

Abstracts of the Australasian Academic Association for Primary Care's (AAAPC) Annual Research Conference

12–13 July 2019, University of Adelaide, Australia

The Australasian Association of Academic Primary Care (AAAPC) held its inaugural Annual Research Conference (ARC 2019) at the University of Adelaide from 12–13 July 2019.

The conference provided an important opportunity to:

- Showcase Australasia's leading primary care research
- Nurture research excellence
- Build effective research collaborations
- Translate evidence into high quality practice
- Magnify impact in primary care research

The conference had over 200 delegates from across Australia, New Zealand and the wider international primary care community. Sessions included engaging plenary speakers, skills- building workshops and interactive poster sessions.

Conference Committee

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Dr Lauren Ball, Griffith University

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About AAAPC

Vision

The Australasian Association of Academic Primary Care's vision is for a multidisciplinary primary care oriented health care system founded on patient-centred, primary care principles and developed through evidence and education.

Mission

To be Australia and New Zealand's leading advocate for high quality multidisciplinary primary care research, education, policy and practice.

Members

We are a proudly multidisciplinary Trans-Tasman organisation. Our members are from Australia and New Zealand. All share a passion for primary care and include:

- Professionals from any primary care discipline who have an interest in research and/or education
- Primary care academics working at universities or with training providers
- Higher degree research students and/or postgraduate trainees of primary care disciplines
- Organisations with an interest in strengthening the capacity, capability and influence of primary care in the health systems of Australia and New Zealand. These include universities, regional health authorities, primary care training providers and professional colleges

1 Barriers and enablers of advance care planning for people with dementia: a qualitative study of general practitioners in Australia

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Context: Advance care planning is a crucial issue for people with dementia and general practitioners (GPs) are ideally placed to initiate advance care planning early. However, the rates of advance care planning in Australian general practice remains low. While some international studies have shed light on the reasons behind this, research in the Australian context has been sparse. **Objective:** To gain a deeper understanding of the barriers and enablers of advance care planning for people with dementia among Australian GPs. **Design:** Qualitative research with hour-long semi-structured interviews of GPs. Deidentified audio recordings will be transcribed verbatim for thematic analysis using NVivo QSR. **Setting:** General practices across the south east region of metropolitan Melbourne. **Participants:** Practicing GPs will be recruited through the Monash Practice-Based Research Network database. Registrars will be excluded. **Findings:** This study is a work in progress. We expect to reach data saturation by 20 interviews. Findings will be presented under the sub-headings of: prerequisites, timely initiation, stakeholder engagement and important aspects of the advance care planning conversation. We anticipate new insights into how these factors dynamically interact with each other in the unique context of the Australian healthcare system. **Implication(s) for practice:** The findings of this study will identify practical ways in which advance care planning can be improved in general practice for people with dementia and lead to recommendations that will enhance advance care planning in this patient population.

2 Provision of medical abortion services in primary care: a scoping review

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Context: Despite the availability of medical abortifacients for several years, currently only 4% of general practitioners (GPs) are certified medical termination of pregnancy (MTOP) providers in Australia. Understanding the perspectives of primary care providers on MTOP delivery is pertinent to identifying barriers to service provision and is critical to increasing access for Australian women. **Objective:** To understand the knowledge, attitudes and practices (KAP) of MTOP providers in primary care. **Design:** We conducted a scoping review of literature published in Web of Science and PubMed using search terms related to medical abortion and primary care. **Setting:** Primary care and general practice. **Participants:** Studies were included if the KAP of primary care providers were assessed, in relation to medical abortion services, and published in the English language. **Findings:** Our search is in progress. To date, we have identified 25 studies including KAP data from GPs ($n = 17$) and pharmacists ($n = 8$). Five studies were conducted in Australia. Preliminary analyses show GPs emphasised the need for training on delivery of MTOP and dissemination of guidelines whereas pharmacists reported limited knowledge of medical abortion regimens and complications. **Implication(s) for Practice:** Primary care providers require training and resources to facilitate MTOP service delivery. While some studies were conducted in Australia, these do not adequately address this complex topic. Our findings support the initiatives of a NHMRC Centre of Research Excellence in Sexual and Reproductive Health in Primary Care (SPHERE) to identify gaps in MTOP service provision and increase medical abortion providers in Australian primary care.

