current doctoral research is focused on how 'place' is constructed, represented and experienced in medical education by both educators and students.

- MEd, BA Organisational Learning
- PhD student, Translational Health Research Institute, Western Sydney University

### Abstract submission - Emerging Research(er)

#### Background:/Aims:

Rural background and extended rural placements have been shown to increase graduates' intention to practice rurally. Place-based pedagogies and training therefore play an important role in addressing issues around workforce retention in rural and underserved areas. However, little is known about how place is conceptualised in rural health professions education programs, the extent to which place-based pedagogies are being adopted, and how these translate into curriculum. To investigate, we conducted a scoping review.

#### Methods:

Scoping reviews are used to explore relatively understudied areas across the breadth of the literature in relevant fields. A search protocol was developed to guide the search process to ensure rigour. The ERIC, Medline and Scopus data bases were searched drawing on terms centring on place, curriculum and health and medical education. Preliminary findings revealed an ambiguity in how place-based educational activities were described. A PRISMA diagram was developed to depict the search process. Of 2726 papers screened, only 14 studies met the inclusion criteria. Using a data extraction template, the collated information was thematically analysed .

#### Results:

Although not high in volume, the papers that were included offered conceptualisations of place, describe favourable conditions for place-based pedagogies, implementation opportunities and challenges, as well as suggestions regarding a future research agenda. Most studies were conducted in the global north, Canada in particular, and within the last decade. Interestingly, place-based curriculum activities were often opportunistic, rather than intentionally designed.

#### Challenges:

Despite its centrality to rural medical and health professions education and training, place is an elusive concept. Therefore, it is apparent that a further exploration of place-based pedagogies in health professional education is required in order to understand how this is woven into and experienced in the curriculum.

#### Take Home Messages:

We propose that when implementing place-based pedagogies in health professional education, this must be done with intent, and 'place' must be actively defined and not passively assumed. The review demonstrated that in health professional education place is poorly conceptualised, and descriptions on how these conceptualisations are translated into the curriculum are scant. Place is complex, 'messy' and is not simply a geographical location. Alternate understandings of place offer further insight into what makes up place. These include ecological, socio-historical and political dimensions.

#### Authors:

- Ms Tagrid Yassine, Translational Health Research Institute, Western Sydney University, [20009856@student.westernsydney.edu.au](mailto:20009856@student.westernsydney.edu.au) , 47b Wangee Road Lakemba, New South Wales, 2195.

# Development of a framework to promote rural health workforce capability through digital solutions: A qualitative study of user perspectives

Sabrina Pit

Sabrina is a Research Translation Specialist in the Knowledge Mobilisation Team, Rural Doctors Network. Sabrina has worked in the education, workforce, ageing, research and health sectors for 25 years. Her research and professional interests include workforce; rural issues; ageing societies; employability; aged care; preventive health; health professional education; medicine use, digital technology; health workforce; rural workforce; teamwork; migrants; longitudinal studies; falls; leadership; systems change; interprofessional teamwork; social and health outcomes. She has published over 80 papers and is regularly invited to speak at conferences and international meetings. She is currently Chair of the International Organization for Standardization Technical Committee (TC) 314 Ageing Societies - Working Group Ageing Workforce.

## Abstract submission - General Research

### Background: & Aim(s)

A global reality is that rural health services, and the workforces that provide those services, are under unprecedented pressure. It is posited that improving a rural health practitioners' capability could help to retain them working rurally for longer. With rapidly increasing access to, and use of, digital technology worldwide, there are new opportunities to build capability and leverage personal and professional support for those who are working rurally. Our aim was to understand the factors that make up a health professionals' capability and the motivations or cues to act to build or maintain their capability.

### Methods:

In 2021, semi-structured interviews were conducted in rural Australia with thirteen General Practitioners and allied health professionals. Thematic analysis was adopted to analyse the data and map it to the Health Information Technology Acceptance Model. This led to further development of the model.

### Results or expected outcomes:

Whilst it could be assumed that low technology literacy would act as a barrier to the use of digital tools, the study demonstrated that this was not a significant factor in impeding participants' willingness to adopt digital tools when social and professional networks weren't available face to face to address their capability challenges. The findings provide insight into the concept of health workforce capability, important considerations when designing capability support and key features of health apps or digital tools to support the capability of the rural health workforce.

### Implications or take-home message:

Understanding the factors that make up a health professionals' capability and the motivations or cues to act to build or maintain their capability may have a positive effect on their retention in a rural location.

### Authors:

- Dr Robyn Ramsden, NSW Rural Doctors Network, rramsdn@nswrdn.com.au, Suite 1, 53 Cleary St Hamilton, NSW, 2303.
- Dr Sabrina Pit, NSW Rural Doctors Network, spit@nswrdn.com.au, Suite 1/53 Cleary Street, Hamilton, NSW, 2303.
- Mrs Kristy Payne, NSW Rural Doctors Network, kpayne@nswrdn.com.au, Suite 1/53 Cleary Street, Hamilton, NSW, 2303.
- Mr Richard Colbran, NSW Rural Doctors Network, NSW Rural Doctors Network, Suite 1/53 Cleary Street, Hamilton, NSW, 2303.
- Dr Aaron Tan, NSW Rural Doctors Network, atan@nswrdn.com.au, Suite 1/53 Cleary Street, Hamilton, NSW, 2303.
- Mr Mike Edwards, NSW Rural Doctors Network, medwards@nswrdn.com.au, Suite 1/53 Cleary Street, Hamilton, NSW, 2303.



## Investigating the Nutrition Dashboard's ability to predict Malnutrition

Erin Fisher

Erin Fisher is a clinical dietitian at Armidale Rural Referral Hospital and educator in nutrition and dietetics for the University of Newcastle Department of Rural Health. Erin has recently completed her first research project as a candidate of the HETI Rural Research Capacity Building Program. The project aimed to investigate a novel nutrition technology's ability to predict malnutrition and its clinical application in a hospital setting

### Abstract submission - Emerging Research(er)

#### Background and aims:

Malnutrition is experienced frequently by Australian inpatients and negatively affects health, from individual health impacts to substantial health system financial burdens. Despite this, typically malnutrition is inadequately identified and therefore poorly managed. Furthermore, even though rural populations experience poorer health and healthcare access, research on malnutrition in rural inpatient settings is scarce. The Nutrition Dashboard (ND) is a unique and unresearched interactive nutrition technology platform that presents comprehensive food provision and intake data from patients admitted in at least 48 NSW Health inpatient sites. The ND utilises this data to categorise patients' nutrition risk. This study aims to identify the ability of the ND to identify malnutrition compared to the validated Malnutrition Screening Tool (MST).

#### Methods:

The Inter Rater Reliability (IRR) of food intake estimation (proportion consumed) was assessed prior to the study. A retrospective observational study (June 2020 to August 2020) was conducted at the 99-bed Armidale Rural Referral Hospital, utilising demographic and clinical data abstracted from medical notes and food intake data presented via the ND. For the purpose of analyses, default food intake thresholds of 4500kJ and 50g protein were applied. Generalised estimating equation regression models were used to identify the association between the ND risk categories and the MST, with and without controlling for patient demographics.

