



Public Health Association  
AUSTRALIA



# ABSTRACT BOOK

## AUSTRALIAN PUBLIC HEALTH CONFERENCE 2018

Leadership in public health: Challenges  
for local and planetary communities

Wednesday 26 to Friday 28 September 2018

Pullman International Cairns

#AustPH2018

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# Contents

<b>Wednesday 26 September 2018.....</b>	<b>3</b>
Poster Presentations – P1 Ballroom Foyer, 1:00pm - 1:30pm.....	3
1A Public Health and Infectious Diseases Mossman Ballroom, 1:30pm - 2:30pm .....	6
1B Table Top Presentations Tully 1, 1:30pm - 2:30pm .....	8
1C Rapid Fire - Aboriginal and Torres Strait Islander, Rural and Mental Health Tully 2 & 3, 1:30pm - 2:30pm .....	10
1D Rapid Fire - Aboriginal and Torres Strait Islander Health Kuranda Ballroom, 1:30pm - 2:30pm .....	15
2A Workshop - Part 1 Kuranda Ballroom, 3:00pm - 4:30pm .....	19
2B Workshop – Part 1 Tully 2 & 3, 3:00pm - 4:30pm.....	19
2C Workshop - Part 1 Tully 1, 3:00pm - 4:30pm .....	20
<b>Thursday 27 September 2018.....</b>	<b>21</b>
3A Public Health and Lifestyle Mossman Ballroom, 11:00am – 12:30pm .....	21
3B Table Top Presentations Tully 1, 11:00am – 12:30pm.....	24
3C Rapid Fire - Global Public Health and Public Health Behaviours Tully 2 & 3, 11:00am – 12:30pm ...	27
3D Rapid Fire - Challenges and failures in Public Health Kuranda Ballroom, 11:00am – 12:30pm .....	31
Poster Presentations – P2 Ballroom Foyer, 1:00pm - 1:30pm.....	36
4A Workshop – Part 2 Kuranda Ballroom, 1:30pm – 3:00pm.....	40
4B Workshop - Part 2 Tully 2 & 3, 1:30pm – 3:00pm.....	40
4C Workshop - Part 2 Tully 2 & 3, 1:30pm – 3:00pm.....	41
<b>Friday 28 September 2018 .....</b>	<b>42</b>
5A Public Health Policy and Law Mossman Ballroom, 11:00am – 12:30pm.....	42
5B Table Top Presentations Tully 1, 11:00am – 12:30pm.....	45
5C Rapid Fire - Public Health Leadership and Governance Tully 2 & 3, 11:00am – 12:30pm.....	48
5D Rapid Fire - Prevention & Health Promotion Kuranda Ballroom, 11:00am – 12:30pm .....	52
Poster Presentations – P3 Ballroom Foyer, 1:00pm - 1:30pm.....	57
6A Aboriginal and Torres Strait Islander Health and Chronic Diseases Mossman Ballroom, 1:15pm – 2:45pm .....	61
6B Table Top Presentations Tully 1, 1:15pm – 2:45pm.....	64
6C Rapid Fire - Public Health Lifestyle Tully 2 & 3, 1:15pm – 2:45pm .....	67
6D Rapid Fire - Public Health Kuranda Ballroom, 1:15pm – 2:45pm .....	71
<b>Author Index .....</b>	<b>76</b>

# Wednesday 26 September 2018

## Poster Presentations – P1

Ballroom Foyer, 1:00pm - 1:30pm

### P1001 - The views of Aboriginal women on health supports: a mixed methods study

**Authors:** Sarah Perkes<sup>1</sup>, Noeline Skinner<sup>2</sup>, Bernise Leece<sup>1</sup>, A/Prof Maree Grupetta<sup>2</sup>, Associate Professor Gillian Gould<sup>2</sup>

**Affiliations:** <sup>1</sup>University of Newcastle, Newcastle, Australia, <sup>2</sup>Mid North Coast Local Health District New South Wales Health, Australia

#### **Abstract:**

**Background:** Aboriginal women want good health for themselves, their babies and their communities, but there are a number of challenges that make it challenging for an Aboriginal woman to achieve these goals. The aim of this study was to explore Aboriginal women's perceptions of community supports for health, including social and emotional wellbeing and quitting smoking during pregnancy.

**Methods:** Two Aboriginal research assistants and a PhD candidate conducted 11 focus groups with 76 Aboriginal women in NSW using a yarning methodology, and a survey was completed. Audio-recorded transcripts underwent thematic analysis, with descriptive analyses of the survey.

**Results:** Participants were aged from 18-60 years. Preliminary analysis has shown that Aboriginal women were likely to use family, friends and health professionals for support for most health topics, but for some health topics, they manage alone. Women are less likely to access community support to quit smoking, for mental health and sexual health. The reasons for not accessing support may be embarrassment, shame or lack of acceptable services and resources. Online platforms such as Google and Facebook were also frequently used for health support. Women thought a targeted mobile App could have potential to connect them with services.

**Conclusions:** The types of health supports Aboriginal women use are generally consistent across health domains, but some health topics remain off the agenda. Novel, acceptable approaches are needed to increase access to health support for Aboriginal women, especially for those health topics less talked about.

The Aboriginal participants agreed to findings being publicised.

### P1002 - Coalescing community capacity for school readiness in Queensland communities

**Authors:** Miss Elisha Roche<sup>1</sup>, Mrs Ernesta Sofija<sup>1</sup>, Mrs Giselle Olive<sup>2</sup>, Mrs Skye Frazer-Ryan<sup>2</sup>, Mrs Alanna Philipson<sup>2</sup>, Mr Neil Harris<sup>1</sup>

**Affiliations:** <sup>1</sup>Griffith University, Gold Coast, Australia, <sup>2</sup>Centre for Children's Health and Wellbeing, Brisbane, Australia

#### **Abstract:**

**Background:** Early childhood is a critical time period when children undergo rapid growth and development. Maximising developmental opportunities during this time ensures children are school ready with the tools they need to learn, grow and achieve positive outcomes later in life. However, the Australian Early Development Census (AEDC, 2015) suggests many Queensland children are not meeting developmental milestones by school age. In response, a community capacity building intervention has been implemented in ten Queensland communities to improve child school readiness.

**Methods:** A time series evaluation has been implemented to assess the extent to which the intervention has supported local capacity and action for school readiness. An early assessment has been conducted using semi-structured interviews with community members and program staff and focus groups with communities. A content analysis of qualitative data revealed common ideas and themes.

**Results:** Preliminary findings suggest the intervention is having a positive impact on communities. Program staff working with community have been instrumental in drawing people together; opening communication channels; identifying community issues and mobilising resources. The intervention has created a platform for developing small and large impact community strategies, some of which have been implemented to a positive response.

**Conclusion:** The intervention has made a substantial contribution to communities and their ability to address issues associated with child readiness for school. It highlights that communities often have resources; the challenge lies with coalescing resources to achieve a greater effect than individual parts.

**Reference:** Australian Early Development Census. (2015). Australian Government Department of Education and Training.

## **P1003 - Sugar coating beverages: how television advertisements position sugar-sweetened beverages as healthy**

**Authors:** Aimee Brownbill<sup>1,2</sup>, Associate Professor Caroline Miller<sup>1,2</sup>, Associate Professor Lisa Smithers<sup>1</sup>, Professor Annette Braunack-Mayer<sup>3,1</sup>

**Affiliations:** <sup>1</sup>University of Adelaide, School of Public Health, Adelaide, Australia, <sup>2</sup>South Australian Health and Medical Research Institute, Population Health Research Group, Adelaide, Australia, <sup>3</sup>University of Wollongong, School of Health and Society, Wollongong, Australia

### **Abstract:**

**Background:** Reducing population consumption of sugar-sweetened beverages (SSBs) has become a public health priority in many countries due to correlations between high consumption, weight gain and non-communicable diseases. This study aims to explore how beverages are being positioned as better-for-you through television advertisements.

**Methods:** Advertisements on free-to-air television from the Australian nine-network (4 channels) were collected throughout the year of 2016. Advertisements from beverage manufacturers (n=37) were transcribed for textual, oral, audio and visual information. Data were analysed inductively using a multimodal discourse method to identify health and better-for-you discourses present in advertisements.

**Results:** SSB advertisements communicated health messages using a holistic view of health. This included advertising not only prevention of disease but also promotion of mental and social wellbeing. Such messages align with the World Health Organization's definition of health used in health promotion approaches to reduce obesity. SSB advertisements positioned as assisting in obtaining these broader aspects of health are well communicated via television advertisements as they combine visual, textual and audio cues that can illicit emotional responses. SSB advertisements also communicated personal choice and responsibility to health which deflects responsibility from corporations.

**Conclusion:** By communicating messaging using the health promotion definition of health, advertisers may be enhancing the promotion of sugar-sweetened beverages as healthy, or better-for-you, and weakening health promotion messages for obesity prevention.

### **Learning objectives:**

1. Illustrates current advertising techniques that misleadingly position SSBs as healthy.
2. Demonstrates how SSB manufacturers capitalise on ambiguity in the holistic definition of health used in health promotion.

## **P1004 - 'This goes with that': a pragmatic application of social determinants to interventions.**

**Authors:** Assoc/prof Lisa Wood<sup>1</sup>, Ms Nuala Chapple<sup>1</sup>

**Affiliations:** <sup>1</sup>University of Western Australia, Crawley, Australia

### **Abstract:**

**Background:** The steady decline in smoking in the Australian population overall masks alarmingly high and largely unchanging smoking rates among vulnerable population groups. For example people who are homeless, in prison or have mental illness have smoking rates up to 9 times higher. Inter-related social determinants of health explain much of these disparities. When we look at the array of social determinants however, it can be overwhelming for community sector and health agencies; - which ones can we most do something about? What are the practical implications for interventions? How do we prioritise?

An alternative way of looking at social determinants – applying this to tobacco control

We have devised a simplified and visual model that groups social determinants and maps these to corresponding public health implications. It has three thematic categories of social determinants;

- (i) difficult to change retrospectively (eg trauma, education): need to take into consideration
- (ii) can be influenced, but lie outside direct responsibility of health sector (eg neighbourhoods): implications for partnerships, tapping into existing programs
- (iii) variable (eg health literacy): public health sector can address

For each category of social determinants, practical implications for policy and practice suggested. Positive feedback has been received from health promotion and community sector organisations working with vulnerable population groups with high smoking prevalence.

Whilst the model was developed with tobacco control in mind, the pragmatic way of grouping social determinants and mapping these to feasible actions has potential application to other areas of health.

### P1005 - A spike in melioidosis cases; do roadworks increase the risk of infection?

**Authors:** Ms Sally Rubenach<sup>1</sup>, Ms Carlie Thirlwell<sup>1</sup>, Dr Simon Smith<sup>2,3</sup>, Mr Peter Horne<sup>1</sup>, Dr Alister Keyser<sup>1</sup>, Dr Richard Gair<sup>1</sup>

**Affiliations:** <sup>1</sup>Tropical Public Health Services Cairns, Cairns City, Australia, <sup>2</sup>Department of Medicine, Cairns Hospital, Cairns, Australia, <sup>3</sup>James Cook University Clinical School, Cairns Hospital, Cairns, Australia

#### **Abstract:**

**Background:** Melioidosis most commonly occurs in tropical areas during the wet season when the bacterium *Burkholderia pseudomallei* is brought to surface water by rainfall. Melioidosis can be fatal in individuals with chronic disease and compromised immune systems and requires immediate medical attention. A spike in melioidosis cases was observed in South Cairns in 2017.

**Methods:** The population rate of notifications for melioidosis in South Cairns and average monthly rainfall in 2017 were compared with notifications and rainfall for the previous nine years.

**Results:** In 2017, the rate of melioidosis notifications in South Cairns was 36 per 100,000 population. The average annual notification rate estimated from the previous 9 years was 2.4 per 100,000 population (95% CI 1.2-4.2). The melioidosis notification rate for 2017 was 15 times the average annual rate for the area and was not associated with higher than average rainfall. An environmental assessment identified that major roadworks in South Cairns concluding in August 2017 were likely to have resulted in considerable soil disruption.

**Conclusion:** The observed increase in melioidosis cases in 2017 was not associated with increased rainfall. It is hypothesised that the presence of major roadworks involving significant disruption of soil may have contributed to an increased level of environmental contamination and an increased risk of infection. The distribution of melioidosis cases relative to major roadworks merits further study. Soil management during roadworks and other activities likely to result in significant soil disruption may require review in tropical areas where *Burkholderia pseudomallei* is present in the environment.

### P1006 - On-site dental service to residential aged care – a 3-year descriptive summary

**Authors:** Mr Steven Chu<sup>1</sup>

**Affiliations:** <sup>1</sup>Centre for Education and Research on Ageing, Sydney, Australia

#### **Abstract:**

**Background:** Many older Australians with severe chronic medical conditions reside in residential aged care facilities (RACFs) where they suffer from poorer general and oral health as compared to their community dwelling peers. Most of them would benefit from outreach dental services as they are not able to access care in the traditional dental setting. Outreach dental services, however, have not been widely practiced in Australia. This study aims to discuss the practicality of outreach dental services operations and to describe the provision of services in a 3-year period.

**Methods:** All itemised dental services provided in a 3-year period were recorded. Data acquired includes type and frequency of dental services provided and the fee incurred for providing the proposed services.

**Results:** In 2014, 177 persons received 663 itemised dental services (41% diagnostic; 25.5% preventive) where a total of \$52,946.00 was spent. In 2015, 280 persons received 1709 services (36.0% diagnostic; 21.2% preventive) where a total of \$153,317.00 was spent. In 2016, 257 persons received 1597 services (41.8% diagnostic; 25.5% preventive) where a total of \$124,192.00 was spent. The types of on-site services provided were consistent in the 3-year period; however, the average spending per persons increased from \$299.13 per persons in 2014 to \$483.24 in 2016.

**Conclusion:** Core dental services can be provided on-site functionally, safely and efficiently. The success for provision of services will depend on the infrastructure and support available to the dental practitioners.

### P1007 - 16 DAYS OF ACTIVISM POSTER CAMPAIGN: STAND UP – DON'T STAND BY

**Authors:** Justine Devonport<sup>1</sup>, Jane McKinnon<sup>1</sup>, Felicity Antony<sup>1</sup>, Jane Moriarty<sup>1</sup>, Emily Lee-Ack<sup>1</sup>

**Affiliations:** <sup>1</sup>Women's Health and Wellbeing Barwon South West

#### **Abstract:**

**CONTEXT:** Statistics from 'The Line' campaign, Our Watch (2015) highlighted that secondary school aged students have a worryingly high level of acceptance of violence – both physical and online. Women's Health and Wellbeing Barwon South West (WHWBSW) saw this as an opportunity to provide some educational resources to challenge current misconceptions and attitudes.

**Objectives:** Our objectives were to (1) increase adolescent awareness and prevent unhealthy and abusive behaviour in relationships; (2) increase adolescent awareness and prevent inappropriate sexual harassment that can occur through social media and (3) provide bystander responses that could be used to 'stand up' against negative behaviours.

**Process:** Four posters representing different social media platforms were created in consultation with young people and delivered to schools with an explainer pack for teachers, linking the messages to the Respectful Relationships curriculum. A survey was made available to assess the impact of the campaign.

**Outcomes:** A total of 173 surveys were completed by students (86) or teaching staff (87). 90% of students found the posters increased their knowledge of unhealthy relationships and behaviour and gave them options to intervene as a bystander. The majority of teachers agreed that the posters were relevant for young people and increased their confidence to become an active bystander.

**Practice Change/Learning Objectives:** Despite challenging content, schools had a positive reaction to content of posters. Feedback suggested that this resource was a missing link to connect “real life” with curriculum. WHWBSW has since made the posters and curriculum resource more widely available

### **P1008 - Third hand smoking exposure and smoking cessation: role of religious leaders**

**Authors:** Dr Muhammad Aziz Rahman<sup>1</sup>

**Affiliations:** <sup>1</sup>Austin Clinical School of Nursing, La Trobe University, Heidelberg, Australia

#### **Abstract:**

**Background:** Smoking cessation intervention should utilize any platform/opportunity for increasing public health awareness. The aim was to involve religious leaders for creating awareness on smoking cessation including third hand smoking (THS) exposure among the multicultural community people in Australia.

**Methods:** As an informal community intervention, one of the largest Islamic organizations in Victoria was selected. Firstly, an individual consultation was done with the religious leader regarding the Islamic views of smoking. Then the awareness material was developed with scientific and religious views on smoking and THS. The material included details of Quitline.

**Results:** The awareness material was approved to be displayed on the entrance of the institution for easy visibility. Messages such as “Are you aware that smoking is haram?” or “If the health warnings did not alert you to quit in the meantime, will the fear of Allah (God) do now?” attracted the attention of the attendees. Importance of quitting was also discussed in the weekly sessions with over 1,000 attendees including school children.

**Conclusions:** Religious leaders and institutions can play an important role in promoting awareness on smoking cessation.

**Implications for public health:** Religious leaders can be involved in creating awareness on behavioral risk factors for health and wellbeing.

**Translation to policy and/or practice change:** Role of these powerful community leaders need to be integrated to supplement the ongoing tobacco control efforts in Australia and globally.

**Learning objectives:** To understand the role of religious leaders for health promotion; to understand the integration of scientific and religious messages

## **1A Public Health and Infectious Diseases**

Mossman Ballroom, 1:30pm - 2:30pm

### **Is chickenpox a neglected vaccine-preventable disease in Australia?**

**Authors:** Dr James Fielding<sup>1</sup>

**Affiliations:** <sup>1</sup>Victorian Infectious Diseases Reference Laboratory, Melbourne, Australia

#### **Abstract:**

**Context:** The Immunise Australia Program is Australia’s flagship preventive health program and funds the purchase of vaccinations to protect millions of Australians. Since single-dose childhood chickenpox vaccination was included in the National Immunisation Program in 2005, overall chickenpox incidence and its severe outcomes have reduced.

**Process:** Evidence from overseas suggests reduced effectiveness and waning immunity from single-dose chickenpox vaccine over time, and that outbreaks continue to occur in highly vaccinated populations. This necessitated a change to a two-dose chickenpox vaccine program in the United States. Measures to assess the impact of the one-dose chickenpox vaccine program in Australia were reviewed to assess the need for a possible two-dose schedule.

**Analysis:** Whilst chickenpox is a notifiable disease in most states and territories, limited medical practitioner notifications mean that most notified cases cannot be clinically determined. Trends in notifications data are inconsistent with expected observations, and consistent temporal data on chickenpox incidence are restricted to hospitalised cases. Data on the effectiveness of, or duration of immunity provided by, chickenpox vaccine in Australian children are scarce.

**Outcomes:** Assessment of the impact and effectiveness of Australia's chickenpox vaccination program is inadequate. Reliable indicators against which to evaluate the publicly funded chickenpox vaccine program, and assess the need for a two-dose vaccination program, are required. Alternative approaches for more accurate measurement of chickenpox incidence and outbreaks in the community, such as sentinel or targeted active surveillance, warrant consideration.

### **Preparing for Zika transmission in Australia**

**Authors:** Sian Ashton<sup>1</sup>

**Affiliations:** <sup>1</sup>*Queensland Health, Tropical Public Health Services, Cairns, Australia*

#### **Abstract:**

**Context:** In 2016 Zika was declared a Public Health Emergency of International Concern by the World Health Organisation. This led to prevention and preparedness planning in Queensland.

Zika is a flavivirus spread through infected *Aedes* species mosquitoes. It can also be sexually transmitted. The region of Australia "receptive" to Zika is the north east coast of Queensland up to the Torres Strait. This designation is based on the significant presence of vectors and a history of dengue outbreaks. The receptive zone may have diminished in recent years due to the introduction of *Wolbachia* bacteria to mosquitoes which limits their ability to transmit viruses.

**Process / analysis:** Zika causes mild symptoms in most infected people but can cause birth defects in pregnant women. The viruses predominantly mild presentation and high asymptomatic rate, makes prevention based on case definition difficult and standard vector control responses are insufficient.

Existing dengue management practices were reviewed and extended to integrate management of Zika and vector control and surveillance was broadened to include places frequented by pregnant women. New health promotion materials and social media initiatives were established. Targeted education sessions for health professionals and pregnant women were held and information about home based residual spraying was added to public messaging.

**Outcomes:** Zika risk in Australia is greatest in the Torres Strait due to reduction of mainland risk following the introduction of *Wolbachia* infected mosquitoes. There has been no local transmission of Zika in Australia to date although preparations are in place should this occur.

### **Review of legionella colony forming units and associated factors during community outbreaks.**

**Authors:** Mr Travers Johnstone<sup>1</sup>, Dr Emma Quinn<sup>1</sup>, Dr Isabel Hess<sup>1</sup>, Dr Leena Gupta<sup>1</sup>

**Affiliations:** <sup>1</sup>*Sydney Local Health District Public Health Unit, Camperdown, Australia*

#### **Abstract:**

**Background:** Legionnaires' disease (LD) generates public concern due to the potential for large outbreaks, the majority of which are caused by water-cooling towers (WCTs). NSW Public Health guidelines require public health units to investigate outbreaks; including sampling WCTs within 500 metres of common exposure locations and any further action (e.g. decontamination and shutdown) is based on the NSW Public Health Regulations.

Currently, there is a lack of definitive evidence regarding the level of colony forming units (CFUs) required for human infection and the distance disease causing aerosols can travel. We undertook a systematic literature review to identify the range of WCT legionella CFUs detected and other factors associated with LD outbreaks.

**Methods:** A keyword search of three databases from 1990 to 2016 for peer-reviewed literature was undertaken to identify LD outbreak reports. Exclusion criteria ensured results were specific to community-acquired outbreaks with matched clinical and environmental samples.

**Results:** After application of exclusion criteria, 24 outbreak reports were identified. Five outbreak reports were associated with legionella CFUs of <1,000/mL, where NSW Regulations would not have triggered decontamination and shutdown, despite causing 208 LD cases. There were range of distances reported between exposure locations and WCTs (e.g. up to 12,000 meters) indicating a larger radius should be considered in LD outbreak investigations.

**Conclusion:** The NSW Public Health guidelines may need to incorporate a larger area for environmental health investigation during LD outbreaks. The Regulations may need updating in light of outbreaks associated with <1,000 CFUs/mL. Further research into the epidemiology of non-WCT associated LD outbreaks is warranted.

## Vancomycin-resistant enterococci in a neonatal intensive care unit – an unfortunate premiere

**Authors:** Dr Patiyan Andersson<sup>1</sup>, Dr Ming Chen<sup>2</sup>, Mrs Wendy Beckingham<sup>2</sup>, Dr Karina Kennedy<sup>2,3</sup>, Dr Katrina Roper<sup>1</sup>, Dr Nicholas Coatsworth<sup>2,3</sup>

**Affiliations:** <sup>1</sup>National Centre for Epidemiology and Population Health, Australian National University, Canberra, Australia, <sup>2</sup>Infectious Disease and Microbiology, Canberra Hospital and Health Services, Canberra, Australia, <sup>3</sup>Medical School, Australian National University, Canberra, Australia

### Abstract:

**Background:** Nosocomial infections with vancomycin resistant enterococci (VRE) is cause of significant morbidity and mortality worldwide. Colonisation usually precede infections and therefore it is crucial to minimise the burden of colonisation in highly vulnerable patient populations. This study investigates the transmission pathways and origins of the first occurrence of VRE colonisation in the neonatal intensive care unit (NICU) at the Canberra Hospital.

**Methods:** Demographic and clinical variables for a cohort of 14 colonised infants and 77 non-colonised infants, representing all admitted patients at the NICU and SCN over the outbreak period January to May 2017, were analysed to assess possible transmission pathways for the VRE colonisation. Whole genome sequencing of the VRE isolates was used to determine the origin of the outbreak strain.

**Results:** Swift implementation of wide-ranging infection control measures brought the outbreak under control. Multivariate logistic regression revealed a strong association between colonisation and administration of Nystatin cream and Ampicillin. Whole genome sequencing showed the isolates to be highly clonal non-typable *Enterococcus faecium* (NTEfm) vanA and closely related to other NTEfm recently sequenced from the hospital. Staffing data revealed a high proportion of non-regular staff during the period leading up to the discovery of the outbreak.

**Conclusion:** The colonisation of NICU patients was with a highly successful clone endemic to the Canberra hospital likely introduced into the NICU environment from other wards, with subsequent cross contamination involving a topically administered Nystatin cream. Use of ongoing routine surveillance screening could have identified colonisation at an earlier stage.

## 1B Table Top Presentations

Tully 1, 1:30pm - 2:30pm

### Factors that influence Emergency Department attendance in Cairns: a patient perspective study

**Authors:** Mary O'Loughlin<sup>1</sup>

**Affiliations:** <sup>1</sup>James Cook University, PO Box 6811, Australia

### Abstract:

**Objectives:** To enhance knowledge of patient rationale for ED attendance and identify opportunities to improve health services, especially for people living with chronic conditions in Cairns.

**Background:** Emergency Department (ED) services across Australia face an ever-increasing demand, particularly in regional areas. Patient-centred care is a goal of the Australian health system, however there is limited evidence from the patient perspective on their rationale for ED attendance.

**Methods:** Cross-sectional survey of Cairns Hospital ED attenders, for a one-month period (March-April 2014), with linkage of survey data to administrative datasets.

**Results:** 1,000 Cairns-resident adults completed the survey and many (57%) reported having their presenting complaint for less than 24-hours. The administrative dataset recorded 93% as 'self-referred', however 29% of survey respondents described being referred by a medical practitioner to the ED. The majority had a regular general practice (86%) with 30% visiting their practice in the week prior to ED presentation. Awareness of the 13-Health telephone advice line was low and most did not consider alternative services as suitable for their care. High quality care, co-location of diagnostic services and extended hours of service were important to patients. A lack of specialist availability was reported.

**Conclusion:** Despite being connected to general practice, people focused their health-seeking behaviour on the ED in the immediate period prior to presentation. Patients reported a limited awareness of alternative health services and opportunities were identified that could potentially reduce ED attendance, particularly for young and middle-aged people living with chronic conditions.



## Rural GPs and nurses leading abortion service delivery: perspectives and possibilities

**Authors:** Dr Alana Hulme-Chambers<sup>1</sup>, Professor Meredith Temple-Smith<sup>2</sup>, Ms Lauren Coelli<sup>3</sup>, Ms Ange Davidson<sup>3</sup>, Dr Catherine Orr<sup>3</sup>, Ms Samantha Clune<sup>1</sup>, Associate Professor Jane Tomnay<sup>2</sup>

**Affiliations:** <sup>1</sup>The University of Melbourne, Wangaratta, Australia, <sup>2</sup>The University of Melbourne, Parkville, Australia, <sup>3</sup>Gateway Health, Wodonga, Australia

### Abstract:

**Clear context:** Medical termination of pregnancy (MToP) is an abortion option that has been available in Australia since 2012 for use in the first nine weeks of pregnancy. However, service provision is limited, even within states like Victoria where abortion is legal. Service scarcity in rural areas has created further inequity for rural women. This presentation critiques a multi-agency effort to improve rural MToP service availability, analysing whether decentralising MToP has resulted in increased rural MToP service leadership.

**Process:** Collaboration between key urban-based reproductive health organisations and a rural sexual health promotion organisation has occurred over the past six years to respond to increasing demand for MToP services. Strategies to improve MToP availability focused on service decentralisation through increasing numbers of trained rural GPs and nurses and reorienting knowledge and resources to rural areas.

**Analysis:** Evaluation found that devolution of centralised knowledge and feeling better supported resulted in increased service delivery leadership amongst rural GPs and nurses. Additionally, a peer-reviewed study of women's experiences of a rural MToP service found it was a valued and accessible option. However, challenges to the viability of rurally-led services remained in the form of stigma, a disjointed statewide system, and increasing service demand.

**Outcomes:** With initial support and then ongoing access to professional development, rural GPs and nurses can lead MToP services. However, political, cultural and operational challenges remain that require public health advocacy if more rural GPs and nurses are to take up and be able to sustain rural MToP service leadership.

## Choosing who to help: Setting priorities in the Australian healthcare system

**Authors:** Ms Susan Pennings<sup>2</sup>

**Affiliations:** <sup>1</sup>Australian National University, Acton, Australia, <sup>2</sup>Council of Academic Public Health Institutions Australasia (CAPIA), Deakin, Australia

### Abstract:

Policymakers need to be able to make choices within the healthcare budget when there are not enough resources to meet everyone's needs, and this shortage of resources is a problem which will only grow more acute with an ageing population. Disability Adjusted Life Years (DALYs) and Quality Adjusted Life Years (QALYs) are two metrics which are widely used in these healthcare prioritisation decisions. DALYs and QALYs measure both the extent to which a medical or public health intervention improves a person's quality of life, as well as the effect of the intervention on the person's lifespan. These metrics are used in calculating the extent to which different causes contribute to the overall burden of disease, and are intended to help policymakers allocate funds impartially and efficiently. In Australian health policy, they are used in comparing different medications and medical treatments, and deciding if they are good value for money.

I will discuss a number of objections to the use of these health metrics: that they are inaccurate about the lived experiences of people with disabilities, that their current usage fails principles of democratic accountability, and that they obscure issues of distributive justice. I will discuss alternative health metrics and argue for the importance of including measures of subjective well-being in considering how to prioritise healthcare interventions.

## Building a biospecimen collection: A pilot with 45 and Up Study participants

**Authors:** Ms Ashleigh Armanasco<sup>1</sup>, Dr Martin McNamara<sup>2</sup>

**Affiliations:** <sup>1</sup>NSW Ministry of Health, Sydney, Australia, <sup>2</sup>Sax Institute, Sydney, Australia

### Abstract:

**Background:** The development of biobanking resources is a key objective for research organisations across the world due to their potential to scale-up research into the cause and treatment of disease. The Sax Institute plans to build a large biospecimen collection linked to a range of health and lifestyle data. It is planned that blood samples will be collected from up to 50,000 participants from the 45 and Up Study, a widely used cohort study of over 250,000 NSW residents over 45 years of age. This pilot will test feasibility and acceptability of collecting biospecimens for research purposes with an already engaged cohort of participants.

**Methods:** Blood samples will be collected from 2,000 45 and Up Study participants. They will be asked to complete a brief questionnaire about current health and to provide a small sample of blood (30mL) at a NSW Health Pathology collection centre.

**Results:** Response rates will be compared on participant (e.g. age, gender), collection centre factors (e.g. distance from residence, parking availability) and with other collection methods.

**Conclusions:** Results from this pilot will inform the scale-up of blood sample collection for the larger cohort of 50,000 participants. The large scale collection of blood samples will enable research in diverse fields from precision medicine and genomics to clinical and population health. This project will contribute to our understanding of factors that enable us to build large biospecimen collections, allowing us to answer a wider range of research questions and bring together researchers from across multiple disciplines.

## **The Lived Experience of Australian Public Health Nurses' Roles in Disasters**

**Authors:** Dr Pip Rokkas<sup>1</sup>, Professor Paul Arbon<sup>1</sup>, Professor Kristine Gebbie<sup>1</sup>

**Affiliations:** <sup>1</sup>Flinders University, Adelaide, Australia

### **Abstract:**

Disasters are increasing their impact on Australian communities, challenging the surge capacity of local and national health systems and simultaneously challenging the nursing profession to (re)consider their disaster roles and functions. Nurses are considered 'frontline' workers in disasters, however minimal research has been undertaken in Australia regarding public health nurses' roles in the out-of-hospital setting. Perspectives of their actual disaster experience, what a disaster means to this group of nurses, and what this means for disaster nursing practice, is largely unknown.

An interpretative qualitative approach, using hermeneutic phenomenology, explored the lived experience of Australian public health nurses' roles in disasters. Interviews were conducted with 18 public health nurses from five Australian States.

Seven themes were identified: the main theme, having a public health mind, refers to the specific way of thinking the nurses had adapted from their nursing backgrounds to address the spatial challenges of providing disaster preparedness and response at the population level of health. The remaining themes revealed the nurses adherence to the key public health messages of protection and prevention through being: sentinels, making sure, advocates, adaptors, bridges/connectors and being unknown protectors.

Insight was found into understanding how Australian public health nurses experience their disaster roles through their unique worldview of a public health mind. This particular way of thinking presents an opportunity to (re)consider disaster nursing education and practices. It may be considered a different way to educate nurses to understand their own roles, and to promote their roles to other disaster responders and relief agencies.

## **1C Rapid Fire - Aboriginal and Torres Strait Islander, Rural and Mental Health**

Tully 2 & 3, 1:30pm - 2:30pm

### **Burden of Adverse Childhood Experiences of Children Attending Community Clinics in Sydney**

**Authors:** Dr Yuanee Wickramasinghe<sup>1</sup>, Dr Shanti Raman<sup>1</sup>, Dr Pankaj Garg<sup>1</sup>, Dr Romy Hurwitz<sup>1</sup>

**Affiliations:** <sup>1</sup>Department of Community Pediatrics, South Western Sydney Local Health District, Liverpool, Australia

### **Abstract:**

**Background:** Adverse childhood experiences (ACE) have been associated with short, medium and long-term health outcomes. South Western Sydney (SWS) is culturally diverse, including many disadvantaged population groups. Since 2017 a modified ACE checklist has been used in all SWS Community Paediatric (CP) clinics. Our aims were to determine the burden of ACE and developmental health of children attending clinics, in order to facilitate early intervention.

**Methods:** Data was collated from ACE checklists completed within CP clinics, including child development (CD) and vulnerable child (VC) clinics between February 2017 and August 2017. Simple descriptive analysis was performed using SPSS.

**Results:** Of 279 children seen, 167 (60%) attended CD clinics, 112 (40%) attended VC clinics. Seventy-eight (28%) had ACE  $\geq 4$  and 178 (64%) had ACE  $\geq 1$ . Of those attending CD clinics, 8 (5%) had ACE  $\geq 4$  compared to 70 (63%) attending VC clinics ( $p < 0.001$ ). More than half of Indigenous children had ACE  $\geq 4$  (63.6%). The greatest proportion of children with ACE  $\geq 4$  was in children  $\geq 15$  years of age (73%), significant association between age group and ACE  $\geq 4$  ( $p < 0.001$ ).

**Conclusions:** Children attending specialised clinics for vulnerable groups, older children and those of Indigenous background had the highest burden of ACE. Our findings support the need for specialised pathways for paediatric assessment and care for vulnerable, at-risk children.

Participants will gain an understanding of:

- 1) ACE and their association with poor health outcomes through the life-course
- 2) Identification of ACE risk in community clinic populations and that certain population groups are at greater risk

## **Murray Consortium - Collaborative governance framework to enhance access and self-determination**

**Authors:** Ms Brydie Donnelly<sup>1</sup>, Ms Alana Pund<sup>2</sup>, Mr David Noonan<sup>3</sup>

**Affiliations:** <sup>1</sup>Upper Hume Primary Care Partnership, Wodonga, Australia, <sup>2</sup>Gateway Health, Wodonga, Australia, <sup>3</sup>Albury Wodonga Aboriginal Health Service, Albury, Australia

### **Abstract:**

Partnerships have been identified as a key component of system and program design to 'Close the Gap' on Indigenous health and well being outcomes. The Murray Consortium is a governance partnership in action, enhancing access and outcomes through strategic collaboration and program design. In 2016 two mainstream and two ACCOs formed a consortium to manage funds for Aboriginal and Torres Strait Islander programs within the Upper Hume area of Victoria and NSW. Members bring their own strengths and expertise to the group, enabling a strong focus on Aboriginal and Torres Strait Islander community needs, rather than a focus on agency priorities. The consortium enables a strong partnership between ACCO and mainstream services, working to enhance the cultural safety of mainstream services, increase access for Aboriginal and Torres Strait Islander people across the rural and regional catchment, and strengthen self determination. The Murray Consortium has strengths in health service provision, cultural expertise, social service provision, evaluation and monitoring, and partnership development.

There have been big challenges throughout the development of the Murray Consortium, but they have been met with the strength of collaborative action and a strong foundation of transparency, trust and joint purpose by the partners.

The evaluation of the Consortium, and implementation of collaborative program models within this collaborative and innovative governance model has achieved positive outcomes, by providing an alternative option for funders who seek program delivery with maximum benefit for Aboriginal and Torres Strait Islander communities, and for the mainstream service sector to improve its cultural safety.

## **Understanding suicide postvention outcomes for Aboriginal and Torres Strait Islander peoples**

**Authors:** Mrs Sara Dixon<sup>1</sup>, Mr Marc Gehrmann<sup>1</sup>, Ms Susan Vaughan<sup>2</sup>, Mrs Victoria Visser<sup>1</sup>

**Affiliations:** <sup>1</sup>The Science Of Knowing Pty Ltd, Buddina, Australia, <sup>2</sup>STANDBY Support After Suicide Service, , Australia

### **Abstract:**

**Context:** The STANDBY Support After Suicide service provides support and coordinates services for people bereaved by suicide. The service operates throughout Australia, including rural and remote areas with large Aboriginal and Torres Strait Islander populations. Evaluating the effectiveness of a suicide bereavement service is a challenging task, which must consider the vulnerability of clients and address various complexities, particularly in an Indigenous context. For example, the conceptualisation of suicide, health and wellbeing can differ substantially between Aboriginal and Torres Strait Islander and non-Indigenous people. In order to take into account such differences, a culturally appropriate client feedback process was developed for Aboriginal and Torres Strait Islander STANDBY clients and piloted in the Kimberley region.

**Process:** The presentation showcases the approach we used to develop the client feedback process, including a bottom up, multi-phased consultation process combined with a participatory action research approach. The presentation includes a reflection on how this process helped to identify key operational challenges, utilise local knowledge and expertise, and develop stakeholder buy-in.

**Analysis and outcomes:** The feedback process is currently being piloted with Aboriginal and Torres Strait Islander clients in the Kimberley via an action learning approach. This approach has enabled ongoing monitoring of the process, so that key learnings are translated into process improvements. Analysis of preliminary data will be presented, including evaluating the potential for further roll-out. The presentation will also reflect on challenges, including the importance of adopting a bottom up approach, and balancing research rigour with implementation feasibility and cultural appropriateness.

### **Learning Objectives:**

1. To increase knowledge about working with Aboriginal and Torres Strait Islander communities to develop client feedback processes that are meaningful to the community and the organisation.
2. To increase knowledge about designing evaluation approaches that effectively balance research rigour, process feasibility and cultural appropriateness.

## Something to smile about: The evolution of dental services at Wuchopperen

**Authors:** Ms Manjunath Rajashekhar<sup>1</sup>

**Affiliations:** <sup>1</sup>Wuchopperen Health Service, Manoora, Australia

### **Abstract:**

**Context:** Oral health is poor in low income populations without fluoridated water, including those accessing Wuchopperen, the Aboriginal community controlled health service in Cairns. Dental caries is a known independent risk factor for diabetes and has recently been implicated in cardiac disease, preterm delivery, low birth weight babies, respiratory diseases, osteoporosis, renal failure and stroke: all chronic conditions that contribute to the significant health gap for the Aboriginal and Torres Strait Islander community.