3 Nutrition care by general practitioners: an integrative review using the COM-B framework

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Context: The importance of nutrition in preventing and managing chronic disease is well recognised. Primary care is heralded as the ideal setting to assist patients have a healthy diet. Enduring claims suggest that general practitioners (GPs) provide inadequate nutrition care to patients, with minimal clear gains over recent times. A new way of examining this problem will inform novel strategies to support GPs to provide nutrition care.

Objective: To critically synthesise contemporary evidence on nutrition care provided to patients by GPs. **Design:** An integrative review was used to identify all relevant qualitative and quantitative studies from 2012 to 2018. Sixteen studies were analysed thematically using meta-synthesis informed by the COM-B model of behaviour (capability, motivation and opportunity). **Setting:** United States, The Netherlands, Germany, Denmark, United Kingdom, Lebanon, Australia and New Zealand. **Participants:** GPs. **Findings:** GPs perceive that they lack the capability required to provide effective nutrition care to patients. GPs' motivation for nutrition differed based on patient and provider characteristics and their amount of perceived opportunity. GPs' attitudes were clearly influenced by the motivation of educators and opportunity to provide nutrition care afforded by professional and governmental policies. **Implication(s) for practice:** Given that healthy eating is an integral component of disease prevention and management, it is critical that GPs develop sufficient capability to provide nutrition care. Strategies that enhance GPs' capability, motivation and opportunity to provide nutrition care should be prioritised to support high-quality care for patients.

4 Physical activity management by general practitioners for prostate cancer survivors in Australia

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Context: Physical activity is an important component of standard care to ensure quality of life for prostate cancer survivors. Prostate cancer survivorship is often managed by general practitioners. **Objective:** To describe the frequency of physical activity management (physical activity counselling or referrals) from general practitioners (GPs) for prostate cancer survivors. A secondary aim is to explore GP characteristics that may influence physical activity recommendations, such as GP or patient age, GP gender, and GP geographical location. **Design:** Secondary analysis of longitudinal survey data from the Bettering the Care and Evaluation of Health (BEACH) study. **Setting:** General practice. **Participants:** Prostate cancer survivors were identified by consultations where prostate cancer was managed, but not classified as a new problem or associated with palliative care. **Findings:** GPs provided physical activity recommendations at 2.0% ($n = 58/2,882$) of prostate cancer survivorship consultations. The physical activity management provided was physical activity counselling on 39 occasions and a physical activity referral on 19 occasions. All physical activity referrals were made to Physiotherapy. After controlling for potential confounding factors, results showed that younger GPs used physical activity management

at four times the rate of older GPs, and that GPs in major cities used physical activity management at twice the rate of rural GPs. No patient characteristics influenced physical activity management. **Implication(s) for practice:** Australian GPs rarely incorporate physical activity management as part of their management of prostate cancer. Strategies are needed to increase the frequency with which GPs recommend physical activity for prostate cancer survivors.

5 ‘It’s not all about GPs’: recognising Primary Health Care Scientists in Australia