#### Results:

The pre-audit assessment showed there was good agreement between raters, across 912 meal items, on the amount of food consumed ( $\kappa = 0.69$ , 95% CI .65-.72,  $p < 0.01$ ). Analyses of 1,775 hospital admission days for 216 individuals found that those in the highest risk ND Category were 1.93 times more likely to have a MST score indicating malnutrition risk compared to the lowest risk ND Category (unadjusted odds ratio 1.93, 95% CI, 1.17-3.19,  $p < 0.01$ ). However, when patient weight was added to the model, the relationship between ND and MST malnutrition risk categories was no longer significant. Increased patient weight reduced the likelihood of malnutrition risk on the MST (adjusted OR 0.97, 95% CI 0.96-0.99,  $p = 0.006$ ).

#### Challenges:

This preliminary research into the Nutrition Dashboard confirms the complex nature of investigating a nutrition intake technology but suggests that it can play a role in improving malnutrition identification.

#### Implications:

The Nutrition Dashboard has clinical relevance. Further adaptations could improve the Nutrition Dashboard's ability to support identification of malnutrition and therefore improve the care of patients within NSW Health Facilities.

#### Authors:

- Ms Erin Fisher, Hunter New England Local Health District and The University of Newcastle Department of Rural Health, erin.fisher@health.nsw.gov.au, Locked Bag 4, Armidale Rural Referral Hospital, NSW, 2350.
- A/Prof Georgina Luscombe, The University of Sydney, Medicine School of Rural Health - Dubbo/Orange, georgina.luscombe@sydney.edu.au, University of Sydney, School of Rural Health 1502 Forest Rd, Orange, NSW, 2800,
- Dr Kerith Duncanson, Health Education & Training Institute, NSW Health, Kerith.Duncanson@health.nsw.gov.au, HETI Locked Bag 2030 St Leonards, NSW, 1590.

# Intralesional 5-FU: An alternative therapy for non-melanoma skin cancers

William Luu

William Luu is a third year medical student at The University of Sydney. He previously completed a Bachelor of Commerce (Finance and Economics majors) as part of the University's Double Degree Medicine Program.

**Najma Ibrahim Ulusow** is a third year medical student at The University of Sydney.

**Dr Michelle McRae** is a Honours graduate of Sydney University Postgraduate Medical Program. Prior to commencing medical training, Michelle achieved first class honours in Chemical Engineering. As a NSW Rural Doctors Network Cadet, Michelle had a strong desire to return to Orange and undertake rural GP training. However, a very keen interest in skin resulted in achieving a position in the Australasian College of Dermatology training program. Completing her dermatology training in 2014, Michelle is the principal specialist at Pinnacle Dermatology in Orange and one of the very few full time females.

## Abstract submission - Emerging Research(er)

### Background:

Non-melanoma skin cancers (NMSC), namely Basal Cell Carcinomas (BCC) and Squamous Cell Carcinomas (SCC), are the most commonly diagnosed cancers in Australia. Although surgical intervention remains the gold standard treatment for NMSC, it is not optimal in patients with comorbidities that contraindicate surgery. There is also a higher risk of infection, cosmetic and functional deficits dependent on the site of the lesion. In addition, a delayed diagnosis in rural and remote regions require people to travel long distances to seek specialized treatment in urban and regional centres. These factors are the main drivers for alternative therapies and intralesional 5-FU is an under-utilized treatment modality. The paucity of literature is limited to case reports and small case series without any protocols. This study investigated the safety profile and feasibility of using intralesional 5-FU to treat NMSC.

### Methods:

A retrospective case series was prepared using patients who commenced intralesional 5-FU treatment for at least one NMSC between 1st January 2018 and 1st January 2019 at Pinnacle Dermatology, Orange. We collated deidentified patient information, lesion details, treatment data, adverse effects; and photographs. These were the inclusion criteria: at least one NMSC was treated; only intralesional 5-FU used; and treatment ceased due to complete or incomplete remission, or adverse effects. We also conducted a literature review using the online databases OVID-Medline, PubMed and the Cochrane Library.

### Results:

15 SCC patients (seven female, eight male, 60-99 years) and out of the total 23 cSCCs, 19 lesions were successfully treated (82.6%) whilst one lesion recurred (4.3%). Two lesions were injected for size reduction prior to excision. Six lesions (26.1%) ulcerated and four lesions became infected (17.4%).

13 BCC patients (six female, seven male, 60-99 years) and out of the total 12 BCC lesions, 9 were successfully treated (75%) whilst 3 lesions recurred (25%). Five lesions were injected for size reduction prior to excision. Four lesions (30.7%) ulcerated and two lesions became infected (15.4%).

All patients resided in the Central Tablelands region in NSW.

### Challenges:

Coordinating collaborations between Sydney University students and rural-based supervisors due to COVID-19 presented challenges. We adapted by utilising digital technology to discuss data and progress.

### Implications:

This case series can contribute to the growing literature for future clinical trials and the development of a protocol. Rural Australians may benefit from clinicians using intralesional 5-FU as a non-surgical treatment alternative.

### Authors:

- Mr William Luu, University of Sydney, wluu4879@uni.sydney.edu.au, Camperdown, NSW, 2006.
- Ms Najma Ulusow, University of Sydney, nulu6047@uni.sydney.edu.au, Camperdown, NSW, 2006.
- A/Prof Catherine Hawke, University of Sydney, catherine.hawke@sydney.edu.au, Orange, NSW, 2800.
- Dr Michelle McRae, University of Sydney, michelle@pinnacledermatology.com.au, Orange, NSW, 2800.

Wednesday 10 November – Tuesday 30 November  
 Online ePosterProgram

[Link to Padlet](#)

Author	Title
Dilli Banjade	Optimization of Radiotherapy Utilization to improve cancer survival rate in regional NSW
Olivia Chua	Perioperative Fasting of Clear Fluids in Elective Surgical Patients in an Australian Regional Centre
Asta Fung	A telehealth breathing intervention to improve patient outcomes for adults with chronic pain of working age: Patients' perspectives
Atilla Jonas	The Impact of Hypnobirthing and Doula Work on Obstetric Anaesthesia and Maternity Care in Bathurst Base Hospital
Jiyoon Lee	Digital Tools for Remote Screening and Monitoring of Diabetic Retinopathy in Rural, Remote and Indigenous Australian Communities: A Narrative Review of the Literature
Robyn Ramsden	Connecting Research, practice and communities using a digital platform known as Rural Health Pro
Kate Smith	Virtual Art Workshops as a Model of Care: Creative innovations in aged care reduce social isolation and foster diverse rural health networks

## Optimization of Radiotherapy Utilization to improve cancer survival rate in regional NSW

### Dilli Banjade

Dr Dilli Banjade is Certified Medical Physics Specialist and Director of Medical Physics Specialist in Radiation Oncology service in Orange and Dubbo hospital, Western NSW Local Health District. 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 Radiation Oncology Physics discipline. Many of his research contributions are published in national and international peer reviewed journal. Dr Banjade's current focus is cost effective innovation and making advanced radiotherapy technology available to cancer patients in Western NSW region.