**Process:** Oral health services provided over a five year period at Wuchopperen were analysed including: number of patients with chronic diseases referred to dental services; patient characteristics; and types of dental services provided.

**Analysis:** The pattern of oral health services delivered has changed from those limited to emergency treatments and extractions to restorative and preventive services.

**Outcomes:** Wuchopperen self-funds its dental service, meaning more accessible services and follow-up to improve outcomes, especially for patients with chronic diseases. Sustainable and accessible oral health care services at primary health organisations can not only reduce the financial burden on health system but provide better quality of life for patients, improve the course of chronic diseases, and provide interventions to ensure children have better knowledge about looking after their teeth and gums.

### **Learning objectives:**

1. Dental emergency presentations at hospitals, medical practices and pharmacies can be decreased by providing continuous comprehensive oral health services.
2. Focussing on preventive dental care means less chronic disease, better quality of life, and improves community prevalence of dental caries.

## Developing a sustainable model of oral health promotion through co-designing with rural communities

**Authors:** Dr Felicity Croker<sup>1</sup>, Dr Karen Carlisle<sup>1</sup>, Professor Sarah Larkins<sup>1</sup>

**Affiliations:** <sup>1</sup>James Cook University, Cairns, Australia

### **Abstract:**

**Background:** It is widely acknowledged that children and adolescents in rural communities are at-risk of poorer oral health outcomes than those in larger centres. Effectively engaging them in health promotion has potential to impact positively on their lifelong general health. Addressing this through a community participatory approach has been the focus of the Engaging Communities in Oral Health Project (Rural ECOH).

This presentation reports on the co-design, implementation and evaluation of innovative place-based initiatives that are effectively strengthening local capacity to deliver sustainable oral health programs for young people in North Queensland.

**Methods:** The National Health and Medical Research Council funded Rural ECOH project involved rural primary health organisations, Royal Flying Doctors Service, State Health Services, Latrobe and James Cook (JCU) Universities working with rural communities in Queensland and Victoria.

The method adopted for the project comprised of two stages.

- 1) Community participatory planning using structured workshops
- 2) Implementation of local solutions and monitoring by JCU, local providers and community members.

**Results:** Innovations designed and implemented in partnership with local communities and health services effectively delivered low-cost, sustainable activities that were reflective of the rural context and available workforce. Embedding dental students into translational research projects and the delivery of oral health promotion to rural adolescents has been integral to sustainable implementation.

**Conclusion:** When planning a sustainable way forward, the university provides an enduring anchor organisation within this fluid health environment. Where a socially accountable university program invests in partnering with State services and community-based organisations, then embedding the activities within a rural context is achievable.

## Building the Aboriginal population health workforce in NSW

**Authors:** Dr Lisa McCallum<sup>1</sup>, Ms Alex Scott<sup>1</sup>, Ms Dawn Arneman<sup>1</sup>

**Affiliations:** <sup>1</sup>*Centre for Epidemiology and Evidence, NSW Ministry of Health, North Sydney, Australia*

### Abstract:

**Context:** In 2011, NSW Health established the Aboriginal Population Health Training Initiative (APHTI). The program aims to contribute to the development of the Aboriginal population health workforce, with the long-term goal of improving the health of Aboriginal people in NSW.

**Process:** The APHTI is a three-year program that provides comprehensive, competency-based public health training for Aboriginal people. Participants complete a series of supervised work placements and professional development activities in population health and study towards a Master of Public Health degree. Trainees receive support throughout the program, including tutoring and mentoring.

**Analysis:** As at March 2018, 25 trainees have enrolled in the program. Ten have successfully completed a Master of Public Health and demonstrated their capabilities against the APHTI competency framework and a further 11 are working towards these. Approximately two thirds of trainees were previously employed by a health service prior to starting the APHTI, and all graduates continue to be employed by NSW health services. The program is successful because it remains flexible and responsive to the needs of trainees and the health services that employ them. The support provided to trainees and their supervisors is a key feature that contributes to the ongoing success of the program.

**Outcomes:** The APHTI is a successful, comprehensive public health training program exclusively for Aboriginal people and could be a useful model for guiding the development of similar programs across other jurisdictions in Australia

## Trachoma in the Torres Strait: a public health conundrum

**Authors:** Ms Kate Lynch<sup>1,2</sup>, Dr Garry Brian<sup>1</sup>, Associate Professor Stephen Lambert<sup>1,2</sup>

**Affiliations:** <sup>1</sup>*Communicable Diseases Branch, Queensland Health, Herston, Australia*, <sup>2</sup>*UQ Child Health Research Centre, The University of Queensland, South Brisbane, Australia*

### Abstract:

**Background:** Trachoma, an eye disease caused by *Chlamydia trachomatis* (Ct), can lead to blindness with repeated infections. Recent surveys have identified active trachoma (TF), diagnosed using the World Health Organization (WHO) simplified grading system, is present at endemic levels in the Torres Strait. These findings are in stark contrast with the experience of local clinicians who do not consider trachoma to be a public health problem.

**Methods:** We conducted a cross-sectional trachoma prevalence study, including clinical exam by an ophthalmologist and collection of ocular swabs, in a remote Torres Strait community where follicular conjunctivitis had recently been reported.

**Results:** TF diagnosed using the WHO system was observed in 23% of screened children (hyperendemic levels). No cicatricial trachoma was observed. No swab tested positive for Ct by PCR.

**Conclusions:** In the Torres Strait, a high prevalence of TF is not reflective of a threat to vision and mass drug administration as recommended in the national guidelines is not appropriate.

**Implications:** The national guidelines recommend use of the WHO system for trachoma detection and discourage use of laboratory testing. However, as ocular Ct infection prevalence decreases, the positive predictive value of TF for Ct infection will also decrease. This could lead to communities receiving unwarranted MDA.

**Practice change:** Queensland's approach to trachoma screening has changed with use of more detailed criteria for diagnosis. Current national guidelines should be reviewed.

### Learning objectives:

Trachoma is not a public health problem in the Torres Strait.

The national guidelines should be reviewed.

## Antenatal care service utilisation among Indigenous women in Chittagong Hill Tracts, Bangladesh

**Authors:** Ms Shahinoor Akter<sup>1,4,5</sup>, Dr Jane Rich<sup>2,4</sup>, Dr Kate Davies<sup>2,5</sup>, Associate Professor Kerry Inder<sup>3,5</sup>

**Affiliations:** <sup>1</sup>*School of Medicine and Public Health, The University of Newcastle, Callaghan, Australia*, <sup>2</sup>*Centre for Rural and Remote Mental Health, The University of Newcastle, Newcastle, Australia*, <sup>3</sup>*School of Nursing and Midwifery, The University of Newcastle, Newcastle, Australia*, <sup>4</sup>*Department of Anthropology, Jagannath University, Chittaranjan Ave, Bangladesh*, <sup>5</sup>*Hunter Medical Research Institute, New Lambton Heights, Australia*

### Abstract:

**Background:** Despite substantial improvements in maternal health in Bangladesh, the prevalence of accessing antenatal care (ANC) services among Indigenous women in the Chittagong Hill Tracts (CHT) is unknown. Accessing ANC during pregnancy has positive effects on maternal and child health outcomes. This study aims to estimate the prevalence of accessing ANC services by Indigenous women in the CHT and identify factors associated with attendance.

**Methods:** A cross-sectional study was conducted in villages among three ethnic groups (Chakma, Marma, and Tripura) in Khagrachari district, Bangladesh in collaboration with community leaders. Indigenous women (15–49 years) within 36 months of delivery were surveyed about attending ANC services for their last delivery. Factors associated with attendance were determined using multivariable logistic regression; results are presented as odds ratio (OR) and 95% confidence intervals (CI).

**Results:** Of 438 Indigenous women (220 Chakma, 100 Marma and 118 Tripura) who participated (99% response rate), 75% were aged 15–29 years. A total of 232 (53%) reported attending ANC services (54% for Chakma, 66% Marma, 42% Tripura;  $p=0.002$ ). Independent factors associated with attending were knowledge about private ANC services (OR 10.5, 95%CI 2.6, 41), higher income (OR 3.2, 95%CI 1.6–6.7) and higher education (OR 2.1, 95%CI 1.2–3.6). Ethnicity, occupation, media, and number of pregnancies were not independently associated with attendance.

**Conclusion:** Antenatal care service attendance for Indigenous women may be improved through better education and raising awareness of local services. Qualitative interviews have been undertaken to explore cultural factors that may improve attendance at antenatal care services.

## Patterns of electrocardiographic abnormalities and their determinants from a rural Bangladeshi population

**Authors:** Dr Kaniz Fatema<sup>1,2,3,4,5</sup>, Professor Liaquat Ali<sup>5</sup>

**Affiliations:** <sup>1</sup>*Centre For Health Equity Training, Research & Evaluation (chetre), Sydney, Australia*, <sup>2</sup>*Part of the UNSW Sydney Research Centre for Primary Health Care & Equity, Sydney, Australia*, <sup>3</sup>*A Unit of Population Health, South Western Sydney Local Health District, NSW Health, Sydney, Australia*, <sup>4</sup>*A member of the Ingham Institute, Sydney, Australia*, <sup>5</sup>*Bangladesh University of Health Sciences (BUHS), Darus Salam, Mirpur, Bangladesh*

### Abstract:

Objective data regarding the prevalence of Coronary Heart Diseases (CHDs), from any rural Bangladeshi population are not yet available and it is difficult to be generated due to obvious technical reasons. An ECG based study was conducted to estimate the prevalence of CHDs as well as to explore the patterns and determinants of ECG abnormalities in such a population.

The study population consisted of 1170 adults, from a remote rural area of north-western Bangladesh, who were categorized as 'High Risk' by a Questionnaire-based WHO CVD-RISK Management Package during the screening of a cohort consisting of 66701 subjects aged 31–74 years. ECG was done by trained RA and it was interpreted by qualified physicians. Data were analysed by univariate as well as multivariate statistics.

Following standard ECG criteria overall prevalence of CHDs was found to be 3.93% ( $n=46$ ) among high risk participants. Inferior ischemia was the most common (39.13%) abnormality followed by anterior ischemia (26.09%) and old anterior MI (17.39%). On univariate analysis, employment status, SBP, Pre-HTN, HTN, LDL, TG, BMI, and WC were found to be significantly associated with CHDs; on multivariate, all of those variables ( $p<0.001$ ) were found to be the major determinants of overall ECG abnormalities.

The prevalence of ECG diagnosed CHDs is around 4% among high risk population even in a rural Bangladeshi population, diseases in this population are mainly caused by inferior ischemia, anterior ischemia and anterior MI. The present data also indicate that employment status, SBP, and LDL are the major determinants of overall CHDs.

## 1D Rapid Fire - Aboriginal and Torres Strait Islander Health

Kuranda Ballroom, 1:30pm - 2:30pm

### Driving clinical improvement through leadership in statewide clinical guideline development

**Authors:** Ms Emily Holmes<sup>1</sup>, Ms Jacinta Lee<sup>1</sup>, Ms Stephanie Sutherns<sup>1</sup>, Dr Brent Knack<sup>1</sup>, Ms Cara Cox<sup>1</sup>, Associate Professor Rebecca Kimble<sup>1,2,3</sup>

**Affiliations:** <sup>1</sup>Queensland Clinical Guidelines, Brisbane, Australia, <sup>2</sup>Department of Health, Brisbane, Australia, <sup>3</sup>Queensland Health, Brisbane, Australia

#### Abstract:

**Context:** There have been six deaths in Australia from congenital syphilis since 2011, all occurring in North Queensland (NQ). Outbreak cases of syphilis totalled 1066 in NQ in January 2018. In 2012 notifications for infectious syphilis in Aboriginal and Torres Strait Islander people occurred at five times the rate of non-Indigenous people in Australia. The Queensland Sexual Health Strategy 2016-2021 identified the need for a coordinated approach to the management of syphilis in pregnancy.

**Process:** In late 2017, Queensland Clinical Guidelines in collaboration with the Communicable Diseases Branch and the Queensland Syphilis Surveillance Service began developing a statewide clinical guideline on syphilis in pregnancy.

**Analysis:** The ability of a statewide clinical guideline to effect change lies not only in clinician adherence to guideline recommendations, but also the strength of the development process to:

- Engage clinicians and consumers and other stakeholders, including Aboriginal and Torres Strait Islander people
- Raise awareness of the impact of syphilis through education, consultation and feedback
- Identify clinical champions to promote and drive change
- Identify problem areas in service delivery
- Promote the importance of testing, contact tracing and follow-up
- Reduce unnecessary variation in clinical practice

**Outcomes:** Developing and implementing of the statewide guideline is expected to drive improvements in clinician understanding, identification and management of syphilis in pregnancy. A demonstrable decrease in the incidence of congenital syphilis is a realistic anticipated outcome.

### Establishing a research agenda at Wuchopperen

**Authors:** Ms Anita Seinen<sup>1</sup>, Dr Jacki Mein<sup>1</sup>, Ms Dania Ahwang<sup>1</sup>

**Affiliations:** <sup>1</sup>Wuchopperen Health Service, Manooora, Australia

#### Abstract:

**Context:** Wuchopperen Health Service Ltd, an Aboriginal Community Controlled Health Service in Cairns, provides services to approximately 55% of the area's Aboriginal and Torres Strait Islander residents. The organisation is frequently approached for in-kind research support including staff time, data and other resources. Wuchopperen supports and benefits from research, however, our capacity to support such activities is finite and research priorities were established that are important to the community and aim to reduce health disparities.

**Process:** Wuchopperen reviewed data including burden of disease, service use and hospitalisations for Aboriginal and Torres Strait Islander residents in the area in order to develop draft priority areas. Information from surveys and focus groups with staff, clients and Elders in the community was used to better understand the community's perspective on research and health priorities.

**Analysis:** Quantitative and thematic analysis of data led to recommended priority areas for the Executive and Board to consider and refine.

**Outcomes:** The research priorities are not an exclusive list; all research applications are assessed on merit. However, we encourage research in areas important to the Aboriginal and Torres Strait Islander community and will make the biggest impact in reducing health disparities by sharing research priorities we hope to support a proactive process including partnerships and the development and nurturing of our own internal researchers.

#### Learning objectives:

1. Identification of health disparities for Aboriginal and Torres Strait Islander residents in Cairns.
2. Importance of community input into prioritisation of research.
3. Development and maturation of research at Wuchopperen

## Indigenous access to immunization services in Cairns -an urban myth?

**Authors:** Mrs Juliet Esmonde<sup>1</sup>, Ms Rominy Balodis

**Affiliations:** <sup>1</sup>*Cairns Public Health Unit, Cairns, Australia*

### Abstract:

**Background:** Access to primary health care in rural and remote areas has long been recognised as an issue for indigenous populations. Yet immunisations in the far north remote communities are at an enviable level. This figure is not replicated in the urban Cairns region as indigenous immunisation rates are often well below national benchmarks. Unfortunately, In January of this year a young indigenous resident of Cairns died of Diphtheria.

**Body:** This presentation will look at the contemporary challenges faced by indigenous people accessing immunisation services in an urbanised setting. In order to identify and address these local issues the Connecting Our Mob (COM) project was conceived, and funding for implementation was successfully secured from the Department of Health Immunisation Services.

The COM Project aims at engaging local Aboriginal Medical Services, General Practices and community health centres, to identify and articulate barriers to vaccination services, and collate new and innovative ideas to improve access to the immunisation programme.

**Summary:** Indigenous immunisation rates in urban Cairns are well below National Benchmarks, leading to vaccine preventable diseases still contributing to local mortality and morbidity. The COM project aims at addressing barriers to vaccination services to increase timely participation of Indigenous people in the National Immunisation Program.

## Exploring pathways to mental healthcare for urban Aboriginal children and adolescents

**Authors:** Ms Janice Nixon<sup>1</sup>, Ms Deanna Kalucy<sup>1</sup>, Ms Simone Sherriff<sup>1</sup>, Mr Peter Fernando<sup>1</sup>, Professor Sandra Eades<sup>2</sup>, Professor Catherine D'Este<sup>3</sup>, Ms Jennifer McMellon<sup>4</sup>, Mr Michael Parvizian<sup>5</sup>, Dr Anna Williamson<sup>1</sup>

**Background**

**Affiliations:** <sup>1</sup>*Sax Institute, Ultimo, Australia*, <sup>2</sup>*University of Melbourne, Melbourne, Australia*, <sup>3</sup>*Australian National University, Canberra, Australia*, <sup>4</sup>*Riverina Medical and Dental Aboriginal Corporation, Wagga Wagga, Australia*, <sup>5</sup>*McMaster University, Hamilton, Canada*

### Abstract:

Social and emotional wellbeing problems are the chief health issue experienced by young Australians. The Study of Environment on Aboriginal Resilience and Child Health (SEARCH) showed that 1/3 of urban Aboriginal children were at high risk of emotional or behavioural problems. Aboriginal Community Controlled Health Services (ACCHS) staff have extensive knowledge about 'what works' in their communities.

**Method:** An interview team (including one Aboriginal researcher) conducted semi-structured, qualitative interviews with 21 ACCHS staff (GPs, nurses, Aboriginal health workers) at two ACCHSs in urban NSW who participate in SEARCH. Interviews were transcribed and analysed thematically. The interviews aimed to explore:

1. The availability and suitability of training, screening tools and guidelines to assist in their work around child and adolescent mental health;
2. How children and adolescents with mental health concerns are managed, including identification of barriers and facilitators to ideal pathways to mental healthcare being followed.

**Results:** Participants described a lack of screening tools and guidelines and a desire for more training in providing mental healthcare for Aboriginal children and adolescents.

Participants saw Aboriginal Health Workers, whole family focus, flexibility and proactivity, availability of specialists, and consistent, coordinated care as key elements of successful mental healthcare provision.

**Conclusions:** Results suggest that training, tools and guidelines are needed and highlight the key role of Aboriginal Health Workers. Ongoing knowledge exchange ensures that results are fed back to ACCHS partners and local service providers. Findings from this work have been adopted by the Local Health Districts where the ACCHSs are based.



### Addressing Dementia: A Contributing Initiative from the Circular Head Aboriginal Community

**Authors:** Dr Lynette Goldberg<sup>1</sup>, Ms Dianne Baldock<sup>2</sup>, Dr Terry Cox<sup>1</sup>, Dr Ha Hoang<sup>1</sup>

**Affiliations:** <sup>1</sup>University of Tasmania, Hobart, Australia, <sup>2</sup>Circular Head Aboriginal Corporation, Smithton, Australia

#### Abstract:

**Background:** Australia's Indigenous peoples are at greater risk than non-Indigenous Australians for chronic diseases that increase susceptibility to dementia. This risk is compounded by the consequences of repeated head injury, depression, physical inactivity, smoking, substance abuse, limited education, childhood stress, and loss of social and cultural connectivity.<sup>1</sup> The Circular Head Aboriginal community has initiated a partnership with university investigators to identify the community's understandings of dementia and reduce dementia risk. This paper reports on Stage 1 of this partnership.

**Methods:** 50 community members (38 women, 12 men), aged 22-85 years, met in a series of yarning sessions to complete the Dementia Knowledge Assessment Scale (DKAS) and share their experiences about dementia care. Community leaders reviewed the DKAS and advised against changing the wording of items for this initial study. Participants completed it in communal sessions where they were able to ask for clarification of terms as needed.

**Results:** Of most concern was participants' lack of understanding of risk factors for dementia that can be modified (high blood pressure, blood vessel disease, not maintaining a healthy lifestyle, obesity, and diabetes) and the inter-relationship of these factors.

**Conclusion:** This community-led public health initiative provided data for a successful Department of Health/Dementia and Aged Care Services grant, currently underway, to increase knowledge about dementia, reduce dementia risk, and increase capacity to provide care.

**Reference:** Radford K, Delbaere K, Draper B, et al. Childhood stress and adversity is associated with late-life dementia in Aboriginal Australians. *Am J Geriatr Psychiatry*. 2017; 25:1097-1106. doi: 10.1016/j.jagp.2017.05.008

### Eliminating Crusted Scabies in Remote NT Communities

**Authors:** Ms Michelle Dowden<sup>1</sup>, Ms Meg Scolyer<sup>1</sup>, Ms Irene OMeara<sup>1</sup>, Ms Hannah Woerle<sup>1</sup>

**Affiliations:** <sup>1</sup>One Disease, Darwin, Australia

#### Abstract:

**Context:** Aboriginal communities in the Northern Territory, Australia, have some of the highest reported rates of scabies in the world. Secondary skin infections associated with scabies can lead to ongoing heart and kidney complications.

In 2014, scabies was added to the World Health Organisation's list of Neglected Tropical Diseases (NTDs); and in 2017, the scabies classification was elevated from Category B to Category A in the NTD profile. Scabies is the only WHO Category A NTD that does not yet have a road-map for Elimination.

**Process:** To date, the not-for-profit One Disease is the only organisation with an informed, planned approach for addressing Crusted Scabies in the Northern Territory; and is leading the way in developing a framework for Elimination. One Disease aims to Eliminate Crusted Scabies from the NT by 2019, and across Australia by 2022.

**Analysis:** Preliminary work in readiness for Elimination of Crusted Scabies has seen One Disease focus on two key aims: Improve detection and diagnosis of Crusted Scabies; and prevent recurrence of Crusted Scabies episodes requiring hospital.

Utilising a quality improvement framework, One Disease alongside local health services, is reshaping health systems, to better facilitate coordinated care for people with Crusted Scabies. One Disease are enabling systems change at multiple levels – family, community health centre, and hospital.

**Outcomes:** Providing leadership for improvements in detection, diagnosis, treatment, and management of Crusted Scabies, has seen a more coordinated approach for controlling Crusted Scabies – the first step in Elimination of this debilitating, yet entirely preventable disease.

### Collaboration to improve the resilience of Aboriginal and Torres Strait Islander boarders

**Authors:** Ms Tessa Benveniste<sup>1</sup>, Dr Roxanne Bainbridge<sup>1</sup>, Dr Janya McCalman<sup>1</sup>, Mr Richard Stewart<sup>2</sup>, Ms Katrina Rutherford<sup>1</sup>, Ms Amelia Britton<sup>1</sup>

**Affiliations:** <sup>1</sup>Cquiversity, Cairns, Australia, <sup>2</sup>Transition Support Services, Education Queensland, Cairns, Australia

#### Abstract:

**Background:** Over 500 Aboriginal and Torres Strait Islander Australian students from remote communities in Queensland are required to transition from home to boarding schools. For students to maintain their wellbeing, these transitions require navigation of new systems, cultures, challenges and resources, and the capacity of schools to support these processes. A collaboration between Education Queensland's Transition Support Service, CQ University and boarding schools, this study aims to measure and develop strategies for building and maintaining resilience for students during this transition.

**Methods:** We report quantitative and qualitative data from students in the 2nd phase of a 5-year intervention study. An interrupted time series design is being applied to evaluate levels of change in students' resilience and wellbeing. Structured questionnaires were collaboratively developed, with questions adapted from the Child and Youth Resilience Measure (CYRM-28), and the Kessler Psychological Distress Scale (K5). Surveys were completed by 240 students from 17 boarding schools, 2 primary schools and re-engaging students from one remote community. As well, yarnning circles were held, with students asked to discuss the ways they have maintained their wellbeing, despite the challenges of transitions.

**Results:** Pilot data found that most primary students reported high levels of resilience. A third of primary students reported normal - high levels of psychological wellbeing. Secondary students attending boarding school a reported reduction in resilience measures and psychosocial wellbeing.

**Conclusion:** The findings are informing intervention strategies to enhance student resilience and wellbeing.

### **B.strong – targeting multiple behavioural-risks for Aboriginal and Torres Strait Islander clients**

**Authors:** Dr Frances Cunningham<sup>1</sup>, Dr Majella Murphy<sup>1</sup>, Mrs Grace Ward<sup>1</sup>, Mr Royden Fagan<sup>1</sup>, Dr Simone Nalatu<sup>2</sup>

**Affiliations:** <sup>1</sup>*Menzies School of Health Research, Spring Hill, Australia*, <sup>2</sup>*Queensland Health, Brisbane, Australia*

#### **Abstract:**

**Context:** B.strong (the Queensland Health Aboriginal and Torres Strait Islander Brief Intervention Training Program) is an evidence-based brief intervention training program for Aboriginal and Torres Strait Islander health practitioners/health workers, addressing smoking cessation, nutrition and physical activity. Menzies School of Health Research is implementing B.strong to tackle multiple unhealthy risks through brief intervention training across Queensland from 2017-2019. B.strong is based on current Australian guidelines, and is being delivered across all Hospital and Health Service areas for government and non-government Indigenous primary health care services. B.strong is training over 1,100 Queensland-based Aboriginal and Torres Strait Islander health workers and other health and community workers. Monitoring and evaluation are key program components.

**Description of workshop:** The workshop will showcase for participants the design of the B. Strong Program, its engagement with services, its delivery in Queensland, and will present early evaluation findings. It will demonstrate how to address multiple lifestyle risk factors through delivery of brief interventions as part of the primary health care client pathway, or opportunistically at every client contact. Facilitators will help participants practice how to do brief interventions in small groups.

**Outcomes:** The workshop will introduce policy-makers, managers and practitioners to the innovative, culturally appropriate B.strong program. Managers will learn how to support their staff in taking up B.strong training and to implement it effectively in their health service. It will introduce the program to practitioners, to support their take-up of B.strong training to help them work with Indigenous clients to improve multiple lifestyle behaviours.

### **Reflections on better clinical service at Wuchopperen**

**Authors:** Ms Anita Seinen<sup>1</sup>

**Affiliations:** <sup>1</sup>*Wuchopperen Health Service, Manoora, Australia*

#### **Abstract:**

**Context:** A review of Social and Emotional Wellbeing Services at Wuchopperen in 2014 identified that more than half of the clients accessing these services had not had a physical health check in the preceding 2 years. Although having a health check at Wuchopperen was not a requirement to access SEWB services, it demonstrated that improvements could be made in the integration of services to deliver holistic care to those accessing the service. In 2016 Wuchopperen restructured services to deliver integrated and holistic care.

**Process:** Service use data for clients accessing Wuchopperen's social and emotional wellbeing services in 2014 and 2018 was analysed in order to examine differences in number and type of services being accessed. Current Wuchopperen clients were invited to participate in a service evaluation interview and those who consented to participate also gave permission for their clinical health record to be audited and analysed for correlation.

**Analysis:** Service use data pre and post restructure was analysed as an internal audit. Correlations between self-identified health concerns and the chart audit were undertaken as part of a larger review of the service restructure.

**Outcomes:** The outcomes of this first phase of analysis showed a discrepancy between self-identification of anxiety and depression compared with diagnosed conditions for the same patients in the charts, and suggested benefits for enhanced screening of social and emotional wellbeing.

#### **Learning objectives:**

1. Holistic team-based health service delivery is important.
2. Client feedback improves care.
3. Reviewing service delivery change helps enable reflection and improvement of services.

## 2A Workshop - Part 1

Kuranda Ballroom, 3:00pm - 4:30pm

### Working with councils to promote community health

**Authors:** Dr Fiona Haign<sup>1,2,3</sup>, Jinhee Kim<sup>1,2,3</sup>, Karla Jaques<sup>1,2,3</sup>, Alana Crimeen<sup>1,2,3</sup>, Maria Beer<sup>4</sup>, Dr Sigg Zapart<sup>1,2,3</sup>, Andrew Reid<sup>1,2,3</sup>

**Affiliations:** <sup>1</sup>Centre For Health Equity Training, Research and Evaluation, part of the UNSW Centre for Primary Health Care & Equity, UNSW Sydney, Liverpool, Australia, <sup>2</sup>A unit of Population Health, South Western Sydney Local Health Districts, NSW Health, Sydney, Australia, <sup>3</sup>A Member of the Ingham Institute, Sydney, Australia, <sup>4</sup>Health People and Places Unit, Population Health, South Western Sydney Local Health Districts, NSW Health, Sydney, Australia

#### Abstract:

**Context:** The Centre for Health Equity Training, Research and Evaluation (CHETRE) provides leadership and expertise in our local community to “co-create intelligence for better health”. Our diverse involvement with councils in South West Sydney includes working in agency partnerships, regional and developmental planning, place-based interventions and community capacity building. In this workshop we want to work with other public health practitioners who currently, or would like to, work to build health and health equity with council partners.

**The Workshop:** The workshop consists of three parts. Firstly, we will present an introduction to key guidelines and strategies for working with other sectors and their applications. We will then demonstrate real world applications of intersectoral action using case studies of CHETRE’s work including: Integrating health into land use planning; our locational disadvantage work including place-based interventions; and health impact assessments. Finally, we will facilitate an interactive session with participants in which they can share their challenges and successes when working with councils and other non-health sector partners. Workshop learning objectives are:

- 1) Identify important council contextual factors including barriers, facilitators, and opportunities to work with councils for health
- 2) Awareness of available resources to support intersectoral action
- 3) Understand techniques to build supportive environments for change
- 4) Improve readiness for working with councils

**Outcomes:** Participants will gain new awareness of resources, strategies for engaging with councils, problem solving techniques, and an increased professional network. In addition, top-tips for working with councils will be developed during the workshop for dissemination.

## 2B Workshop – Part 1

Tully 2 & 3, 3:00pm - 4:30pm

### Equipping public health nutritionists with cross-disciplinary skills for sustainable food system reform

**Authors:** Liza Barbour<sup>1</sup>, Sarah Burkhart<sup>2</sup>, Sandra Murray<sup>3</sup>, Judith Maher<sup>2</sup>, Sonia Nuttman<sup>4</sup>, Evangeline Mantzioris<sup>5</sup>

**Affiliations:** <sup>1</sup>Monash University, Notting Hill, Australia, <sup>2</sup>University of the Sunshine Coast, <sup>3</sup>University of Tasmania, <sup>4</sup>Deakin University, <sup>5</sup>University of South Australia,

#### Abstract:

**Context:** Our natural environment needs to produce enough food for a growing population. As these finite resources diminish, there is an urgency to strengthen action towards more sustainable food systems. Public health nutritionists (PHN) form part of the inter-disciplinary workforce required to achieve this, and are well-placed to take a leadership role. International momentum in this area has recently transferred to Australia, with more tertiary education opportunities arising for PHN students. In order to strengthen the PHN workforce in this area, training must inspire and equip nutrition students and practitioners to collaborate across disciplines.

**Process:** The proposed workshop will open with recent research results to describe the existing Australian education landscape for tertiary nutrition students to learn about sustainable food systems and present student data on familiarity and understanding of this topic. Facilitated activities will identify key competencies required by PHN practitioners to lead sustainable food system transformation by critically appraising existing competency standards and identify opportunities to formalise cross-disciplinary collaboration.

**Analysis:** Discussions from this workshop will be recorded (pending ethics approval) and thematically analysed to inform tertiary education offerings and PHN workforce development strategies.

Learning Outcomes:

1. Describe existing higher education opportunities for PHN students to build competence in sustainable food system reform
2. Explore the existing competency standards (domestic, international and inter-disciplinary) required to practice in this area and identify gaps within Australian competencies
3. Identify opportunities to integrate cross-disciplinary expertise into PHN training for students and practitioners to develop competence in sustainable food system reform.

## 2C Workshop - Part 1

Tully 1, 3:00pm - 4:30pm

### Complementary medicine and advertising reform: Policy challenges, successes and failures

**Authors:** Dr Ken Harvey<sup>1</sup>, Dr Jon Wardle<sup>2</sup>, Ms Alanna Rottler<sup>1</sup>, Mr Mal Vickers<sup>1</sup>

**Affiliations:** <sup>1</sup>Monash University, Melbourne, Australia, <sup>2</sup>University of Technology, Sydney, Australia

**Abstract:**

Context: There are currently over 16,700 complementary medicines listed on the Australian Register of Therapeutic Goods, used by around 70% of Australians. Sales reached \$4.7 billion in 2016. However, post-marketing reviews by the Therapeutic Goods Administration (TGA) in 2015-6 and 2016-17 revealed that 80% of around 400 products investigated had compliance problems, mainly because they lacked evidence to support the claims made.

Process: In 2016, the Government accepted most of the recommendations designed to improved compliance and strengthen consumer protection made by the Review of Medicines and Medical Devices Regulation. The TGA then held consultations on implementing the Review's broad-brush recommendations. Earlier this year, following considerable controversy, the Therapeutic Goods Amendment (2017 Measures No. 1) Bill was passed after the Government accepted one of several amendments put to the Senate.

Analysis: The implementation of the Bill continued to be contested by stakeholders, especially with respect to a list of permitted indications, a new Therapeutic Goods Advertising Code and a new complaint system taken over by the TGA. The disallowance process for legislative instruments was invoked for the Therapeutic Goods (Permissible Indications) Determination No.1 of 2018. The new measures commenced operation on 1 July 2018.

Outcome and learning objectives: This saga provides a nice case study of contested policy; the challenges faced, success and failure. Participants in this workshop will identify the stakeholders involved and their competing agendas; analyse strategies used to influence policy and evaluate why some policy objectives succeeded while others failed.

## Thursday 27 September 2018

### 3A Public Health and Lifestyle

Mossman Ballroom, 11:00am – 12:30pm

#### Exercise for preventing falls in older people living in the community

**Authors:** Prof Cathie Sherrington<sup>1</sup>, Dr Nicola Fairhall<sup>1</sup>, Ms Geraldine Wallbank<sup>1</sup>, **A/Prof Anne Tiedemann<sup>1</sup>**

**Affiliations:** <sup>1</sup>University of Sydney, Missenden Road, Australia

#### **Abstract:**

**Background:** One third of community-dwelling people over 65 years of age fall each year. We aimed to assess the effects of exercise for preventing falls.

**Methods:** This Cochrane review included randomised controlled trials evaluating exercise as a single intervention in people aged 60+ years living in the community.

**Results:** This review includes 98 randomised trials (19,774 participants) from 24 countries. The rate of falls (primary outcome) was reduced compared to control by: 26% from balance and functional exercises (Rate Ratio 0.74, 95% CI 0.68 to 0.80; participants = 6971; studies = 33,  $I^2 = 21\%$ , high certainty of evidence); 19% from Tai Chi (Rate Ratio 0.81, 95% CI 0.67 to 0.99; participants = 2655; studies = 7,  $I^2 = 74\%$ , high certainty of evidence); and by 38% from programs that involved multiple exercise categories (most commonly balance and functional exercises plus resistance exercises, Rate Ratio 0.62, 95% CI 0.43 to 0.89; participants = 1132; studies = 9,  $I^2 = 70\%$ , moderate certainty of evidence). There was no evidence of fall prevention effects from programs that only involved resistance exercises (Rate Ratio 0.92, 95% CI 0.57 to 1.49; participants = 282; studies = 4,  $I^2 = 31\%$ , moderate certainty of evidence), dance (Rate Ratio 1.34, 95% CI 0.98 to 1.83; participants = 522; studies = 1, low certainty of evidence) or walking (Rate Ratio 1.14, 95% CI 0.66 to 1.97; participants = 441; studies = 2,  $I^2 = 67\%$ , moderate certainty of evidence).

**Conclusion:** Falls can be prevented by well-designed exercise programs.

#### Healthier Workplace WA –learnings from a comprehensive state-wide workplace health promotion program.

**Presenter:** Simone Pettigrew

**Authors:** Ms Emily Davey<sup>1</sup>, Mr Trevor Shilton<sup>1</sup>, Ms Natalie Quinn<sup>1</sup>, Ms Carly Martin<sup>2</sup>, Ms Melissa Ledger<sup>2</sup>, Emily Brown

**Affiliations:** <sup>1</sup>Heart Foundation WA, Subiaco, Australia, <sup>2</sup>Cancer Council WA, Subiaco, Australia

#### **Abstract:**

**Background:** The workplace can directly impact health and wellbeing. With the Australian workforce spending 60% of their day at work, the workplace is a priority setting for health promotion. Healthier Workplace WA (HWWA) is a six year workplace health promotion program, funded by the Department of Health Western Australia. It provides free services and support to develop skills and capacity of Western Australian workplaces to create supportive environments and policies that promote healthy lifestyle behaviours relating to smoking, nutrition, alcohol and physical activity (SNAP).

**Methods:** HWWA offers a number of tools, resources, training, face-to-face advisory and contemporary initiatives to workplaces, including a small grants scheme and recognition program. This paper will present program components, recent process and impact evaluation results, and will reflect on key learnings.

#### **Results:**

1. Survey results show a positive relationship between the number of program services accessed by workplaces and the probability that workplaces will initiate healthy changes.
2. Small grants schemes are a good engagement strategy and have increased the capacity of small businesses to implement sustainable healthy initiatives.
3. Preliminary survey results indicate:
  - a. about half of the survey respondents reported their workplace made changes to support healthy lifestyle behaviours
  - b. about 1/3 implemented a healthy lifestyle policy
  - c. over half made changes to their workplace environment.

**Conclusion:** HWWA's multi-faceted approach has enabled the engagement of workplaces from different industries and sizes across WA. Evaluation results highlight the program's success in increasing workplace capacity to implement strategies to support employee health and wellbeing.

## Causal pathways for mental health effects of unaffordable housing: A mediation analysis

**Authors:** Dr Ankur Singh<sup>1</sup>, Ms Zoe Aitken<sup>1</sup>, Associate Professor Emma Baker<sup>2</sup>, Associate Professor Rebecca Bentley<sup>1,3</sup>

**Affiliations:** <sup>1</sup>Centre for Health Equity, Melbourne School of Population and Global Health, The University of Melbourne, Melbourne, Australia, <sup>2</sup>School of Architecture and Built Environment, The University of Adelaide, Adelaide, Australia, <sup>3</sup>Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, The University of Melbourne, Melbourne, Australia

### Abstract:

**Background:** There is evidence that unaffordable housing leads to poor mental health but causal pathways are unclear. We test financial hardship and social support as mediators in the causal association between housing costs becoming unaffordable and mental health decline.

**Methods:** Data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey (2013-2015) was analysed. We identified households where housing costs changed from affordable to unaffordable (using the 30/40 rule). Financial hardship, social support and mental health (using the Mental Health Inventory (MHI)) were measured in 2015. Baseline covariates included age, sex, household income, financial hardship, social support, marital status and employment status. Sequential causal mediation analysis was applied to decompose the total effect of housing unaffordability on mental health into a 'natural direct effect (NDE)' (the effect operating through pathways other than the mediators of interest), and a 'natural indirect effect (NIE)' (the effect operating through the mediators). Bootstrapping with 1000 replications was used to calculate 95% confidence intervals (CIs).

**Results:** Unaffordable housing was causally associated with a change of a mean score of -1.3 (95% CI: -2.3, -0.3) on MHI scale. Financial hardship was estimated to account for 55% of the total effect (NIE: -0.7, 95%CI: -1.2, -0.2) and collectively financial hardship and social support explained 59.7% of the total effect (NIE: -0.8, 95%CI: -1.4, -0.1).