He has led and completed many quality improvement projects, recently implemented SABR treatments first time in the region and increased the utilisation of IMRT/VMAT techniques. As a result, Western NSW patients are receiving state-of-the-art radiotherapy treatment locally at Orange and Dubbo Hospital. The results of his quality improvement initiatives have been recently published in Australian Journal of Rural Health, Volume 28 (2020); 311-316.

He is currently leading a Medical Physics Specialist team to extend the state of the art radiotherapy service in Dubbo through the newly established Western Cancer Centre Dubbo.

### Abstract submission - ePoster

#### Background:

In developed countries, the radiotherapy utilization rate is approximately 50 percent. Strategic plan of the Tripartite Committee of Royal Australian and New Zealand College of Radiologists (RANZCR) emphasised that the planning of radiation oncology services must be based upon achieving the agreed optimal target radiotherapy utilization rate of 52.3% for new cases of cancer by 2022.

Literature estimates 5-years increase in overall survival rate with optimal radiotherapy utilization rate compared to underutilisation. This research explore the issues of underutilization of radiotherapy to improve cancer survival in regional patients of WNSW LHD.

#### Methods:

The radiotherapy utilization of WNSW local health district (LHD) is analysed along with additional data from the Cancer Institute. The survival rate of cancer patients are compared to observe the disparity among the districts, mainly Metro versus regional LHDs. Finally, the radiotherapy utilization rate of WNSW LHD is compared with the NSW LHDs.

#### Results:

The results show that the average overall 5-year survival rate of cancer patients in NSW is 67.80% with the minimum survival rate of 57.40% for Albury LHD and maximum survival rate of 71.65% for Northern Sydney LHD. The same for WNSW LHD is 67.60%.

The radiotherapy utilization rate is lower in regional NSW compared to Metro region. The lower overall cancer survival rate in regional NSW could be linked to underutilization of radiotherapy. The radiotherapy utilization rate of NSW in 2013 was 48.0% and currently the same in WNSW LHD is 47.0%, which needs to be improved.

The fragmented planning of specialist oncological services, radiation oncology infrastructure, scarcity of trained workforce along with ability to retain radiation oncology professionals are some of the key challenges for the region. Additionally, variability in access to timely radiotherapy treatments due to large geographical and dynamic demographic profile of the district has an impact on underutilization of radiotherapy service.

#### Take-home message:

Evidence shows that this is a public health concern. To improve overall cancer survival by increasing radiotherapy utilization, the following are recommended:

- Improve awareness level of regional patients and health professionals about locally available state of the art radiotherapy modality of cancer treatment.
- Attract, train and retain specialized radiation oncology workforce in the region.

- Allocate additional resources to meet the radiotherapy demand.
- Elaborate this research to demonstrate the underlining issues and formulate future strategy in order to achieve equity of health for the population of regional NSW

**Authors:**

- Dr Dilli Banjade, Director Medical Physics Specialist, District Radiation Oncology Service, Western NSW LHD, dilli.banjade@health.nsw.gov.au, Orange, NSW, 2800.

**Optimization of Radiotherapy Utilization to Improve Cancer Survival rate in Regional NSW**

*Dr Dilli Banjade  
Director Medical Physics Specialist  
Western NSW LHD*

**Background & aim**

In developed countries, the radiotherapy utilization rate is approximately 50 percent. Strategic plan of the Tripartite Committee of Royal Australian and New Zealand College of Radiologists (RANZCR) emphasised that the planning of radiation oncology services must be based upon achieving the agreed optimal target radiotherapy utilization rate of 52.3% for new cases of cancer by 2022.

Literature estimates 5-years increase in overall survival rate with optimal radiotherapy utilization rate compared to underutilisation. This research explore the issues of underutilization of radiotherapy to improve cancer survival in regional patients of WNSW LHD.

**Methods**

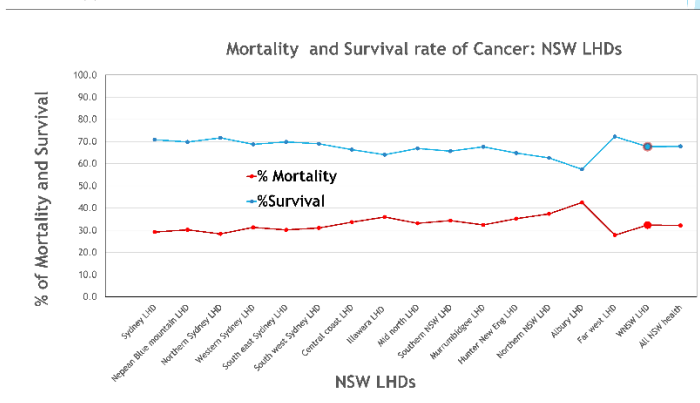
The radiotherapy utilization of WNSW local health district (LHD) is analysed along with additional data from the Cancer Institute. The survival rate of cancer patients are compared to observe the disparity among the districts, mainly Metro versus regional LHDs. Finally, the radiotherapy utilization rate of WNSW LHD is compared with the NSW LHDs.

**Results discussions**

The results shows that the average overall 5-year survival rate of cancer patients in NSW is 67.80% with the minimum survival rate of 57.40% for Albury and maximum survival rate of 71.65% for Northern Sydney LHD. The same for WNSW LHD is 67.60%.

The radiotherapy utilization rate is lower in regional NSW compared to Metro region. The lower overall cancer survival rate in regional NSW could be linked to underutilization of radiotherapy. The radiotherapy utilization rate of NSW in 2013 was 48.0% and currently the same in WNSW LHD is 47.0%, which needs to be improved.

The fragmented planning of specialist oncological services, radiation oncology infrastructure, scarcity of trained workforce along with ability to retain radiation oncology professionals are some of the key challenges for the region. Additionally, variability in access to timely radiotherapy treatments due to large geographical and dynamic demographic profile of the district has an impact on underutilization of radiotherapy service.



**Take-home message**

Evidence shows that this is a public health concern. To improve overall cancer survival by increasing radiotherapy utilization, the following are recommended:

- Improve awareness level of regional patients and health professionals about locally available state of the art radiotherapy modality of cancer treatment.
- Attract, train and retain specialized radiation oncology workforce in the region.
- Allocate additional resources to meet the radiotherapy demand.
- Elaborate this research to demonstrate the underlining issues and formulate future strategy in order to achieve equity of health for the population of regional NSW



WHRN 2021 Research Symposia

# Perioperative Fasting of Clear Fluids in Elective Surgical Patients in an Australian Regional Centre

Olivia Chua and Gowry Simon

Dr Olivia Chua is a Critical Care senior resident medical officer, currently based in Blacktown Hospital. Born and raised in Bathurst, NSW, she completed part of her medical training at Wagga Wagga and has worked in various regional hospitals including in Port Macquarie and Bathurst. As part of her interest in pursuing a career in Anaesthesia, she looked into patient understanding of peri-operative fasting to optimise the instructions and care given to patients prior to surgery. Dr Chua plans to continue ongoing research in the fields of anaesthesia and peri-operative medicine, and hopes to one day work as an Anaesthetist in a rural or regional hospital.

Abstract submission - ePoster

## Background and aims:

Fasting prior to anaesthesia is important, primarily to avoid the risk of pulmonary aspiration. ANZCA guidelines advise fasting times of 6-hours for limited solid food, and 2-hours for clear fluids prior to anaesthesia for elective procedures. However, it has been observed that many patients experience prolonged periods of fasting and subsequent associated adverse effects. The aims of this audit were to assess the duration of fasting from clear fluids and patient understanding of fasting instructions for elective procedures performed in a regional centre in western NSW.

## Methods:

A prospective audit was conducted from 16 June 2021 to 9 July 2021 on adults undergoing an elective procedure requiring anaesthesia. Patients were interviewed in the anaesthetic bay prior to their surgery using a questionnaire, assessing their duration of fasting, degree of thirst (on a scale from 1 to 5), and patient understanding of fasting instructions.

## Results or expected outcomes:

Of the 60 patients included in the study, the minimum, maximum and mean duration of fasting from clear fluids were 3.0, 18.5 and 6.7 hours. All 60 patients fasted for longer than recommended by ANZCA guidelines. The mean reported degree of thirst was 2.6 out of 5 ('moderately thirsty'). 58 patients stated they received clear fasting instructions, however only 2 out of 60 patients reported instructions in line with ANZCA guidelines, with the majority of patients (56.7%) reporting instructions to fast 2-hours prior to planned admission time.

## Implications or take-home message:

All patients fasted from clear fluids for longer than the recommended period outlined in the ANZCA guidelines. Although majority of patients believed they received clear information regarding fasting times, the instructions reported back by patients were broad. There is scope to reduce perioperative fasting periods for clear fluids through education of hospital staff, provision of clear fluids to patients waiting >2-hours prior to anaesthesia, and a standardised, simplified information sheet for patients to take home before the day of surgery. A reaudit after implementing these changes is recommended.

## Authors:

- Dr Olivia Chua, [oliviaweiweichua@gmail.com](mailto:oliviaweiweichua@gmail.com) Bathurst, NSW, 2795
- Dr Gowry Simon, Bathurst Base Hospital, [gowrisimon@hotmail.com](mailto:gowrisimon@hotmail.com), Bathurst, NSW, 2795

# Perioperative Fasting of Clear Fluids in Elective Surgical Patients in an Australian Regional Centre

Olivia Chua<sup>1,2</sup>, Gowry Simon<sup>2</sup>  
<sup>1</sup>Blacktown Hospital, <sup>2</sup>Bathurst Base Hospital

## INTRODUCTION

- Perioperative fasting is the cessation of food and drink prior to anaesthesia, and is a necessity to minimise the risk of pulmonary aspiration, by decreasing gastric contents and volume<sup>1</sup>
- However, excessive fasting can lead to a negative patient experience, including increased thirst, hunger, malaise, anxiety, and reduced patient wellbeing and satisfaction<sup>2</sup>

## AIMS AND OBJECTIVES

- To assess the duration of fasting from clear fluids and patient understanding of fasting instructions for elective procedures performed in our department

## RESULTS

- Total number of patients = 60
- Duration of fasting times:
  - Minimum = 3.0 hours
  - Maximum = 18.5 hours
  - Mean = 6.7 hours
- 100% patients fasted for longer than recommended by ANZCA guidelines
- Median 'Degree of Thirst' was 3 out of 5 ('moderately thirsty')
- 96.6% patients felt they received clear instructions
- Only 2 out of 60 patients reported instructions correctly reflecting guidelines
- Majority of patients (56.7%) reported instructions to fast 2 hours prior to Planned Admission Time
- 8 patients could not recall a specific duration of fasting instructed
- Mean waiting time between admission and surgery start time was 2.2 hours

## CONCLUSIONS

- All patients fasted from clear fluids for longer than guidelines recommend
- Majority of patients did not report instructions in line with ANZCA guidelines
- A broad range of instructions were reported back due to varying sources of instruction (anaesthetist, nurses, surgeons, patient's own research)

## RECOMMENDATIONS

- Education of perioperative fasting guidelines amongst hospital staff
- Consider the provision of clear fluids to patients waiting >2-hours prior to anaesthesia
- A standardised, simplified take-home information sheet to be given to all patients before surgery
- Re-audit after implementing these changes

## REFERENCES

1. NAP4. Major complications of airway management in the United Kingdom, The Royal College of Anaesthetists and The Difficult Airway Society
2. Hausel, et al. "A Carbohydrate-Rich Drink Reduces Preoperative Discomfort In Elective Surgery Patients". *Anesthesia & Analgesia*, 2001. 93 (5): 1344-1350.
3. PS07 Guidelines on the Pre-Anaesthesia Consultation and Patient Preparation, Australian and New Zealand College of Anaesthetists

## CURRENT GUIDELINES

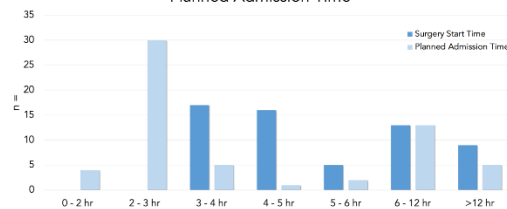
- Currently, ANZCA guidelines recommend fasting times of 6-hours for limited solid food, and 2-hours for clear fluids prior to undergoing general anaesthesia, major regional anaesthesia/analgesia and sedation for elective procedures<sup>3</sup>

## METHODS

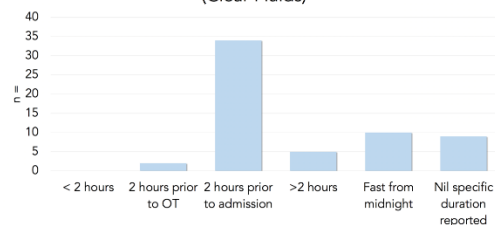
A prospective audit was conducted from 16 June 2021 to 9 July 2021 on adults undergoing an elective procedure requiring anaesthesia or sedation

- Patients were interviewed in the anaesthetic bay prior to their procedure
- A patient questionnaire was used
- Questions on the survey included:
  - Time of last clear fluids
  - Degree of thirst (from 1 to 5)
  - Understanding of duration of fasting
- Data regarding Planned Admission Time, Actual Admission Time, Surgery Start Time were obtained from theatre lists and electronic medical records
- Duration of fasting was calculated from patient's reported time of last clear fluids to the 'Planned Admission Time' and 'Surgery Start Time'
- These results were then compared to ANZCA fasting guidelines