**Conclusion:** Although, housing becoming unaffordable has a small negative effect on mental health score, a large proportion of this effect is mediated through increased financial hardship and reduced social support.

## "Teabacco": Smoking nicotine-infused tea as an unintended consequence of prison smoke-free policies

**Authors:** Ms Cheneal Puljevic<sup>1,2</sup>, Professor Stuart Kinner<sup>1,3</sup>, Dr Dominique de Andrade<sup>1,4</sup>, Professor Ross Coomber<sup>1,5</sup>

**Affiliations:** <sup>1</sup>Griffith Criminology Institute, Griffith University, Brisbane, Australia, <sup>2</sup>School of Public Health and Institute for Social Science Research, The University of Queensland, Brisbane, Australia, <sup>3</sup>Centre for Adolescent Health, Murdoch Children's Research Institute, Melbourne, Australia, <sup>4</sup>Lives Lived Well Research Group, School of Psychology, University of Queensland, Brisbane, Australia, <sup>5</sup>Department of Sociology, Social Policy and Criminology, University of Liverpool, Liverpool, United Kingdom

### Abstract:

**Background:** Following the introduction of smoke-free policies in prisons, there have been anecdotal reports of prisoners creating substitute cigarettes by mixing nicotine patches or lozenges with tea leaves ("teabacco"). Among a sample of people recently released from smoke-free prisons in Queensland, Australia, this study aimed to explore the perceived popularity of teabacco use and the motivations for its use, and to document any potential related health hazards through forensic analyses of its chemical constituents.

**Method:** This study used a mixed-methods design. Eighty-two former prisoners completed surveys at parole offices, and 21 teabacco smokers took part in follow-up, qualitative interviews to explore themes identified in survey responses in greater depth. Forensic analyses were conducted on samples of teabacco made from nicotine lozenges.

**Results:** The majority of survey participants (57%) reported smoking teabacco while incarcerated, with 37% smoking teabacco frequently (> once per week). Nearly half of participants (47%) smoked teabacco made from nicotine lozenges. Commonly reported motivations for teabacco use included craving tobacco, wanting to experience a drug high, and boredom. Participants described nose bleeds, vomiting, and headaches resulting from teabacco use, and remarked on the perceived inevitability of prisoners finding substitutes for tobacco. Chemical analyses identified several potentially toxic compounds but found that smoking this form of teabacco is less harmful than smoking teabacco made from nicotine patches, or smoking traditional tobacco cigarettes.

**Conclusion:** Correctional smoking bans are an important public health initiative but should be complemented with demand and harm reduction measures that are cognisant of the risk environment.

## Alcohol culture: inspiring change and measuring impact

**Authors:** Genevieve Hargrave<sup>1</sup>, Emma Saleeba<sup>1</sup>, Associate Professor Virginia Lewis<sup>2</sup>, Dr Michael Livingston<sup>2</sup>

**Affiliations:** <sup>1</sup>Victorian Health Promotion Foundation, Carlton, Australia, <sup>2</sup>LaTrobe University, Bundoora, Australia

### Abstract:

The influence of cultural factors on alcohol consumption and harm is widely recognised, but poorly defined and implemented in alcohol harm reduction research and programs. In 2016, VicHealth collaboratively developed the Alcohol Cultures Framework which defines 'alcohol cultures' as the way people drink, including the formal rules, social norms, attitudes and beliefs around what is and what is not socially acceptable for a group of people before, during and after drinking. The Framework provides a lens for designing and implementing projects to reduce alcohol-related harm by identifying four frames for intervention: societal, setting, subculture and family-individual and considers factors that influence the way people drink.

VicHealth used cultural research insights and others to deliver the Alcohol Culture Change Initiative funding rounds which sought proposals for co-designed intervention projects targeting subpopulations in Victoria. Current projects work with tertiary residential students, young people at risk of disengagement from education or employment, lesbian, gay and bisexual women, young adults who frequent inner-city entertainment precincts and others. Nine intervention projects and the overarching evaluation share a pool of \$3 million. The evaluation includes a world-first common suite of 11 indicators to measure change in drinking cultures, contributing to the impact and outcome assessment of all nine projects.

We describe the 11 indicators and early learnings from nine alcohol culture change projects.

Our early experiences suggest this is a promising way forward to create and measure coordinated action for alcohol harm reduction through applying an alcohol culture change framework.

## Preventing Harm from Gambling: Building Evidence on an Emerging Public Health Issue

**Authors:** MS Niamh O'Brien<sup>1</sup>, Mr Manu Peeters<sup>1</sup>, Mr David Hunt<sup>1</sup>

**Affiliations:** <sup>1</sup>Victorian Responsible Gambling Foundation, North Melbourne, Australia

### Abstract:

Research commissioned by the Victorian Responsible Gambling Foundation (the Foundation) has shown that low and moderate risk gambling accounts for 85% of the total burden of gambling harm in Victoria (Browne et al. 2016). Through adopting a public health approach, the Foundation provides a comprehensive range of initiatives that seek to intervene earlier where harms from gambling may be prevented.

The Foundation's Prevention Partnership Program (the Program) forms a significant function of this public health approach, and aims to help prevent and reduce gambling harm within local communities across Victoria. Since 2014, the Program has funded a wide range of community organisations to test new ideas and build evidence for effective practice in the prevention of gambling harm.

This presentation will include insights and reflections on the near four years that the Program has been operating. Beginning with an overview of the Program's strategic intent, the presentation will then outline key findings from an independent evaluation of the Program.

While the evidence is more established around best practice approaches to reducing harms from alcohol or tobacco, for instance, this presentation will offer insights into effective approaches to tackle the emerging public health issue of reducing and preventing harm from gambling. This is presented in the context of an evolving and dynamic gambling environment in Australia, where the translation of knowledge will be critical to informing and leading the way for future harm prevention initiatives.

## 3B Table Top Presentations

Tully 1, 11:00am – 12:30pm

### Public health's window for action on climate change-associated conflict

**Authors:** Dr [Devin Bowles](#)<sup>1</sup>

**Affiliations:** <sup>1</sup>University of Canberra, Bruce ACT Australia

**Abstract:**

There is high level concern in the public health community about the effects of climate change. This is marked by a growing realisation that climate change-associated conflict will be a primary driver of ill-health, with some commentators suggesting that climate change contributed to the onset of the conflict in Syria. Health effects include morbidity and mortality from fighting, and increased disease transmission due to diminished baseline health status in populations and declining health and other public infrastructure. Social sequelae of climate change-associated conflict, including mass displacement and migration, present further risks to health.

Public health professionals have a clear duty to minimise the health consequences of climate change-associated conflict. Potential intervention points vary temporally: before, during or after a conflict. This could include peace-building measures, enhancing governance and the role of civil society, increasing public health infrastructure, providing medical care and space for displaced people. This presentation will examine each of these options using several criteria: scale of the population affected, importance of health benefits, likelihood of success, co-benefits of intervention, costs of intervention. Deeper analysis suggests that relative utility of interventions could change over time, particularly as climate change intensifies, and if climate change-associated conflict becomes relatively widespread. In particular, the impartiality of healthcare and the distribution of the determinants of health is routinely compromised during times of conflict. This presentation concludes that the public health community has a narrow window of opportunity now to substantially diminish the negative health consequences of climate change-associated conflict.

### Anticipating opportunities: Preparing for a review of State Tobacco Legislation

**Authors:** [Kelly Kennington](#)<sup>1</sup>, Ms Fiona Phillips<sup>1</sup>, Mr Maurice Swanson<sup>2</sup>, Ms Noni Walker<sup>3</sup>

**Affiliations:** <sup>1</sup>Cancer Council WA, Perth, Australia, <sup>2</sup>Australian Council on Smoking and Health, Perth, Australia, <sup>3</sup>National Heart Foundation WA, Perth, Australia

**Abstract:**

**Clear context:** Non-Government agencies in Western Australia (WA) such as Cancer Council WA, Heart Foundation and Australian Council on Smoking and Health play a key role in providing recommendations to State Government to strengthen tobacco control legislation in WA. Once known for its leadership in tobacco control policy and legislation, WA has made little progress in this area in recent times. While the WA Tobacco Products Control Act 2006 (TPCA) was amended in 2009 to introduce smoking restrictions in specific places and on tobacco displays, the legislation is well overdue for a review, particularly since the Australian tobacco control landscape has changed significantly over this time.

**Process:** A review of the WA TPCA is scheduled for 2018 and provides the opportunity for Non-Government agencies to work together to present the strongest rationale and evidence for reform. A combination of WA and interstate research is being conducted to prepare for the review that involves; examining the retail environment; regular surveys with WA smokers, non-smokers and young people to demonstrate strong community support and positive attitudes towards smoke free areas and retail restrictions; and ongoing collaboration with Non-Government agencies to synthesise evidence.

**Analysis / Outcomes:** This paper will present a case-study of how public health advocates from NGOs in WA and interstate worked together to produce local evidence to support amendments in key tobacco control priority areas such as tobacco retail environment, increasing smoke free areas and licensing. It will demonstrate that working together within and across borders can impact local policy.

### Factors that influence vaccination decision-making in vaccination: a mixed methods study

**Authors:** [Dr Jon Wardle](#)<sup>1</sup>, Dr Aimee Steel<sup>1</sup>, Dr Romy Lauche<sup>1</sup>

**Affiliations:** <sup>1</sup>University of Technology Sydney, Ultimo, Australia

**Abstract:**

**Background:** Despite the unequivocal success of childhood vaccinations in prevention of serious infectious diseases there remain some community concerns around vaccination that lead to pockets of low vaccine uptake. To assess factors which support and impose barriers on vaccination an exploratory qualitative and quantitative study of decision-making on vaccination was conducted.



**Methods:** Four focus groups were conducted with 29 self-identified attachment parents in Brisbane and Sydney, Australia. A discrete choice experiment of a nationally representative sample of 1,178 Australians was conducted to examine factors that influenced vaccine decision-making

**Results:** Neither conventional nor complementary health practitioners are not a significant source of vaccination information for vaccination decision-making. Current narratives around herd immunity and risk do not appear to influence vaccine decision-making. Well-meaning attempts by health practitioners can backfire, particularly if parents view such attempts as paternalistic ('I think my journey from anti-vaccination to pro-vaccination would have been much quicker if I hadn't talked to my GP'), and some anti-vaccination messages may appear more compelling than pro-vaccination due to their 'more scientific look', emotional engagement, personalisation and calls to individual autonomy. There appear to be few causal links between 'alternative' lifestyle choices and non-vaccination, with a 'questioning approach' being the common driver for both decisions. Identical sources were seen to be both anti-vaccination and pro-vaccination by respondents, suggesting pre-conceived ideas may influence perception of vaccine information.

**Conclusions:** Factors influencing vaccination decision-making in vaccine hesitant communities are complex. Current promotional strategies may not be effective at encouraging vaccine uptake among vaccine hesitant groups

### **Small geographic area variations in the relationship between housing and health outcomes**

**Authors:** Lucy Farrell<sup>1</sup>

**Affiliations:** <sup>1</sup>Public Health Information Development Unit, Adelaide, Australia

#### **Abstract:**

Housing is an important determinant of health. There is mounting evidence to demonstrate that access to suitable and affordable housing has a significant impact on health outcomes in its own right, as well as being a driver of broader socio-economic inequalities in health. The aim of this study was to describe housing factors that may impact upon health outcomes.

Drawing on small area geographic data from the 2016 Australian Census of Population and Housing, administrative datasets (e.g., perinatal outcomes, potentially preventable hospitalisations) and ABS health and social surveys, we used multivariate analysis to examine associations between health and housing.

Results show important differences in health risk factors and outcomes across housing circumstances. An inverse relationship was observed between home ownership density and the prevalence of some health risk factors and outcomes (e.g. low birth weight, incomplete childhood immunisation, premature mortality). However, areas of high rental density were associated with better health outcomes on some measures (e.g. respiratory conditions, high cholesterol). As well, some adverse health outcomes (e.g. poor self-assessed health, diabetes) were more closely correlated with area-level mortgage stress than rental stress.

Findings at small area geographies illuminate associations between housing precarity, affordability and health, and could be instructive for decision-makers concerned with tailoring specific services in order to alleviate health inequalities.

### **Feasibility of health professionals' smoking cessation training for Aboriginal pregnancy care**

**Authors:** Associate Professor Gillian Gould<sup>1</sup>, Ms Michelle Bovill<sup>1</sup>, Dr Yael Bar-Zeev<sup>1</sup>, Ms Lauren Pollock<sup>1</sup>, Ms Gabrielle Gribben<sup>1</sup>, Associate Professor Maree Gruppetta<sup>1</sup>, ICAN QUIT in Pregnancy Pilot Group<sup>1</sup>, Professor Billie Bonevski<sup>1</sup>

**Affiliations:** <sup>1</sup>University of Newcastle, Callaghan, Australia

#### **Abstract:**

**Background:** Many health providers (HP) lack confidence in smoking cessation care (SCC) for pregnancy. Study aims: 1) explore the feasibility and acceptability of a co-designed multi-component intervention including training HPs at Aboriginal Medical Services (AMS) in pregnancy-specific SCC, and culturally-competent resources; 2) refine implementation for a full RCT.

**Methods:** The Indigenous Counselling and Nicotine (ICAN) QUIT in Pregnancy Trial provided HP webinar training, patient resources, oral Nicotine Replacement Therapy (NRT), and research facilitation. Recruitment rates of Aboriginal pregnant women and HPs were assessed. HP and manager post-trial interviews were explored thematically to determine acceptability. "Decision-making after Pilot and feasibility Trials" (ADePT) guided implementation decisions for a full RCT.

**Results:** N=22 pregnant women (47% eligible) and N=50 HP (59% eligible) were recruited from six AMS in NSW, SA and Queensland. Interview themes included: suitability of the intervention for the Aboriginal context, webinar training, and study facilitation. Feedback indicated that ICANQUIT in Pregnancy provided valuable training, excellent resources, and improved NRT access. ADePT modifications included: reducing training length and trial requirements.

**Conclusion:** ICANQUIT in Pregnancy was well-received, feasible and acceptable, in AMS in three states, with modifications recommended.

Smoking in pregnancy is a key challenge for Indigenous health. Training HP and providing resources has a high potential to improve outcomes for Aboriginal women and babies.

Our translational approach enabled an assessment of study and intervention components before conducting a larger funded SISTAQUIT trial.

Learning objectives:

1. Identify elements of a successful pilot
2. Understand implementation challenges

AMs granted permission to publicise findings.

**Connectivity of real-time video counselling versus telephone counselling for smoking cessation**

**Authors:** Ms Judith Byaruhanga<sup>1,2</sup>, Dr Flora Tzelepis<sup>1,2,3</sup>, Professor Christine Paul<sup>1,3</sup>, Professor John Wiggers<sup>1,2,3</sup>, Ms Emma Byrnes<sup>1,2</sup>

**Affiliations:** <sup>1</sup>*School of Medicine and Public Health, University of Newcastle, University Drive, Callaghan, Newcastle, Australia,* <sup>2</sup>*Hunter New England Population Health, Hunter New England Local Health District, Locked Mail Bag 10, Wallsend, Australia,* <sup>3</sup>*Hunter Medical Research Institute, Locked bag 1000, New Lambton, Australia*

**Abstract:**

**Background:** Real-time video software (e.g. Skype, FaceTime) is widely available and facilitates virtual face-to-face communication. However quitlines have not implemented real-time video counselling into routine practice. A potential barrier may be the perceived connectivity of video communication technology compared to telephone. This study aims to investigate the connectivity of video sessions compared to telephone sessions delivered to smokers in regional and remote areas.

**Methods:** Participants are from a randomised trial in which two arms offer: a) real-time video counselling or b) telephone counselling to assist smokers to quit. Depending on their allocation, participants are offered up to six video or telephone sessions. On completion of each video or telephone session, the smoking cessation advisor records the quality of that call (e.g. connectivity, audio quality, picture quality (video only)).

**Results:** To date 279 video counselling sessions and 368 telephone counselling sessions have been completed. Preliminary findings show there is adequate connectivity of the video intervention in regional and remote locations with there being no echoing noise in more than 95% of video sessions. In approximately 80% of video sessions there was no difficulty seeing and hearing participants and no loss of internet connection. In the telephone counselling condition more than 90% of telephone calls had no echoing noise, no difficulty hearing the participant and no loss of telephone line connection.

**Conclusion:** The connectivity of real-time video counselling and telephone counselling for smoking cessation appears acceptable in regional and remote areas. This may inform the practices of quitlines.

**The relations between disability and residents worry about environmental contamination**

**Authors:** Dr Irena Connon<sup>1</sup>, Dr Erica McIntyre<sup>2</sup>, Associate Professor Jason Prior<sup>1</sup>, Distinguished Professor Jon Adams<sup>2</sup>

**Affiliations:** <sup>1</sup>*Institute for Sustainable Futures, University of Technology Sydney, Broadway, Australia,* <sup>2</sup>*Faculty of Health, University Of Technology Sydney, Broadway, Australia*

**Abstract:**

**Background:** Approximately 61 million people are exposed to environmental contaminants across the globe. While the link between contamination and adverse effects on human health is increasingly recognised, it is argued that the magnitude of the health problem is inadequately addressed because it is largely invisible. This invisibility partly results from the absence of research exploring the subjective impacts of contamination on people's quality of life, particularly amongst vulnerable populations. Although worry is linked to a range of negative quality-of-life outcomes, the question of how disability affects cognitive responses to environmental contamination, such as worry, remains unaddressed.

**Methods:** A cross-sectional study of 485 adults living in 13 residential areas in Australia affected by a range of environmental contaminants. A telephone survey measured sociodemographic characteristics and resident subjective experience of worry about contamination.

**Results:** Ordinal logistic regression analysis found that those with a disability, were female, had a high income, or lived near to a contaminated site were statistically significantly more likely to worry about contamination.

**Conclusion:** People with disabilities and/or long-term chronic illnesses expressed higher levels of worry about environmental contamination compared with the general population. This may increase the risk of pathological worry and mental ill-health amongst people with disabilities. Public health information associated with contamination should therefore be specifically tailored to the needs of this group. Future research should determine how population groups that are more likely to be worried about contamination could be supported to better manage their worry to prevent the development of pathological worry and anxiety.

### 3C Rapid Fire - Global Public Health and Public Health Behaviours

Tully 2 & 3, 11:00am – 12:30pm

#### Leveraging expert elicitation for a novel Victorian food security decision support system.

**Authors:** Dr Sue Kleve<sup>1</sup>, Dr Martine J. Barons<sup>2</sup>, Assoc. Prof Claire Palermo<sup>1</sup>, Assoc. Prof Julie Brimblecombe<sup>1</sup>

**Affiliations:** <sup>1</sup>Monash University, Notting Hill, Australia, <sup>2</sup>University of Warwick, Coventry, UK

##### Abstract:

**Context:** Food insecurity, the limited or uncertain physical, economic, social access to food, is a complex public health problem with multiple determinants requiring innovative solutions. The predominate Australian response is focused on food relief through the charitable food sector, rather than policy based solutions, failing to address the known determinants of food insecurity. One difficulty for policy-makers wishing to make evidence-based decisions regarding interventions that will best support household food security is how to access high quality evidence, combine it coherently to formulate and evaluate policy options.

**Process:** Decision support systems utilising existing knowledge, data, expert judgment and modelling facilitate the informed decision making necessary for estimating and comparing the potential effectiveness of policy options. In developing a food security decision support system for Victoria it was necessary to overcome the absence of evidence to quantify elements of income, food cost and location, which impact household food insecurity.

**Analysis & Outcomes:** Structured expert elicitation is a method for quantitatively characterizing the state of knowledge about an uncertain quantity. The IDEA protocol (Investigate, Discuss, Estimate, Aggregate) is a validated method for aggregating expert judgements combining behavioural (seeking consensus) and mathematical processes. This was undertaken with identified Victorian food security experts in an elicitation designed to quantify the probability of household food security in Victoria given various combinations of location, income and food cost scenarios.

The process and outcomes of implementing this structured expert elicitation in identifying the effect on household food insecurity by combining scenarios of key determinants will be reported.

#### Ensuring protection of people and the planet for future food security

**Authors:** Ms Sonia Nuttman<sup>1</sup>, Ms Rebecca Patrick<sup>1</sup>

**Affiliations:** <sup>1</sup>Deakin University, Burwood, Australia

##### Abstract:

**Background:** Within the health promotion sector, addressing food security for at-risk groups is common. The sector generally addresses food security from a food availability and food supply framework within a social determinants lens. Although this perspective is critical for addressing the complex social and economic factors contributing to food insecurity this approach does not typically take into account the impacts of industrialised food systems on ecosystems that underpin food security.

**Methods:** A mixed methods approach was adopted for this study with 1) a national online survey (n=61) and 2) semi-structured interviews (n=16) targeting health promotion practitioners to explore opportunities for health promotion practice and education. Triangulation was adopted to develop points of convergence and corroboration of the phenomena under study.

**Results:** The findings revealed that some Australian health promotion practitioners recognised the importance of addressing food security from an environmental sustainability perspective. This was reflected by the use of principles that resonated with sustainable food systems.

**Conclusion:** Food insecurity was seen as one of many multifaceted issues in the food system that could not be addressed adequately in isolation. A set of principles that resonated with sustainable food systems and a broadening of practice was apparent where practitioners were utilising systems thinking for addressing food insecurity. These are significant developments for addressing food insecurity and point to a broadening of practice within the sector.

#### Do young Australians support a tax on sugar-sweetened beverages?

**Authors:** Mr Brendan Yanada<sup>1</sup>, Mr Tom Richardson<sup>1</sup>, Professor David Watters<sup>1</sup>, Associate Professor Douglas Stupart<sup>1</sup>, Dr Prabhat Lamichhane<sup>1</sup>, Professor Colin Bell<sup>1</sup>

**Affiliations:** <sup>1</sup>School of Medicine, Deakin University, Geelong, Australia

##### Abstract:

**Background:** Taxing sugar-sweetened beverages (SSBs) has been proposed as one intervention to address obesity in Australia. Our aim was to determine the level of support for a tax amongst young Australian adults and the potential impact on SSB consumption in this group if a tax is introduced.

**Methods:** Cross-sectional convenience survey of Australians aged 18-30 years sampled between November and December 2017 in the City of Greater Geelong, Australia.

**Results:** 1793 responses were recorded. Overall 48% support a tax on SSBs, which increased to 74% and 72% if tax revenue was allocated to subsidising fruit and vegetables or funding community exercise facilities respectively. Participants also reported reducing SSB consumption if a tax of \$0.40/100g of sugar was introduced and most would replace SSBs with water.

**Conclusions:** A large proportion of the young adults surveyed support a tax on SSBs, particularly if tax revenue is used to support healthy eating or physical activity. In addition, most indicated that they would reduce their SSB consumption, and substitute SSBs for water, if a tax was introduced.

Learning objectives for presentation:

- 1) Appreciate the acceptability of a SSB tax amongst young Australian adults
- 2) Understand associations between socio-demographic characteristics and opinions towards a SSB tax
- 3) Recognise the potential impact of a SSB tax on the consumption habits of young Australian adult.

**Count Me In: A sports participation model for social inclusion**

**Authors:** Miss Dana Young<sup>1</sup>, Dr Karen Block<sup>1</sup>, Prof Lisa Gibbs<sup>1</sup>

**Affiliations:** <sup>1</sup>Jack Brockhoff Child Health and Wellbeing Program, Centre for Health Equity, Melbourne School of Population and Global Health, The University of Melbourne, Carlton, Australia

**Abstract:**

**Context:** Culturally and linguistically diverse (CALD) migrant and refugee-background families comprise a significant proportion of the Victorian population. Evidence shows these young people are at risk of long-term marginalization with attendant poor mental health and social outcomes associated with social exclusion.

Sports participation has the potential to be a critical mediator for achieving health, wellbeing, social inclusion and to engaging meaningfully in Australian society. However, refugee and migrant youth have low participation rates in mainstream sport, despite policies and guidelines to promote inclusivity and cultural competence.

**Process:** The Count Me In program works in partnership with community organisations, local government, academics and sports clubs. It is designed to address the identified barriers to sports participation for CALD migrant and refugee-background young people such as costs, discrimination, transport and lack of knowledge of mainstream sports services. Community Support Coordinators are employed to be the conduit between families and sports clubs to address and overcome the barriers to participation and to facilitate social connections.

**Analysis:** Interviews and focus groups were conducted with sports club representatives, parents and children participating in Count Me In. Children also completed pre- and post-surveys assessing wellbeing, resilience and social connectedness.

**Outcomes:** Interviews indicated that additional efforts were needed to improve communication between clubs and families. Despite this, parents and children were positive about the program. An increase in resilience ( $p=0.047$ ) was found for young people participating in the program. A moderate positive correlation between resilience and wellbeing and an increase in social connections were also reported

**Depression is associated with poor health behaviours among women with cardiovascular disease**

**Authors:** Professor David Sibbritt<sup>1</sup>, Associate Professor Holger Cramer<sup>2</sup>, Distinguished Professor Jon Adams<sup>1</sup>, Dr. Jane Frawley<sup>1</sup>, Dr. Romy Lauche<sup>1</sup>, Professor Alex Broom<sup>3</sup>

**Affiliations:** <sup>1</sup>University Of Technology Sydney, Sydney, Australia, <sup>2</sup>Kliniken Essen-Mitte, Faculty of Medicine, University of Duisburg-Essen, Essen, Germany, <sup>3</sup>Faculty of Arts and Social Sciences, University of New South Wales, Sydney, Australia

**Abstract:**

**Background:** Depression is a common comorbidity in patients with cardiovascular conditions. This study aims to assess the influence of comorbid depression on health-promoting behaviour in Australian women with hypertension or heart disease.

**Methods:** Analysis of a sub-study of the 45 and Up Study including 1,925 Australian women who had been diagnosed with a chronic illness. Health behaviours including smoking status, alcohol consumption and physical activity were assessed. Associations of depression with health behaviours in women with hypertension or heart disease were analysed using unadjusted and adjusted (for chronic conditions and demographic measures) logistic regression models.

**Results:** A total of 666 women with hypertension and 220 women with heart disease were included in the analysis. In adjusted analyses, women with hypertension and co-morbid depression were 3.24 (95% confidence interval [CI]: 1.52, 6.88) times more likely risky or high-risk drinkers and 36% (adjusted odds ratio [AOR]=0.44; 95% CI: 0.27, 0.72) less likely highly physically active, compared to women without depression. Women with heart disease and co-morbid depression were 67% (AOR=0.33; 95% CI: 0.11, 0.93) less likely highly physically active, compared to women without depression.

**Conclusions:** This study provides the first data indicating that depression may be a barrier to health-promoting behaviour in women with hypertension or heart disease. Given that physical inactivity and risky alcohol consumption are important risk factors for aggravation of cardiologic conditions, health-promoting behaviours should be specifically targeted in the treatment of women with comorbid depression. Targeted intervention programs are needed to address specific barriers in this patient group.

### **Determinants of the dental hospitalisation of children**

**Authors:** Dr John Rogers<sup>1</sup>, Professor Clive Wright<sup>2</sup>, Professor Mike Morgan<sup>1</sup>

**Affiliations:** <sup>1</sup>University of Melbourne, Melbourne, Australia, <sup>2</sup>University of Sydney, Sydney, Australia

#### **Abstract:**

**Background:** Potentially preventable dental hospitalisations are the most common cause of all potentially preventable hospitalisations for children in Australia. They are costly for families and the community and entail some risk.

**Methodology:** As part of the Victorian Child Health and Welfare Study computer assisted telephone interview, Victorian parents were interviewed on behalf of randomly selected children under 13 years of age and asked if their child had ever received dental treatment in hospital under a general anaesthetic. Demographic and socioeconomic data were collected. Bi and multivariate Poisson analysis were undertaken to identify determinants of hospitalisation. Incidence Rate Ratios (IRRs) were calculated and 95% Confidence Intervals were set for rejection of the Null Hypothesis.

**Results:** Parents of 5,025 children were interviewed, a 75% participation rate. Bivariate analysis identified that children who had dental treatment in hospital under a general anaesthetic were more likely to have had a tooth extracted; had toothache; lived in a rural residence; had other health or behavioural needs; or were from low socioeconomic families. Multivariate analysis identified three determinants that were each independently associated with a child having a general dental anaesthetic were children who previously had: a tooth extracted (IRR 5.6); reported toothache (2.6); or lived in a rural residence (2.6). **Conclusions:** High dental needs and rural residence were the most significant determinants of the dental hospitalisation of Victoria children. Low socioeconomic status and general health or behavioural needs were also predictors.

### **Expectations of women being offered treatment for pelvic organ prolapse in Nepal**

**Authors:** Mrs Delena Caagbay<sup>1</sup>, Dr Sarah Bernays<sup>1</sup>, Associate Professor Camille Raynes-Greenow<sup>1</sup>, Associate Professor Kirsten Black<sup>1</sup>

**Affiliations:** <sup>1</sup>The University of Sydney, Sydney, Australia

#### **Abstract:**

**Context:** Pelvic organ prolapse (POP) is a common condition in Nepal for which the early stages can be effectively managed conservatively with pelvic floor muscle training (PFMT).

**Process:** This mixed methods study was conducted in Nepal from February 2016 – January 2018. Semi-structured interviews were conducted with Nepali women (n=15) and local health workers (n=88) to ascertain their knowledge and awareness of POP treatment options. The last part involved an educational intervention about PFMT for women (n=69) clinically diagnosed with a POP. The transcripts were transcribed and translated from Nepali to English and analysed thematically.

**Analysis:** Knowledge of PFMT as a conservative treatment option for POP amongst Nepali women and local health workers was low. Despite being counselled that PFMT was the recommended treatment, some resisted this option expressing a preference for surgery. The perception amongst many women seeking help for POP symptoms was that surgery offered a curative 'quick fix' solution.

**Outcome:** Even though PFMT is a low cost, non-invasive and evidence-based intervention for POP, there is an emerging trend for women to seek out surgical interventions. Prior to implementing public health interventions, it is vital to understand the community's perception of the optimum treatment and provide appropriate education to improve uptake and acceptability.

#### **Objectives:**

- Before implementing an intervention, it is essential to understand the community's expectations and identify potential barriers
- The demand for dramatic single interventions such as surgery is not a unique problem in Nepal but can also be observed in high income countries

## Estimating current hepatitis C population living in the Northern Territory in 2016

**Authors:** Ms Linda Garton<sup>1,2</sup>, Dr Emma Field<sup>2</sup>, Dr Peter Markey<sup>1</sup>

**Affiliations:** <sup>1</sup>Centre for Disease Control, Darwin, Australia, <sup>2</sup>National Centre for Epidemiology and Population Health Australian National University, Canberra, Australia

### Abstract:

**Introduction:** In 2016 the Australian Government subsidised direct-acting antiviral agents effective at curing hepatitis C. Given the potential impact of improved access on existing health services, this study aimed to estimate the current number of people living with hepatitis C in the Northern Territory (NT) to better inform general practice and specialised services of likely treatment demand.

**Methods:** Notification data were extracted from 1991 to June 2016. We used weights derived from life expectancy and migration tables to estimate the probability each case was still alive and living in 2016. A sub-analysis of risk factors associated with hepatitis C was also performed.

**Results:** There were 3,585 estimated cases alive and living in the NT in 2016. The proportion of cases was significantly higher in males (68%) compared to females ( $p < 0.001$ ) and the highest prevalence was in non-Indigenous 55-59 year olds (5.7%). After adjusting for age, non-Indigenous people were twice as likely to have the infection (ARR: 2.1). Injecting drug use, the most common risk factor, was higher in males (63%) compared to females (34%) ( $p < 0.001$ ). Only 2.1% of cases had a history of incarceration ( $n=22$ ).

**Conclusion:** We estimated the number of people living with hepatitis C in the NT, using a novel weighting method. Our study aimed to better inform services of the demographic characteristics and distribution of hepatitis C across the NT reflecting potential demand for treatment services. Our study also highlighted the need to improve enhanced data collection to better identify risk behavior and inform prevention strategies.

## Perceptions of the health impacts of climate change in South Tarawa, Kiribati

**Authors:** Dr Kate Kennett<sup>1</sup>

**Affiliations:** <sup>1</sup>Western Sydney Local Health District, North Parramatta, Australia, <sup>2</sup>Flinders University, Adelaide, Australia

### Abstract:

**Background:** Climate change is a growing public health concern. Atoll nations like Kiribati are particularly vulnerable and already experience climate change-induced environmental threats. Little research has been undertaken in Kiribati about local health needs to respond to climate change. This study was a qualitative exploration of understandings and experiences of the health impacts of climate change in South Tarawa, Kiribati.

**Body:** In 2012/13, 27 people from health, environment, water, education and social sector organisations ( $n=21$ ) and community groups ( $n=6$ ) participated in a semi-structured interview about how they believe climate change affects health in South Tarawa. Interview data was analysed using qualitative content analysis. All participants believed that climatic changes are occurring in Kiribati with negative health consequences. Participants described water and vector-borne infections, chronic diseases and respiratory illnesses they perceive to be increasing due to climate change. Participants identified how over-crowding, inadequate water and sanitation, unemployment and changed lifestyles in South Tarawa combine with climate change to exacerbate these diseases. Participants also explained how interactions between climate change, social determinants and disease heighten vulnerability for disadvantaged groups.

**Summary:** This study found that in South Tarawa climate change is understood as an ecological public health concern. Initial health responses in Kiribati have involved donor-sponsored projects focusing on limited, targeted interventions. Conversely, the results of this study indicate that health and climate change action in Kiribati must consider and address a wide range of diseases, social determinants and inequity to meaningfully protect population health from climate change in this atoll community.

## Public interest journalism: an under-recognised determinant of health?

**Authors:** Dr Melissa Sweet<sup>1</sup>, Ms Marie McInerney<sup>1</sup>, Ms Summer May Finlay<sup>1</sup>, Dr Megan Williams<sup>1,2</sup>, Mr Mitchell Ward<sup>1</sup>, Dr Tim Senior<sup>1</sup>, Ms Amy Coopes<sup>1</sup>

**Affiliations:** <sup>1</sup>Croakey Health Media, Marulan, Australia, <sup>2</sup>Graduate School of Health, UTS, Sydney, Australia

### Abstract:

Public interest journalism (PIJ), distinguished from other forms of journalism because it explicitly centres the public interest, is in crisis. This has worrying implications for individual, community, societal and planetary health. PIJ has contributed to many public health advances, from tobacco control to regulation of environmental hazards such as asbestos, and is also important for research and knowledge translation. It has a vital role in scrutinising and holding to account governments, industries and other powerful interests that shape health. Yet a review of national and global statements on the determinants of health indicates that PIJ is rarely recognised as a determinant of health. Public health often recognises the importance of education and health literacy for improving people's health, but rarely goes beyond promoting media advocacy as a public health strategy, or criticising "the media" for poor reporting of health issues. As a result, the public health field generally has not contributed to policy and public debates about PIJ futures, or regarded this as a topic for research, advocacy or policy intervention. At the same time, PIJ advocates often have not recognised their field's importance as a determinant of health, although this framing could increase public and political engagement. This paper proposes a theoretical model for PIJ as a determinant of health, and an action plan for public health organisations, researchers, practitioners and advocates seeking to engage with PIJ futures. It thus aligns with conference topics of leadership, social or ecological determinants of health, and public health challenges and failures.

## 3D Rapid Fire - Challenges and failures in Public Health

Kuranda Ballroom, 11:00am – 12:30pm

### Hospital entrances as spaces for well-being: using research in re-development plans

**Authors:** Mr Andrew Reid<sup>1,2,3,4</sup>, Dr Saggi Zapart<sup>1,2,3,4</sup>, Dr Fiona Haigh<sup>1,2,3,4</sup>, Ms. Natalie Gorgioski<sup>1,2,3,4</sup>, Mrs. Melissa Bernstein<sup>1,2,3,4</sup>

**Affiliations:** <sup>1</sup>Centre for Health Equity Training, Research & Evaluation (CHETRE), Liverpool, Australia, <sup>2</sup>UNSW Australia Research Centre for Primary Health Care & Equity, Kensington, Australia, <sup>3</sup>A Unit of Population Health, South Western Sydney Local Health District, Liverpool, Australia, <sup>4</sup>A Member of the Ingham Institute, Liverpool, Australia

### Abstract:

**Background:** Across Australia, there is currently considerable activity in the area of hospital re-development. In the greater Sydney area alone 15 hospitals are either in the planning stage of a re-development process or at differing stages of re-development. However, despite this high level of activity, the impact of hospital re-development on health is not widely researched and little attention has been given to hospital entrances as potential health-promoting spaces for the facility.

**Aims and Methods:** The Centre for Health Equity Training, Research, and Evaluation (CHETRE) Hospital Entrance Redevelopment Evaluation (HERE) project aims to inform the re-development plan, and evaluate the impact of, the Liverpool Hospital (one of the largest in NSW) front entrance on the well-being of patients, staff and visitors. The project involves: literature reviews of health promoting environmental and architectural designs, and hospital entrances in relation to health equity; and conducting pre-post surveys of usage and perceptions of the front entrance, and direct observations of patterns and behaviours.

**Findings and implications:** This paper will briefly present findings from the pre-development evaluation and their use in informing design considerations for, and evaluation of, the hospital entrance re-development. It will then discuss lessons learned during the design and implementation stage, and their value in informing the re-development design. Finally how findings and experiences from this research can be useful in informing other hospital re-developments will be discussed.

### Inter-sectoral collaboration and the logistical challenges of a large herd immunity study.

**Authors:** Dr Pip Rokkas<sup>1,2</sup>, Ms Su-San Lee<sup>2</sup>, Ms Sara Almond<sup>3</sup>, Associate Professor Ann Koehler<sup>3</sup>, Mr Mark McMillan<sup>1,2</sup>, Professor Helen Marshall<sup>1,2</sup>

**Affiliations:** <sup>1</sup>Robinson Research Institute and Adelaide Medical School, The University of Adelaide, Adelaide,, Australia, <sup>2</sup>Vaccinology and Immunology Research Trials Unit, Women's and Children's Health Network, Adelaide,, Australia, <sup>3</sup>Communicable Disease Control Branch, SA Health, Adelaide, Australia

### Abstract:

**Background:** A large cluster randomised controlled trial (B Part of It) is being conducted in South Australian high school students to assess the impact of a meningococcal B vaccine on carriage of *Neisseria meningitidis* in adolescents. Carriage studies are logistically challenging due to the large sample size required. The collaborative processes undertaken, to assist the logistical challenges of conducting a carriage study of this scale in school students in South Australia, will be described.

**Method:** Early high level engagement and inter-sectoral collaboration was established between, The University of Adelaide, SA Health, Local Government and three Education Sectors. A media campaign was launched in December 2016 with both traditional and social media strategies playing a key role in communicating the study to the public. A creative media campaign was undertaken to engage with students and parents about the study, including multimedia and extensive use of social media (Twitter, Facebook, Snapchat, YouTube, Instagram).