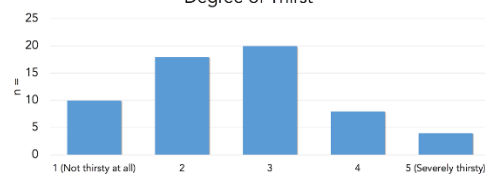
Duration of Fasting prior to Surgery Start Time vs Planned Admission Time



Patient Understanding of Fasting Instructions (Clear Fluids)



Degree of Thirst



## A telehealth breathing intervention to improve patient outcomes for adults with chronic pain of working age: Patients' perspectives

Asta Fung

Asta Fung has 20 years clinical experience as a speech pathologist after graduating from the University of Sydney with a Bachelor of Applied Science in Speech Pathology. She completed a Master of Health Science in Speech Language Pathology in 2005 through the University of Sydney and is a current candidate of the Rural Research Capacity Building Program with the Health Education and Training Institution NSW. Asta has worked across a wide range of clinical areas in acute hospitals in Sydney and as a senior clinician at tertiary teaching hospitals Concord Hospital Sydney and Monash Health Victoria specialised in head and neck oncology, voice and swallowing management. Asta joined the Western NSW Local Health district as a senior speech pathologist in 2019 and has recognised skills in delivering clinical assessment and management via telehealth. She has a particular interest and clinical expertise in utilising breathing training for voice management and is currently undertaking research in breathing training for people with chronic pain.

### Abstract submission - ePoster

#### Background:

Breathing training (BT) in chronic pain management is an emerging area in research and clinical practice. Demonstrated benefits of BT include improved quality of life and increased function. However, there is a gap in the evidence on the effect of delivering BT via telehealth in regional and rural Australia. This pilot study aims to trial the implementation of BT via telehealth in a rural NSW adult population. It also aims to explore the patient's perspective and experience of participating in the intervention.

#### Methods:

This pilot study will use sequential mixed methods with pre and post quantitative assessments followed by semi-structured interviews on 12-16 working age participants residing in WNSW LHD with access to telehealth. Descriptive analysis will be used pre-post for the quantitative outcome measures. The semi structured interview data will be analysed using an inductive thematic approach.

#### Results or expected outcomes

This study is currently at recruitment phase at the time of abstract submission. Preliminary quantitative and qualitative data may be presented. It is anticipated to identify patterns and themes from the qualitative data that may converge with the quantitative measures. For example, frequent episodes of panic attacks on the Depression Anxiety Stress Scale 21 may converge with expressing the wish to learn strategies to manage anxiety levels. The findings related to the implementation process will also be described.

#### Challenges:

Potential challenges of this research study include lack of recruitment, participants drop out during the study, participants' limitation in telehealth access and internet stability affecting the delivery and experience of the BT intervention.

#### Implications:

Potential significance of this study may include reducing the burden of disease and improve quality of life by providing BT as a self-managing technique for people living with chronic pain. The results from this pilot study could be used to inform the development of a larger scale RCT of telehealth BT for people living with chronic pain in regional and rural NSW.

#### Authors:

- Ms Asta Fung, Orange Hospital, Western NSW Health, asta.fung@health.nsw.gov.au, Orange, NSW, 2800.
- Dr Kerith Duncanson, Health Education & Training Institute, NSW Health, Kerith.Duncanson@health.nsw.gov.au, Newcastle, New South Wales, 2308.
- Dr Claire Sui, Chronic Pain Services, Western NSW Health, claire.sui@health.nsw.gov.au, Orange, NSW, 2800.
- Dr Manasi Mittinty, Pain Management Research Institute, The University of Sydney, manasi.mittinty@sydney.edu.au, St Leonards, Sydney, New South Wales, 2065.
- Ms Bronwyn Martin, Orange Hospital, Western NSW Health, bronwyn.martin@health.nsw.gov.au, Orange, 2800.

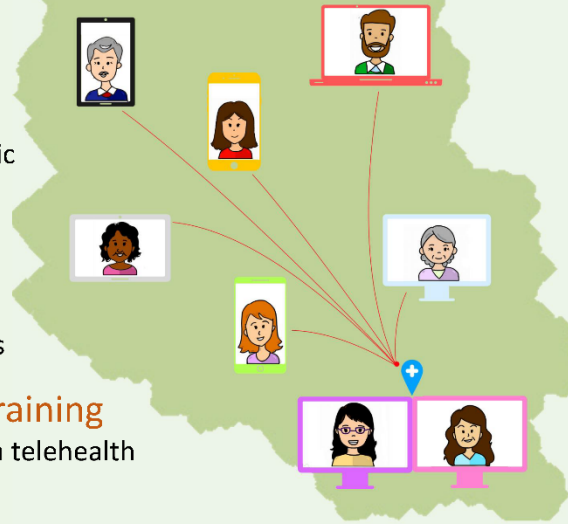


# A telehealth breathing intervention to improve patient outcomes for adults with chronic pain of working age: Patients' perspectives

Asta Fung<sup>1</sup>  
 Claire Sui<sup>1</sup>  
 Kerith Duncanson<sup>2</sup>  
 Manasi M Mittinty<sup>3</sup>  
 Bronwyn Martin<sup>1</sup>

## Context

- 1 in 5 Australians live with chronic pain
- 44.6% of people with chronic pain have anxiety or depression
- Current waiting time for Chronic Pain Services in Western NSW LHD is 2 years



## Telehealth Breathing Training

- ✓ 3 sessions group therapy via telehealth
- ✓ Diaphragmic breathing
- ✓ Calm and consistent breathing pattern
- ✓ Promotes relaxation and self management

## Questions

## Results (n=7)

Was the breathing training program beneficial?	Yes	100%
Did you prefer group or individual therapy?	Group	100%
What did you think of the telehealth mode?	Positive	100%
Should it be offered to people on the waiting list?	Yes	100%

*"The waiting list, it's that long you feel as though you've been forgotten about, at least if somebody was sort of offering you the services, to do a bit of breathing, to help you get through it, at least you know somebody was there who actually cared."*

*"Breathing is probably the first thing they can do for themselves, to actually help themselves. So, definitely as initially part of your management, it's the first step. For me, it was the first step in recovery."*

*"Better for telehealth because living out here where we do ... where I do, it's three hours to go to Orange, so that's a six-hour trip, and travelling is one of the things that really gives me a lot of pain."*

*"Being within a group, it gave me a confidence that I wasn't the only person... there were others suffering from pain injury. It wasn't just a therapist or somebody who's not suffering... We were all in the same boat."*

<sup>1</sup> Orange Health Service, Western NSW LHD  
<sup>2</sup> Health Education and Training Institute, NSW Health  
<sup>3</sup> Faculty of Medicine and Health, The University of Sydney  
 \*Graphic designed for this ePoster and courtesy of Cherryblossom Graphics, Orange 2021

# The Impact of Hypnobirthing and Doula Work on Obstetric Anaesthesia and Maternity Care in Bathurst Base Hospital

Attila Jonas

Bio

Abstract submission - ePoster

## Background:

According to Healthstats NSW, the number of Caesarean sections has been increasing in our hospital (1). Hence it is imperative for us to find a solution and improve service user experience. There is evidence that hypnobirthing and doula techniques can reduce medicalisation of the birth process (2): Emergency Caesarean section from 15% to 4%, elective Caesarean section from 10% to 4%, instrumental delivery from 11% to 4%. These techniques include parental education of breathing techniques, changing positions, acupressure and massage. We would like to demonstrate that these techniques can reduce medicalisation of the birth process here in Bathurst as well. Keeping the birth process normal has become even more important with the emergence of COVID, since in the setting of an emergency Caesarean section, theatre staff may not have sufficient time to put their personal protective equipment on properly, hence delaying the operation.

## Methods:

Training local midwives as well as colleagues in the Rural Clinical School, collect data to demonstrate change after implementation of techniques: number of emergency and elective Caesareans sections, instrumental deliveries and normal vaginal births.

## Expected outcomes:

There is data available from the UK that these techniques can help achieving these goals. Additionally, we can also help our colleagues working in community and rural areas without instant medical backup.

As a subset of information coming from this project, I would like to develop and test an antenatal maternal questionnaire to predict certain perinatal complications: for example positive answers to dry skin, brittle nail, hair and scanty menstrual bleeding, we could predict slow cervical dilatation. Another example is hypertension, clots in the menstrual blood and low placental capacity and autoimmunity.

## Challenges:

This is an emerging study, based on our current understanding of Chinese medical concepts and their verification with Western evidence.

## Implications:

Based on data from the UK, hypnobirthing and doula work may also help our community including aboriginals to achieve a better birth experience in as well as outside our hospital.

## Reference:

h [http://www.healthstats.nsw.gov.au/Indicator/mab\\_spbth\\_cat/mab\\_spbth\\_cat\\_hos](http://www.healthstats.nsw.gov.au/Indicator/mab_spbth_cat/mab_spbth_cat_hos)

h <https://www.birthinstinct.co.uk/content/general-hypnobirthing-comparison>

## Authors:

- Dr Attila Jonas, Bathurst Base Hospital, drjonasattila@yahoo.com, Bathurst, NSW, 2795.
- Dr Suzanne Grant, National Institute of Complementary Medicine, S.Grant@westernsydney.edu.au, Sydney, NSW, 2145.
- Dr Marty Roebuck, Bathurst Base Hospital, martin.roebuck1@health.nsw.gov.au, Bathurst, NSW, 2795.
- Mrs Melissa Waterford, Bathurst Base Hospital, melissa.waterford@health.nsw.gov.au, Bathurst, NSW, 2795.
- Ms Vivien Nguyen, Western Sydney University, 19432351@student.westernsydney.edu.au, Bathurst, NSW, 2795.



# Digital Tools for Remote Screening and Monitoring of Diabetic Retinopathy in Rural, Remote and Indigenous Australian Communities: A Narrative Review of the Literature

Jiyoon Lee

Jiyoon is a medical student at the University of Sydney at the School of Rural Health in Orange. I have an interest in medical innovation and health equity, and through my research I am looking to better understand the health disparities that exist in Australia and ideate solutions to break down the barriers to healthcare by redefining the way it is delivered.

## Abstract submission - ePoster

### Background:

In the management of chronic illnesses such as diabetes, regular access to healthcare to monitor the trajectory of disease is crucial in improving the quality of life. Of the complications that are caused by diabetes, diabetic retinopathy is one of the most serious condition that can lead to blindness if not monitored and treated adequately. In Australia, diabetic retinopathy is one of the leading causes of blindness for people aged between 20-65. The 2016 National Eye Health Survey (NEHS) showed that, residents of rural and remote communities, particularly if there were of Indigenous background, a considerably lower percentage reported being screened according to the recommendations by the NHMRC Guidelines than the national average.

### Methods:

In this study, the literature around the current digital tools for remote screening and monitoring of diabetic retinopathy from around the globe will be investigated to evaluate feasibility of incorporating these tools to improve screening and monitoring rates in rural and remote Australian communities, with a particular focus on Indigenous Australian communities. The review will be conducted by utilising multiple databases such as Scopus, Google Scholar and MEDLINE. Currently, 17 studies have been identified and categorised into two groups: digital tools for diabetic retinopathy and their use and effectiveness, and the challenges in delivering healthcare such as diabetic eye screening in rural, remote, and indigenous communities in Australia.

### Challenges and implications:

Drafting a narrative review is a dynamic process and it is difficult to finalise an abstract prior to completing the results and discussion section. In this study, the primary question is to discuss the various tools available for remote monitoring of diabetic retinopathy and evaluating their effectiveness based on detection rate, reliability of results, specificity and sensitivity of data. The results from this question will then be utilised to guide the answers to the secondary question of evaluating the feasibility of implementing tele-monitoring tools to improve screening of diabetic retinopathy in rural, remote and Indigenous Australian communities.

### Authors:

- Ms Jiyoon Lee, University of Sydney, jlee3955@uni.sydney.edu.au, Orange, NSW, 2800.
- Prof. Philip Poronnik, University of Sydney, philip.poronnik@sydney.edu.au, Camperdown, NSW, 2050.

# Portable handheld devices in fundus photography could improve access to diabetic retinopathy screening in remote communities around Australia

## Digital Technologies in Tele-Ophthalmology for Remote Screening and Monitoring of Diabetic Retinopathy in Rural and Remote Australia: A Narrative Review of the Literature

Jiyoon Lee

### INTRODUCTION

Diabetes is arguably the biggest challenge that the Australian healthcare system faces today, and diabetic retinopathy is one of the main causes of preventable blindness in Australia. This narrative review aims to synthesize a summary of the various technologies in tele-ophthalmology to evaluate their technical and implementation potential for image acquisition to support remote screening and monitoring of diabetic retinopathy in rural and remote Australia.

### METHODS

Cochrane Database of Systematic Reviews, Medline, Embase, and Scopus were searched for English-language, secondary studies reviewing the use of various digital technologies used for remote screening and monitoring diabetic retinopathy.

### RESULTS

Digital technologies used for remote screening and monitoring diabetic

retinopathy requires fundus photography to acquire retinal images that can be transferred for remote analysis.

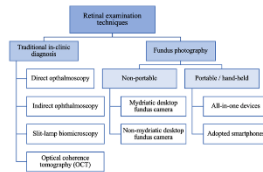


Figure 1. Different type of technologies for retinal photography.

Considering the performance of the different types of digital technologies in remote screening and monitoring of DR in the context of rural and remote Australia, portable devices that are capable of fundus photography could be a promising solution to the poor screening rates in geographically isolated regions.

### DISCUSSION

To date, there have been no pilot studies implementing adopted smartphone devices as a tool for remote screening of DR in rural and remote Australia and it would be an appropriate target of future cohort studies.