**Results:** Over 37,000 students consented to the study with 34,447 students in years 10, 11 and 12 across 237 schools currently participating in the B Part of It Study, representing the largest cohort of adolescents participating in an interventional carriage study. The study trained over 250 personnel across metropolitan, regional and remote communities, combining research with service delivery and clinical practice.

**Conclusion:** Stakeholder engagement and communication were key to the successful roll out of the study. Ongoing engagement and collaboration with key stakeholders helped ameliorate the logistical challenges of implementing the study and maintain student participation numbers.

### **Accelerating evidence into policy and practice - lessons from homelessness and health**

**Authors:** Miss Shannen Vallesi<sup>1</sup>, Dr Lisa Wood<sup>1</sup>

**Affiliations:** <sup>1</sup>University of Western Australia, Crawley, Australia

#### **Abstract:**

**Context:** None of us dispute the need for greater links between public health research, policy and practice, but achieving this 'on the ground' isn't without challenge. Our recent experiences around homelessness and health have distilled three critical success factors: relevance, responsiveness and relationships.

**Process:** Beginning as a small collaborative grant to evaluate the health and economic benefits of a primary health practice for people experiencing homelessness. Within 18 months, a close 'can you help with this' type of working relationship evolved between our research team, Homeless Healthcare, Royal Perth Hospital, WA Health, and the homelessness sector. The research has expanded in response to evidence and policy gaps, and results sharing is driven by priority needs of our partners to enable them to best utilise their resources and focus interventions on those who need it most.

**Analysis:** Emerging findings from our research demonstrates the enormous scope to reduce chronic disease and preventable hospitalisations among people who are homeless. This is paralleled by important learnings from the mutually beneficial way in which the lines between researcher, practitioner and policy maker have become blurred. To sum up, it is about relevance (of the research questions, the data); responsiveness (generating evidence quickly to address funding or policy opportunities) and most of all, relationships (sharing of passions for social justice, small wins, struggles and of course, coffees).

**Outcomes:** These 3Rs have potential application to a range of public -health issues where there is a desire to galvanise greater research-practice-policy links.

### **Engaging to strengthen public health in the Pacific**

**Authors:** Dr Ingrid Johnston<sup>1</sup>, Dr Devin Bowles

**Affiliations:** <sup>1</sup>Public Health Association of Australia, Deakin, Australia

#### **Abstract:**

**Context:** The Pacific region contains a diverse group of small-island developing nations with significant health challenges including high burden of communicable and non-communicable diseases, poor life expectancy, poor sexual and reproductive health, and impacts of climate change including high annual losses from disasters, lack of access to safe drinking water, and increases in communicable and infectious diseases. With limited financial and human capacity, the attainment of the Sustainable Development Goals (SDGs) will be difficult. Many of the most serious threats to health and well-being are preventable, through addressing determinants of health including obesity, poor nutrition, smoking, domestic and family violence and substance misuse.

**Policy responses:** The Global Charter for the Public's Health is a way of implementing the SDGs - building the public health capacity of national health systems is a vital element to the achievement of the Goals. Many public health measures would directly enhance other SDGs - increasing gender equity, reducing hunger, decreasing poverty and enhancing education are all well-accepted public health measures.

This presentation looks at the possible ways the Public Health Association of Australia (PHAA) and the Council for Academic Public Health Institutions Australasia (CAPHIA) may play a role in this with a range of local partners, through helping to build international networks and supporting the active participation of civil society.



## Beliefs about imaging for low back pain: Qualitative evidence synthesis

**Authors:** Ms Sweekriti Sharma<sup>1</sup>, Dr Adrian C Traeger<sup>1</sup>, Mr Benjamin J Reed<sup>2,3</sup>, Dr Denise A O'Connor<sup>2,3</sup>, Prof Tammy C Hoffmann<sup>4</sup>, Dr Gustavo C Machado<sup>1</sup>, Dr Carissa Bonner<sup>1</sup>, Prof Chris G Maher<sup>1,5</sup>, Prof Rachelle Buchbinder<sup>2,3</sup>

**Affiliations:** <sup>1</sup>School of Public Health, University Of Sydney, Sydney, Australia, <sup>2</sup>Monash Department of Clinical Epidemiology, Cabrini Institute, Malvern, Australia, <sup>3</sup>Department of Epidemiology and Preventive Medicine, School of Public Health and Preventive Medicine, Monash University, Melbourne, Australia, <sup>4</sup>Faculty of Health Sciences and Medicine, Centre for Research in Evidence-Based Practice, Bond University, Gold Coast, Australia, <sup>5</sup>Institute for Musculoskeletal Health, Sydney Local Health District, Sydney, Australia

### Abstract:

**Background:** Low back pain (LBP) is the leading cause of disability worldwide. Australians spent \$214 million on lumbar radiographs in 2014, despite it being unnecessary for the majority of patients. This study aimed to systematically review the qualitative research that has explored clinician, patient and general public beliefs about diagnostic imaging for LBP.

**Methods:** We conducted a systematic review of qualitative studies. We searched 5 databases (MEDLINE, EMBASE, CINAHL, AMED, and PsycINFO). Two reviewers independently screened articles and extracted data. Initial synthesis was done by open coding results into key themes and subthemes. The protocol was registered on PROSPERO (CRD42017076047).

**Results:** Of 6157 studies from the search, we screened 429 full-text studies. 63 studies met our inclusion criteria. We identified four key-themes from initial synthesis; (1) beliefs about consequences e.g. further treatment is risky without x-rays (2) emotional impact e.g. imaging provides reassurance (3) enhances understanding e.g. imaging provides useful visual information (4) beliefs about capabilities e.g. imaging informs clinical reasoning.

One striking initial finding is that patients believed imaging helps legitimize pain. Clinicians feared risk of missing diagnosis and litigation. However, there was a common concern about radiation exposure among both patients and clinicians. We will present complete results of narrative synthesis at the conference.

**Conclusions:** Both patients and clinicians believe that imaging is an important diagnostic tool for LBP. These beliefs are at odds with evidence that diagnostic imaging causes more harm than good for most people with LBP, and could be important targets of public health campaigns.

## Universal health coverage in Makueni County in rural Kenya

**Authors:** Miss Moureen Mutua<sup>1</sup>

**Affiliations:** <sup>1</sup>QUT, Brisbane, Australia

### Abstract:

**Back ground:** Universal health care (UHC) is the most important approach public health has to deliver. Equity in access of health services, appropriate quality health services and financial protection are key to UHC. UHC and Sustainable development goals are interlinked. When UHC is achieved it will help deliver other health related goals with person and population focus. The objective of the presentation is to discuss challenges of UHC.

**Body:** In rural Kenya like Makueni County, it is estimated that medical expenditure account for 40% in most of household budgets. This challenge led to health care revolution to embrace UHC in Makueni County. Key elements were increasing health facilities, reducing distances to access care, increasing health personnel, pilot programme and finally rolling out of a 5 dollar registration per household to access free care in level 4-6 facilities in the county as well as supplementing resources in primary health care centres.

**Summary:** The realization of UHC has been coupled with challenges, like low uptake due to voluntary registration, existing insurance schemes hence sustainability issues, increased work load, critics on great focus on curative services, and questions about quality of care and addressing social determinants of health.

**References:** Ministry of Health, Government of Kenya. 2014. 2013 Kenya Household Health Expenditure and Utilisation Survey. Nairobi: Government of Kenya

World Health Organization. (2015). tracking universal health coverage: first global monitoring report. World Health Organization.

<https://www.makueni.go.ke/promoting-makueni-universal-healthcare> Accessed 05/04/2018

## **‘Safe’ pest bait products expose children to poison when used as directed**

**Authors:** Dr Harrison Edwards<sup>1</sup>

**Affiliations:** <sup>1</sup>*University of Queensland, Herston, Australia*

### **Abstract:**

**Background:** Australian Standard 4710-2001 specifies minimum child-resistant properties of poison bait packaging intended to allow rodent and insect access while blocking child access. Aged standards can be revised to make them more applicable to current products or withdrawn if no longer needed. To determine if this aged standard should be revised or withdrawn, two areas of research were undertaken: examination of hospital data and examination of current packaging.

**Method:** A review of hospital cases of early childhood pest bait poisoning was undertaken in South Australia, Queensland and Victoria.

All bait products relevant to the standard were purchased at a large retail store and examined for compliance with the standard when used as directed.

**Results:** 620 hospital cases were reported in 2001-2016. 26 cases mentioned “packaging”. Although the data were imprecise, it’s suggestive that children were exposed to packaging they found ways to defeat.

Five of six products on the market advertised as safe were found to allow children access to poison when used as directed.

**Implications for public health:** There are products on the market that do not comply with the intention of this standard resulting in public health concerns.

**Translation to policy:** It is recommended that Australian Standard 4710-2001 be revised to protect the public from current products that circumvent or fail the aims of the standard.

### **Learning objectives:**

Products are constantly evolving. It is prudent to vigilantly assess current products to evaluate their efficacy against standards.

Aged standards should not be withdrawn without investigation into their current relevancy.

## **Participant perceptions: Important factor in program design, implementation, evaluation, and ongoing success**

**Authors:** Dr Saggi Zapart<sup>1,2,3,4</sup>, Professor Lynn Kemp<sup>4,5</sup>

**Affiliations:** <sup>1</sup>*Centre For Health Equity Training, Research And Evaluation, Sydney, Australia*, <sup>2</sup>*UNSW Sydney Research Centre for Primary Health Care and Equity, Sydney, Australia*, <sup>3</sup>*Population Health, South Western Sydney Local Health District, NSW Health, Sydney, Australia*, <sup>4</sup>*Ingham Institute for Applied Medical Research, Sydney, Australia*, <sup>5</sup>*Translational Research and Social Innovation Unit, Western Sydney University, Sydney, Australia*

### **Abstract:**

**Context:** Early childhood sustained nurse home visiting (SNHV) programs have shown positive impacts on maternal and child health and well-being. However program effectiveness has traditionally been demonstrated through successful outcomes as determined by providers and researchers. Evidence about mechanisms by which programs are effective, and components and process crucial to success is from perspectives of program developers, providers and nurses. There has been little exploration into participants’ perceptions of what they receive, the impact it has and the value they place on it. SNHV programs are being rolled out in Australia and overseas. A complete understanding of how and why they work would ensure appropriate, effective program delivery, monitoring and evaluation.

**Process:** A study that investigated the contribution SNHV programs make to achieving perceived positive outcomes, particularly for mothers with psychological vulnerability, through exploration of the experiences of mothers who participated in the Maternal Early Childhood Sustained Home-Visiting (MECSH) trial, is used as a case study. Study findings are compared to current evidence, to highlight the importance of including participant perceptions.

**Outcomes and implications:** What participants in the MECSH trial wanted, needed and valued was generally in line with evidence for what program developers, providers, nurses, and researchers, consider important. Findings however provide a more complete picture. They confirmed characteristics and practices that should be continued, identified those needing to be improved, or incorporated into practice, and identified important considerations for ongoing program monitoring and evaluation. Inclusion of participant perceptions is vital to program design, implementation, evaluation, and ongoing success.

## Analysis of the Recently Abolished Therapeutic Goods Advertising Complaint Resolution Panel

**Authors:** Mr Malcolm Vickers<sup>1</sup>, Professor Ken Harvey<sup>1</sup>

**Affiliations:** <sup>1</sup>*Monash University, Public Health and Preventative Medicine, Clayton, Australia*

### Abstract:

**Context:** The WHO 2014-2023 strategy for traditional (and complementary) medicine identified the following challenges for Member States: controlling and regulating advertising claims and ensuring consumers make informed choices. For the last seventeen years, the independent Australian Therapeutic Goods Advertising Complaint Resolution Panel (CRP) has acted on complaints about the advertising of therapeutic goods. On 1 July 2018, the panel was abolished and its role taken over by the Therapeutic Goods Administration.

**Process:** Over 2200 complaints have been adjudicated throughout the life of the panel. The panel acted in accordance with Therapeutic Goods Advertising Codes and other Australian laws. Advertisers were granted an opportunity to respond as part of the process and determinations were made regarding Code breaches.

**Analysis:** We analysed the data generated from the panel's annual reports to assess the regulation of Australian therapeutic goods advertising. Ten years of reports have been collated and assessed. The analysis includes determining which laws and codes were most commonly breached by advertisers.

**Outcome:** It was found that complaints about traditional and complementary medicines were most numerous followed by medical devices. Advertisements delivered via the internet were cited most often by complainants. Over a period of ten years, 2% of complaints were determined by the CRP as "not justified". The CRP was abolished primarily because it lacked the power to enforce its determinations.

This presentation will make suggestions for evidence-based policy stemming from the analysis and will look at the performance of the TGA in complaints handling since 1 July 2018.

## Rethinking Syphilis Surveillance and Public Health Management in South Eastern Sydney

**Authors:** Mr Alvin Lee<sup>1</sup>, Dr Catherine Bateman-Steel<sup>2</sup>, Ms Kelly-Anne Ressler<sup>2</sup>, Prof Mark Ferson<sup>2,3</sup>

**Affiliations:** <sup>1</sup>*NSW Ministry Of Health, North Sydney, Australia*, <sup>2</sup>*Public Health Unit, South Eastern Sydney Local Health District, Randwick, Australia*, <sup>3</sup>*School of Public Health and Community Medicine, University of New South Wales, Randwick, Australia*

### Abstract:

**Background:** The NSW Public Health Act 2010 requires doctors, hospitals and laboratories to notify syphilis cases. The surveillance and public health management of syphilis (SPHMS) hinges upon identification and follow-up of infectious cases. These processes are particularly burdensome in South-Eastern Sydney due to the number of organisations involved, sheer volume of laboratory notifications received, complexities of interpreting serological results and intensive public health follow up required. Our evaluation aimed to explore multiple stakeholder perspectives to improve the appropriateness and efficiency of SPHMS.

**Methods:** Mixed methods were used. Quantitative data comprised notifications on the Notifiable Conditions Information Management System, and internal workload documentation. Qualitative data comprised semi-structured stakeholder interviews (clinicians, laboratories and public health personnel) which were systematically examined to discover patterns, similarities and contradictions.

**Results:** Quantitative data analysed revealed that <10% of syphilis notifications in South-Eastern Sydney residents represented infectious cases, whilst some Public Health Units devoted approximately 0.4FTE exclusively to SPHMS. In total, 22 stakeholder interviews were completed. Five dominant themes emerged: (1) clarification of epidemiological and public health management aims; (2) the value, burden and complications; (3) the need to rethink the SPHMS; (4) the use of technology and information flow; (5) the need for greater engagement and collaboration between stakeholders, including clinicians, hospital scientists and public health practitioners.

**Conclusion:** SPHMS in South-Eastern Sydney is complicated and burdensome yet important. Efficiency and appropriateness of SPHMS can be improved by reassessing aims and tools of the system, use of technology, engaging clinicians better and greater collaboration between stakeholders.

## Impacts and outcomes of 'nature play' among children: a systematic review

**Authors:** Dr Katherine Baldock<sup>1</sup>, Miss Esther Tian<sup>1</sup>, Dr Saravana Kumar<sup>1</sup>

**Affiliations:** <sup>1</sup>*School of Health Sciences, University of South Australia, Adelaide, Australia*

### Abstract:

**Background:** Nature play has become increasingly popular for children as it is thought to promote unstructured play resulting in numerous health, educational and developmental benefits. As a result, there have been substantial investments including a \$6 million state government investment in pre-schools across 2014-2018 in South Australia. Despite this popularity, to date there has been no systematic evaluation of the evidence base underpinning nature play and this research aimed to address this knowledge gap.

**Methods:** A systematic search of electronic databases (such as MEDLINE, Embase, Emcare, ERIC, The Cochrane Library, PsycINFO) as well as grey literature and pearling were conducted. Primary research studies (quantitative and qualitative) were included with children under 18 years of age and intervention involved any unstructured outdoor activities engaging with nature. This review was conducted and reported in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses statement. McMaster critical review form for quantitative and qualitative studies was used to assess the methodological quality of the included studies. Given the heterogeneity of the included studies, a descriptive synthesis of the included studies was undertaken.

**Results:** A diverse range of study designs were identified which evaluated the effectiveness of nature play through a plethora of interventions and outcomes. While nature play may have positive impact across a range of outcomes, the evidence base suffers from a number of methodological limitations.

**Conclusion:** While nature play shows emerging potential, caution is required when generalising its impact to a broad population and diverse contexts.

## Poster Presentations – P2

Ballroom Foyer, 1:00pm - 1:30pm

### P2001 - Aboriginal health innovation in online and offline strategies for tackling smoking in men

**Authors:** Mr Dale Wright<sup>1</sup>, Ms Rani Lawler<sup>1</sup>, Ms Franca Facci<sup>1</sup>, Mr Kishan Kariippanon<sup>2</sup>

**Affiliations:** <sup>1</sup>*NSW Health, Wollongong, Australia*, <sup>2</sup>*University of Wollongong, Wollongong, Australia*

### Abstract:

**Context:** The challenge for public health is to co-create anti-tobacco media content in partnership with youth and adult males through a two way communicative design process. Content that is relevant and targeted at specific segments are proven to be effective. Workforce development in digital media production and social media marketing becomes essential to engage youth. The use of body mapping and filmmaking enables co-creation of contextually rich and relevant short films. The analysis of social media analytics further enables a highly targeted marketing strategy.

**Process:** Aboriginal Health practitioners are trained in body mapping, filmmaking & social media analytics. Youth & male elders are invited to play a game called Life Happens (Tobacco series) through established networks. This game uses body mapping to discuss sensitive topics. The filmmaking, then transforms the rich contextual knowledge gained from playing the game and the body map into short films for social media marketing. The film is produced and directed by Aboriginal Health Practitioners using Yarning in a digital medium.

**Analysis:** Results show that these novel methods are potentially effective for a combined online and offline strategy for public health tobacco quit programs targeting men whilst upskilling health practitioners to tackle tobacco cessation from a systems thinking approach.

**Outcomes:** The outcome to date is one completed short film out of five still in pre-production stage. The short film has been promoted on the Health NSW websites and other Aboriginal Medical Services Facebook Pages. In depth knowledge gained will be shared in the conference.

## P2002 - Antenatal care - know the gap to close it

**Authors:** Dr Annie Preston Thomas<sup>1</sup>, Ms Sally Rubenach<sup>1</sup>, Ms Cherrie Glasson<sup>1</sup>, Ms Jacqueline Griffiths<sup>2</sup>, Ms Sue-Ellen Day<sup>3</sup>, Ms Jasmin Fischer<sup>1</sup>

**Affiliations:** <sup>1</sup>Tropical Public Health Services Cairns, Cairns and Hinterland Hospital and Health Service, Cairns, Australia, <sup>2</sup>Women's Health, Cairns and Hinterland Hospital and Health Service, Cairns, Australia, <sup>3</sup>Townsville Public Health Unit, Townsville Hospital and Health Service, Townsville, Australia

### Abstract:

**Background:** Infectious syphilis in pregnancy presents a significant risk of congenital syphilis and other complications. With multiple outbreaks of infectious syphilis affecting the Aboriginal and Torres Strait Islander population of north Queensland, early and regular engagement in antenatal care is essential to ensure detection and appropriate treatment.

**Methods:** Antenatal care service use by 5,357 pregnant Aboriginal and Torres Strait Islander women living in north Queensland was examined to identify the models of antenatal care used, the characteristics of women presenting for antenatal care later in their pregnancy and the characteristics of women attending fewer antenatal care services.

**Results:** Sixty-nine per cent of women used public only antenatal care services. Use of shared public and private antenatal care increased from 20 per cent in 2015 to 31 per cent in 2017 and was highest in the Cairns and Hinterland region, at 43 per cent. One in three women did not attend antenatal care in the first trimester of their pregnancy. Pregnant women aged less than 20 years were more likely to present later for antenatal care and attend fewer services.

**Conclusion:** The increasing utilisation of shared care by Aboriginal and Torres Strait Islander women highlights the importance of partnerships between public health services and Aboriginal and Islander Community Controlled health services. Strategies to engage younger Aboriginal and Torres Strait Islander women in antenatal care earlier in pregnancy are required to ensure better detection and early treatment of syphilis during pregnancy.

## P2003 - Perspectives on childhood resilience among the Aboriginal community: an interview study

**Authors:** Mr Christian Young<sup>1</sup>, Mr Mandy Cutmore<sup>2</sup>, Ms Janice Nixon<sup>3</sup>, Mr Peter Fernando<sup>3</sup>, Ms Deanna Kalucy<sup>3</sup>, Ms Simone Sherriff<sup>3</sup>, Professor Kathleen Clapham<sup>4</sup>, Mr Jonathan Craig<sup>1</sup>, Dr Anna Williamson<sup>3</sup>

**Affiliations:** <sup>1</sup>The University of Sydney, Sydney, Australia, <sup>2</sup>Awabakal, Newcastle, Australia, <sup>3</sup>The Sax Institute, Sydney, Australia, <sup>4</sup>University of Wollongong, Wollongong, Australia

### Abstract:

**Background:** Australian Aboriginal children are exposed to a number of adversities that can contribute to longstanding mental and physical health 'gaps' between Aboriginal and non-Aboriginal people. Despite these challenges most Aboriginal children are resilient and show remarkable adaption during difficult circumstances. In Australia, research has identified risk and protective factors that influence Aboriginal children's health; however, few studies specifically investigate resilience. The relatively small amount of resilience studies appears disproportionate to the frequency with which resilience is mentioned in conjunction with Aboriginal people, and the potential benefits research could offer by providing an evidence base for initiatives designed to enhance childhood resilience. The aim of this study was to describe Aboriginal community members' perspectives on the outcomes and origins of resilience among Aboriginal children, and identify potential strategies for enhancing resilience.

**Method:** Face-to-face interviews were conducted with 36 Aboriginal adults (15 health service professionals, 8 youth workers and 13 community members) at two urban and one regional Aboriginal Community Controlled Health Service in New South Wales. Interviews were transcribed and analysed thematically.

**Results:** We identified six themes: withstanding risk, adapting to adversity, positive social influences, instilling cultural identity, community safeguards, and personal empowerment.

**Conclusion:** Community members believed that resilient Aboriginal children possessed the knowledge and self-belief that encouraged positive decision-making despite challenging circumstances. A strong sense of cultural identity and safe, stable and supportive family environments were thought to promote resilient behaviours.

## P2004 - The relative validity of the MRSDAT in Aboriginal children aged 6-36 months.

**Authors:** Dr Emma Tonkin<sup>1</sup>, Mrs Dani Kennedy<sup>1</sup>, Associate Professor Rebecca Golley<sup>2</sup>, Dr Rebecca Byrne<sup>3</sup>, Dr Athira Rohit<sup>1</sup>, Dr Thérèse Kearns<sup>4</sup>, Dr Sarah Hanieh<sup>5</sup>, Professor Beverley-Ann Biggs<sup>5</sup>, Associate Professor Julie Brimblecombe<sup>6</sup>

**Affiliations:** <sup>1</sup>Nutrition Program, Wellbeing and Preventable Chronic Disease, Menzies School of Health Research, Casuarina, Australia, <sup>2</sup>Nutrition and Dietetics, College of Nursing and Health Sciences, Flinders University, Adelaide, Australia, <sup>3</sup>Institute of Health and Biomedical Innovation, Centre for Children's Health Research, Queensland University of Technology, Brisbane, Australia, <sup>4</sup>Child Health, Menzies School of Health Research, Casuarina, Australia, <sup>5</sup>Department of Medicine at the Peter Doherty Institute for Infection and Immunity, The University of Melbourne, Melbourne, Australia, <sup>6</sup>Nutrition, Dietetics and Food, Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Australia

**Abstract:**

**Background:** The Menzies Remote Short Item Dietary Assessment Tool (MRSDAT) is a 30-item questionnaire developed to assess the dietary quality of mothers and their young children in the remote Australian Aboriginal community (RAC) setting. It can be used to derive a dietary index score which measures the degree of compliance with the Australian Dietary Guidelines. This study aimed to determine the relative validity of a dietary index score for children aged 6-24 months living in a RAC, derived using the MRSDAT.

**Methods:** This validation study compared food group intake and dietary index scores derived using the MRSDAT with those derived from the average of three 24-hour-recalls. Participants were aged 6-36 months at first dietary assessment, and were living in a RAC. The level of agreement between the two methods was explored using Lin's concordance correlation coefficient (CCC), Bland-Altman plots, weighted Cohen's kappa, Fischer's exact and paired t-tests.

**Results:** Forty participants were recruited. Ranking comparisons showed 35% of individuals were placed in the same quartile of dietary quality score using the different methods. The CCC was poor between methods ( $R=0.35$ , 95% CI 0.06, 0.58), with the MRSDAT estimating higher dietary intakes scores for all food groups except fruit, and higher dietary quality scores by an average of 4.78 points/100, with no proportional bias.

**Conclusions:** It is not clear whether the MRSDAT or 24-hour-recalls provide the more accurate assessment of dietary intake in this unique population. The MRSDAT is the first validated tool appropriate for use with very young children in RACs.

**P2005 - Using experiential arts to understand our leadership, motivation and strengths**

**Authors:** Associate Professor Gillian Gould<sup>1</sup>

**Affiliations:** <sup>1</sup>University of Newcastle, Callaghan, Australia

**Abstract:**

This interactive workshop uses techniques from art therapy to explore our professional role and/or personal experiences about leadership. It will give an opportunity to reflect in a new way about our work and share experiences.

We need to be leaders in our own right, working from strengths and values. We may be experiencing challenges in our work life, feel unmotivated or stressed. Alternately, we may be searching for new ways to develop our influence, hoping to deepen understandings of how we can be most effective.

This workshop is an opportunity to try something new, reflect and express our own experiences – professional or personal – through art, talking and writing. We will use visual prompts as an access point, then through a process of yarning find a starting point to represent our leadership experience. We will be safely led through a process to write or draw with crayons, finding key words to focus on the implications of the representation. We will connect with another to discuss our journey, and distil our meanings. The workshop will be summed up with a group discussion, a confirmation of our strengths and the way forward.

The workshop gives an opportunity to learn new skills, discover more about leadership, and plunge into art in a comfortable environment, suitable for the novice to the veteran artist.

**Learning objectives:**

1. Understand your potential strength as a leader
2. Explore the use of the arts to find meaning
3. Apply an arts therapy technique to a leadership topic

**P2006 - "Change is hard without mistakes": qualitative analysis of alcohol-related, emergency-based 'teachable moments'.**

**Authors:** Mr Michael Barclay<sup>1</sup>, Dr Jennie Hutton<sup>2</sup>, Prof Steve Allsop<sup>3</sup>, Prof Andis Graudins<sup>1,4</sup>, A/Prof Diana Egerton-Warburton<sup>1,4</sup>

**Affiliations:** <sup>1</sup>School of Clinical Sciences, Monash University, Clayton, Australia, <sup>2</sup>St Vincent's Health, Fitzroy, Australia, <sup>3</sup>National Drug Research Institute, Curtin University, Bentley, Australia, <sup>4</sup>Monash Health, Clayton, Australia

**Abstract:**

**Background:** Australia is a leading alcohol consumer and alcohol-related emergency presentations are common and particularly resource draining. These presentations offer a 'teachable moment' for patients, by utilising brief interventions. Current evidence of brief interventions suggests they have a statistically small effect which is likely to have meaningful population benefits. However, there has been no research which investigates the 'teachable moment' from a patient perspective. Our study aims to do this and develop a theoretical model to inform future interventions.

**Methods:** This is a qualitative phenomenological study in which alcohol-related emergency patients were interviewed. Adult patients who were not: dependent, critically ill, mentally incapable, or, had taken recreational drugs were recruited until saturation of themes was achieved. Semi-structured interviews examined participants': reactions to presentation, usual drinking, motivations to change and, thoughts on the 'teachable moment'. Themes arising from the interviews were analysed using NVivo 11.

**Results:** From 10 participants, three themes were identified: the perception of their alcohol habits, which was often trivialised; the perception of the event, which reflected injury severity and participant personalities and; the influence on future behaviour, which was predicted to be overall modest alcohol reduction. Nine participants identified alcohol as a trigger for their presentation. Overall, six participants were motivated to change their drinking and four were not, mostly due to feeling in control over their behaviour.

**Conclusion:** Our study suggests that encouraging patient reflection of the relationship between their presentation and alcohol may produce a 'teachable moment' without further intervention.

## **P2007 - Should haemodialysis patients in the tropics receive antibiotic prophylaxis for melioidosis?**

**Authors:** Dr Ken Wang Tat Chau<sup>1</sup>, Dr Simon Smith<sup>1</sup>, Dr Katherine Kang<sup>1</sup>, Dr Shyam Dheda<sup>1</sup>, Dr Josh Hanson<sup>1</sup>

**Affiliations:** <sup>1</sup>*Cairns Hospital, Cairns, Australia*

### **Abstract:**

**Background:** Melioidosis, caused by the environmental, opportunistic bacteria *Burkholderia pseudomallei*, is endemic in the tropics. Melioidosis continues to cause significant morbidity and mortality, even with optimum medical care. In the absence of a suitable vaccine, strategies to prevent melioidosis are required. Chronic haemodialysis patients are particularly at risk and daily prophylactic trimethoprim/sulfamethoxazole (TMP/SMX) has been shown to significantly reduce the incidence of melioidosis in this population.

**Methods:** Cairns Hospital laboratory is the sole provider for public microbiology services in Far North Queensland (FNQ). The hospital also provides haemodialysis to the region across multiple sites. We reviewed all cases of culture-confirmed *Burkholderia Pseudomallei* isolated from January 1997 to December 2017. We compared this data with Cairns hospital dialysis database during the same period to determine the incidence of melioidosis in the haemodialysis population in FNQ.

**Results:** Over the 21-year study period, there were 242 cases of melioidosis; 3 of which occurred amongst 3068 patient-years of haemodialysis (0.1%). All 3 patients receiving chronic haemodialysis survived without requiring ICU support. Assuming an efficacy of 100%, prescription for TMP/SMX prophylaxis required to prevent one case of melioidosis is 1023 patient-years in the chronic haemodialysis population.

**Conclusion:** Universal adoption of TMP/SMX prophylaxis may not yet be justifiable in FNQ after taking into consideration of large number needed to treat. Additionally, adverse reactions associated with TMP/SMX have been reported as high as 8%. We recommend other melioidosis endemic regions to evaluate own data prior to adoption of prophylactic antibiotics in chronic haemodialysis patients.

## 4A Workshop – Part 2

Kuranda Ballroom, 1:30pm – 3:00pm

### Compassionate Communities: Living Well, Dying Better.

**Authors:** Dr. Stephen Ginsborg<sup>1</sup>

**Affiliations:** <sup>1</sup>CCNB, Frenchs Forest, Australia

#### Abstract:

Our current approaches to death, dying and bereavement are putting pressure on our systems and could be growing public health issues across Australia.

This interactive, highly practical workshop will tell the Compassionate Communities story. A work in progress, we will share how this “movement” is being played out in the Northern Beaches of Sydney. Participants will be challenged, encouraged and supported to unpack their current practice. At the end of the session, participants will know more about;

- Compassionate Communities movement
- Assessing the practice evidence from here and overseas
- Building their own “compassionate community”
- Integrating their local community’s strengths to develop a compassionate community
- Understanding how Compassionate Communities can deliver good Quadruple bottom line outcomes
- What could happen when a large group of citizens come together to collectively take action?
- Initial findings of research conducted by Western Sydney University
- Comparisons with the national Death Literacy benchmark

With Australia’s ageing population set to double by 2050, the end of life system in Australia requires collaborative action from health organisations, NGO’s, community groups and individuals in order to see sustainable change.

Recent evidence from the UK is showing that when isolated people who have health problems are supported by community groups and volunteers, the number of emergency admissions to hospital falls spectacularly.

Participants will leave the workshop energised, connected and with a start guide to use with their own communities.

#### References:

Julian Abel; Compassionate Communities and End of Life Care, 2018

<http://www.phpci.info/>

<https://www.theguardian.com/commentisfree/2018/feb/21/town-cure-illness-community-from-somerset-isolation>

## 4B Workshop - Part 2

Tully 2 & 3, 1:30pm – 3:00pm

### Building capacity to address health inequities through 'Learning by Doing' training

**Authors:** Dr Siggi Zapart<sup>1,2,3,4</sup>, Dr Fiona Haigh<sup>1,2,3,4</sup>, Ms Suzanne Ingram<sup>1,2,3,4</sup>, Miss Karla Jaques<sup>1,2,3,4</sup>

**Affiliations:** <sup>1</sup>Centre For Health Equity Training, Research And Evaluation, Sydney, Australia, <sup>2</sup>UNSW Sydney Research Centre for Primary Health Care and Equity, Sydney, Australia, <sup>3</sup>Population Health, South Western Sydney Local Health District, NSW Health, Sydney, Australia, <sup>4</sup>Ingham Institute for Applied Medical Research, Sydney, Australia

#### Abstract:

**Context:** There is a growing need for capacity building in the workforce and community to ensure equitable health outcomes in complex environments dealing with ‘wicked problems’. Learning by doing (LbD) is the process of acquiring knowledge and skills through active involvement with practical real-world experience. Participants apply theory to real life problems. The Centre for Health Equity Training, Research and Evaluation (CHETRE) has conducted LbD programs since 2009 to build capacity in: working in locationally disadvantaged communities; conducting Health Impact Assessment, and Equity Focussed Health Impact Assessment; and has recently extended the program to working in indigenous health. Programs can be targeted to: workers or planners in all areas of health, local government, and housing; private sector developers and consultants; environmental and social impact assessors; and the community and volunteer sector.



**Process:** This workshop will comprise instructional presentations, activities and interactive group work. Learning and insights will be provided by CHETRE staff and partner organisations who have been involved in CHETRE's programs. Previous knowledge and experience of participants will also be drawn on.

**Outcomes:** Participants will learn: what LbD is, and the key features of a LbD program; the distinguishing features and outcomes of LbD and how they differ to 'traditional' training approaches; how LbD increases understanding of the relevance and role of health equity in their work; how LbD is, and can be, applied in different contexts and; the barriers and facilitators to 1) running effective LbD programs and 2) ensuring sustainable positive program impacts or outcomes

## 4C Workshop - Part 2

Tully 2 & 3, 1:30pm – 3:00pm

### Partnering Aged Care Organisations to encourage exercise benefits for residents with dementia

**Authors:** Associate Professor Gaynor Parfitt<sup>1,3</sup>, Dr Dannielle Post<sup>1,3</sup>, Alison Penington<sup>2</sup>, Megan Corlis<sup>2,3</sup>

**Affiliations:** <sup>1</sup>Alliance for Research in Exercise Nutrition and Activity (ARENA), School of Health Sciences, University of South Australia, Adelaide, Australia, <sup>2</sup>Research and Development, Helping Hand Organisation, North Adelaide, Australia, <sup>3</sup>NHMRC Cognitive Decline Partnership Centre, University of Sydney, Sydney, Australia

#### Abstract:

Providing avenues in residential aged care to maintain functionality as dementia progresses is important, and one approach to this is through the delivery of exercise programs prescribed by Accredited Exercise Physiologists (AEPs). Key to the success of such programs is the support of family members and care staff, who play critical roles in the support of residents. Understanding perceptions of the likely benefit of participation for residents with dementia, and how these perceptions can be influenced to create health promoting environments, is vital to the care of residents as they progress along their dementia journey.

This workshop will translate the evaluation findings of an AEP-led exercise program implemented within a residential aged-care facility. Taking a person-centred approach and engaging residents during exercise sessions, changes in a number of functional and behavioural factors were identified through surveys and interviews with family members and care staff. Perceptions of exercise benefit and whom exercise would benefit were influenced by the program, and the factors associated with sustainability of benefit were also identified.

Through discussions and interactive activities, this workshop aims to meet the following learning objectives: to provide an understanding of the benefit of including AEPs as members of multi-disciplinary allied health teams; to demonstrate how an individually-tailored, person-centred approach facilitates functional and behavioural change for residents with dementia; how engaging key stakeholders, such as family members and care staff, enhances outcomes; and how changing perceptions within an organisation can influence organisational policy change in residential aged care facilities.

## Friday 28 September 2018

### 5A Public Health Policy and Law

Mossman Ballroom, 11:00am – 12:30pm

#### A 12-month observational study of Australian urban waterway users for drowning prevention

**Authors:** Ms Grace Strugnell<sup>1</sup>, Ms Lauren Nimmo<sup>2</sup>, Ms Rhiannon Birch<sup>1</sup>, Dr Damian Morgan<sup>3</sup>, Ms Ashley Ridge<sup>2</sup>, Dr Bernadette Matthews<sup>1</sup>

**Affiliations:** <sup>1</sup>Life Saving Victoria, Port Melbourne, Australia, <sup>2</sup>Royal Life Saving Society - Western Australia, Mount Claremont, Australia, <sup>3</sup>Federation University Australia - Federation Business School and ACRISP, Ballarat, Australia

#### **Abstract:**

**Background:** One-third of aquatic fatalities in Australia occur at inland waterways, accounting for more drowning deaths than beaches, oceans and harbours combined. Analysis of inland waterway exposure is necessary, to determine applicable strategies and ultimately reduce aquatic injury and death. We investigated in situ behaviours that may place persons at high drowning risk for the Yarra River in Victoria and Swan River in Western Australia.

**Methods:** Direct observation of water users for the two river locations were recorded simultaneously at randomised times and days over twelve months. Each river had nine observation points and data collected included the number of people present, activities undertaken, and observable demographic factors.

**Results:** A total of 15,104 observations were made (7,515 Yarra; 7,589 Swan). Males were most frequently observed in, on or around the waterways (57% Yarra; 53% Swan) and those aged 18-59 years (85% Yarra; 70% Swan). Swan observations showed higher rates of recreation (86%; Yarra 52%). Persons in transit accounted for a higher proportion of activity type at the Yarra (42%) compared to the Swan (10%). Inadequate child supervision was noted in 15% of instances and 84% of boaters weren't wearing a lifejacket. In addition, alcohol consumption was observed in 4% of Yarra and 3% of Swan users.

**Conclusion:** Usage and exposure differences for the Yarra and Swan Rivers suggest that countermeasures (such as education and media campaigns, installation of safety equipment and environmental upgrades) should be tailored for each of these locations.

#### Delivering healthcare differently to reduce health disparities among people who are homeless

**Authors:** Ms Angela Gazey<sup>1</sup>, Ms Shannen Valles<sup>1</sup>

**Affiliations:** <sup>1</sup>School of Population and Global Health, The University of Western Australia, Perth, Australia

#### **Abstract:**

**Background:** The enormous disparity in health status for vulnerable population groups remains a challenge in public health. People who are homeless are particularly vulnerable, with multiple morbidities, high levels of trauma and mental health issues, and significant barriers that render it difficult for them to prioritise healthy behaviours or access preventive care. Data from around Australia shows that people who are homeless often cycle through emergency departments whilst their underlying medical and psychosocial issues remain unaddressed. St Vincent's Hospital Melbourne (SVHM) sees a large proportion of Melbourne's street homeless and has introduced innovative services to meet their needs. An evaluation of four SVHM homelessness services was undertaken in 2016. One of these services, The Cottage, provides recuperative care to people experiencing homelessness and was the first of its kind in Australia.

**Methods:** In-depth qualitative interviews were conducted with Cottage clients, staff and stakeholders (n=35) and clients' hospital service use was collected for six months pre and post contact with the Cottage as part of a broader evaluation of SVHM homelessness services.

**Results:** The creation of a welcoming and 'homely' environment within the Cottage was central to the establishment of trusting relationships between clients and staff, particularly for clients with complex experiences of trauma. These relationships supported clients to attend out-patient appointments, increased their capacity to self-manage conditions and helped them engage with community-based services.

**Conclusion:** The innovative model of care assisted in stabilising clients and interrupted the chaotic cycle of homelessness, ill-health and repeated use of acute health services.

## Abortion law and its reform: survey of NSW community knowledge and views

**Authors:** Professor Alexandra Barratt<sup>1</sup>, Dr Kevin McGeechan<sup>1</sup>, Associate Professor Kirsten Black<sup>2</sup>, Ms Julie Hamblin<sup>3</sup>, Professor Caroline de Costa<sup>4</sup>

**Affiliations:** <sup>1</sup>*Sydney School of Public Health, University of Sydney, Australia*, <sup>2</sup>*Sydney Medical School, University of Sydney, Australia*, <sup>3</sup>*HWL Ebsworth Solicitors, Sydney, Australia*, <sup>4</sup>*College of Medicine and Dentistry, James Cook University, Cairns, Australia*

### Abstract:

**Background:** Abortion remains a crime in the NSW Crimes Act 1900, punishable by up to 10 years jail. Abortion laws have been reformed in all Australian jurisdictions except NSW and Queensland. A law reform bill was debated in the NSW parliament, but defeated by 25 votes to 14 in 2017, despite endorsement by health and legal professionals, and community groups. To inform development of the bill, a survey was conducted to assess community knowledge and views on abortion law.

**Methods:** 1015 men and women resident in metropolitan and rural NSW were surveyed anonymously on-line using panel sampling. Data were weighted by age, gender and area of residence; the sample was generally representative of the NSW population but slightly more educated.

**Results:** 76% of respondents were unaware that abortion remains a criminal offence; when informed, 73% thought it should be decriminalised and regulated as a healthcare service. Support for decriminalisation was consistent across gender, age, residents of metropolitan/regional and rural areas, and levels of education. There was strong support for women to be protected from harassment (89%) and for protest exclusion zones at abortion clinics (81%), with stronger support for these measures among regional/rural residents.

**Conclusions:** This is the first survey of knowledge of abortion law and community views on law reform to be conducted in NSW. Residents were largely unaware that abortion remains a criminal offence, and when informed, supported decriminalisation and law reform. Law reform would help reduce current inequities of access and support women's autonomy and reproductive rights.

## Human Rights Health Impact Assessment

**Authors:** Dr Fiona Haigh<sup>1,2,3</sup>, Professor Lynn Kemp<sup>4</sup>, Adjunct Professor Pat Bazeley<sup>4,5</sup>, Dr Neil Haigh<sup>6</sup>

**Affiliations:** <sup>1</sup>*Centre For Health Equity Training, Research And Evaluation, UNSW Sydney, Sydney, Australia*, <sup>2</sup>*A Unit of Population Health, South Western Sydney Local Health Districts, NSW Health, Sydney, Australia*, <sup>3</sup>*A Member of the Ingham Institute, Sydney, Australia*, <sup>4</sup>*Translational Research and Social Innovation Unit (TReSI), Western Sydney University, Sydney, Australia*, <sup>5</sup>*Research Support Pty Limited, Bowral, Australia*, <sup>6</sup>*EdQuest, Hamilton, New Zealand*

### Abstract:

**Background:** Despite increasing attention given to human rights and health by policymakers and researchers, there are limited methodologies and tools developed to identify relationships between a proposed action, human rights and health. In the absence of such explanations, it is difficult to decide 'what to do' to improve human rights and health outcomes. This presentation reports on the findings of research integrating human rights into Health Impact Assessment methodology (HRHIA).

**Methods:** A 4-stage critical realist framework for theory development and verification was used. Each step involved the analysis and use of data from: 2 rounds of interviews with 23 international human rights (HR) and health impact assessment (HIA) experts; data from existing case studies of HIAs (11 case studies, 33 interviews) and of the application of a human rights-based approach (1 case study, 12 interviews); researcher recollections and introspections on HIA projects.

**Results:** An HRHIA methodology framework was developed consisting of: environment, knowledge, goals, rationale, conceptual frameworks, processes, and criteria and standards. We found that integrating human rights changes HIA in terms of: what is assessed; the phenomena to be considered, the ways HIA can work, how power is considered and also the process for carrying out HIA.

**Conclusion:** A Health Rights Health Impact Assessment tool could support decision makers to adopt public policies, programs and projects that are most likely to contribute to fulfilling human rights obligations and improving human development outcomes while also providing potentially affected communities and civil society organisations with a tool for influencing decision-making.

## Evaluate the Effectiveness of New Geriatric Assessment Model in an overburdened hospital

**Authors:** Dr. Ka Chun Chong<sup>1</sup>, Ms. Patsy Chau<sup>1</sup>, Prof Benny Zee<sup>1</sup>, Dr. Maggie Wang<sup>1</sup>, Prof. Eng Kiong Yeoh<sup>1</sup>

**Affiliations:** <sup>1</sup>*The Chinese University of Hong Kong, Hong Kong*

### Abstract:

**Background:** High inpatient occupancy in public hospitals is one the major healthcare burden in Hong Kong. Recently, a pilot program of geriatric assessment model named multidisciplinary community referral (MCR) model has been suggested to reduce unnecessary hospitalizations at accidental and emergency (A&E) department through assessing patient needs and referring to community care team for supports.

**Methods:** In the MCR model, when a subject aged >65 years old arrives the A&E department and is triaged at the non-urgent categories, a frailty assessment will be conducted to decide whether he would be assessed by a geriatrician and further be diverted to sub-acute care or to home. In the pilot program, 1,140 subjects were screened and 61% of them were successfully diverted with a drop in unplanned attendance. The pilot findings were synthesized in the computational simulation to determine changes of bed occupancy rates in acute inpatient over time when different resources were applied.

**Results:** According to the simulation results, the daily inpatient occupancy rate could be kept <100% in most of the days when 5.2 nurses and 3.6 geriatricians can be employed on average for screening and assessments. It could also save around HKD\$13.2 million of the annual bed-days costs. Nevertheless, the unplanned reattendance would only have slight drops.

**Conclusion:** The study demonstrated the MCR model could reduce the inpatient occupancy with an acceptable human costs. Compared with other interventions, the model tends to be more direct and feasible, in which the resources can be mainly arranged by an internal resource management.

## Primary care, public health and health promotion impact of complementary healthcare providers in Australia: challenges and opportunities

**Authors:** Dr Jon Wardle<sup>1</sup>, Dr Aimee Steel<sup>1</sup>, Dr Romy Launche<sup>1</sup>

**Affiliations:** <sup>1</sup>*University of Technology Sydney, Ultimo, Australia*

### Abstract:

**Background:** Complementary medicine (CM) professions now form a significant part of the healthcare system in Australia, yet very little is known about how these professions practice or impact on health promotion and public health goals.

**Methods:** 1000 consecutive patients seeing naturopaths (n = 500) and massage therapists (n = 500) from 50 practitioners in five Australian cities was conducted to examine reasons for visit, practice and consultation characteristics, practitioner recommendations and patient perceptions on CM practitioners as a source of information on public health and health promotion.

**Results:** CM practitioners have a significant primary care role, with over half of CM patients using their CM practitioner as their primary care provider. CM patients overestimate the training, regulation and qualifications of their CM practitioner, and consider them to be equally trained and knowledgeable about health issues to their conventional counterparts. CM patients tend to view their CM provider as good sources of information on most health issues, even those unrelated to their scope. Dietary and lifestyle recommendations are built into CM consultations at a much greater level than observed in conventional practice and appear to align with conventional public health and health promotion recommendations. CM practitioners cross-refer to conventional providers, but these are often not supported or utilized by CM patients.

**Conclusions:** CM practitioners appear to be strong supporters of patient education, health promotion and self-care activities. To ensure that CM practitioners are optimally used in health promotion initiatives issues such as appropriate integration, education and practice initiatives need to be considered.

## 5B Table Top Presentations

Tully 1, 11:00am – 12:30pm

### A Systematic Review of Caregiver Strain among Indigenous Australians

**Authors:** Ms. Michaela Gross<sup>1</sup>

**Affiliations:** <sup>1</sup>University of South Florida, Tampa, United States

#### Abstract:

**Background:** While Indigenous Australians live nearly ten years fewer than non-Indigenous Australians, this gap has been decreasing leading to more age-related health issues and a growing number of caregivers. This systematic review aims to provide insight into the causes of Indigenous caregiver strain and potential solutions.

**Methods:** The PRISMA approach was applied to CINAHL, PubMed, and Web of Science databases. Phrases searched included: Aboriginal, Torres Strait, Indigenous, Australia, Care, and Caregiver. A total of 851 articles were found. The vast majority of articles were not relevant and focused on child populations. Thirteen articles focusing on caregiving were identified, seven of which concerned paid caregiving or the provision of care by licensed healthcare workers. Six articles met inclusion criteria and focused on family caregiving amongst Indigenous Australians.

**Results:** All articles featured interviews of caregivers and Indigenous individuals suffering from chronic diseases, dementia, and cancer. Common themes were high living costs, a shortage of community-based support, and a lack of culturally competent healthcare workers. There was a lack of knowledge and understanding concerning dementia that may contribute to abuse and neglect. Indigenous caregivers felt kinship obligations, guilt, anxiety, and isolation.

**Conclusion:** Further research is necessary to uncover the extent of caregiver-specific burden among Indigenous Australians. Respite facilities have great potential to alleviate some of this burden. Services should be coordinated within communities to improve feelings of isolation. Public education on elder care and dementia should be emphasized to foster greater understanding.

### Feasibility and acceptability of opportunistic screening for atrial fibrillation among Aboriginal adults

**Authors:** Dr Rona Macniven<sup>1</sup>, Dr Josephine Gwynn<sup>1</sup>, Ms Hiroko Fujimoto<sup>1</sup>, Professor Sandra Thompson<sup>2</sup>, Dr Sandy Hamilton<sup>2</sup>, Associate Professor Kerry Taylor<sup>3</sup>, Ms Monica Lawrence<sup>3</sup>, Ms Deborah McCowan<sup>4</sup>, Ms Heather Finlayson<sup>5</sup>, Professor Ben Freedman<sup>6</sup>, Adjunct Associate Professor Kylie Gwynne<sup>1</sup>

**Affiliations:** <sup>1</sup>Poche Centre for Indigenous Health, The University Of Sydney, Australia, <sup>2</sup>Poche Centre for Indigenous Health, Crawley, Australia, <sup>3</sup>Poche Centre for Indigenous Health, Alice Springs, Australia, <sup>4</sup>Armajun Aboriginal Health Service, Inverell, Australia, <sup>5</sup>Brewarrina Multipurpose Service, Brewarrina, Australia, <sup>6</sup>Charles Perkins Centre, The University of Sydney, Australia

#### Abstract:

**Background:** Atrial fibrillation (AF), or irregular heartbeat, is an established precursor for stroke and other forms of cardiovascular disease which are the main cause of mortality among Aboriginal Australians. Handheld electrocardiogram (ECG) devices have been recommended internationally as preferred screening tools for the diagnosis of atrial fibrillation. We aimed to examine the feasibility and acceptability of an ECG attached to a mobile phone (iECG) screening device among Aboriginal patients in Aboriginal Controlled Community Health Services (ACCHS) and other community settings.

**Methods:** Semi-structured interviews were conducted with ACCHS staff in urban, rural and remote communities in three Australian states/territories. Quantitative (5-item likert scale) and qualitative questions identified the enabling factors and barriers for ACCHO staff and Aboriginal patients' receptiveness to the device. Mean quantitative scores and their standard deviation were calculated in Microsoft Excel and thematic analyses of qualitative questions identified key themes.

**Results:** Nineteen interviews were conducted with 23 staff across 11 ACCHS. Quantitative data found staff were confident in providing iECG screening, managing the referral follow-up pathway and that the process was beneficial for patients. Qualitative data highlighted the usefulness of the device to undertake opportunistic screening and its acceptability in routine practice and provided opportunities to engage patients in education around AF.

**Conclusion:** The iECG device was well accepted within ACCHSs and was feasible to use to screen for AF among Aboriginal patients in clinical and community settings. The device can help prevent the effects of untreated AF including stroke to improve the health of Aboriginal people.

## Relapse to smoking among people released from smoke-free prisons in Queensland

**Authors:** Ms Cheneal Puljevic<sup>1,2</sup>, Professor Stuart Kinner<sup>1,3</sup>, Dr Dominique de Andrade<sup>1,4</sup>, Professor Ross Coomber<sup>1,5</sup>

**Affiliations:** <sup>1</sup>Griffith Criminology Institute, Griffith University, Brisbane, Australia, <sup>2</sup>School of Public Health and Institute for Social Science Research, The University of Queensland, Brisbane, Australia, <sup>3</sup>Centre for Adolescent Health, Murdoch Children's Research Institute, Melbourne, Australia, <sup>4</sup>Lives Lived Well Research Group, School of Psychology, University of Queensland, Brisbane, Australia, <sup>5</sup>Department of Sociology, Social Policy and Criminology, University of Liverpool, Liverpool, United Kingdom

### Abstract:

**Background:** Despite increasing adoption of prison smoke-free policies, US-based studies have found high rates of post-release smoking relapse. A mixed-method approach was used to investigate return to tobacco smoking among adults recently released from smoke-free prisons in Queensland, Australia.

**Methods:** We conducted a cross-sectional survey of 114 people, complemented with follow-up qualitative interviews with a subset of 21 participants, within two months of release from prison. The survey measured health, social, and criminological factors related to tobacco smoking. We used logistic regression to identify factors associated with reduced post-release smoking levels compared to pre-incarceration levels. Semi-structured interviews were used to explore the perceived barriers and facilitators of maintained smoking abstinence.

**Results:** 94% of participants relapsed to smoking within two months of release, with 72% relapsing on the day of release. 62% of participants smoked significantly less per day after compared with before incarceration. Living with a partner, expressing support for smoke-free prison policies, intending to remain quit post-release, and intending to quit in the future were associated with reduced smoking post-release. Use of illicit drugs post-release was negatively associated with reduced smoking post-release. In multivariate analyses, pre-release intention to remain smoke-free was associated with reduced smoking post-release. Semi-structured interviews identified several barriers to continued abstinence following release from smoke-free prisons.

**Discussion:** Interventions promoting continued smoking abstinence among people exiting smoke-free prisons should focus on targeting the perceived barriers to maintained smoking abstinence while simultaneously promoting perceived facilitators, so as to reduce smoking-related health and economic disparities in a marginalised population.

## Perspectives on sharing power and building trust for co-production in Aboriginal health

**Authors:** Ms Simone Sherriff<sup>1</sup>, Ms Hilary Miller<sup>2,3</sup>, Dr Sumthira Muthayya<sup>1</sup>, Dr Anna Williamson<sup>1</sup>, Professor Jonathan Craig<sup>4</sup>, Professor Sally Redman<sup>1</sup>, Associate Professor Allison Tong<sup>2</sup>, Dr Abby Haynes<sup>1</sup>

**Affiliations:** <sup>1</sup>The Sax Institute, Sydney, Australia, <sup>2</sup>Sydney School of Public Health, The University of Sydney, Sydney, Australia, <sup>3</sup>Centre for Kidney Research, The Children's Hospital at Westmead, Westmead, Australia, <sup>4</sup>Flinders University, Adelaide, Australia

### Abstract:

**Background:** Historically, Aboriginal health research has been non-participatory, misrepresentative, and has produced few measurable improvements to community health. The Study of Environment on Aboriginal Resilience and Child Health (SEARCH) was established to co-produce research with Aboriginal people as equal partners. Over the past decade, SEARCH has built a successful partnership across policy, research and Aboriginal community sectors which has resulted in improvements in Aboriginal health through enhanced services, policies and programs. This study aimed to explore critical success factors behind this partnership, focusing on how SEARCH established and continues to build trusting co-productive relationships, continuing challenges and areas of improvement.

**Methods:** Semi-structured interviews were conducted with 27 Aboriginal and non-Aboriginal stakeholders involved in SEARCH who were purposively selected to obtain diversity of roles and perspectives. Interview questions explored concepts that informed the development of SEARCH such as trust, transparency, leadership, governance, reciprocity and empowerment. Data was analysed thematically and written up using the qualitative description approach.

**Results:** Two overarching themes of sharing power and respecting trust emerged as critical to the partnership that linked to nine critical success factors for co-production: shared control; strong credible leadership; shared vision, shared goals; willingness to take risks; connecting across cultures; empowering the community; valuing local Aboriginal knowledge; ongoing investment, collaboration and adaptability.

**Conclusion:** Our findings describe the challenges and benefits of using a co-production model in Aboriginal health research. While this model has room for ongoing improvement, we demonstrate that co-production in Aboriginal health research is achievable and necessary to improve health outcomes.

## A qualitative evaluation of the Swim for Fruit program in Aboriginal children

**Authors:** Ashley Ridge<sup>1</sup>, Lauren Nimmo<sup>1</sup>

**Affiliations:** <sup>1</sup>Royal Life Saving Society of WA, Perth, Australia

### Abstract:

**Background:** Aboriginal Australians have higher disease and death rates, and are 3.6 times more likely to drown than non-Aboriginal Australians. Through addressing these health inequities, we can work to help bridge the gap between Aboriginal and non-Aboriginal Australians. The Royal Life Saving Society of WA (RLSSWA) has been working with 18 swimming pools within the Pilbara and Kimberley regions in the north-west of WA to run the Swim for Fruit program. The program encourages regular physical activity at the pool by providing fruit as an incentive for participation. The aim of this research was to conduct an in-depth evaluation of the program within the Pilbara region to examine barriers and enablers to participation and its effectiveness in improving levels of physical activity, healthy eating and swimming skills.

**Methods:** A mixed methods approach was employed which included program participation data, structured phone interviews with pool managers and semi-structured face to face yarning sessions at the pool with participants and non-participants from seven of the twelve pools.

**Results:** Pool managers described the program as an invaluable asset providing many benefits, including increased physical activity, improved swimming and water safety skills and increased fruit consumption.. Program enablers included flexible programming, creating a fun, safe and social environment, and using a reward system. Children having other interests, transport, age and supervision requirements and not knowing about the program were barriers.

**Conclusion:** This research highlighted the success of the Swim for Fruit program in engaging children in physical activity, encouraging healthy eating and improving swimming skills. The outcomes of this research can be used to guide other programming in regional and remote areas to increase participation among Aboriginal children.

## Growing up in Australia: Explaining overweight/obesity in 4-11-year-old children of Australian immigrants.

**Authors:** Dr Tehzeeb Zulfiqar<sup>1</sup>, Dr Lyndall Strazdins<sup>1</sup>, Dr Cathy Banwell<sup>1</sup>, Dr Huong Dinh<sup>1</sup>, Dr Catherine D'Este<sup>1</sup>

**Affiliations:** <sup>1</sup>The Australian National University, Canberra, Australia

### Abstract:

**Objectives:** Children of Australian immigrants are at higher risk of overweight/obesity compared to children of Australian-born mothers. Our study investigates child behavioral risk factors by maternal immigrant status and their association with overweight/obesity in 4-11-year-old children.

**Methods:** Cross-sectional and longitudinal analysis of 8 years data from the Longitudinal Study of Australian Children were conducted. Children's overweight/obesity was defined according to the International Obesity Taskforce, age-and sex-specific BMI cutoff-points. Maternal immigrant status was defined by Australian Bureau of Statistics and Human Development Index criteria.

**Results:** We found sex-specific differences in trends of overweight/obesity by maternal immigrant status across most ages. Sons were more likely to be overweight/obese at 8-9 years (30% vs 23%, & 22%,  $p = 0.05$ ) and daughters at 4-5 years (35% vs 22%, 24%;  $p = 0.002$ ), if the mothers were from low-and-middle-income-countries compared to if the mothers were Australian-born or from high-income-countries respectively. Children of mothers from low-and-middle-income-countries had higher vegetables and sugar-sweetened-beverages intake; higher sedentary activities and lower organized-sports participation. These behaviors were particularly evident at younger ages. Organized-sports participation and screen-time converged to the Australian norms in 10-11-year-old sons, but not in daughters. Preference for sedentary activities and screen-time explained the differences in overweight/obesity by maternal immigrant status in sons but not in daughters.

**Conclusion:** Our results indicate that the drivers of overweight/obesity amongst children of mothers from low-and-middle-income-countries can differ to those for children of Australian-born mothers and require more nuanced age, sex and culturally sensitive health messages for prevention.

## Building back better: Strengthening Vanuatu's surveillance system post Tropical Cyclone Pam

**Authors:** Mr Onofre Edwin A. Merrilles Jr.<sup>1</sup>, Mr George Worwor<sup>2</sup>, Ms Salanieta Duituturaga<sup>3</sup>, Ms Christelle Lepers<sup>1</sup>

**Affiliations:** <sup>1</sup>The Pacific Community (SPC), Noumea, New Caledonia, <sup>2</sup>Ministry of Health, Vanuatu, Port Vila, Vanuatu, <sup>3</sup>The Pacific Community (SPC), Suva, Fiji

### Abstract:

**Background:** A functional health surveillance system producing quality data and information, and able to respond to emergencies in a timely manner is what every country needs. Unfortunately, even strong surveillance systems are unable to cope well with unexpected challenges. In March 2015, Tropical Cyclone Pam hit Vanuatu highlighting the capacity gaps in surveillance and response.

**Methods:** Together with decision makers in the Vanuatu Ministry of Health, we developed support packages to strengthen the surveillance system. Building on the principle “from work, at work, for work”, four modular capacity development workshops of the Postgraduate Certificate Programme in Field Epidemiology conducted with members of the Pacific Public Health Surveillance Network (PPHSN). Training on Laboratory Quality Management System done. National infection prevention and control guideline updated.

**Results:** Twenty-two health workers from six provinces in Vanuatu trained in epidemiology and surveillance now operate national and provincial surveillance units. Weekly data collected and analyzed and reports shared through the PPHSN communication platform – PacNet. Periodic review of laboratory processes, practices and performance conducted. The trained surveillance officers are working on system improvement projects to address gaps and weaknesses they self-identified. The Ministry of Health created additional surveillance positions at national and provincial levels.

**Conclusions:** The realities and vulnerabilities in most Pacific island countries require collective and synergistic approaches to strengthen public health surveillance. Periodic follow through, coupled with supportive work environment and implementation of system improvement initiatives are essential. Evaluation of the processes and lessons learned need further analysis to guide similar initiatives in the Pacific.

## 5C Rapid Fire - Public Health Leadership and Governance

Tully 2 & 3, 11:00am – 12:30pm

### Open Water Grey Medallion: Responding to increased drowning among older adults

**Authors:** Ms Rhiannon Birch<sup>1</sup>, Ms Grace Strugnell<sup>1</sup>, Dr Bernadette Matthews<sup>1</sup>

**Affiliations:** <sup>1</sup>Life Saving Victoria, Port Melbourne, Australia

#### Abstract:

**Introduction:** Adults aged over 55 years have a high age-specific fatal drowning rate. Contributing factors for drowning among older adults include unintentional entry into water, underlying medical conditions, and reduced skills and fitness. With the aging population predicted to grow, drowning deaths are likely to increase without intervention.

The Open Water Grey Medallion (OWGM) aquatics and health promotion program was piloted at Torquay Beach in 2017. The OWGM aimed to teach older Victorians personal survival techniques and emergency response skills, and develop confidence and competence to enjoy aquatic activities safely.

**Methods:** A pre-post cohort survey of 12 participants measured changes in water safety skills, knowledge, and intended future participation in lifesaving and community activities. Semi-structured post-program focus group sessions covered detailed program impacts.

**Results:** The proportion of participants reporting their resuscitation and water safety skills and knowledge as ‘good’ or ‘excellent’ increased from 33% pre-program to 92% post-program. More markedly, the proportion that felt they possessed sufficient knowledge to avoid getting into hazardous situations in and around water increased from 25% to 92%.

Additionally, 92% described increased confidence participating in aquatic activities and applying water safety knowledge and 83% considered participating in aquatic activities in future including formal First Aid training and recreational swimming. Additional benefits included new friendships and motivation to become more active.

**Conclusions:** By providing education, formal training, practical skills and experience in open water environments, expansion of the OWGM program has the potential to reduce the number of older Victorians drowning through preventable aquatic incidents.

### Fostering public health leaders: Recommendations for engaging students and young professionals

**Authors:** Thomas Piggot<sup>1</sup>, Ameera Katar<sup>1</sup>, Aimee Brownbill<sup>1</sup>, Ambika Agarwal<sup>1</sup>, Andrea Buron Pust<sup>1</sup>, Stefan Buttigieg<sup>1</sup>, Shakira Choonara<sup>1</sup>, Vina HuLamm<sup>1</sup>, Damir Ivankovic<sup>1</sup>, Annelyse Jorgenson<sup>1</sup>, Aimee Lee<sup>1</sup>, Mary Onah<sup>1</sup>, Manasi Parikh<sup>1</sup>, Gaia Piccinni<sup>1</sup>, Rachael Reed<sup>1</sup>, Theodore Russell<sup>1</sup>, Valerie Simpson<sup>1</sup>, Penelope Strauss Penelope Strauss<sup>1</sup>, Adam Thorburn<sup>1</sup>, Marius Vouking<sup>1</sup>

**Affiliations:** <sup>1</sup>World Federation of Public Health Associations, Students and Young Professionals Working Group

#### Abstract:

**Background:** The past 50 years have seen tremendous accomplishments in public health. Key to these successes have been the persistent efforts of public health leaders. Complex public health challenges remain and new ones continue to surface. Looking to the future, engaging students and young professionals (SYPs) early in their public health career and providing guidance, clear actions and support, will enable them to utilise their enthusiasm to tackle major public health challenges. Engaging SYPs will not only foster public health leaders of tomorrow, but will encourage SYPs and recognize them as leaders of today.



**Body:** This project aimed to produce a set of recommendations to guide public health associations and organisations in how best to support and engage SYPs. A multi-staged approach was used. The project included a narrative literature review of strategies for engaging SYPs (n=31 articles), a scoping survey of SYPs to identify areas they feel requiring further opportunities/support (n=72 respondents), a stakeholder consultation workshop to further explore previously identified themes (n=39 participants; 162 tweets were generated) and a final survey for consensus building on final recommendations (n=239 respondents).

**Summary:** Five key recommendations have been identified to provide guidance for public health associations and organisations to meet the needs of SYPs. The results are presented in actionable recommendations for associations, organisations and individuals willing to increase the engagement of SYPs in public health.

**Learning objectives:**

- 1) How public health associations/organisations can engage SYPs
- 2) How SYPs can be proactive in looking for engagement and professional development opportunities

**Contribution of leadership in public health: A systematic narrative review**

**Authors:** Mr. Sudarshan Subedi<sup>1</sup>, Dr. Darlene McNaughton<sup>1</sup>, Prof. Colin MacDougall<sup>1</sup>

**Affiliations:** <sup>1</sup>Flinders University, Adelaide, Australia

**Abstract:**

**Purpose:** To identify the contribution of leadership in public health services delivery and outcomes.

**Methods –** A systematic search was conducted in ProQuest, PubMed, Emerald, InterNurse and Google Scholar in April 2017. A total of 19 studies (qualitative and quantitative) were included and reviewed by adopting thematic analysis and narrative synthesis.

**Findings:** Studies examined and observed leadership from two perspectives, 1) applying and assessing leadership as an intervention 2) observing leadership in its original/existing status. The contribution of leadership in public health was categorized and described into two parts, 1) health service delivery 2) health outputs/outcomes. The themes extracted in terms of health service delivery were human resource performance, institutional performance and partnership/participation, whereas the themes extracted for health outputs/outcomes were maternal health, child health, sexual behaviour/AIDS and psychosocial status.

**Conclusion:** Health workers in leadership role/position emphasize on staffs' motivation/empowerment and stakeholders' coordination to attain health care quality. Leadership intervention programs are useful in increasing instantaneous health services delivery and outcomes but the sustainability of these interventions is uncertain. Further comprehensive, in-depth original researches on public health leadership including the exploration of leadership behaviour/styles of public health managers and its impact on public health systems are quite essential.

**Implications:** The results from this review would be beneficial for public health managers and/or organizations in applying leadership behaviours and/or interventions by identifying the ways how leadership works in public health settings.

**Keywords:** Leadership, public health, health services delivery, health outcomes.

**Community leadership evaluating policies for breastfeeding protection, promotion and support: WBTi Australia**

**Authors:** Ms Naomi Hull<sup>1</sup>, Dr Julie Smith<sup>1</sup>, Ms Jen Hocking<sup>3</sup>

**Affiliations:** <sup>1</sup>WBTi Australia, Brisbane, Australia, <sup>2</sup>Australian National University, Canberra, Australia, <sup>3</sup>Australian Catholic University/ Western Sydney University, Melbourne, Australia

**Abstract:**

**Context:** In 2003, the International Baby Food Action Network developed an easy-to-use assessment tool, titled The World Breastfeeding Trends Initiative (WBTi). It was designed to enable the systematic analysis of a nation's progress in relation to the principles of the Global Strategy for Infant and Young Child Feeding. The assessment has been used by 84 countries around the world, to benchmark their current infant feeding policies and programs.

This presentation will describe the background of the WBTi, how the assessment was conducted and the current results for Australia. The presentation will also include how the assessment results have been used thus far, and the group's plans for future advocacy and reassessment.

**Process:** In September 2017, academics, health professionals and breastfeeding and public health advocates came together for a training workshop on conducting a WBTi assessment for Australia. A core group was formed, and the assessment has been undertaken. Data has been collected and scoring is complete.

**Analysis:** Australia scored well on indicators such as parental leave policies. Low scores resulted from lack of a nationally coordinated approach, including on breastfeeding education for health professionals, addressing needs of infants in emergencies, effective and updated public actions on the WHO International Code, and resourcing and governance systems for mother-baby friendly standards throughout the health care system.

**Outcomes:** Preliminary findings have been discussed and agreed upon by the Core and Reference group and will be submitted to IBFAN for validation before mid-April 2018.

**Learning objectives:**

- Knowledge of the World Breastfeeding Trends initiative and its role in global systems for assessing and improving breastfeeding policy
- Understanding of what is involved in conducting a national WBTi assessment
- Familiarity with results for Australia, including key areas of strength and weakness

**Strengthening Asia-Pacific health system capacity for surveillance and response: Tropical Partners project**

**Authors:** Dr Karen Carlisle<sup>1,2</sup>, Professor Sarah Larkins<sup>1,2</sup>, Dr David MacLaren<sup>1,2,3</sup>, Mr Humpress Harrington<sup>1,2,3</sup>, Professor Maxine Whittaker<sup>1,2</sup>, Ms Mere Delai<sup>4</sup>, Professor Emma McBryde<sup>1,2</sup>

**Affiliations:** <sup>1</sup>College Of Medicine And Dentistry, James Cook University, Douglas, Australia, <sup>2</sup>Australian Institute of Tropical Health and Medicine, James Cook University, Douglas, Australia, <sup>3</sup>Atoifi Health Research Group, Atoifi, Solomon Islands, <sup>4</sup>Ministry of Health and Medical Services, Suva, Fiji

**Abstract:**

**Context:** A fit-for-purpose public health workforce, appropriately distributed, networked and with the required skill-sets is an essential part of detecting and responding to emerging and existing infectious diseases in the Asia-Pacific region. Historically, however, little investment has been made in the development of their skill-sets. Mobilising frontline workers is a vital strategy for strengthening long-term capacity and responsiveness in the larger Asia-Pacific region.

**Process:** In order to strengthen frontline surveillance and response, a series of implementation research workshops was delivered to public health and biosecurity workers in Fiji, Solomon Islands, PNG, Eastern Indonesia and Timor L’Este. The workshops adopted a ‘learning by doing’ model, therefore participants undertook a workplace-linked implementation research project on a priority issue identified in collaboration with local policy makers and in-country stakeholders.

**Analysis:** Over 60 public health workers participated in the research training in Fiji, Solomon Islands and Eastern Indonesia and paired with local and international mentors. Workplace implementation research projects were developed to address locally relevant priorities, implemented after ethical review and disseminated.

**Outcomes:** Implementation of this training program has generated extensive evidence on the value of engaging public health workers in a ‘learning by doing’ model of research training, whilst delivering important local answers to priority questions. This work also contributes to knowledge on more empowering and sustainable ways of working with our Asia-Pacific neighbours. Evidence to date suggest that this approach to workforce capacity strengthening can enable frontline workers to identify and respond to local level surveillance and response priority issues.

**Case managing to hear the stories, teach resilience and work towards long term change**

**Authors:** Leonie Shawcross<sup>1</sup>, Toni Tapim<sup>1</sup>

**Affiliations:** <sup>1</sup>Wuchopperen Health Service

**Abstract:**

**Context:** The over-representation of Aboriginal and Torres Strait Islander children and young people in care is well documented. Case managers focused on housing, substance abuse, and domestic violence have attempted many forms of intervention with limited success. Wuchopperen’s Family Wellbeing Service takes a new approach to helping families with diverse needs, at the earliest possible opportunity to prevent concerns from escalating, as well as providing intensive support for families already in contact with the child protection system.

**Process:** In developing the service, a needs analysis was undertaken by reviewing key information from the Department of Child Safety, Education Queensland, Wuchopperen staff, the local Aboriginal and Torres Strait Islander community and other key stakeholders. Evidence based models that recognise community and family strengths and place families at the centre of decision making were reviewed.

**Analysis:** It was identified that existing models of support required improvement. Wuchopperen, in partnership with stakeholders, developed a service that is evidence based and draws on the cultural knowledge and experience of Aboriginal and Torres Strait Islander practitioners from the local community in order to deliver an empowering model of family led decision making.

**Outcomes:** By hearing the stories, assessing the Determinants of Health that underpin the issues, and by looking into the theory of change, we identified that families need to be supported informed and in control, to develop resilience.

**Learning objectives:**

1. Identification of skills and knowledge required to effectively support and strengthen Aboriginal and Torres Strait Islander families

Programs need to be informed by local cultural practices

### **Building Population Health Workforce Capacity: A New South Wales Approach**

**Authors:** Dr Lisa McCallum<sup>1</sup>, Ms Alex Scott<sup>1</sup>, Dr Hopi Yip<sup>2</sup>, Ms Dawn Arneman<sup>1</sup>, Mr Jeff Standen<sup>2</sup>

**Affiliations:** <sup>1</sup>Centre for Epidemiology and Evidence, NSW Ministry Of Health, North Sydney, Australia, <sup>2</sup>Aboriginal Environmental Health, Health Protection NSW, North Sydney, Australia

#### **Abstract:**

**Context:** Improving the health of the people of New South Wales (NSW) requires an adaptive and diverse population health workforce. NSW Health has developed a range of training programs to build the capability and capacity of the population health workforce, including: the Aboriginal Population Health Training Initiative (APHTI), Aboriginal Environmental Health Officer Training Program (AEHOTP), Public Health Training Program (PHTP) and Biostatistics Training Program (BTP).

**Process:** These programs use comprehensive, competency based training to develop flexible and adaptive practitioners with the skills to respond to NSW's current and emerging needs. Each program uses a model of delivery that has been tailored to best address the target specialty. Trainees are employed full-time and actively participate in or lead a wide range of priority projects, in a variety of workplace settings.

**Analysis:** As at March 2018, the four programs had enrolled 328 trainees, 194 trainees had successfully completed the programs, and 173 trainees had attained a tertiary qualification. More than two thirds (>68%) of trainees continued to be employed by NSW Health after finishing their training. These programs remain successful because they adapt to a changing healthcare landscape and actively engage key leaders within each specialty. Regular evaluations ensure the programs are enhancing the workforce and trainees are developing relevant, evidence based skills.

**Outcomes:** The PHTP, BTP, APHTI and AEHOTP are successful, comprehensive training programs that provide useful models for developing workforce capability and capacity, which could be modified to provide similar outcomes in other jurisdictions.

### **Research governance: a fresh approach**

**Authors:** Dr Malcolm McDonald<sup>1</sup>, Dr Sandy Campbell<sup>2</sup>, Mrs Ruth Fagan<sup>3</sup>, Dr Jacki Mein<sup>4</sup>, Dr Alan Ruben<sup>5</sup>

**Affiliations:** <sup>1</sup>Centre for Chronic Disease Prevention, James Cook University, Cairns, Australia, <sup>2</sup>Centre for Indigenous Health Equity Research, Central Queensland University, Cairns, Australia, <sup>3</sup>Gurriny Yealamucka Health Service, Yarrabah, Australia, <sup>4</sup>Wuchopperen Health Service, Cairns, Australia, <sup>5</sup>Apunipima Cape York Health Council, Cairns, Australia

#### **Abstract:**

Many Aboriginal Australian and Torres Strait Islander communities have research fatigue. This is exacerbated when research is conducted according to external agendas and describes health problems whilst falling short on solutions. Historically, translation of research findings to effective healthcare outcomes has been dogged by lack of purpose, administrative roadblocks and poorly-sustained funding. The Values and Ethics: Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research [NHMRC] and the Guidelines for Ethical Research in Australian Indigenous Studies [AIATSIS] each provide a framework for the scientific quality, ethical acceptability and cultural safety. They are comprehensive reference documents, but length and complexity may daunt community decision makers who do not have research expertise.

Human research and ethics committees have been established across the country to address ethical review and are increasingly held responsible for research governance. However, they are invariably attached to universities or city-based institutions and rarely connected to community-controlled health services.

FNQ community-controlled health services and local Indigenous researchers have produced a discussion paper that is brief, succinct and accessible. It covers the reasons for research and in whose interest, establishment of research priorities, scientific integrity, community consultation, ethical and cultural considerations, local research capacity-building and leadership, timeframes, ways of returning results to the community and translation of findings to healthcare service delivery. Copies will be provided to the conference audience for discussion and feedback. The aim is to hone this summary document so that it can be adopted across the region, and perhaps beyond.