### Tables & Figures

The tables below compare the efficacy of various digital tools that can be used for remote screening and monitoring of diabetic retinopathy:

Technique	Advantages	Disadvantages
Direct ophthalmoscopy (5, 9)	Inexpensive, hand-held	Requires mydriasis, offers small field of view, low sensitivity, specificity, small FOV possible
Indirect ophthalmoscopy (5, 9)	Inexpensive, mobile	Requires mydriasis, larger field of view than direct ophthalmoscopy but still low sensitivity, retrospective audit not possible
Slit-lamp biomicroscopy (5, 9, 17)	Good standard for retinal examination, high sensitivity and specificity, can be mobile	Requires mydriasis, expensive, requires extensive time for retrospective audit not always possible (photography not sometimes by itself)
Optical coherence tomography (OCT) (5)	Effective for detecting retinal thickening and intraretinal haemorrhage	Useful as a supplementary tool for DR screening, not as stand-alone response

Table 1. Summary of various retinal examination techniques.

Technology	Main features	Sensitivity & specificity	Notes	Ref.
Mydriatic desktop fundus camera	AxV: 30° combined image can form up to 70° Fov: wide, low, variable, accurate, transparent to the macula	SN: 90% SP: 99%	Classic conventional fundus camera – guided for Early Treatment Diabetic Retinopathy Study (ETDRS) that has led to the development of the DR severity scale	(1), (2)
Non-mydriatic desktop fundus camera	AxV: 30° (1-field) Fov: varied	SN: 87% SP: 92%	Does not require mydriasis, but still has limited field of view and higher technical failure rate due to small pupils	(19)

Technology	Main features	Sensitivity & specificity	Notes	Ref.
Retina Scope	AxV: 40° (4-field) Fov: variable, close, near to optic disc, temporal (superior and inferior)	SN: 94.7% SP: 93.6%	Non-mydriatic, high definition (HD) images and video that can be displayed on the 3.5" full-color LCD	(1), (2), (20)
EpiScribe	AxV: 30° (can be varied) Fov: variable, dependent on user skills	SN: N/A SP: N/A	Sensitivity and specificity are reported for DR, can be used by patients themselves, non-mydriatic	(1), (2), (21), (22)
SmartScope Prose Plus	AxV: 40° (4-field) Fov: 3.8-degree (up to 10-degree) AxV: 30° when combined	SN: 81.9% SP: 81.7%	Non-mydriatic, digital still and video capture	(2), (22), (23)

Technology	Main features	Sensitivity & specificity	Notes	Ref.
Retinika Fundus on Phone (FOP)	AxV: 42° (4-field) Fov: variable, close, near to optic disc, temporal (superior and inferior)	SN: 92.7% SP: 98.6%	Achieves an accuracy of 95%	(1), (2), (24), (25)
CellScope Retina	AxV: 180° (2-field) – image captured by mirror below Fov: central, nasal, inferior, superior, temporal retina	SN: 95.4% SP: 98.2%	Used Eye-An system for autonomous grading	(1), (2), (26), (27)
Smartphone ophthalmoscopy (S-Oph)	AxV: 20° (with mydriasis) Fov: variable, optic disc, macula, pale, peripheral retina	SN: 81% SP: 98%	Validity and portability – USFDA approved	(1), (2), (28), (29)
Examiner	AxV: 23° (with mydriasis)	N/A	USFDA approved	(1), (2), (29)
TripleShot Prose Scope	AxV: 42° (variable number of fields) Fov: anterior and posterior segment	SN: 99% SP: 98%	Mydriatic photography	(1), (2), (25), (30)



Take a picture for author's contact details



## Connecting Research, practice and communities using a digital platform known as Rural Health Pro

**Robyn Ramsden**

Robyn is currently a Research Advisor for the NSW Rural Doctors Network (RDN) and has been in that role since January 2016. She is lead or co-author of a number of peer-reviewed publications in the field of rural health, including articles relating to the role of digital technology to support the education and training of rural health professionals, working in partnership to address health workforce challenges, building rural health workforce capability and rural health workforce literacy. Robyn is an Honorary Fellow in the School of Health and Social Development at Deakin University, Melbourne. She is on the Editorial Board of the UK based journal Health Education and is currently the Guest Editor of a special issue titled: Digital solutions to bridge the gap between health services and workforce in rural areas. Robyn is passionate about the integration of evidence into healthcare policy and practice.

### Erin Press

Erin is a visual communication and marketing professional with experience across a variety of industries including travel, fashion, manufacturing and mining. She has experience working in both small and medium business as well as large corporate organisations. Erin now works to provide valuable content for Rural Health Pro members and ensure that rural medical and health professionals are aware of the support, connections and opportunities available to them.

Erin is passionate about health equity across Australia, and enjoys working in innovative ways to support rural and remote communities. She is particularly focused on accurate representation of the rural workforce at all levels.

### Abstract submission - ePoster

#### Background:

Online communities play a crucial role in supporting healthcare professionals. Rural Health Pro (RHP) ([www.ruralhealthpro.org](http://www.ruralhealthpro.org)) supports rural health professionals to practice in rural/remote Australia and build health workforce capability. RHP members have access to a portfolio of resources, tools and experiences including; digital events/training, discussion forums, jobs boards, Grants and Funding space, video on-demand and personalised content from leading health organisations as well as the ability to connect and network with people working within the rural health sector.

#### Method:

A mixed-methods design was used including, secondary data analysis of platform data, discourse analysis of qualitative data publicly available on RHP, an online survey and interviews with key-stakeholders.

#### Results:

Since launching in July 2020, RHP has connected more than 100 health sector organisations and has almost 4,000 members. Online discussion boards, special-interest-groups, webinars and digital conferences held on RHP were considered to be effective forums for engaging health professionals, expanding awareness of new networks and having a positive effect on personal and professional lives.

#### Implications:

Technology provides an opportunity to connect isolated health professionals and hence contribute to positive mental health and wellbeing. Given the large proportion and active engagement of students on RHP, it is also an ideal tool to assist in preparing, informing and recruiting the future workforce.

#### Authors:

- Dr Robyn Ramsden, NSW Rural Doctors Network, [r Ramsden@nswrdn.com.au](mailto:r Ramsden@nswrdn.com.au), Suite 1/53 Cleary Street, Hamilton, 2303.
- Mr Ben Eames, NSW Rural Doctors Network, [beames@nswrdn.com.au](mailto:beames@nswrdn.com.au), Suite 1/53 Cleary Street, Hamilton, NSW, 2303.
- Dr Sabrina Pit, NSW Rural Doctors Network, [spit@nswrdn.com.au](mailto:spit@nswrdn.com.au), Suite 1/53 Cleary Street, Hamilton, NSW, 2303.
- Mr Richard Colbran, NSW Rural Doctors Network, [rcolbran@nswrdn.com.au](mailto:rcolbran@nswrdn.com.au), Suite 1/53 Cleary Street, Hamilton, NSW, 2303.

# CONNECTING RESEARCH, PRACTICE AND COMMUNITIES USING A DIGITAL PLATFORM KNOWN AS RURAL HEALTH PRO

Robyn Ramsden, Ben Eames, Erin Press | NSW Rural Doctors Network

## INTRODUCTION

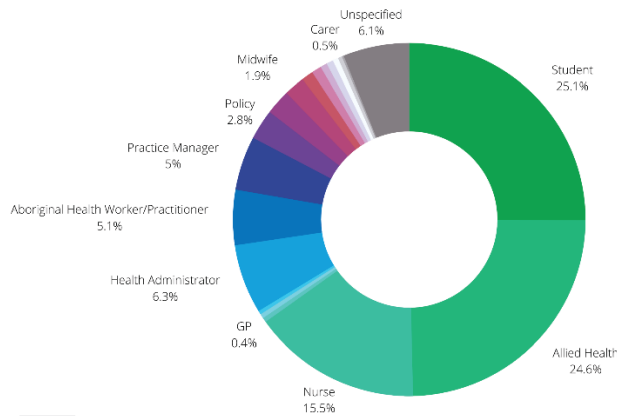
Rural Health Pro (RHP) - a popular digital platform that connects health professionals and organisations interested in rural health. RHP provides:



RHP members have the ability to connect and network with people working within the rural health sector, and leading health organisations.

**4350 health professionals have joined RHP**

RHP Members by Profession



Further evidence is needed to determine the effectiveness of RHP in enhancing health professional's ability to network, gain support and access information.

## OBJECTIVES

The study will assess the functionality, content, use and impact of Rural Health Pro over three years and aims to:

1. Determine members' engagement and satisfaction of RHP and the information and resources provided
2. Analyse content provided on the platform and retrieved, communicated and shared by members
3. Determine the value and impact that members' engagement with RHP and resources has on their capability.

## RESEARCH METHODS

The study will utilise the same mixed methods research design in each of the three years and includes:

1. Secondary data analysis of RHP platform data
2. Discourse analysis of the qualitative data publicly available on the RHP platform
3. Online survey with RHP members
4. In-depth interviews with members.

People often say the best part of their job is the people they work with, so if they are the only one doing a certain job in a rural area, having the opportunity to connect with like-minded people is extremely important. People are connecting more and more virtually these days.  
(RHP member 2021)

## FINDINGS

Overall satisfaction of RHP is very high with 52% of respondents rating it between 8 and 10. Satisfaction ratings of 1 represent the lowest satisfaction and 10 the highest satisfaction score.

The diversity of topics. There is something for everyone and I am interested across all disciplines.  
(RHP member 2021)



65 survey respondents



The study demonstrates RHP is reaching its goal to support rural health professionals. RHP's role in building capability of rural health professionals is particularly positive.

Further planning to address challenges and increase engagement is required to grow the platform to the next level.

# Virtual Art Workshops as a Model of Care: Creative innovations in aged care reduce social isolation and foster diverse rural health networks

Kate Smith

## Abstract submission – ePoster

### Background:

The aim of Art Snacks is to deliver a high-quality, innovative online arts program that is responsive to COVID impacted rural aged-care facilities. The Virtual Arts Snacks Program delivered by the Regional Arts Development Organisation, Arts OutWest is a cross-sector arts in health project that employs regional creative artists to deliver online art activities to residents and carers in rural Multi-Purpose Services. Commencing in August 2021, funded by a Regional Arts NSW, Renewal grant, the program is designed to respect aged-care residents' need to stay connected and culturally engaged; reduce social isolation and co-create 'liveable' places with aged-care residents and health staff, whilst fostering diverse networks across the rural health service and broader community.

### Aims:

This research evaluates both tangible and intangible outcomes regarding the implementation of virtual art workshops into rural Multi-Purpose Services. Meaningful social experiences generate wellbeing and are often intangible to measure. This paper discusses how and why the regular programming of virtual art activities co-creates liveable environments and in line with the National Standards for the delivery of quality care in Multi-Purpose Services can operate as a tangible pathway to accreditation.

### Methods:

Participatory Action Research (PAR) using a collaborative, cyclical research process with the user-led model - plan, act, observe, reflect will be applied to evaluate the program. This will support researchers to understand and improve the lifeworld of research participants. The process will assess the effectiveness of the online delivery of arts workshops in music, visual art and performance/ movement. It will also evaluate the feasibility and success of various types of technology for delivery. The three main methods used to collect data are focus groups, feedback via text message and the Geriatric Depression Scale Data (GDS).

### Challenges:

Navigating workforce issues regarding capacity and facilities; delivering activities to multiple sites simultaneously; and technological issues pertaining to the federal governments roll-out of iPads with limited state infrastructure to support implementation.

### Take-Home Message:

The implementation of virtual art workshops in rural Multi-purpose Services contribute to accreditation by reducing social isolation for aged-care residents by fostering meaningful connections across diverse networks. Can this innovative and creative approach to wellbeing be regarded as 'essential' rather than an 'optional' model of virtual care?

### Authors:

- Dr Kate Smith, ArtsOutWest, katesmith@csu.edu.au, Research Station Drive, Charles Sturt University, NSW, 2795.
- Ms Christine McMillan, ArtsOutWest, Christine.Mcmillan@health.nsw.gov.au, Arts OutWest Research Station Drive, Charles Sturt University, NSW, 2795.



# Virtual Art Workshops as a Model of Care

Creative innovations in aged care reduce social isolation & foster diverse rural health networks



## AIM

Online art activities  
In six Multipurpose Services  
Expand across WNSWLHD  
Respond to COVID  
Support Accreditation  
Model arts program for wellbeing as essential care

## ART FORMS

Performance/Movement +  
Visual Arts + Music  
High-quality + Creative  
Collaborative  
Interactive + Innovative  
Professional artists

**Images** of storms in WNSWLHD chosen by visual artist Ro Burns, to illustrate musician Rob Shannon's composition, 'Late Summer Storm' Waltz. All were used as inspiration for the multi arts program.

**LHS:** Jimmy Deguara, 'Heading back to Nyngan', 2004

**Centre:** Belinda Dimarzio-Bryan 'Cotton Harvest' 2018 at Auscott, Warren NSW

**RHS:** Backpacky(Reddit) 'A storm on the horizon' on the farm in Baradine, NSW, 2008



## SUCCESSSES

Reduce social isolation  
Meaningful connection  
+ wellbeing  
'Liveable' spaces +  
diverse groups  
Foster networks  
Steering Committee

## RESEARCH

Participatory Action  
Research  
Arts-based methods  
Disseminate new  
knowledge using visual  
arts + performance +  
music

## CHALLENGES

Building rapport online  
Connectivity  
Technology  
Infrastructure + staff  
Perception of MPS' as  
aged-care homes

## QUESTION

Can this innovative and creative approach to wellbeing be regarded as 'essential' rather than an 'optional' model of virtual care?

**Partners:** WNSWLHD/Arts OutWest, USYD- School of Rural Health, CSU- School of Biomedical Sciences

**Funder:** Renewal Grant, Australian Government through Regional Arts NSW



WHRN 2021 Research Symposia