### **Creating a Healthy Airport: Building health promoting complex infrastructure**

**Authors:** Alana Crimeen<sup>1,2,3,4</sup>, Andrew Reid<sup>1,2,3,4</sup>, Professor Evelyne de Leeuw<sup>1,2,3,4</sup>, Dr Fiona Haigh<sup>1,2,3,4</sup>, Professor Robert Freestone<sup>2</sup>

**Affiliations:** <sup>1</sup>Centre For Health Equity Training, Research And Evaluation, Liverpool, Australia, <sup>2</sup>University of New South Wales, Sydney, Australia, <sup>3</sup>South Western Sydney Local Health District, Liverpool, Australia, <sup>4</sup>Ingham Institute, Liverpool, Australia

#### **Abstract:**

**Context:** The confirmed new airport for South Western Sydney has promised economic and development stimulus to an area that currently experiences inequities across multiple social determinants of health. Traditionally, airports themselves are not considered health promoting environments, with their development posing health risks to the local community and environment.

The Centre for Health Equity Training, Research and Evaluation (CHETRE) have theorised that adopting a healthy settings approach to a new airport development in South Western Sydney may provide an opportunity to reconcile our goals for a healthier, more equitable local community with a complex and multifaceted infrastructure development.

**Process:** A research process has been undertaken including a peer review of the airports environmental impact statement, health impact assessment, literature reviews and stakeholder engagement in participation with experienced public health, built environment and airport professionals.

**Analysis:** Most perspectives around health determinants and airports take a micro level view on risk mitigation. Broader studies on economy and the aerotropolis (airport city) theory have helped us understand the potential changes airports make to city landscapes. By applying the WHO healthy settings approach to our findings, CHETRE has developed a conceptual framework for a “Healthy Airport”.

**Outcomes:** The framework includes fourteen dimensions of “Healthy Airports”, some of which include environments, public participation, heritage, services and facilities, connectivity and health hazards and risk. This approach recognises that health must be prioritised in both risk management and the proactive promotion when building complex urban infrastructures. We have commenced testing this approach with community and industry partners.

## 5D Rapid Fire - Prevention & Health Promotion

Kuranda Ballroom, 11:00am – 12:30pm

### Quantifying influenza severity in Australia

**Authors:** Ms Kaitlyn Vette<sup>1</sup>, Ms Christina Bareja<sup>2</sup>, A/Prof Robert Clark<sup>1</sup>, Dr Aparna Lal<sup>1</sup>

**Affiliations:** <sup>1</sup>Australian National University, Canberra, Australia, <sup>2</sup>Australian Government Department of Health, Canberra, Australia

#### Abstract:

**Context:** Australian influenza surveillance traditionally uses historical ranges and expert opinion to determine the influenza seasonal period and its severity. The World Health Organization has recently published Pandemic Influenza Severity Assessment (PISA) guidance for in-country implementation to standardise and enhance global capacity to monitor severe and pandemic influenza. As globalisation increases the interface between communities of animals and humans, the threat of emerging influenza strains and transmission between populations makes detecting severe influenza increasingly important.

**Process:** National data from sentinel GP surveillance, hospital surveillance, a public health hotline and an influenza-like illness survey system were used to measure PISA’s severity indicators (transmission, impact and seriousness). Thresholds for indicator parameters were set using 2012-2016 data and then applied to 2017 seasonal data.

**Analysis:** Multiple sources of Australian data measured and produced thresholds for each severity indicator, including confirmed influenza data to validate measurements. When thresholds were applied to the 2017 season, there was good agreement between all data sources in measuring each indicator’s activity. The season was characterised as having high transmission and extraordinary impact. Seriousness was characterised as moderate in all groups except those aged ≥65 years where it was high.

**Outcomes:** Evidence-based, internationally-comparable, timely measurement of national influenza severity is now possible in Australia. This measurement can inform the scale, focus and timing of activities in response to seasonal and pandemic influenza and maximise the impact of activities. By leading the way globally through the application of PISA in Australia, we hope to encourage adoption of severity assessment internationally.

### PrEP in Australia: Are there challenges facing sexual health promotion?

**Authors:** Dr Matthew Dunn<sup>1</sup>, Mr Anthony Barnett<sup>1</sup>, Prof Richard Osborne<sup>1</sup>

**Affiliations:** <sup>1</sup>Deakin University, Burwood, Australia

#### Abstract:

**Background:** Pre-exposure prophylaxis (PrEP) for HIV refers to the daily use of antiretroviral medication by HIV uninfected person to block HIV infection before it occurs. Despite being one of the most promising biomedical interventions to eliminate HIV, there has been low uptake in countries where PrEP is available. This study aimed to explore whether PrEP had caused any challenges for organisations undertaking sexual health promotion activities in Australia.

**Methods:** In-depth, semi-structured interviews were conducted with 17 participants (15 male, 2 female) who were purposively sampled from a range of HIV advocacy and health promotion settings. These included publicly funded HIV/AIDS councils, organisations representing people living with HIV/AIDS, sex worker advocacy organisations, PrEP activist volunteer groups, and sexual health clinics. Guided by an exploratory, inductive approach, the interviews were analysed using thematic analysis.

**Results:** The introduction of PrEP had caused few major challenges for organisations undertaking sexual health promotion activities. While there were some challenges, such as overcoming barrier-only beliefs and stigma toward those using PrEP, there were profound benefits, such as shifting the prevention burden from the HIV-positive community to the HIV-negative community.

**Conclusions:** PrEP is a highly effective biomedical intervention to reduce HIV transmission, and its introduction has led to changes in how sexual health promotion campaigns are designed and implemented. Future challenges include designing sexual health promotion activities for those at risk for HIV transmission outside MSM communities, and overcoming decades of prevention campaigns that focus on barrier methods only.

### Using real-world comparisons of teenagers' versus adult responses to adult-targeted anti-smoking campaigns

**Authors:** Kelly Kennington<sup>1</sup>, Rajni Rai<sup>2</sup>, Professor Simone Pettigrew<sup>2</sup>, Dr Michelle Jongenelis<sup>2</sup>

**Affiliations:** <sup>1</sup>Cancer Council WA, Perth, Australia, <sup>2</sup>WA Cancer Prevention Research Unit (WACPRU), Curtin University, Perth, Australia

#### Abstract:

**Clear context:** The Make Smoking History (MSH) project is coordinated by Cancer Council WA to reduce smoking prevalence among adults in Western Australia. The project takes a comprehensive approach to tobacco control, of which mass media advertising is pivotal. While the primary target audience of MSH advertising is adults, preventing the uptake of smoking among young people is also an important objective for tobacco control. With this in mind, a study was undertaken examining the impact of MSH advertising on young people aged 15-17 years in WA and comparing it to responses from WA adult smokers.

**Process:** MSH conducted a 12-week WA-wide mass media campaign (From Every Quitter) in 2017. To evaluate the campaign, computer assisted telephone interviewing was conducted with 200 smokers aged 18-54 years. In addition, a web panel survey was conducted with 340 young people aged 15-17 years. Questions in both the interview and online survey measured smoking related beliefs as well as awareness and attitudes towards the 'From Every Quitter' mass media campaign.

**Analysis:** When compared, results showed high levels of campaign awareness, approval of anti-smoking campaigns, and intended message take-out among both adults and young people.

**Outcomes:** Results suggest MSH campaigns are having a positive impact on young people in WA, in addition to the primary target group of adults. These findings support existing evidence that suggests adult-focused campaigns are similarly effective at communicating with younger target audiences.

### Dentists' role in recognising, responding and referring women who experience domestic violence

**Authors:** Dr Felicity Croker<sup>1</sup>, Dr Ann Carrington<sup>1</sup>, Ms Amanda Lee-Ross, Miss Nausheen Mohammad Muhajir

**Affiliations:** <sup>1</sup>James Cook University, Cairns, Australia

#### Abstract:

**Background:** Domestic violence is a significant public health issue that impacts not only on individual women, but also on their families and communities. The prevalence of domestic violence means that student dentists encounter traumatised women in their clinical practice, however, they reported feeling inadequately prepared for this challenging role. The Dentists and Domestic Violence – Recognise, Respond and Refer (DV-RRR) training program is a groundbreaking intervention developed collaboratively with JCU Social Work and the Cairns Regional Domestic Violence Service to address this problem.

Embedding dental students into participatory action research projects that evaluate the DV-RRR initiative has been integral to successful design and implementation. While they have identified that dental students' embed awareness of domestic violence into their clinical practice, graduates' capacity to respond appropriately has not been explored.

**Methods:** Current research aims to explore JCU dental graduate's perceptions of the effectiveness and value of DV-RRR training in their practice using a mixed method approach. Online surveys will evaluate the sustained impact of this education to graduate dental practice. Focus groups will then enrich the evaluation data on the program.

**Results:** Data collection is in progress. Findings will reveal the sustained impact of domestic violence training on graduates' clinical practice. The presentation will provide results on the sustained value, effectiveness and clinical application of the DV-RRR intervention

**Conclusion:** DV-RRR is embedded in the JCU Dental Surgery curriculum. Interest from health professionals suggests that other dental programs would benefit from a similar collaborative initiative that enables appropriate responses to domestic violence.

## Understanding STI testing of adolescents and young adult Queenslanders

**Authors:** Dr Mohammad Kadir<sup>1</sup>, Professor Sharyn Rundle-Thiele<sup>1</sup>

**Affiliations:** <sup>1</sup>Griffith University, Nathan, Australia

### Abstract:

**Background:** Testing for sexually transmissible infections (STI) is critical for adolescents who are most vulnerable to sexually transmissible diseases (STD).

**Methods:** A survey questionnaire was used to collect data on STI testing, attitude, knowledge, risk perceptions, risky sexual health behaviour and competency and demographics from 1451 Queenslanders aged 15-29 years. Percentages, chi-square and regression were used to analyse data.

**Results:** Nineteen percent of the participants reported that they tested for STIs within the past three months.

Significant associations were found between STI testing and age ( $\chi^2(2)=8.337$ ,  $p<.05$ ), sexual preference ( $\chi^2(4)=14.159$ ,  $p<.01$ ), household type ( $\chi^2(6)=13.380$ ,  $p<.05$ ), parents from non-English speaking countries ( $\chi^2(1)=5.265$ ,  $p<.05$ ), number of sexual partners ( $\chi^2(4)=40.530$ ,  $p<.01$ ), condom use as a method for STI protection ( $\chi^2(1)=6.043$ ,  $p<.05$ ) and willingness to discuss sexual health with professionals (WDSHP) ( $\chi^2(1)=7.359$ ,  $p<.05$ ).

Effects of the above mentioned variables, STI knowledge, attitude, and risk-perception, sexual health competency, risky sexual health behaviours and STD knowledge on the likelihood of testing STIs within three months was examined. The regression model was statistically significant,  $\chi^2(13)=101.204$ ,  $p<.01$  and explained 67.1% of the variance in STI testing and correctly classified 93.3% of cases. Age, number of partners, WDSHP, STI attitude and knowledge and STD knowledge were statistically significant.

An increased number of partners, WDSHP, STI and STD knowledge were associated with an increased likelihood of STI testing; however, increasing age and STI attitudes were associated with a reduction in the likelihood of STI testing.

**Conclusion:** Sexual health knowledge can be used to increase the rate of STI testing.

## Behavioural and attitudinal characteristics of beachgoers and factors influencing safety signage recall

**Authors:** Ms Rhiannon Birch<sup>1</sup>, Mr Robert Andronaco<sup>1</sup>, Ms Grace Strugnell<sup>1</sup>, Dr Bernadette Matthews<sup>1</sup>

**Affiliations:** <sup>1</sup>Life Saving Victoria, Port Melbourne, Australia

### Abstract:

**Background:** Victoria's Mornington Peninsula Shire (MPS) is a national coastal drowning risk hotspot, with 22 deaths from 2004-2014. Beach safety signage provides warnings of aquatic hazards, to improve beachgoer safety. Behavioural and attitudinal characteristics of beachgoers impact the way safety signs are interpreted and how they modify behaviour. The study aimed to identify beachgoer attitudes and behaviours specific to hazards at MPS beaches, including recall of safety signage.

**Methods:** On-site surveys of visitors to eight MPS beaches were conducted over summer and autumn 2016/17. Four beaches contained safety signage, and whether persons walking past the signage observed it or not was recorded.

**Results:** Beachgoers ( $n=427$ ) agreed that calm open water may hold hidden hazards, that parents are primarily responsible for child supervision and that drinking alcohol around water carries inherent risk. Rip currents were considered the main hazard at MPS beaches; however, 48% of respondents could not confidently identify one and the perceived likelihood of injury was considered highly unlikely.

Where safety signage was present at ocean beaches, 22.3% of beachgoers were noted to observe signage. On-site surveys; however, suggest recall occurred among 40.3% of beachgoers. Observation of signage was lower at bay beaches (3.9%).

**Conclusion:** While there is a general understanding of potential hazards at beaches, beachgoers lack an awareness of the likelihood of these hazards. Further work is needed to educate the public about the potential hazards at beaches. These findings also demonstrate the need for a multifaceted approach to risk treatment, rather than treating risks in isolation.

## User perceptions of the Make Healthy Normal Facebook page– implications for practice

**Authors:** James Kite<sup>1</sup>, Bronwyn McGill<sup>1</sup>, Dr Becky Freeman<sup>1</sup>, John Vineburg<sup>2</sup>, Vincy Li<sup>3</sup>, Nathan Berton<sup>4</sup>, Dr Anne Grunseit<sup>1,5</sup>

**Affiliations:** <sup>1</sup>Prevention Research Collaboration, Sydney School of Public Health and Charles Perkins Centre, University of Sydney, University Of Sydney, Australia, <sup>2</sup>Centre for Population Health, NSW Ministry of Health, North Sydney, Australia, <sup>3</sup>NSW Office of Preventive Health, Liverpool, Australia, <sup>4</sup>Strategic Communications and Engagement, NSW Ministry of Health, North Sydney, Australia, <sup>5</sup>The Australian Prevention Partnership Centre, University of Sydney, Australia

### Abstract:

**Background:** Many public health campaigns use Facebook as a communication channel but there is limited evidence on why users engage with health on Facebook and what their expectations are. This mixed methods study aimed to explore user perceptions of and experience with the NSW Government's Make Healthy Normal (MHN) Facebook page.

**Methods:** We conducted an online survey and focus groups with Facebook users to investigate user perceptions of and experience with the MHN page. The survey was analysed descriptively, and the focus groups were analysed thematically.

**Results:** Results demonstrated that there is demand for pages like MHN but suggested that those attracted to pages like MHN are healthier than the general population. They also highlighted a number of contextual (e.g. belief in the social benefit of MHN and the habit of selectively sharing content on Facebook) and content factors (e.g. post presentation and subject) that are critical to driving user engagement.

**Conclusion:** Our research with users highlighted contextual factors that cannot be directly controlled but could be leveraged or managed by page administrators to influence user engagement and content factors that, conversely, can be directly controlled. It is clear that Facebook pages can be used as part of public health campaigns but that these factors must be considered if the pages are to increase their chances of having an impact on health. These findings can be used to inform the design and operation of public health Facebook pages.

### **Improving Awareness of After Hours Crisis Support: A Proactive Rural/Regional Communications Campaign**

**Authors:** Ms Carolyn Loton<sup>1</sup>, Ms Melissa Neal<sup>2</sup>

**Affiliations:** <sup>1</sup>Juntos Marketing, Camperdown, Australia, <sup>2</sup>Murrumbidgee Primary Health Network, Wagga Wagga, Australia

#### **Abstract:**

**Context:** Within parts of the Murrumbidgee area, levels of self-harm and alcohol use requiring hospitalisation are significantly higher than national and NSW averages<sup>1</sup>. Yet at a time of crisis, people surveyed (n=799) report it can be difficult to know where and how to seek support.<sup>1</sup>

Murrumbidgee Primary Health Network and the Murrumbidgee Mental Health, Alcohol and Other Drugs Alliance engaged with the community to co-design an integrated communications/ marketing approach to build awareness of after-hours crisis services, to encourage help-seeking behaviour and to reduce stigma around mental health, drug and alcohol concerns.

**Process:** Four focus groups and 14 in-depth interviews were conducted with people with lived experience, carers, high-risk sub-groups and the broad population. Outcomes were used to inform the campaign.

**Analysis:** Approximately 80% of the total Murrumbidgee population saw or experienced the after-hours awareness campaign on social media, television and/or radio over 13 weeks.

The campaign resulted in 66% increase in prompted awareness of phone-support services in the region (n=75) and 241% increase in unprompted awareness of the dedicated Murrumbidgee AccessLine (n=75). <sup>2</sup>

**Outcomes:** Well-planned, creative campaigns can effectively reflect and resonate with diverse groups across a unique rural/regional setting. Structured community engagement in co-design is a very important component.

Campaigns based on community input, developed with clear messaging and professionally designed can be effective in increasing community awareness and encouraging help-seeking behaviour.

#### **References:**

1. Murrumbidgee PHN. 2016. Murrumbidgee Mental Health, Suicide Prevention, and Alcohol and Other Drugs Needs Assessment.
2. iLink telephone survey, December 2017 and February 2018

### **"Oral Care Clinic": a complement service to healthy mouth for ageing Australians**

**Authors:** Mr Steven Chu<sup>1</sup>

**Affiliations:** <sup>1</sup>Centre for Education and Research on Ageing, Sydney, Australia

#### **Abstract:**

**Context:** Approximately 20% of Australians aged 65 years and older have lost some of their independence, but still remain in the community with assistance from family, friends or professional support services. These frail older people are at greater risk of adverse health outcomes and are also more likely to present with geriatric syndromes that hold substantial implications for functioning and quality of life. As dental diseases are associated with general health outcomes, improving oral care of the frail older people before their health further deteriorate are therefore crucial. Currently, there are limited services available to provide oral care to frail older people living in the community.

**Proposed process:** Establishing a new service that focuses on oral care to complement existing dental treatment is proposed. The oral care service will utilise existing inter-disciplinary network within the public health sector to engage its patients in promotion of better oral health leading to better nutritional and dietary intake; more active lifestyle; reducing chronic disease burden; improving access to care; reducing cost to healthcare.

**Analysis:** The proposed service will be governed by public hospitals; universities; and field experts in geriatric medicine and dentistry to analyse immediate to short-term health outcomes generated and the likelihood of service transferability after evaluation.

**Anticipated outcomes:** Older people are expected to gain capacities to manage their oral health as they grow older in an aged-friendly, community-focused health program hence improving health, function and quality of life.

### **Living life smoke-free: factors associated with non-smoking among urban NSW Aboriginal adolescents**

**Authors:** Ms Christina Heris<sup>1,2</sup>, Dr Lina Gubhaju<sup>2</sup>, Dr Catherine Chamberlain<sup>3</sup>, Prof Sandra Eades<sup>2</sup>

**Affiliations:** <sup>1</sup>Monash University, Melbourne, Australia, <sup>2</sup>University of Melbourne, Melbourne, Australia, <sup>3</sup>La Trobe University, Melbourne, Australia

#### **Abstract:**

**Background:** Tobacco is a major cause of preventable ill health for Aboriginal people. As most smoking commences during adolescence, understanding the individual, social and environmental factors associated with smoking behaviour among Aboriginal adolescents is important for prevention programs.

**Methods:** Cross-sectional analysis of questionnaire data from 106 Aboriginal adolescents aged 12-17 and their caregivers. Participants were recruited from four Aboriginal Community Controlled Health Services (ACCHS) in urban NSW. Outcomes were 'never' or 'ever' smoking regularly. Logistic regression was used to measure the relationship between smoking status and demographics, substance use, social and emotional wellbeing (SEWB), exposure to environmental tobacco smoke, community and cultural connection, school engagement and negative life experiences.

**Results:** Majority of participants had never smoked regularly (81%). A high proportion had been exposed to tobacco: 60% had in utero exposure; 75% had a caregiver who smoked; 40% lived in homes where smoking was allowed inside. Never smoking was associated with good SEWB (OR 5.9, 2.0-17.4), having their mother as the main caregiver (OR 3.2, 1.1-9.6), school engagement (OR 1.7, 1.0-2.7) and community connection (OR 4.2, 1.2-15.3). Smoking was associated with alcohol use (OR 12.2, 3.3-44.6), being sexually active (OR 22.0, 1.9-260.7), poor SEWB (OR 6.6, 1.7-25.6), housing instability (OR 6.6, 1.1-39.1), trouble at school (OR 3.5, 1.1-10.9) or interactions with law enforcement (OR 8.1, 2.7-24.8).

**Conclusions:** Findings of this study suggest that smoking prevention programs could be integrated with education for sexual health and substance use. Programs promoting positive engagement with family, school and community may also be protective.

The presentation of these findings has been approved by the Aboriginal Health and Medical Research Council and the four participating Aboriginal Community Controlled Health Services: Awabakal Limited; Riverina Medical and Dental Aboriginal Corporation; Aboriginal Medical Service Western Sydney (former); and Tharawal Aboriginal Corporation. Further presentations and interpretation of results have been undertaken directly with the ACCHSs.

### **Can you count?: Communicating about alcohol harm minimisation**

**Authors:** Professor Simone Pettigrew<sup>1</sup>, Ms Maria Dekker<sup>1</sup>, Dr Michelle Jongenelis<sup>1</sup>, Professor Melanie Wakefield<sup>2</sup>, Professor Kypros Kypri<sup>3</sup>, Associate Professor Penelope Hasking<sup>1</sup>

**Affiliations:** <sup>1</sup>Curtin University, Perth, Australia, <sup>2</sup>Centre for Behavioural Research in Cancer, Melbourne, Australia, <sup>3</sup>University of Newcastle, Newcastle, Australia

#### **Abstract:**

**Background:** Alcohol is a leading causes of disease in the world. Although it is now clear that there is no 'safe' level of intake, alcohol policy continues to focus on harm minimisation due to very high alcohol consumption prevalence rates making an abstinence promotion approach infeasible. There is therefore a need to develop appropriate harm minimisation messages to disseminate to the general public to encourage reduced consumption in an environment characterised by high levels of acceptance of alcohol as a desirable product.

**Body:** The aim of this study was to assess the acceptability and effectiveness of various alcohol harm-minimisation messages that have been proposed in the alcohol harm prevention literature as being potentially effective. A series of 16 messages was presented to a web panel sample of 1,404 adult drinkers in two surveys administered approximately 4 weeks apart. The results showed that a simple message advising people to count their drinks ("Count the number of drinks you have") was associated with favourable attitudinal and behavioural outcomes across both lighter and heavier drinkers. Respondents reported that the message made them "stop and think" about their drinking and increased their concern about their current levels of consumption. Engaging in this behaviour was also associated with lower levels of alcohol intake over time.

**Summary:** Efforts to reduce alcohol-related harm in the community need to involve a range of initiatives, including public education. Results indicate that encouraging drinkers to actively count their drinks could assist in facilitating lower alcohol consumption at the population level.



## Poster Presentations – P3

Ballroom Foyer, 1:00pm - 1:30pm

### P3001 - Waka ama as health promotion

**Authors:** Dr Christina Severinsen<sup>1</sup>, Mrs Angelique Reweti<sup>1</sup>

**Affiliations:** <sup>1</sup>Massey University, Private Bag 11-222 Palmerston North, New Zealand

**Abstract:**

**Background:** Cultural identity and participation in society are key determinants of health. This paper discusses waka ama as a successful vehicle of health promotion to improve hauora and reduce inequities. Waka ama is one of the fastest growing sports in Aotearoa New Zealand, operating within a strong framework of Māori values.

**Methods:** Sixteen members of a waka ama rūpu were interviewed about the social, cultural and health benefits of waka ama. The research is informed by a kaupapa Māori framework, utilising narratives to understand the experiences of participants. Results Participants spoke of broad understandings of health, and balancing physical aspects with social dimensions. Paddlers valued waka ama's strong tikanga. Narratives show how waka ama helped to create a balance between interrelated factors, including paddlers' connections to each other and their environment. We frame the findings within Te Whare Tapa Whā to illustrate how waka ama contributes to hauora (holistic wellbeing) for paddlers. We use paddlers' narratives to illustrate the four dimensions of hauora: physical, mental, social, and spiritual.

**Conclusion:** Increased access to cultural resources through waka ama is seen as key to good health. Waka ama is an example of health promotion within an indigenous context, where traditional Māori values and belief are foundational. The experience of waka ama is central to health development and maintenance, and the kaupapa is a positive resource for paddlers to draw on. The findings contribute to the evidence base of effective indigenous health promotion, bridging the gap between academia and local community action.

### P3002 - Neighbourhoods for Active Kids: Participatory GIS to understand obesogenic neighbourhoods

**Authors:** Associate Professor Melody Smith<sup>1</sup>, Dr Niamh Donnellan<sup>1</sup>, Mrs Victoria Egl<sup>2</sup>, Miss Erika Ikeda<sup>2</sup>, Mrs Lisa Mackay<sup>2</sup>

**Affiliations:** <sup>1</sup>The University of Auckland, Auckland, New Zealand, <sup>2</sup>Auckland University of Technology, Auckland, New Zealand

**Abstract:**

**Background:** Neighbourhood built environments can have significant and long-lasting impacts on human health behaviours such as physical activity, active travel, and nutrition behaviours. Little is known of children's perceptions of their neighbourhood environments in these contexts. The evidence base is further limited by a lack of child-specific built environment measures. The Neighbourhoods for Active Kids study takes a child-centred approach to understanding links between the neighbourhood built environment and children's health.

**Methods:** Children in school years 5-8 were recruited through 19 Auckland schools. Children's neighbourhood perceptions, experiences, nutrition behaviours, and travel modes to school and neighbourhood destinations were captured via an online participatory geographic information systems-based survey. Physical activity was objectively assessed over 7 days using accelerometry. Height, weight, and waist circumference were measured by a trained researcher. Neighbourhood built environments were characterized using geographic information systems-derived measures of walkability and new child-specific measures were developed.

**Results:** Overall, 1102 children participated in the study, who marked over 2000 neighbourhood destinations. Children's experiences and perceptions of neighbourhood destinations were wide and varied, ranging from social affordances to commentary on aesthetic features and safety. Evidence for the utility of new measures of children's neighbourhood environments has been developed.

**Conclusions:** Capturing spatial patterning of children's perceptions has provided a fine-grained understanding of specific features of importance from the child's perspective. Taking a child-centred approach to measuring neighbourhood use and experiences can yield sensitive and in-depth understanding of contextual factors important for promoting child health behaviours and outcomes

### P3003 - Measuring the impact of digital resources in reducing variations in care

**Authors:** Mr Marc Gehrmann<sup>1</sup>, Mrs Victoria Visser<sup>1</sup>, Mrs Rebecca Tretheway<sup>1</sup>, Dr Megan Willey<sup>2</sup>, Ms Emma Dickins<sup>3</sup>

**Affiliations:** <sup>1</sup>The Science of Knowing, Buddina, Australia, <sup>2</sup>WentWest Ltd, Blacktown, Australia, <sup>3</sup>Sydney Children's Hospital Network, Sydney, Australia

#### **Abstract:**

**Background:** Variations in care are common in general practice, with many paediatric conditions not being managed in accordance with clinical practice guidelines. Using online clinical guidelines and decision-making tools may help reduce variations in care. HealthPathways is a web-based clinical guide to help primary care clinicians with patient assessment and management, and provides localised referral options for various health conditions. However, research evaluating HealthPathways' effectiveness in assisting general practitioners to provide appropriate patient care and referrals is lacking. The aim of our study was to investigate the effectiveness of HealthPathways in improving the quality of care provided by GPs in the western Sydney region. The study compared the quality of patient assessment, management, and referrals between GPs using HealthPathways with GPs not using HealthPathways.

**Methods:** Longitudinal studies, such as general practice case studies or evaluations using patient data, can be costly and time consuming. We took an innovative approach to conducting the study by utilising an experimental design with hypothetical patient scenarios to evaluate the effectiveness of HealthPathways in assisting GPs to provide appropriate patient assessment, management, and referrals.

**Results:** This presentation discusses the study design process, including the development of the hypothetical patient scenarios and clinical indicators that were used to score participants' assessments of the scenarios, as well as a discussion of the study findings.

**Conclusion:** The results of the study will help in better understanding the impact of digital resources in general practice to ensure consistent care that leads to positive health outcomes.

#### **Learning Outcomes:**

1. To increase understanding of digital health resources and how they can be used to improve practice
2. To provide an overview of innovative research methods for assessing the effectiveness of digital resources in improving clinical practice

### P3004 - Evaluating dental students' preparedness to respond to medical emergencies following simulated training

**Authors:** Ms. Stephanie Wong<sup>1</sup>, Ms. Kalen Chao<sup>1</sup>, Ms. Hanin Musbah<sup>1</sup>, Ms. Israel Needham<sup>1</sup>, Ms. Patricia Tan<sup>1</sup>, Dr. Felicity Croker<sup>1</sup>, Mr. Luke Croker<sup>2</sup>

**Affiliations:** <sup>1</sup>James Cook University, Smithfield, Australia, <sup>2</sup>Queensland Health, Cairns, Australia

#### **Abstract:**

**Background:** Rural and remote areas tend to have fewer skilled personnel to manage the significant incidence of chronic diseases and resulting higher proportion of medically compromised patients. Community and professional bodies expect that dentists will have the capacity to manage common adverse reactions and medical emergencies. However, many dentists do not feel adequately prepared to respond appropriately to emergencies. To enable graduates who are capable of pre-empting, identifying and appropriately managing both dental and medical emergencies, James Cook University delivers authentic, high fidelity, scenario-based simulations in the dental setting.

This presentation will report on Dental Simulated Emergency Medical Training (DSEMT), a student-led research project that evaluates students' perceptions of preparedness to manage medical emergencies in their clinical practice.

**Methods:** A cross-sectional, mixed methods study using a validated survey pre- and post-intervention will be used for comparative analysis of BDS year 4 and 5 students' perceptions on preparedness in responding to a medical emergency. Statistical analysis of descriptive quantitative data using T-tests and cross tabulation across year 4 and 5 results and thematic analysis will be used for post clinical placement focus group results.

**Results:** This study is in progress with results pending. Preliminary findings indicate that DSEMT effectively builds a sense of competence.

**Conclusion:** This evaluation research shows that DSEMT is an effective strategy for preparing undergraduate dental students to respond effectively to medical emergencies when practicing in diverse regional, rural, and remote contexts.

**Learning Objective:** Why an authentic scenario-based training program builds competence in responding to medical emergencies.

### P3005 - Joining the Conversation about Being an Active Bystander in Schools

**Authors:** Jane McKinnon<sup>1</sup>, Felicity Antony<sup>1</sup>, Nathalie Davis<sup>1</sup>, Sarah McKean<sup>1</sup>, Emily Lee-Ack<sup>1</sup>

**Affiliations:** <sup>1</sup>Women's Health and Wellbeing Barwon South West

#### **Abstract:**

**Background:** "You the Man" is a short theatre-based performance that highlights how bystanders can interrupt the cycle of relationship violence and abuse. One actor portrays six bystander characters and the program includes a panel discussion from local service providers who discuss access to their services and advice regarding where to get help.

**Context:** The performance supports secondary schools in South West Victoria to deliver the Respectful Relationships curriculum which is one of the priority settings for primary prevention of violence against women and gender equity work. Evidence shows that schools have potential to influence not only education programs and curricula but the whole education environment, as education institutions are not only places of learning, but also workplaces and community hubs (Change the Story, Our Watch 2015).

**Method:** The implementation of "You the Man" across all secondary schools in the Barwon South West region, seeks to increase the level of uniformity with regards to shared experiential learning on the importance of bystander intervention in the forms of intimate partner violence. We would anticipate a reach of 4000 students across the region – partnering with schools, local support services and Deakin University.

**Conclusion and Practice Change:** The presentation will provide an overview of schools as primary prevention settings, and discuss the following learning points which can be achieved through the "You the Man" performance:

- Early identification of people at risk of dating violence
- What constitutes equality and respect in a relationship
- Recognising what different forms of violence are

### P3006 - Neighbourhood greenness and incidence of type 2 diabetes

**Authors:** Dr Shanley Chong<sup>1</sup>, Dr Soumya Mazumdar<sup>1</sup>, Prof Geoff Morgan<sup>2</sup>, Prof Adrian Bauman<sup>3</sup>, Prof Philayrath Phongsavan<sup>3</sup>, Prof Bin Jalaludin<sup>1</sup>

**Affiliations:** <sup>1</sup>South Western Sydney Local Health District, Healthy People & Places Unit, Liverpool, Australia, <sup>2</sup>University Centre for Rural Health – North Coast, University of Sydney, North Coast, Australia, <sup>3</sup>Physical Activity, Exercise and Energy Expenditure, Charles Perkins Centre, University of Sydney, Sydney, Australia

#### **Abstract:**

**Background:** Many studies have reported that built environment features such as greenspace may influence physical activity which then affects the risk of type 2 diabetes (T2DM). These studies are mainly cross-sectional studies. There are few longitudinal studies that have examined associations between greenspace and incidence of T2DM.

**Methods:** We used self-reported information from the New South Wales 45 and Up Study (baseline) and the follow-up Social, Economic and Environmental Factors Study. Incident T2DM was determined if T2DM was not reported at baseline but was reported at follow-up. Self-reported diabetes status was asked at both baseline and follow-up. Use of T2D medication was only asked at the baseline. Average Normalised Difference Vegetation Index (NDVI) within 500m circular buffer of the place of residence was generated as a proxy measure for access to greenspace. Associations between the access to greenspace and incidence of T2DM were explored using frailty survival model. A broad range of risk factors, including socio-demographic characteristics, health status, family history and life-style behaviours were examined as potential confounders. Effect modifiers were also explored.

**Results:** Of the 14,281 participants without reported T2DM at baseline, 215 reported T2DM at follow-up (cumulative incidence 1.5% over 3.4 years, annual incidence rate 0.44%). After adjusting for potential confounders, there was no significant association between greenspace, as measured by NDVI, and incidence of T2DM.

**Conclusion:** In this longitudinal study, we found that greenspace access does not associate with the development of T2DM. This finding is inconsistent with most of the reported cross-sectional studies.

### P3007 - Let's talk about death: Starting the conversation in Queensland

**Authors:** Haley McNamara<sup>1</sup>

**Affiliations:** <sup>1</sup>Queensland Health, Brisbane, Australia

#### **Abstract:**

**Context:** Approximately 150,000 Australians die annually—a number expected to double within two decades because of population ageing. Due to chronic disease prevalence and an unchanged maximum lifespan, around 60% of deaths are now relatively predictable. Despite this, discussing/documenting end-of-life preferences is highly variable, and often avoided—leading to greater potential for what could be considered a “bad death”.

To address this, Queensland Health launched Australia's first government-led campaign in 2017, aiming to increase engagement with end-of-life issues.

**Process:** Formative research conducted in 2016 identified awareness, attitudes, barriers and motivations towards engaging with end-of-life issues, and preferred information channels.

A brand identity was applied to resources for consumers and clinicians, including brochures, videos, posters and a website. Communication channels included newspapers, GP clinic screens, Facebook, Queensland Health website and displays in public hospitals. The campaign period was 8 October - 25 November 2017.

**Analysis:** Early evaluation findings include:

- In a survey of 1,000 people, 15% had seen at least one element of the campaign.
- Among those who had seen the campaign, 83% have since taken some action.
- 10,945 total website sessions (up from 2,201 during the same period in 2016).
- Facebook activity reached 338,298 people.
- Women represented 70% of all impressions and 72% of all video views.

**Outcomes:** We have found an increase in community awareness and a positive impact on behaviour. Women, older people, and healthcare consumers were most likely to be aware of the campaign; believe end-of-life issues are important; and have carried out planning.

### P3008 - Enrolment in a cooking program: from awareness to health behaviour change

**Authors:** Professor Amanda Devine<sup>1</sup>, Ms Joanne Rees<sup>1</sup>, Ms Ros Sambell<sup>1</sup>, Dr Johnny Lo<sup>1</sup>, Dr Leesa Costello<sup>1</sup>, Professor Jonathan Hodgson<sup>1</sup>, Dr CT Christophersen<sup>1</sup>, Dr Anna Callan<sup>1</sup>, Dr Matt Byrne<sup>1</sup>, Professor RU Newton<sup>1</sup>, Ms Lindy Mills<sup>2</sup>

**Affiliations:** <sup>1</sup>Edith Cowan University, Perth, Australia, <sup>2</sup>The Good Foundation, Melbourne, Australia

#### **Abstract:**

**Background:** The purpose of our study was to examine immediate effects on cooking confidence, healthy eating and cooking behaviours of a 7-week food literacy program implemented in Western Australia and relate these to vitality and wellness.

**Methods:** A quasi-experimental repeated measures design incorporated a wait-list Control group and an Intervention group. Confidence to cook, healthy eating and cooking behaviours, Social Vitality Score and perceived health were measured at baseline (T1) and post program (T2) for the Intervention group. Control group completed measurements at -5 weeks (T1) and program commencement (T2). General linear modelling for repeated measures determined group differences with adjustments for BMI, age, education, gender, income status.

**Results:** Of 490 T1 participants (Control 119, Intervention 371), 182 completed T2 (Control 40, Intervention 142) and were on average 43.3±14.3 years and 75% female. Participants' confidence in cooking, use of new ingredients and recipes improved in the Intervention ( $P<0.05$  for all) with no change in the Control, after adjustments. Intervention participants increased frequency of cooking main meals from basic ingredients ( $P=0.033$ ). Both groups showed an increase in vegetable consumption (approx. 1 serve/d,  $P=0.018$ ) and females ate significantly less ready-made meals weekly ( $P=0.04$ ). Both groups reported +3.5% gains in vitality ( $P=0.05$ ), better health ( $P=0.009$ ) and +4.4% gains in physical function ( $P=0.007$ ).

**Conclusion:** Food literacy programs build cooking confidence and influence healthy eating. Where there was intention to participate, indicated by course enrolment, improved health behaviours were also seen. Thus, cooking interventions are relevant tools and provide opportunity to motivate health behaviour-change.

### **P3009 - An investigation of alcohol consumption and aquatic activities during 2017 Western Australia Leavers Festival in Dunsborough**

**Authors:** Ashley Ridge<sup>1</sup>, Lauren Nimmo<sup>1</sup>

**Affiliations:** <sup>1</sup>Royal Life Saving Society of WA, Perth, Australia

**Abstract:**

**Background:** Each year graduated high school leavers converge on designated locations around Australia to celebrate the end of their secondary schooling. While generally providing fun and safe opportunities for youth to party, prevalence of alcohol consumption and aquatic activities creates a risky environment.

**Methods:** A mixed methods design investigated the prevalence of alcohol consumption while partaking in aquatic activities and knowledge of associated risk and awareness of the Don't Drink and Drown campaign among school leavers during 2017 Leavers in Dunsborough, WA.

**Results:** In total, 429 school leavers completed the survey during the Leavers event. Overall, 35% admitted to participating in aquatic-based activities with alcohol use prior to Leavers; 92% intended to drink alcohol during Leavers; 26% estimated they would drink 5-6 standard drinks; 90% had consumed alcohol at Leavers with the majority having consumed 5-6 standard drinks daily. Most (62%) leaver's recognised consuming alcohol around waterways to be risky and 88% had heard of the Don't Drink and Drown program. However, 27% had still consumed alcohol around waterways during Leavers. Thirty-eight participants completed the follow-up survey. Overall, 87% participated in Don't Drink and Drown activities during the event; 50% mentioned this would change their future behaviour; and 97% had a negative attitude towards drinking and partaking in aquatic activities.

**Conclusion:** This research highlighted the issue of alcohol consumption amongst this age group and that Leavers is an event where young people are likely to engage in risky behaviours and reinforced the importance of the Don't Drink and Drown program.

### **6A Aboriginal and Torres Strait Islander Health and Chronic Diseases**

Mossman Ballroom, 1:15pm – 2:45pm

#### **Leading From Behind: Supporting Aboriginal and Torres Strait Islander Eye Health Coalitions**

**Authors:** Amanda Sheppard<sup>1</sup>

**Affiliations:** <sup>1</sup>The Fred Hollows Foundation, Casuarina, Darwin, Australia

**Abstract:**

**Context:** The Fred Hollows Foundation (The Foundation) continues the work of Professor Fred Hollows to end avoidable blindness and improve Aboriginal and Torres Strait Islander health. The Foundation's Indigenous Australia Program's (IAP) priorities include identifying and addressing gaps to improve eye care; developing the regional workforce and increasing coordination capacity. The IAP advocates to governments for sustained investment in high quality, accessible and culturally appropriate eye care for Aboriginal and Torres Strait Islander Australians.

**Process:** The IAP worked with partners, using a continuous quality improvement (CQI) approach, to design and deliver targeted eye care projects to have a significant, sustainable and national impact. By resourcing key personnel to facilitate and support the strategic direction of regional eye health coalitions across the NT and NSW, the IAP supported others to work together to improve coordination and integration of Aboriginal and Torres Strait Islander Australians eye care.

**Analysis:** The regional eye health coalitions are enabling closer coordination and integration of service delivery, more program initiatives, an increase in eye health workforce; and most notably: an increase in eye care uptake and patient attendance. Regional coalitions have developed their own data management and CQI tools to capture, store and share information to improve services, planning and coordination. This has translated to other results: in minimisation of service duplication, cost-saving efficiencies and an improved regional patient pathway.

**Outcomes:** With dedicated facilitation and support, stakeholders remain committed to using regional coalitions to continually address barriers and identify improvements in current eye care service delivery.

#### **Prevalence of racism in a prospective cohort study of Aboriginal children.**

**Authors:** Ms Leah Cave<sup>1</sup>, Dr Carrington Shepherd<sup>1</sup>, Dr Matthew Cooper<sup>1</sup>, Professor Stephen Zubrick<sup>1</sup>

**Affiliations:** <sup>1</sup>Telethon Kids Institute, The University of Western Australia, Subiaco, Australia

**Abstract:**

**Background:** Racial discrimination is a central social determinant of health in Aboriginal and Torres Strait Islander (hereafter referred to as Aboriginal) populations, and is associated with health inequities between Aboriginal and non-Aboriginal Australians. This study sought to estimate the prevalence of racism in a longitudinal study of Aboriginal children.

**Method:** his study examined direct and vicarious racism within the Footprints in Time: The Longitudinal Study of Indigenous Children (LSIC) dataset, providing descriptive analysis of direct and vicarious forms of racism exposure, including overall prevalence, accumulation of exposure and age of first exposure, across key socio-demographic factors over time. Participants for this study include 1,759 children from the first 8 waves of LSIC, comprising those aged 6 months to 12 years.

**Results:** One in five (20.4%) study children had direct experience of racial discrimination by age 11 years, with the majority of these children (73.5%) experiencing first exposure by age 7, while approximately half of all study children experienced vicarious racism (44.5% through the primary carer and 50.5% via family members). Children living in areas of high remoteness, in the most disadvantaged regions and children who spoke an Indigenous language were at increased risk of experiencing direct racism by age 11.

**Conclusion:** Direct and vicarious racism is commonly experienced by Aboriginal children and exposure often occurs within the first years of life. This study is one of the first studies internationally to characterise the prevalence of both direct and vicarious forms of racism among a cohort of children using longitudinal data.

### **Promoting health equity through social marketing: responses to an Aboriginal nutrition campaign**

**Authors:** Miss Mikaela Egan<sup>1</sup>, Miss Catherine Macdonald<sup>1</sup>, Miss Jennifer Browne<sup>1</sup>, Mrs Alison McAleese<sup>2</sup>, Dr Belinda Morley<sup>2</sup>

**Affiliations:** <sup>1</sup>Victorian Aboriginal Community Controlled Health Organisation (vaccho), Collingwood, Australia, <sup>2</sup>Cancer Council Victoria, Melbourne, Australia

#### **Abstract:**

**Background:** Obesity and dietary factors are major contributors to health disparities experienced by Aboriginal people. Social marketing campaigns are a common strategy in obesity prevention, however evidence for the impact of nutrition campaigns targeted at Aboriginal and/or Torres Strait Islander peoples is scarce.

**Methods:** The Aboriginal Rethink Sugary Drink (RSD) advertisement aired on WIN television in regional Victoria during 2016-17. An online survey was distributed to evaluate the responses of Aboriginal and non-Aboriginal Victorians to the campaign. 155 adults (78 Aboriginal, 77 non-Aboriginal) completed the survey. Data were analysed in Stata 15.

**Results:** Aboriginal survey respondents were more likely than non-Aboriginal respondents (76% vs. 56%,  $p=0.004$ ) to recall seeing the Aboriginal RSD ad, more likely to agree the ad was relevant to them (78% vs. 47%,  $p=0.003$ ) and motivated them to take action to improve their own health (82% vs. 50%,  $p=0.001$ ) and the health of their family (100% vs. 85%,  $p=0.002$ ). Of the Aboriginal respondents, those who had seen the advertisement were significantly more likely to correctly identify the sugar content of a 600mL soft drink ( $p=0.025$ ), and reported drinking soft drink on fewer days in the past week, however this difference was not significant.

**Conclusion:** These results provide some evidence that the Aboriginal RSD advertisement is reaching its target audience and impacted knowledge about the content of sugary drinks and motivation to improve health. The fact that many non-Aboriginal people also responded positively to the advertisement suggests Aboriginal-led health promotion campaigns may be beneficial for the whole community.

### **Ethnic inequalities in psychological distress: Prospective analysis of an Australia panel data**

**Authors:** Dr. Amanuel Elias<sup>1</sup>

**Affiliations:** <sup>1</sup>Deakin University, Tarneit, Australia

#### **Abstract:**

**Background:** This paper applies panel data models to examine ethnic inequalities in the prevalence of psychological distress in a nationally representative sample composed of working age adults from culturally and linguistically diverse (CALD) backgrounds.

**Methods:** The sample consists of 44,123 observations from 14,276 respondents, for five waves of the Household, Income and Labour Dynamics in Australia survey for 2007, 2009, 2011, 2013 and 2015. Multilevel mixed effects was estimated to model the relationship between CALD background and psychological distress based on the Kessler 10 Psychological Distress Scale.

**Results:** The mean score for K10 psychological distress for the total sample was 15.7. Indigenous Australians were more likely to report high/very high levels of distress (23%) followed by respondents from non-English speaking background (NESB). Multivariate results from mixed effects analysis indicated strong independent association between psychological distress and CALD background. An indigenous Australian on the average scored 0.88 point higher ( $p<0.01$ ) in the K-10 scale than her Anglo-Australian counterpart. The marginal effect for a NESB respondent was 0.58 points ( $p<0.01$ ) and 0.22 points ( $p<0.01$ ) for a person from English speaking background (ESB). The odds of reporting above 16 points in K10 scale for a NESB, Indigenous, and ESB respondent were 27%, 16% and 9% higher ( $p<0.01$ ) than for a comparable Anglo-Australian respondent.

**Conclusions:** Psychological distress unequally impacts society, with people from minority CALD backgrounds having higher risk of experiencing adverse mental health outcomes than the rest of the society. This has implication on public health interventions targeting these groups.

## The Epidemiology of *Helicobacter pylori* in Australia: A Scoping Review

**Authors:** Ms Jillian Congedi<sup>1</sup>, Associate Professor Craig Williams<sup>1</sup>, Dr Katherine Baldock<sup>1</sup>, Dr Hanna Tervonen<sup>1</sup>

**Affiliations:** <sup>1</sup>University of South Australia, Adelaide, Australia

### Abstract:

**Background:** *Helicobacter pylori* is a spiral-shaped bacterium that has a causative role in peptic ulcer development and is associated with certain types of gastric cancer. *H. pylori* infects half the world's population, but its epidemiology in Australia has not been previously reviewed. This scoping review aimed to examine the extent and nature of epidemiological research activity on *H. pylori* in Australia, with a special focus on prevalence.

**Method:** We conducted literature searches on Medline, Embase and Scopus to identify relevant studies published in Australia between 1982 and 2017.

**Results:** From a total of 377 identified studies, 60 were included in the review. Studies of *H. pylori* epidemiology have been conducted in all Australian states and in the Northern Territory, but only two national datasets have been used to estimate whole population prevalence. The populations most commonly studied were patients having investigations for gastrointestinal symptoms, and other specific clinical populations not related to gastrointestinal conditions. Data was also obtained from health survey cohorts and general or migrant health clinics. *H. pylori* infection was more prevalent in populations with low socio-economic status, in older age-groups and in patients with gastrointestinal symptoms.

**Conclusion:** The epidemiology of *H. pylori* has been studied in many different population groups in Australia over the past 4 decades. These studies confirmed the same pattern of infection that occurs worldwide. The studies were heterogeneous in design and in types of included populations, which would complicate determination of national prevalence or examination of trends in prevalence over time.

## Epidemic thunderstorm asthma – addressing a contemporary health issue

**Authors:** Ms Nicole Hughes<sup>1</sup>, Ms Vanora Mulvenna<sup>1</sup>

**Affiliations:** <sup>1</sup>Victorian Department of Health And Human Services, Melbourne, Australia

### Abstract:

**Context:** On 21 November 2016 Victoria experienced the largest epidemic thunderstorm asthma event on record. The event resulted in thousands of people experiencing asthma symptoms in a short period of time – significantly stretching health system capacity, especially hospital and ambulance services. Following the event, the Victorian Department of Health and Human Services implemented a multidisciplinary program including community and health professional education programs, a forecasting system, and improvements to health sector preparedness.

**Process:** The program was designed in a flexible and iterative manner, with multiple stakeholders including clinicians, asthma and allergy peak bodies, researchers and experts from the emergency management, health and meteorological sectors. This extensive engagement was required to meet the complex needs of a large program, and in response to an emerging health phenomenon that was not completely understood. The breadth of engagement was an important element of program design.

**Analysis:** A comprehensive analysis of the first season of the epidemic thunderstorm asthma program was conducted utilising a mixed methods approach, seeking to understand the effectiveness of the program in empowering and preparing the Victorian community for future events, and ensuring that the government is better able to understand, predict and respond to events like this in the future.

**Outcomes:** The program achieved significant reach into the community, health and emergency management sectors. The successes of this program were the utilisation of key influencers and the role of government in leading, coordinating and supporting a broad range of stakeholders to inform, implement and communicate the program.

## 6B Table Top Presentations

Tully 1, 1:15pm – 2:45pm

### Patient's Rights - Roles and Responsibilities

**Authors:** Mrs Amanda Jackson<sup>1</sup>

**Affiliations:** <sup>1</sup>Rights Focus, Molendinar, Australia

#### **Abstract:**

**Context:** Overview of current health sector approaches to meet patient's human rights and new legislative approaches.

**Process:** Identify existing industry and large organisation models to set:

- standards and develop capabilities to equip workforce
- adapt models of care and service
- add management of a new activity to already complex management and governance environment.

**Analysis:** Through a comparison of existing models to needs, develop criteria for a single Framework of Capabilities that accommodate all health care disciplines and experience levels.

**Outcomes and Learning Objectives:** For the individual, developing rights focussed capabilities is a personal journey undertaken with guidance from the framework and professional supervision. Explanation of occupational responsibility to meet patient rights. Professional bodies may find this framework the way to incorporate patient rights and rights competence into their standards. The framework guides the development of rights focussed models of care, models of service and quality systems through policies and procedures. Case studies are used. Supervision and management considerations are included in the framework to rapidly develop line management capability to identify, plan, supervise and review performance of rights responsibilities. For leadership and governance – Top 3 things every leader and board needs to consider. To achieve greater outcomes, we discuss leverage and provide an example of leveraged occupational responsibility to meet patient rights within a treating team including Consultant, Registrar and SMO. To help achieve rights focus across the entire service we discuss Rights Action © and the Rights Action strategy.

### Evaluation of an innovative model of care for chronic wounds patients

**Authors:** Dr David Brain<sup>1,2</sup>, Mrs Ruth Tulleners<sup>1,2</sup>

**Affiliations:** <sup>1</sup>Australian Centre for Health Services Innovation, Brisbane, Australia, <sup>2</sup>Wound Management Innovation Cooperative Research Centre, Brisbane, Australia

#### **Abstract:**

**Background:** Chronic wounds are under-recognised as a public health issue, and their health and economic effects are poorly understood. The aim of this study was to evaluate whether utilising a specialist transdisciplinary wounds service is a cost-effective approach to managing wounds, compared to continuation of routine healthcare services.

**Methods:** Patient out-of-pocket costs, quality of life, healing outcomes and health service utilisation data were collected over a 3 month period from participants attending a specialist wound clinic in Queensland. To characterise routine services, data on health service utilisation and patient out-of-pocket costs were also collected for the 12 months prior to enrolment in the clinic. These data were used to inform a Markov model developed to compare the expected changes to cost and quality of life associated with using the specialist wounds service and routine services for a hypothetical cohort of patients in Australia.

**Results:** Patients accessing treatment at the specialist clinic showed larger improvements in quality of life and achieved better healing of their wound compared with routine services. Increased costs associated with the specialist clinic are offset by savings that are realised as a result of faster healing, decreased recurrence and fewer complications requiring hospitalisation. Overall, utilising a specialist service is a cost-effective approach to wound management.

**Conclusion:** Utilising expert wound management services delivers improvements to health, quality of life and economic outcomes when compared with routine services. Investment in expert, targeted services represents good value for money in the Australian setting and should be prioritised by decision makers.



## Solutions to the Chronic Wounds Problem in Australia: A Call to Action

**Authors:** Ruth Tulleners<sup>1,2</sup>, Dr Rosana Pacella<sup>1,2</sup>

**Affiliations:** <sup>1</sup>Australian Centre For Health Services Innovation (AusHSI), Kelvin Grove, Australia, <sup>2</sup>Wound Management Innovations Cooperative Research Centre (WMI CRC), Brisbane, Australia

### Abstract:

**Background:** Chronic wounds are a silent epidemic in Australia. They are an under-recognised public health issue, and their health and economic effects are under-estimated. Wound management services receive little attention and investment compared to other chronic conditions. Evidence-based practice in wound care has significant health and economic benefits, yet there are still considerable evidence-practice gaps. The key challenges to implementation of evidence-based practice are a general lack of awareness, poor education and training of health professionals, and high costs of chronic wound care.

**Methods:** To identify solutions to these barriers, surveys were administered to solicit key stakeholders' opinions, and a national forum facilitated further discussion to refine and prioritise solutions. A collaborating group was established and a recommendations paper was produced using the outcomes of these discussions.

**Results:** The main recommendations were to raise awareness of the significance of chronic wounds, and to make chronic wounds a strategic priority for governments. The Chronic Wounds Solutions Collaborating Group was established to encourage, support, and monitor action on the implementation of these recommendations to prevent and manage chronic wounds in Australia. The Recommendations Paper was endorsed by key stakeholders and was launched on the 15th of March 2018.

**Conclusions:** Urgent action is needed by federal, state and local governments, non-governmental organisations, medical and nursing organisations, industry, academics and the public if Australia is to reduce the significant burden of chronic wounds and improve patient outcomes. The immediate implementation of these recommendations should be encouraged at all levels.

## #CroakeyGO and walking journalism: a public health innovation

**Authors:** Dr Megan Williams<sup>1,2</sup>, Dr Melissa Sweet<sup>1</sup>, Mr Mitchell Ward<sup>1</sup>, Ms Summer May Finlay<sup>1</sup>, Ms Marie McInerney<sup>1</sup>, Associate Professor Lesley Russell<sup>1</sup>, Ms Amy Coopes<sup>1</sup>

**Affiliations:** <sup>1</sup>Croakey Health Media, Marulan, Australia, <sup>2</sup>Graduate School of Health, UTS, Sydney, Australia

### Abstract:

Walking journalism is an innovation in journalism that has much to offer public health advocates, practitioners and communities. #CroakeyGO is a form of walking journalism that is being developed by Croakey, a social journalism for health initiative. It provides a platform for community members to walk and talk with experienced health journalists and health experts, and to collaboratively produce solutions-focused stories, discussions and multi-media content. At the same time, #CroakeyGO reinforces public health messages through walking, and respectfully connects with Aboriginal and Torres Strait Islander knowledges of Country and culture. It supports the development of relationships and networks, skills and holistic approaches to health. Each #CroakeyGO has a different focus, reflecting the needs and interests of different communities. #CroakeyGO is designed to enable local communities to participate throughout the process – designing the walk, contributing content, and identifying and communicating solutions. #CroakeyGO has been piloted over the past year, demonstrating community engagement and support in diverse settings. An online platform, Mapping #CroakeyGO, is being developed to collate stories and content from each event, and to develop momentum and a business model to support wider development and uptake. In this presentation, we invite public health practitioners to engage with the further development of #CroakeyGO. This tabletop presentation thus aligns with conference topics of planetary health, community, contemporary health initiatives, Aboriginal and Torres Strait Islander health, ageing and public health, regional and rural health issues, health promotion, social or ecological determinants of health, and prevention.

## Systems thinking and collective impact for establishing a community-led obesity prevention initiative.

**Authors:** Ms Jillian Whelan<sup>1</sup>, Dr Penny Love<sup>2</sup>, Dr Lynne Millar<sup>3</sup>, Professor Steven Allender<sup>4</sup>, Mr Andrew Brown<sup>4</sup>, Ms Catherine Morley<sup>5</sup>, Ms Ngareta Melgren<sup>6</sup>, Ms Jo Martin<sup>6</sup>, Professor Colin Bell<sup>1</sup>

**Affiliations:** <sup>1</sup>School of Medicine, Global Obesity Centre Deakin University, Geelong, Australia, <sup>2</sup>School of Exercise and Nutrition Sciences, Deakin University, Geelong, Australia, <sup>3</sup>Australian Health Policy Collaboration, Victoria University, Melbourne, Australia, <sup>4</sup>Global Obesity Centre, Deakin University, Geelong, Australia, <sup>5</sup>Wimmera Health Care Group, Horsham, Australia, <sup>6</sup>Rural Northwest Health, Warracknabeal, Australia

### Abstract:

Globally, obesity is a leading cause of early chronic disease and premature death. Obesity prevalence is not distributed evenly; socio-economically disadvantaged groups and rural and remote communities generally experience a higher prevalence internationally and within Australia. Localising interventions is key, with multiple stakeholders supported to work toward a shared vision. This paper describes the combination of components of systems thinking and the Collective Impact Framework for catalysing action on obesity prevention in rural Australia.

A case study design was used to describe the application of community-based system dynamics to mapping determinants of obesity in Yarriambiack (pop. 7204) in Victoria. The paper uses the COREQ framework for qualitative studies. Resulting variables and community identified strategies were themed against the Foresight Obesity Model. We also describe how the Collective Impact Framework was applied to guide the collaborative effort.

In each of the three communities across the shire, community representatives (between 8 and 16) attended a series of five group model building workshops (15 workshops in total). Three separate causal loop diagrams were created and 139 variables identified. A common agenda to 'make the healthy choice, the easy choice' was agreed and twelve mutually reinforcing activities were prioritised. Working groups were formed; communications channels identified and/or set up, a backbone organisation established and a draft evaluation plan developed.

Together, group model building and collective impact helped community members understand the complexity of obesity causation and identify possible solutions. The use of GMB and CI appeared to be synergistic and catalysed ongoing action.

### **Training community nurses to measure parent-child interaction to promote child language development**

**Authors:** Dr Penny Levickis<sup>1,2</sup>, Dr Cristina McKean<sup>1,2</sup>, prof James Law<sup>1</sup>

**Affiliations:** <sup>1</sup>Newcastle University, Newcastle Upon Tyne, United Kingdom, <sup>2</sup>Murdoch Children's Research Institute, Parkville, Australia

#### **Abstract:**

**Background:** This study aims to determine whether the Parental Responsiveness Rating Scale (PaRRiS) carried out at two years can be used by community nurses to identify families most likely to benefit from parent-child interaction interventions. This presentation reports: 1) validity of PaRRiS as a measure of parent behaviours and its relationship to child language development; and 2) findings from ongoing work to test whether community nurses can be trained to use PaRRiS to measure parent-child interaction during routine two-year health visits.

**Methods:** Observational data from a community-based cohort of mothers and their slow-to-talk two-year-olds was used to develop PaRRiS; a single measure of parental responsiveness (contingent, appropriate and prompt parenting in response to child initiation) on a five-point Likert scale. 204 mother-child dyads were videotaped during 15 minutes of free-play. Videos were blindly rated on a detailed rating of responsiveness shown to predict language outcomes and PaRRiS. Relationships between parent-child profiles and language at 4 years were analysed. Data from community nurse PaRRiS ratings during routine health visits and those of trained researchers will also be compared.

**Results:** PaRRiS was positively associated with detailed coding of parental responsiveness ( $r(242)=.44$ ,  $p<.001$ ). Using adjusted linear regression PaRRiS strongly predicted receptive (coefficient=4.6,  $p<0.001$ ) and expressive language (coefficient=3.1,  $p=0.004$ ) at 4 years. The reliability of nurse ratings will also be presented.

**Conclusion:** PaRRiS has the potential to provide community nurses with an additional tool for identifying dyads at increased risk, who could then be provided with interventions that promote optimal parent-child interaction.

### **Aboriginal health innovation in online and offline strategies for tackling smoking in men**

**Authors:** Mr Dale Wright<sup>1</sup>, Ms Rani Lawler<sup>1</sup>, Ms Franca Facci<sup>1</sup>, Mr Kishan Kariippanon<sup>2</sup>

**Affiliations:** <sup>1</sup>NSW Health, Wollongong, Australia, <sup>2</sup>University of Wollongong, Wollongong, Australia

#### **Abstract:**

**Context:** The challenge for public health is to co-create anti-tobacco media content in partnership with youth and adult males through a two way communicative design process. Content that is relevant and targeted at specific segments are proven to be effective. Workforce development in digital media production and social media marketing becomes essential to engage youth. The use of body mapping and filmmaking enables co-creation of contextually rich and relevant short films. The analysis of social media analytics further enables a highly targeted marketing strategy.

**Process:** Aboriginal Health practitioners are trained in body mapping, filmmaking & social media analytics. Youth & male elders are invited to play a game called Life Happens (Tobacco series) through established networks. This game uses body mapping to discuss sensitive topics. The filmmaking, then transforms the rich contextual knowledge gained from playing the game and the body map into short films for social media marketing. The film is produced and directed by Aboriginal Health Practitioners using Yarning in a digital medium.

**Analysis:** Results show that these novel methods are potentially effective for a combined online and offline strategy for public health tobacco quit programs targeting men whilst upskilling health practitioners to tackle tobacco cessation from a systems thinking approach.

**Outcomes:** The outcome to date is one completed short film out of five still in pre-production stage. The short film has been promoted on the Health NSW websites and other Aboriginal Medical Services Facebook Pages. In depth knowledge gained will be shared in the conference.

## 6C Rapid Fire - Public Health Lifestyle

Tully 2 & 3, 1:15pm – 2:45pm

### Breastfeeding journeys: Young mothers' successful breastfeeding

**Authors:** Dr Christina Severinsen<sup>1</sup>, Dr Eva Neely<sup>1</sup>

**Affiliations:** <sup>1</sup>Massey University, Private Bag 11-222 Palmerston North, New Zealand

#### Abstract:

**Background:** Exclusive breastfeeding for the first six months of an infant's life is a universally acknowledged public health goal (WHO, 2016). Despite this, New Zealand's breastfeeding rates drop steeply to around 25% at six months (MoH, 2015). Young mothers are often represented in a negative light in terms of their mothering capabilities (Breheny & Stephens, 2008). Likewise for breastfeeding, young mothers are seen to be 'at risk' and unsuccessful. However, 59% of New Zealand mothers aged under 25 years are exclusively feeding at discharge from their lead maternity carer (around 4 – 6 weeks). We were interested in the continuation of breastfeeding against normative trends.

**Methods:** We adopted a strength-based approach to explore the experiences and resilience of young mothers that have breastfed exclusively to six months and beyond. In-depth interviews were carried out with 44 young mothers who had breastfed their babies for more than six months. Through narrative analysis, the stories of participants are used to explore determinants of successful breastfeeding.

**Results:** Participants reflected on their breastfeeding intentions, initiation and support of breastfeeding, social and environmental influences, overcoming challenges and changes over time. Mothers identified their key reasons for success and offered suggestions for supporting young mothers in their breastfeeding journeys.

**Conclusion:** The research will identify the services, strategies and support systems across multiple levels that act as enablers of breastfeeding survival in young mothers. This information is critical for informing the development of breastfeeding promotion strategies.

### #waterwiththat: consumer led action to improve drink offerings in children's meals

**Authors:** Alice Pryor<sup>1</sup>, Jack Vear<sup>1</sup>, Marina Saunders<sup>2</sup>

**Affiliations:** <sup>1</sup>Parents' Voice, Melbourne, Australia, <sup>2</sup>Melbourne University, Melbourne, Australia

#### Abstract:

The development of the Quick Service Restaurant Initiative for Responsible Advertising and Marketing to Children (QSRI) led to the large fast food chains change their advertising practises directed to children.

This meant that many children's meals were advertised as being served with water. The in store experience is quite different, with parents and children ordering the kids' meals having to actively choose the healthier options.

Consumer advocacy group, Parents' Voice, surveyed Australian parents and found that 89 per cent agreed that water should be the default option in kids' meals.

With 47 per cent of Australian children consuming at least one sugary drink every day<sup>1</sup>, the campaign #waterwiththat is urging all signatories to the QSRI to put water with their kids' meals.

Campaigns Manager will outline how Parents' Voice have approached the campaign including the research basis and how Parents' Voice have built support within the quick service restaurant industry.

<sup>1</sup>Australian Bureau of Statistics, 2011-12, Australian Health Survey: Nutrition First Results - Foods and Nutrients, cat. no. 4364.0.55.007, viewed on 1 April 2017, <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.007main+features7102011-12>

### Sustained Low consumption of Fruit and Vegetables in Australian Children

**Authors:** Dr Seema Miharshahi<sup>1</sup>, Dr Rimma Myton<sup>2</sup>, Dr Stephanie Partridge<sup>1</sup>, Ms Emma Esdaile<sup>1</sup>, Dr Louise Hardy<sup>1</sup>, Dr Joanne Gale<sup>1</sup>

**Affiliations:** <sup>1</sup>University Of Sydney, The University Of Sydney, Australia, <sup>2</sup>The University of Technology, Ultimo, Australia

#### Abstract:

**Objective:** To examine the population proportion of Australian children meeting the fruit and vegetable recommendations in 2011-12 and 2014-2015 by age, sex and socio-economic status (SES).

**Design/Setting:** Secondary analysis of 2011-2012 and 2014-2015 Australian National Health Surveys.

**Subjects/Methods:** Australian children age 2-18 years in both surveys. Percentages of children meeting fruit and vegetable recommendations by survey year, age group, sex and SES tertile were calculated using population weights supplied by the Australian Bureau of Statistics (ABS). Chi squared tests and logistic regression were used to test for the relative influence of each factor.

**Results:** In 2011-12, 64.6%, 5.1% and 4.6% of children met the recommended intake for fruit, vegetable and, fruit-vegetable combined, respectively. In 2014-15, 68.2%, 5.3% and 5.1% of all children met the recommended intake for fruit, vegetable and, fruit-vegetable combined, respectively. There was a large reduction in proportions of children meeting both the fruit and vegetable recommendations between 3 and 4 years of age, which coincides with when most Australian children start pre-school. There were sex differences, but we found little evidence that SES is a significant factor predicting the difference in meeting the vegetable recommendations.

**Conclusions:** The proportion of Australian children meeting fruit and vegetable recommendations are sub-optimal across all SES groups which suggests that a national approach across demographic strata is warranted. Future interventions should have a refocus on vegetables instead of 'fruit and vegetables', particularly in the key transition period when children start pre-school.

### **Evidence-based practice: reliability & validity of a healthy food environment audit tool**

**Authors:** Dr Josephine Chau<sup>1</sup>, Ms Bridget Foley<sup>1</sup>, Ms Carol McInerney<sup>1</sup>, Ms Beatrice Tang<sup>2</sup>, Ms Megan Cobcroft<sup>2</sup>, Dr Margaret Thomas<sup>1</sup>

**Affiliations:** <sup>1</sup>Sydney School of Public Health, University of Sydney, Sydney, Australia, <sup>2</sup>NSW Ministry of Health, Sydney, Australia

#### **Abstract:**

**Context:** Food environments in Australia are dominated by unhealthy choices, contributing to poor diets and risk of chronic disease. In 2017, NSW Health re-launched a healthy food and drink policy for food outlets operating in health facilities, including a novel monitoring and reporting system. A mobile application to collect audit data on 13 food and drink benchmark practices was designed for users with limited formal nutrition training.

**Process:** Inter-rater reliability testing was built into a practice annual audit (Nov-Dec 2017). Field officers attended audit tool training and then conducted practice audits in pairs across 15 NSW health districts. Validity testing is in development.

**Analysis:** Fleiss Kappa statistics were calculated to assess inter-rater agreement for each food and drink practice.

**Outcomes:** Thirty trained field officers conducted 270 paired audits in 28 health facilities. The pre-determined inter-rater agreement threshold of kappa=0.70 was met for 10 out of 13 practices. Follow-up interviews with field officers revealed points for improvement in the tool in terms of technical functionality, presentation of information, and clarity of audit instructions. Validity testing of the tool is in development and the approach and results will also be presented.

**Implications for public health:** The audit tool has sufficient reliability for auditing the majority of food and drink practices when used by trained field officers. Validity testing is in development to assess if the tool is correctly measuring the practices as well as if the practices themselves provide a correct measure of a healthy food environment in this setting.

### **'parkrun' may contribute both health and broader economic benefits to a community**

**Authors:** Dr Melanie Sharman<sup>1</sup>, Dr Verity Cleland<sup>1</sup>, Dr Meredith Nash<sup>2</sup>

**Affiliations:** <sup>1</sup>Menzies Institute for Medical Research, Hobart, Australia, <sup>2</sup>University of Tasmania, Hobart, Australia

#### **Abstract:**

**Background:** 'parkrun' is a free, weekly, timed, international, mass community 5km walk/run event. Unlike other paid events, 'parkrun' attracts populations harder to engage in physical activity (PA) (e.g. women, those with overweight/obesity or illness/injury/disability). This exploratory qualitative study explored the reasons behind parkrun's broad appeal in Australia.

**Methods:** Tasmanian parkrunners who completed a quantitative survey (2016) were purposively recruited for a 2017 interview study. Semi-structured interviews focused on reasons for 'parkrun' participation. Data were thematically analysed and data saturation was achieved after 10 interviews.

**Results:** Four themes emerged: 1) participation facilitators and barriers; 2) 'parkrun' as a PA and economic stimulus; 3) social connections/networks; 4) organisational issues. Appealing characteristics of 'parkrun' included strong social support, performance gain opportunities, socialising, inclusivity (e.g. all ages/abilities), sense of community, positive atmosphere and accessibility (e.g. no cost, convenience). Some participants reported that 'parkrun' had led to gains in total PA (not always limited to walking/running) and 'parkrun' may also stimulate local economies (e.g. supporting local business, fee-based running club/event participation, 'parkrun tourism'). Most participants first attended 'parkrun' because of encouragement from their social networks and participants subsequently encouraged others to attend. Participants found 'parkrun' events well organised, but identified some potential threats (e.g. local politics).

**Conclusions:** Social factors appeared critical in driving initial and ongoing 'parkrun' participation. 'parkrun' may have wider economic benefits beyond those gained through increased individual PA. These findings highlight the 'success factors' driving 'parkrun' participation and provide insights for other community-based PA promotion activities.

## Temporal changes in Personal Activity Intelligence and Mortality: the HUNT Study, Norway

**Authors:** Dr. Javaid Nauman<sup>1,2</sup>, Dr. Sophie K Kieffer<sup>2</sup>, Professor Ulrik Wisloff<sup>2,3</sup>

**Affiliations:** <sup>1</sup>Institute of Public Health, College of Medicine and Health Sciences, United Arab Emirates University, Al-Ain, United Arab Emirates, <sup>2</sup>K. G. Jebsen Center of Exercise in Medicine at the Department of Circulation and Medical Imaging, Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology, Trondheim, Norway, <sup>3</sup>School of Human Movement & Nutrition Sciences, University of Queensland, St. Lucia, Australia

### Abstract:

**Background:** Personal Activity Intelligence (PAI) is an activity metric that translates heart rate variations during exercise into a weekly score, and is associated with lower risk of cardiovascular disease (CVD) mortality. However, it is not known whether change in PAI over time is related to risk of mortality.

**Methods:** PAI was estimated using a validated algorithm on 2 occasions around 10-years apart in 11,870 men and 13,010 women without known CVD. The second PAI estimation was done between August-1995 and June-1997, with subsequent mortality follow-up until December-31, 2015. Using Cox regression analyses, adjusted hazard ratios (AHRs) were estimated of CVD and all-cause mortality.

**Results:** During a mean(SD) of 18(4) years of follow-up, there were 4782 total deaths, including 1560 CVD deaths. Compared with the participants with <100 weekly PAI at both measurements, those with ≥100 PAI at both measurements had 32% lower risk of CVD (95% CI:14%-46%), and 20% lower risk of all-cause (95% CI:9%-29%) mortality. For participants with PAI score of <100 at the first measurement but ≥100 at the second measurement, the AHR was 0.86 (95% CI:0.97-0.95) for all-cause mortality. We found an inverse relationship between change in PAI and CVD mortality among participants with baseline PAI score of 0 (P<0.01), and ≤50 (P=0.04), suggesting that a decrease in PAI over time is associated with increased risk of mortality.

**Conclusion:** Among men and women without known CVD, sustained high PAI score and an increase in PAI score over a 10-year period was associated with lower risk of mortality.

## Acceptability of strategies to increase public transport use for physical activity gain

**Authors:** Dr Melanie Sharman<sup>1</sup>, Dr Anna Lyth<sup>2</sup>, Dr Kim Jose<sup>1</sup>, Ms Bruna Ragaini<sup>1</sup>, Professor Andrew Palmer<sup>1</sup>, Professor Leigh Blizzard<sup>1</sup>, Dr Jagannath Aryal<sup>3</sup>, Dr Verity Cleland<sup>1</sup>

**Affiliations:** <sup>1</sup>Menzies Institute For Medical Research, Hobart, Australia, <sup>2</sup>RED Sustainability Consultants, Hobart, Australia, <sup>3</sup>University of Tasmania, Hobart, Australia

### Abstract:

**Background:** Public transport (PT) users accumulate more physical activity (PA) than non-users, but little is known about which strategies might increase PT use. This mixed methods study aimed to determine acceptability and perceived effectiveness of strategies to increase PT (bus) use for PA gain.

**Methods:** In a 2017 online survey, 1,091 Tasmanian adults rated the likelihood of increasing their bus use according to 10 hypothetical strategies (fare-, incentives-, information- or infrastructure-based). A subsequent qualitative study (three focus groups and five interviews; n=31) targeted infrequent bus users of mixed sociodemographic characteristics, to determine key reasons for strategy preferences. Discussions were audio-recorded, transcribed verbatim and thematically analysed.

**Results:** Survey respondents were heterogeneous regarding travel and PA behaviour and key sociodemographic characteristics (e.g. age). The top three strategies in the survey, with supporting rationale from focus groups/interview data, were: provision of real-time bus information ("...because I can better plan..."); bus only lanes ("...it just speeds the whole thing up...") and employee incentives/rewards e.g. bus fare credits ("...it really comes down to money..."). These top ranked strategies were most popular among survey respondents who were younger adults, part-/full-time students or lived close to the capital city (Hobart). Other information-based strategies (e.g. better written/web-based information or telephone assistance) were least popular.

**Conclusions:** Provision of real-time information, bus only lanes and employee incentives/rewards show the greatest promise for increasing bus use in this population. Intervention studies to determine the impact of these initiatives on PT use and associated PA are warranted.

## Small Grants – contemporary engagement and capacity building in workplace health promotion.

**Presenter:** Kelly Kennington

**Authors:** Ms Emily Davey<sup>1</sup>, Mr Trevor Shilton<sup>1</sup>, Ms Natalie Quinn<sup>1</sup>, Ms Carly Martin<sup>2</sup>, Ms Melissa Ledger<sup>2</sup> Emily Brown<sup>1</sup>

**Affiliations:** <sup>1</sup>Heart Foundation WA, Subiaco, Australia, <sup>2</sup>Cancer Council WA, Subiaco, Australia

### Abstract:

**Context:** Healthier Workplace WA (HWWA) is a six year multifaceted workplace health promotion program, funded by the Department of Health Western Australia. The program provides free tools, resources, training, and support to Western Australian workplaces to encourage the implementation of initiatives to support employee health and wellbeing.

**Process:** Between 2013 and 2017, HWWA implemented five rounds of small grants with the aim to increase program engagement with WA workplaces and build their capacity to implement initiatives that target smoking, nutrition, alcohol and/or physical activity (SNAP). This paper will reflect on lessons learnt and the outcomes of using grants as a contemporary engagement and capacity building strategy for workplace health promotion.

**Analysis:** Initially the small grants scheme was used as an engagement strategy to raise awareness about HWWA. Subsequent grant rounds were targeted to small to medium workplaces in high-risk industries, with employees more likely to engage in unhealthy behaviours.

**Outcomes:** Evaluation of 2014/15 grant rounds saw 75% of engaged workplaces reporting that activities from the grant would continue beyond the funding period.

HWWA has provided funding to 101 workplaces since 2013. Items funded include infrastructure (e.g. bike racks, pool bikes) and participation initiatives (exercise classes, education sessions). Each grant round has resulted in increased HWWA website visits, resource downloads and training registrations.

The small grants scheme has been a successful engagement and capacity building strategy for HWWA. It has been adapted over time to better enable the program to engage with hard to reach and resource poor workplaces across WA

### **Utilisation of Complementary Medicine Practitioner Services by Australians with Chronic Health Conditions**

**Authors:** Hope Foley<sup>1,2</sup>, Dr Amie Steel<sup>1,2</sup>, Dr Joanna Harnett<sup>1,3</sup>, Dr Erica McIntyre<sup>1</sup>, Prof David Sibbritt<sup>1</sup>, Dr Jon Wardle<sup>1</sup>, Prof Jon Adams<sup>1</sup>

**Affiliations:** <sup>1</sup>Australian Research Centre in Complementary and Integrative Medicine, Faculty of Health, University Of Technology Sydney, Sydney, Australia, <sup>2</sup>Office of Research, Endeavour College of Natural Health, Brisbane, Australia, <sup>3</sup>Faculty of Pharmacy, University of Sydney, Sydney, Australia

#### **Abstract:**

**Background:** Advances in medical science and post-industrial changes to lifestyle behaviours have led to changes in the planetary and Australian burden of disease, shifting the focus of public health from acute and infectious disease management to that of chronic conditions. Alongside this shift has been an observed increase in use of complementary medicine (CM). We sought to examine the extent to which Australians with chronic conditions are consulting with complementary medicine practitioners.

**Methods:** Cross-sectional survey of a nationally representative sample of the Australian general population. Participants were asked about utilisation of CM practitioner services and whether they had been diagnosed with or treated for a chronic condition within the last three years. Descriptive frequencies and chi-square analyses were conducted to identify correlations.

**Results:** Individuals with chronic conditions had significantly higher rates of consultation with CM practitioners (39%) than those without chronic conditions (31%) ( $p=0.001$ ), particularly with osteopaths ( $p<0.001$ ), chiropractors ( $p=0.001$ ), acupuncturists ( $p=0.001$ ), aromatherapists ( $p=0.011$ ) and naturopaths ( $p=0.021$ ). Rates showed an increasing trend with multimorbidity, reaching 44% for those with three comorbid conditions and 48% for those with five or more comorbid conditions. Consultation rates were also higher for individuals with particular chronic conditions, including reproductive (51%), gastrointestinal (48%), and pain-related conditions (47%).

**Conclusion:** As national and global public health guidelines increasingly recognise the value of patient-centred, integrated care in the management of chronic conditions, it appears CM practitioners in Australia may present an existing resource of chronic care delivery that is currently under-utilised within the field of public health.

### **Leading change in the Northern Territory: a minimum unit price for alcohol**

**Authors:** Ms Meredythe Crane<sup>1</sup>

**Affiliations:** <sup>1</sup>Foundation For Alcohol Research and Education, Deakin West, Australia

#### **Abstract:**

**Context:** Rates of alcohol consumption in the Northern Territory are among the highest globally. So high in fact that if the Northern Territory was a country, its per capita consumption would place it in the top ten drinking nations in the world. This has led to the highest levels of alcohol harm in the country, devastating the health and wellbeing of individuals, families, and communities across the Northern Territory. Pricing policies are amongst the most effective strategies to reduce alcohol harm, yet the Northern Territory's minimum unit price policy will be the first in Australia.

**Process:** The 2017 Alcohol policies and legislation review in the Northern Territory provided the public health sector with an opportunity to advocate for implementation of a minimum unit price. The advocacy strategy focussed on working with other like-minded organisations to frame the issue around cheap alcohol, develop an agreed pricing policy and release of a discussion paper that argued the case for a minimum unit price. Other tactics were also employed.

**Analysis:** The impact of this action is evident through the public debate in the media, support from other sectors and advocacy for the policy, its inclusion in the recommendations of the final report for the review and the government's response to the review's recommendations.

**Outcomes:** The Northern Territory Government has committed to implementing a minimum unit price for alcohol in mid-2018. This presentation will discuss the key elements that resulted in the success of this campaign and the lessons learnt.

### **Pokies in Fairfield what's public health got to do with it?**

**Authors:** Ms Karla Jaques<sup>1,2,3,4</sup>, Dr Fiona Haigh<sup>1,2,3,4</sup>

**Affiliations:** <sup>1</sup>Centre For Health Equity Training Research And Evaluation, Liverpool, Australia, <sup>2</sup>Centre for Primary Health Care and Equity, UNSW Sydney, Sydney, Australia, <sup>3</sup>Population Health, South Western Sydney Local Health District, Liverpool, Australia, <sup>4</sup>Ingham Institute, Liverpool, Australia

#### **Abstract:**

**Context:** Fairfield Local Government Area in south west of Sydney is ranked as the most disadvantaged area in Sydney and the 3rd most disadvantaged area in NSW. The people of Fairfield may be experiencing relatively high levels of disadvantage but they are rich in Electronic Gaming Machines (Pokies) with some of the highest density of electronic gaming machines not only in the state but also internationally. Gambling losses were approximately \$4,000 per resident in 2015/16.

**Analysis:** Fairfield City Council are strong advocates against any increases to gaming machines and frequently refuse applications. However, the role of health in this process is less clear. The health system deals with the negative health impacts of gambling. But it has been reported that currently, donations from gaming venues under the NSW Governments Local Impact Assessment scheme are being accepted by hospitals and community organisations. Venues need to demonstrate the Independent Liquor and Gaming Authority that the increase will result in an overall positive benefit to the community.

**Process:** This presentation explores the role of public health in addressing gambling related harm with a focus on the regulatory system. We use Fairfield as a case study to identify the current role of public health in regulatory decision making and identify opportunity for health to increase their role in reducing the harms caused by these machines.

**Outcomes:** The presentation will identify the potential role, tools and approaches for public health in addressing gambling related harm and will provide an overview of the regulatory process.

## **6D Rapid Fire - Public Health**

Kuranda Ballroom, 1:15pm – 2:45pm

### **Harnessing the wisdom of current public health leaders to inspire future leadership**

**Authors:** Assoc/prof Lisa Wood<sup>1</sup>

**Affiliations:** <sup>1</sup>University of Western Australia, Crawley, Australia

#### **Abstract:**

**Context:** The imperative to inspire new public health leaders and build on the rich legacy of current leaders in the field is reflected in this conference theme. Universities are an important starting point for this, with growing numbers of students undertaking health related courses. There is a unique window of opportunity in these settings to inspire students towards public health leadership and reducing health inequalities. Such inspiration is rarely found in a textbook however, and guest lectures generously given by busy public health leaders only reach a small proportion of students. Creative ways are therefore needed to harness some of the wealth of wisdom and experience of Australia's current public health leaders in ways that students and the emerging public health workforce can learn from.

**Process:** A dozen of Australia's highly regarded public health leaders were asked if they could 'do a favour for the next generation of public health leaders', by answering three questions:

- (i) What do you see as key skills or attributes of good leadership in public health?
- (ii) Can you identify three current challenges for public health leadership?
- (iii) Is there a person, cause or organisation that you regard as leadership inspiration?

**Outcome:** Whilst initially compiled for the benefit of students undertaking health leadership units at The University of Western Australia, the rich insights gleaned from our current vintage of public health leaders are timely for all of us seeking to make a difference to public health in Australia circa 2018 and beyond.

## Fixing Governance: The Ultimate Public Health Prevention Strategy

**Authors:** Dr Peter W Tait<sup>1</sup>

**Affiliations:** <sup>1</sup>PHAA, O'Connor, Australia

### Abstract:

**Context:** We recognise extreme capitalism is running the political economy. Big Industry buys the ear of government. The consequences consume us. The drive to consume is derailing the delicate ecosystem processes that sustain us and simultaneously leads to the ills that public health seeks to prevent from environmental destruction to the obesogenic environment. Society is shaping up not how we would like it, but as one that drives even more inequality and disease. Further, the predominance of the corporatocracy undermines the public's trust in government, reinforcing its position.

**Objective:** The ultimate public health prevention then is to create good governance. Good governance is one key determinant of health. It enables other societal and ecological determinants of health. The path to good governance is two-fold: both reforms of the current governance system and a raft of radical transformations are required. Both pathways need to be taken together; they reinforce each other. Our current approach, piecemeal responses to separate issues, means we are losing.

**Action:** We can apply our toolkit of research, education, advocacy and collaborating to promote good governance for the public's health. Reforms are underway and they need immediate public health support. A transformation of the political process by improving citizen participation in deliberation and more open government is the pathway to even better governance. Only by apportioning some of our efforts to fixing governance can we stop losing and hope to win long lasting health gains.

## Delivering disaster resilience education to school children via virtual excursions

**Authors:** Ms Grace Strugnell<sup>1</sup>, Ms Rhiannon Birch<sup>1</sup>, Ms Melissa Laird<sup>1</sup>, Dr Bernadette Matthews<sup>1</sup>

**Affiliations:** <sup>1</sup>Life Saving Victoria, Port Melbourne, Australia

### Abstract:

**Background:** In Victoria, providing essential disaster resilience education (DRE) to over half a million primary school students is an important, yet challenging task for emergency management agencies and schools. Life Saving Victoria (LSV), Ambulance Victoria (AV) and Country Fire Authority (CFA) sought a collaborative approach to delivering DRE, using video conferencing technology. Virtual excursions (VE) connect students with emergency management personnel in real-time and over distance, improving sustainability and accessibility for students, particularly in regional and rural areas.

**Aim:** To evaluate the feasibility of inter-agency VE to increase student safety awareness, knowledge and personal resilience.

**Methods:** Following inter-agency scoping activities, VE were delivered to 70 students in two Foundation (Prep) classes in metropolitan and regional Victoria. The program consisted of a virtual excursion, which focused on the theme of 'people in the community who can help us'. Content was developed by subject matter and education experts from LSV, AV and CFA. Evaluation comprised direct observation, agency and teacher interviews and student questionnaires.

**Results:** Stakeholders agreed that VE were logistically feasible, encouraged inter-agency collaboration and met curriculum requirements for cost-effective and sustainable delivery. Students correctly linked the emergency personnel with their role following the VE and demonstrated increased positive sentiment towards the agencies. Key elements for successful VE delivery, including logistics, student engagement, equipment and technology will be described.

**Conclusion:** This study demonstrated that effective inter-agency collaboration and technology advancements can provide students with engaging and informative DRE, whilst removing traditional barriers for schools including curriculum constraints, time, distance and cost.

## Validity of routinely collected data in identifying hip fractures

**Authors:** Dr Lieu Trinh<sup>1</sup>

**Affiliations:** <sup>1</sup>Epidemiology and Health Analytics, Western Sydney Local Health District, Sydney, Australia

### Abstract:

**Objectives:** To examine the validity of routinely collected data in identifying hip fractures (HFs) and to identify factors associated with incorrect coding.

**Method:** In a prospective cohort study between January 2014-June 2016, HFs were identified using physician diagnosis and diagnostic imaging and were recorded in a Registry. Records of HFs in the Health Information Exchange (HIE) were identified using ICD-10-AM/ACHI/ACS codes. New HFs were estimated by episode of care, hospital admission and with an algorithm. Data from the HIE and the Registry were compared.



**Results:** The number of HFs as the principal diagnosis (PD) recorded by episode (864) was higher than by admission (743), by algorithm (711) and in the Registry (638). The sensitivity was high for all methods (90%-93%) but the positive predictive value (PPV) was lower for episode (68%) than for admission (80%) or algorithm (81%). The number of HFs with surgery recorded in the PD by episode (639), algorithm (630) and in the Registry (623) was similar but higher than by admission (589). The episode and algorithm methods also had higher sensitivity (91%-92%) than the admission method (84%) for HFs with surgery. Factors associated with coding errors included subsequent HF, long hospital stay, intracapsular fracture, lower age, male, HF without surgery and death in hospital.

**Conclusions:** When it is not practical to use the algorithm for regular monitoring of HFs, using PD by admission to estimate total HFs, and PD by episode in combination with a procedure code, to estimate HFs with surgery can produce robust estimations.

### **Establishing the needs of Family-Day-Care Educators to provide a healthy food environment**

**Authors:** [Dr Ruth Wallace<sup>1</sup>](#), Dr Brennen Mills<sup>1</sup>

**Affiliations:** <sup>1</sup>*Edith Cowan University, Joondalup, Australia*

#### **Abstract:**

**Background:** Optimal nutrition is essential during early childhood, as early diet affects health in adulthood. Australian child health concerns include current rates of overweight/obesity (25% children aged 2–17 years), alongside increased dependency on childcare. Family-day-care (FDC) provides home-based childcare for children aged 0–12 years, legislated by the National Quality Framework. In 2015, >225,000 children attended FDC for an average 33 hours weekly. The quality of the Australian FDC food environment is not well-known; this study gauged educators nutrition behaviours, knowledge, confidence, attitudes, and investigated their perspectives about strategies to facilitate improved food environments.

**Methods:** A mixed methods research design was utilised. An online quantitative survey measured FDC educators' nutrition behaviours, knowledge, confidence, and attitudes. Qualitative interviews explored barriers/enablers to providing healthy food environments.

**Results:** Quantitative data (n=188) revealed poor knowledge of serve sizes recommended by the Australian Dietary Guidelines, good knowledge of foods with high/low added sugar content, but poor knowledge of protein-rich or high saturated-fat foods. Higher nutrition knowledge correlated with more confidence to discuss nutrition with parents. Qualitative interviews (n=9) revealed barriers to healthy food environments such as fussy eaters, relationships between FDC educators and parents, and poor nutrition knowledge. Participants considered their FDC educator role as pivotal in supporting busy working families about healthy food environments.

**Conclusion:** This study highlights the need for FDC-specific training to improve the nutrition knowledge and confidence of FDC educators in providing a healthy food environment and strengthening their role as a significant source of support for Australian working families.

### **Attitude towards wife-beating and child physical punishment as predictors of**

**Authors:** [Assistant Professor Nasser B Ebrahim<sup>1</sup>](#), Assistant Professor Madhu S Atteraya<sup>1</sup>

**Affiliations:** <sup>1</sup>*Keimyung University, Department of Public Health, Daegu, South Korea*

#### **Abstract:**

**Background:** Child maltreatment is public health problem across the world with severe health consequences and is common in many Somali communities. The co-occurrence of child maltreatment and domestic violence is well known; however, the association of domestic violence and child maltreatment is not well understood in Africa. Additionally, although acceptance of corporal punishment as a major child rearing practice is cited as a factor that contribute to child maltreatment, no empirical evidence exists in the context of Somali societies

**Methods:** We used the 2011 Somaliland and Northeast Somalia Multiple Indicator Cluster Survey (MICS). A total of 4,820 and 4,785 households were interviewed. Among these, we limited our study to female-headed households (n=1471) from Somaliland and (n=1395) Northeast Zone, Somalia (age 15-49). Child maltreatment variables (psychological aggression, moderate and severe physical assaults) were assessed by the Parent-Child Tactics Scales. Women's attitude towards wife-beating was assessed by asking women five scenarios in which wife-beating is justified. Women's attitude towards child physical punishment was assessed by a single item. Bivariate and multivariate analyses were performed.

**Results:** Overall, the proportion of children in female-headed households that did experience psychological aggression, moderate, and severe physical assaults were 71.5%, 70.2%, 42.7%, in Somaliland, and 73.3%, 69.3%, and 51.9%, in Northeast Somalia, respectively. Women's attitude towards wife-beating was not a significant predictor of child maltreatment. The odds of experiencing child maltreatment were significantly higher among children whose parents held favorable attitude towards physical punishment.

**Conclusion:** Health education programs focusing on changing cultural parenting beliefs may be useful in cultivating sound and effective child rearing strategies among Somali parents.

## Personal responsibility and choice in Australian healthcare: a view from philosophy

**Authors:** Ms Susan Pennings<sup>2</sup>

**Affiliations:** <sup>1</sup>Australian National University, Acton, Australia, <sup>2</sup>Council of Academic Public Health Institutions Australasia (CAPHIA), Deakin, Australia

### Abstract:

Social survey data\* indicates that the majority of Australians, when asked about healthcare rationing, believe that smokers, the significantly overweight and alcoholics should be given lower priority in the healthcare system than other patients. One argument for this view claims that to treat all patients alike, regardless of their individual responsibility for their health condition, is not to take people's moral autonomy seriously. In this view, to deny a person meaningful choices by not allowing them to experience the benefits and costs of their choices is disrespectful and paternalistic.

I will argue that despite the popularity of these views, they would be implausibly harsh and infeasible to implement in practice, and so cannot be an accurate account of our society's ethical obligations in regard to healthcare. It is very possible for a healthcare system to give patients genuine and meaningful choices without the punitive harshness that assigning a patient lower priority implies. I suggest ways in which the Australian healthcare system could more fully incorporate the practice of shared decision-making and increase the range of treatment options, thus being more responsive and respectful of the agency and choices of patients.

\* Anderson, M., Richardson, J., McKie, J., Iezzi, A, and Khan, M. (2011). The Relevance of Personal Characteristics in Health Care Rationing: What the Australian Public Thinks and Why. *The American Journal of Economics and Sociology* 70(1), 131-151

## World Cafe: Designing Indicators for Sustainable Wellbeing

**Authors:** Dr Rebecca Patrick<sup>1</sup>, Dr Amy Shaw<sup>2</sup>

**Affiliations:** <sup>1</sup>Deakin University, Health Nature Sustainability research group, Burwood, Australia, <sup>2</sup>Deakin University, School of Life and Environmental Sciences, Burwood, Australia

### Abstract:

**Context:** Global agreements including the New Urban Agenda, Paris Agreement and SDG's create a platform for national governments to act on complex planetary health issues, e.g. climate change, health equity, urbanisation. At a state level, Victoria's Climate Change Act 2017 and Victorian Memorandum of Understanding for Health and Nature 2017 enshrine the values of health and sustainability and bring global mandates one step closer to the regional/local levels. All documents clearly express that human health is dependent on ecosystem health and that they need to be linked in public health policy and programs. But how can these complex and visionary documents be implemented and measured at a local level; at a scale where they are simple and meaningful enough to engage local citizens in realising sustainable wellbeing?

**Process/Analysis:** In this World Café style workshop the session aims are:

- Catalyse conversations around engaging community and measuring change for sustainable wellbeing (planetary health)
- Explore the feasibility of modifying/rescaling existing human health and environmental sustainability indexes to support local/regional action in Australia.

A brief Introduction presentation about current initiatives in this area will be followed by 3 x 20 minute Small Group Rounds on key Questions and a 15-minute Harvest.

**Outcomes:** By the end of the session participants will have:

- Enhanced competencies in applying human health and environmental sustainability indicators
- Identified suitable indicators to support policy and program development for sustainable wellbeing at a local level
- Lived experience of a World Café session for their practice toolkit.

## Understanding Oral Health of Refugee-Background Children in Australia: A Systematic Literature Review

**Authors:** Mrs Bushra Khan<sup>1</sup>, Dr Joanna Russell<sup>1</sup>, Dr Elisha Riggs<sup>2</sup>, Prof Heather Yeatman<sup>1</sup>

**Affiliations:** <sup>1</sup>University Of Wollongong, Wollongong, Australia, <sup>2</sup>Murdoch Children's Research Institute, Melbourne, Australia

### Abstract:

**Background:** Oral health plays a significant role in childhood. Despite recognition of the importance of oral hygiene practices, good nutrition and preventative services for better oral health outcomes evidence suggests little is known of the parents oral health knowledge, attitudes and practices, or the challenges they face trying to access oral health services. This systematic literature review aims to explore what is currently reported about oral health of refugee children in the national and international literature.

**Methods:** To inform this review, a systematic search strategy was utilised identifying a total of 313 articles. Exclusion criteria were applied to include 13 articles.

**Results:** Australian studies explored parents, specifically mothers' oral health knowledge, attitudes and practices in refugee communities and identified that perspectives may vary depending on cultural backgrounds and countries of origin of participants. The experiences and perspectives from both fathers and mothers of different cultures and countries of origin are of value in understanding the oral health knowledge, attitudes and practices in refugee communities.

**Conclusion:** There is limited research in Australia on in depth understanding of refugee background parents' perspectives of their children's oral health. A review of three international articles also suggests there is a need to gain deeper understanding of the parents' attitudes and health beliefs as it depends on the unique circumstances of these communities. This important gap in the literature provides a platform for future research into addressing oral health in these vulnerable communities.

### **Addressing cardiovascular risk in minority Indigenous populations: a systematic review**

**Authors:** Dr Lea Merone<sup>1</sup>, Professor Robyn McDermott, Dr Jacki Mein, Professor Philip Clarke, Dr Malcolm McDonald

**Affiliations:** <sup>1</sup>James Cook University, Cairns, Australia

#### **Abstract:**

**Background:** Cardiovascular disease (CVD) is a leading cause of death and disproportionately affects minority Indigenous groups. In Australia, there are guidelines to assess and manage CVD risk for Aboriginal and Torres Strait Islanders, but these have limitations and significantly underestimate risk. The objective of this systematic review was to evaluate the available English-language literature on CVD risk assessment and management in minority Indigenous populations.

**Methods:** The literature search took a systematic review approach in evaluating protocol-selected publications regarding study design, the role of CVD risk assessment and clinical outcomes. The initial search produced 36 publications. Following application of inclusion and exclusion criteria 17 publications remained. Only 6 out of the 17 studies (35%) assessed absolute CVD risk and 2 of these examined absolute risk reduction following CVD risk calculation (table 3).

**Results:** Of 17 studies reviewed, formal risk assessment played a minor role. Few studies focussed on hard CVD outcomes. No studies produced data that could provide foundations for future CVD risk assessment guidelines.

**Conclusion:** New, validated and reliable population-based CVD risk assessment tools can be developed using data from available health databases, but this approach must be matched by finding ways to incorporate these tools into daily practice. Development and clinical application of apt CVD risk assessment tools would likely have a substantial impact on CVD morbidity and mortality in a high-risk population.

### **Knowledge brokerage as a mechanism to catalyse change in ECEC food environment.**

**Authors:** Ms Ros Sambell<sup>1</sup>, Dr Ruth Wallace<sup>1</sup>, Dr Leesa Costello<sup>1</sup>, Professor Amanda Devine<sup>1</sup>

**Affiliations:** <sup>1</sup>Edith Cowan University, Joondalup, Australia

#### **Abstract:**

**Background:** The Early Childhood Education and Care (ECEC) sector requires a national lens to facilitate continued improvement in core food group provision, thus improving health outcomes of children utilising these services. International and national evidence has shown that food provision compliance, based on Dietary Guidelines, is unlikely to meet all core food group recommendations. This study aimed to determine if knowledge brokerage (KB) domains were used to build capacity of the sector and assist with creation, translation, diffusion and application of relevant knowledge to achieve increased level of compliance.

**Methods:** A convenience sample of 18 individuals from universities and non-government organisations formed a National Nutrition Group (NNG) for ECEC. Individuals were interviewed 6 months from formation about being a NNG member and identified KB domains and tasks used in their current research and practice. Thematic analysis of interviews was undertaken.

**Results:** Of participants (n=10), who completed the KB task list, 70% had already supported knowledge sharing and communication with stakeholders, 60% were able to identify common goals of the NNG with stakeholders and engage with relevant groups. From interviews (n=13), there was a sense of collective purpose, "mutual respect" for group members and optimism that NNG membership could influence food environment.

**Conclusion:** The most common tasks demonstrated by members were associated with the domains of "linkage and exchange" and "knowledge management". These markers are indicative of positive relationships between knowledge creators and users as a means of stimulating the transfer and exchange of relevant information where change activation is occurring.

## Author Index

### A

Adams, Jon	25, 27, 69
Agarwal, Ambika	47
Agostino, Jason	75
Ahwang, Dania	14
Aitken, Zoe	21
Akter, Shahinoor	13
Ali, Liaquat	13
Allender, Steven	64
Allsop, Steve	37
Almond, Sara	30

Andersson, Patiyan	7
Andronaco, Robert	53
Antony, Felicity	4, 58
Arbon, Paul	9
Armanasco,	8
Ashleigh	
Arneman, Dawn	12, 50
Aryal, Jagannath	68
Ashton, Sian	6
Atteraya, Madhu	72

### B

Bainbridge, Roxanne	16
Baker, Emma	21
Baldock, Dianne	16
Baldock, Katherine	35, 62
Balodis, Rominy	15
Banwell, Cathy	46
Barbour, Liza	18
Barclay, Michael	37
Bareja, Christina	51
Barnett, Anthony	51
Barons, Martine J.	26
Barratt, Alexandra	42
Bar-Zeev, Yael	24
Bateman-Steel, Catherine	34
Bauman, Adrian	58
Bazeley, Pat	42
Beckingham, Wendy	7
Beer, Maria	18
Bell, Colin	26, 64
Bentley, Rebecca	21
Benveniste, Tessa	16
Bernays, Sarah	28
Bernstein, Melissa	30
Berton, Nathan	53
Biggs, Beverley-Ann	36

Birch, Rhiannon	41, 47, 53, 71
Black, Kirsten	28, 42
Blizzard, Leigh	68
Block, Karen	27
Bonevski, Billie	24
Bonner, Carissa	32
Bovill, Michelle	24
Bowles, Devin	23, 31
Brain, David	63
Braunack-Mayer, Annette	3
Brian, Garry	12
Brimblecombe, Julie	26, 36
Britton, Amelia	16
Broom, Alex	27
Brown, Andrew	64
Brownbill, Aimee	3, 47
Browne, Jennifer	61
Buchbinder, Rachelle	32
Burkhart, Sarah	18
Buron Pust, Andrea	47
Buttigieg, Stefan	47
Byaruhanga, Judith	25
Byrne, Matt	59
Byrne, Rebecca	36
Byrnes, Emma	25

**C**

Caagbay, Delena	28	Clune, Samantha	8
Callan, Anna	59	Coatsworth, Nicholas	7
Campbell, Sandy	50	Cobcroft, Megan	67
Carlisle, Karen	11, 49	Coelli, Lauren	8
Carrington, Ann	52	Congedi, Jillian	62
Cave, Leah	60	Connon, Irena	25
Chamberlain, Catherine	55	Coomber, Ross	21, 45
Chao, Kalen	57	Cooper, Matthew	60
Chapple, Nuala	3	Coopes, Amy	30, 64
Chau, Josephine	67	Corlis, Megan	40
Chau, Ken Wang Tat	38	Costello, Leesa	59, 74
Chau, Patsy	43	Cox, Cara	14
Chen, Ming	7	Cox, Terry	16
Chong, Ka Chun	43	Craig, Jonathan	36, 45
Chong, Shanley	58	Cramer, Holger	27
Choonara, Shakira	47	Crane, Meredythe	69
Christophersen, CT	59	Crimeen, Alana	18, 50
Chu, Steven	4, 54	Croker, Felicity	11, 52, 57
Clapham, Kathleen	36	Croker, Luke	57
Clark, Robert	51	Cunningham, Frances	17
Clarke, Philip	74	Cutmore, Mandy	36
Cleland, Verity	67, 68		

**D**

Davey, Emily	20, 68	Devine, Amanda	59, 74
Davidson, Ange	8	Devonport, Justine	4
Davies, Kate	13	Dheda, Shyam	38
Davis, Nathalie	58	Dickins, Emma	57
Day, Sue-Ellen	36	Dinh, Huong	46
Dekker, Maria	55	Dixon, Sara	10
de Andrade, Dominique	21, 45	Donnellan, Niamh	56
de Costa, Caroline	42	Donnelly, Brydie	10
Delai, Mere	49	Dowden, Michelle	16
de Leeuw, Evelyne	50	Duituturaga, Salanieta	46
D'Este, Catherine	15, 46	Dunn, Matthew	51

**E**

Eades, Sandra	15, 55	Egl, Victoria	56
Ebrahim, Nasser B	72	Elias, Amanuel	61
Edwards, Harrison	33	Esdaile, Emma	66
Egan, Mikaela	61	Esmonde, Juliet	15
Egerton-Warburton, Diana	37		

**F**

Facci, Franca	35, 65
Fagan, Royden	17
Fagan, Ruth	50
Fairhall, Nicola	20
Farrell, Lucy	24
Fatema, Kaniz	13
Fernando, Peter	15, 36
Ferson, Mark	34
Field, Emma	29
Fielding, James	5
Finlay, Summer	30, 64
May	

Finlayson, Heather	44
Fischer, Jasmin	36
Foley, Bridget	67
Foley, Hope	69
Frawley, Jane	27
Frazer-Ryan, Skye	2
Freedman, Ben	44
Freeman, Becky	53
Freestone, Robert	50
Fujimoto, Hiroko	44

**G**

Gair, Richard	4
Gale, Joanne	66
Garg, Pankaj	9
Garton, Linda	29
Gazey, Angela	41
Gebbie, Kristine	9
Gehrmann, Marc	10, 57
Gibbs, Lisa	27
Ginsborg, Stephen	39
Glasson, Cherrie	36
Goldberg, Lynette	16
Golley, Rebecca	36

Gorgioski, Natalie	30
Gould, Gillian	2, 24, 37
Graudins, Andis	37
Gribben, Gabrielle	24
Griffiths, Jacqueline	36
Gross, Michaela	44
Grunseit, Anne	53
Grupetta, Maree	2
Gubhaju, Lina	55
Gupta, Leena	6
Gwynn, Josephine	44
Gwynne, Kylie	44

**H**

Haigh, Fiona	10, 30, 39, 42, 50, 70
Haigh, Neil	42
Hamblin, Julie	42
Hamilton, Sandy	44
Hanieh, Sarah	36
Hanson, Josh	38
Hardy, Louise	66
Hargrave, Genevieve	22
Harnett, Joanna	69
Harrington, Humpress	49
Harris, Neil	2
Harvey, Ken	19, 34
Hasking, Penelope	55
Haynes, Abby	45
Heris, Christina	55

Hess, Isabel	6
Hoang, Ha	16
Hocking, Jen	48
Hodgson, Jonathan	59
Hoffmann, Tammy	32
Holmes, Emily	14
Horne, Peter	4
Hughes, Nicole	62
HuLamm, Vina	47
Hull, Naomi	48
Hulme-Chambers, Alana	8
Hunt, David	22
Hurwitz, Romy	9
Hutton, Jennie	37

**I**

ICAN QUIT in Pregnancy Pilot Group,	24
Ikeda, Erika	56
Inder, Kerry	13

Ingram, Suzanne	39
Ivankovic, Damir	47

**J**

Jackson, Amanda	63
Jalaludin, Bin	58
Jaques, Karla	18, 39, 70
Johnston, Ingrid	31

Johnstone, Travers	6
Jongenelis, Michelle	52, 55
Jorgenson , Annelysse	47
Jose, Kim	68

**K**

Kadir, Mohammad	53
Kalucy, Deanna	15, 36
Kang, Katherine	38
Kariippanon, Kishan	35, 65
Katar, Ameera	47
Kearns, Thérèse	36
Kemp, Lynn	33, 42
Kennedy, Dani	36
Kennedy, Karina	7
Kennett, Kate	29
Kennington, Kelly	23, 52, 68
Keyser, Alister	4

Khan, Bushra	73
Kieffer, Sophie K	68
Kim, Jinhee	18
Kimble, Rebecca	14
Kinner, Stuart	21, 45
Kite, James	53
Kleve, Sue	26
Knack, Brent	14
Koehler, Ann	30
Kumar, Saravana	35
Kypri, Kypros	55

**L**

Laird, Melissa	71
Lal, Aparna	51
Lambert, Stephen	12
Lamichhane, Prabhat	26
Larkins, Sarah	11, 49
Lauche, Romy	23, 27
Launche, Romy	43
Law, James	65
Lawler, Rani	35, 65
Lawrence, Monica	44
Ledger, Melissa	20, 68
Lee, Aimee	47
Lee, Alvin	34
Lee, Jacinta	14
Lee, Su-San	30

Lee-Ack, Emily	4, 58
Leece, Bernise	2
Lee-Ross, Amanda	52
Lepers, Christelle	46

Levickis, Penny	65
Lewis, Virginia	22
Li, Ian	33
Li, Vincy	53
Livingston, Michael	22
Lo, Johnny	58
Loton, Carolyn	54
Love, Penny	64
Lynch, Kate	12
Lyth, Anna	68

**M**

Macdonald, Catherine	61
MacDougall, Colin	48
Machado, Gustavo	32
Mackay, Lisa	56
MacLaren, David	49
Macniven, Rona	44
Maher, Chris G	32
Maher, Judith	18
Mantzioris, Evangeline	18
Markey, Peter	29
Marshall, Helen	30
Martin, Carly	20, 68

McMellon, Jennifer	15
McMillan, Mark	30
McNamara, Haley	59
McNamara, Martin	8
McNaughton, Darlene	48
Mein, Jacki	14, 50, 74
Melgren, Ngareta	64
Merone, Lea	74
Merrilles Jr, Onofre Edwin A.	46
Mihrshahi, Seema	66
Millar, Lynne	64
Miller, Caroline	3

Martin, Jo	64
Matthews, Bernadette	41, 47, 53, 71
Mazumdar, Soumya	58
McAleese, Alison	61
McBryde, Emma	49
McCallum, Lisa	12, 50
McCalman, Janya	16
McCowan, Deborah	44
McDermott, Robyn	74
McDonald, Malcolm	50, 74
McGeechan, Kevin	42
McGill, Bronwyn	53
McInerney, Marie	30, 64
McInerney, Carol	67
McIntyre, Erica	25, 69
McKean, Cristina	65
McKean, Sarah	58
McKinnon, Jane	4, 58

Miller, Hilary	45
Mills, Brennen	72
Mills, Lindy	59
Mohammad	52
Muhajir, Nausheen	
Morgan, Damian	58
Morgan, Geoff	41
Morgan, Mike	28
Moriarty, Jane	4
Morley, Belinda	61
Morley, Catherine	64
Mulvenna, Vanora	62
Murphy, Majella	17
Murray, Sandra	18
Musbah, Hanin	57
Muthayya, Sumthira	45
Mutua, Moureen	32
Myton, Rimma	66

## N

Nalatu, Simone	17
Nash, Meredith	67
Nauman, Javaid	68
Neal, Melissa	54
Needham, Israel	57
Neely, Eva	66

Newton, RU	59
Nimmo, Lauren	41, 46, 60
Nixon, Janice	15, 36
Noonan, David	10
Nuttman, Sonia	18, 26

## O

O'Connor, Denise A	32
O'brien, Niamh	22
Olive, Giselle	2
O'Loughlin, Mary	7

OMeara, Irene	16
Onah, Mary	47
Orr, Catherine	8
Osborne, Richard	51

## P

Pacella, Rosana	64
Palermo, Claire	26
Palmer, Andrew	68
Parfitt, Gaynor	40
Parikh, Manasi	47
Partridge, Stephanie	66
Parvzian, Michael	15
Patrick, Rebecca	26, 73
Paul, Christine	25
Peeters, Manu	22
Penelope Strauss,	47
Penington, Alison	40
Pennings, Susan	8, 73
Perkes, Sarah	2

Pettigrew, Simone	20, 52, 55
Philipson, Alanna	2
Phillips, Fiona	23
Phongsavan, Philayrath	58
Piccinni, Gaia	47
Piggot, Thomas	47
Pollock, Lauren	24
Post, Dannielle	40
Preston Thomas, Annie	36
Prior, Jason	25
Pryor, Alice	66
Puljevic, Cheneal	21, 45
Pund, Alana	10



**Q**

Quinn, Emma	6	Quinn, Natalie	20, 68
-------------	---	----------------	--------

**R**

Ragaini, Bruna	68	Ridge, Ashley	41, 46, 60
Rahman, Muhammad Aziz	5	Riggs, Elisha	73
Rai, Rajni	52	Roche, Elisha	2
Rajashekhar, Manjunath	11	Rogers, John	28
Raman, Shanti	9	Rohit, Athira	36
Raynes-Greenow, Camille	28	Rokkas, Pip	9, 30
Redman, Sally	45	Roper, Katrina	7
Reed, Benjamin J	32	Rottler, Alanna	19
Reed, Rachael	47	Ruben, Alan	50
Rees, Joanne	59	Rubenach, Sally	4, 36
Reid, Andrew	18, 30, 50	Rundle-Thiele, Sharyn	53
Ressler, Kelly-Anne	34	Russell, Joanna	73
Reweti, Angelique	56	Russell, Lesley	64
Rich, Jane	13	Russell, Theodore	47
Richardson, Tom	26	Rutherford, Katrina	16

**S**

Saleeba, Emma	22	Simpson, Valerie	47
Sambell, Ros	59, 74	Singh, Ankur	21
Saunders, Marina	66	Skinner, Noelene	2
Scolyer, Meg	16	Smith, Julie	48
Scott, Alex	12, 50	Smith, Melody	56
Seinen, Anita	14, 17	Smith, Simon	4, 38
Senior, Tim	30	Smithers, Lisa	3
Severinsen, Christina	56, 66	Sofija, Ernesta	2
Sharma, Sweekriti	32	Standen, Jeff	50
Sharman, Melanie	67, 68	Steel, Aimee	23, 43, 69
Shaw, Amy	73	Stewart, Richard	16
Shawcross, Leonie	49	Strazdins, Lyndall	46
Shepherd, Carrington	60	Strugnell, Grace	41, 47, 53, 71
Sheppard, Amanda	60	Stupart, Douglas	26
Sherriff, Simone	15, 36, 45	Subedi, Sudarshan	48
Sherrington, Cathie	20	Sutherns, Stephanie	14
Shilton, Trevor	20, 68	Swanson, Maurice	23
Sibbritt, David	27, 69	Sweet, Melissa	30, 64

**T**

Tait, Peter W	71
Tan, Patricia	57
Tang, Beatrice	67
Tapim, Toni	49
Taylor, Kerry	44
Temple-Smith, Meredith	8
Tervonen, Hanna	62
Thirlwell, Carlie	4
Thomas, Margaret	67
Thompson, Sandra	44
Thorburn, Adam	47

Tian, Esther	35
Tiedemann, Anne	20
Tomnay, Jane	8
Tong, Allison	45
Tonkin, Emma	36
Traeger, Adrian C	32
Tretheway, Rebecca	57
Trinh, Lieu	71
Tulleners, Ruth	63, 64
Tzelepis, Flora	25

**V**

Vallesi, Shannen	31, 41
Vaughan, Susan	10
Vear, Jack	66
Vette, Kaitlyn	51

Vickers, Malcolm	19, 34
Vineburg, John	53
Visser, Victoria	10, 57
Vouking, Marius	47

**W**

Wakefield, Melanie	55
Walker, Noni	23
Wallace, Ruth	72, 74
Wallbank, Geraldine	20
Wang, Maggie	43
Ward, Grace	17
Ward, Mitchell	30, 64
Wardle, Jon	19, 23, 43, 69
Watters, David	26
Whelan, Jillian	64
Whittaker, Maxine	49
Wickramasinghe, Yuanee	9

Wiggers, John	25
Willey, Megan	57
Williams, Craig	62
Williams, Megan	30, 64
Williamson, Anna	15, 36, 45
Wisloff, Ulrik	68
Woerle, Hannah	16
Wong, Stephanie	57
Wood, Lisa	3, 31, 70
Worwor, George	46
Wright, Clive	28
Wright, Dale	35, 65

**Y**

Yanada, Brendan	26
Yeatman, Heather	73
Yeoh, Eng Kiong	43

Yip, Hopi	50
Young, Christian	36
Young, Dana	27

**Z**

Zapart, Sigg	18, 30, 33, 39
Zee, Benny	43

Zubrick, Stephen	60
Zulfiqar, Tehzeeb	46