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Medically and non-medically trained researchers make critical contributions to rigorous primary health care research. Non-medically qualified staff face unique challenges compared with medically qualified counterparts when entering academic primary care. They often encounter challenges in professional identity, building a career within a discipline that is medically focused and, accessing continuing academic appointments or fellowship funding which is often restricted to those with medical qualifications. Navigating opportunities for career advancement can be difficult with few easily identifiable and accessible ‘Champions’ for Primary Health Care Scientists. In the UK, the Society for Academic Primary Care (SAPC) recognised this gap and addressed it by creating PHoCuS – a group within SAPC for Primary Health Care Scientists. The PHoCuS group was established to better understand and address the career development needs of SAPC members from non-medical backgrounds. Establishing a similar group in Australia and New Zealand that understands and can address the needs of non-medical academics and researchers working in academic primary care is a conversation we need to have. Sitting within an overarching representative body like AAAPC, a Primary Health Care Scientists group will give voice and champion the work of non-medical academics and researchers, and facilitate career support and development for this group. **How it is relevant to primary care?** Non-medical researchers make up as much as 70% of the primary health care research workforce in Australia (Barton *et al.* 2015, Oliver-Baxter *et al.* 2016). They play critical roles leading, informing, supporting and enabling primary care research. They enhance the quality of primary care research through using rigorous methodologies and contribute to building a stronger evidence-base for general practice and primary care. And yet, this diverse group, made up of individuals from a broad range of disciplinary backgrounds (Barton *et al.* 2015, Yen *et al.* 2010) lacks a clearly defined professional identity and has little professional representation that can advocate for their unique roles and career development needs. Continuing this situation poses an inevitable threat to the development and maintenance of primary care research capacity in Australia and New Zealand. AAAPC has over the years evolved from its original focus on representation and advocacy for Australian academic GPs to today embracing a broad vision of academic primary care that recognises and celebrates the multidisciplinary make-up of the academic primary care workforce in Australia and New Zealand. Establishing a Primary Health Care Scientists group in AAAPC will further demonstrate commitment to this vision. **The impact it would make to patients and communities:** A Primary Health Care Scientists group will promote a more stable and engaged research workforce. Retention of researchers and academics with specific disciplinary methodological expertise will improve the quantity and quality of primary health care research evidence in Australia and New Zealand.

References

- Barton C, Reeve J, Adams A, McIntyre E (2015) Australian academic primary health care careers: a scoping survey. *Aust J Prim Health* **22**(2), 167–173.
- Oliver-Baxter J, Brown L, McIntyre E (2016) Surviving or thriving in the primary health care research workforce: the Australian experience. *Aust J Prim Health* **23**(2), 183–188.

Yen L, Kalucy L, Ward N, Katterl R, McIntyre E, Patterson S (2010) Stocktake of primary health care research in Australia. Report published by the Australian Primary Health Care Research Institute and the Primary Health Care Research Information Service, Adelaide, SA, Australia.

6 Adolescent health provision in the Australian school setting: perspectives of primary care physicians on their preparedness

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Context: Health service requirements for adolescents and young adults are substantive yet providing the right service at the right time in the right way is challenging, with them having the lowest level of primary care attendance across the life-cycle. The ‘Doctors in Secondary Schools’ pilot program established by the Victorian state government in 2017, is a large-scale initiative, in the first of its kind in Australia, to improve students’ accessibility to general practice by providing a weekly General Practice clinic onsite to one hundred secondary schools, deemed to be of disadvantage across the state of Victoria. **Objective:** The study explores the perspectives of GPs involved in the program with a focus on their perceived readiness and confidence in providing adolescent medicine and their experiences in a School Based Health Service. **Design, participants:** Qualitative study involving semi-structured face-to-face or telephone interviews of twelve recruited GPs from a held database who participated in a School Based Health Service known as the ‘Doctors in Secondary Schools program’. Interviews were transcribed and data is currently being analysed in depth using N Vivo analysis. **Findings:** GPs involved had shared interest in adolescents and adolescent medicine. Motivating factors for GPs included the opportunity to ‘give back’ to the community, to demystify the doctor to young people, health promotion opportunities. Involvement in the program had impact on their practice, their regular clinic and the community. **Implication(s) for practice:** Cohort of skilled GPs who are willing, skilled and engaged to provide adolescent healthcare. Insights into School-based Health Service from GPs directly involved.

7 A need for action: results from the Australian General Practice National Antimicrobial Prescribing Survey

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Context: Antibiotic use in the Australian community is higher than most OECD countries and a systematic approach to drive improved prescribing is lacking. **Objective:** To conduct a pilot audit of systemic antibiotic use in general practice and determine compliance with nationally endorsed Therapeutic Guidelines (TG) and assess prescribing appropriateness. **Design, setting, participants:** Eleven general practices in four Australian states were audited between 2017–2018. Data collected included clinical indication, relevant progress notes and investigation results, antibiotic prescribed, dosage, and quantity supplied. Data were descriptively analysed for compliance with TG and prescription appropriateness. **Findings:** A total of 572 antibiotic prescriptions from 550 patient encounters were audited. Of the antibiotics prescribed, 20.8% complied with TG, 67.0% were deemed non-compliant, 3.3% were microbiologically directed therapy, 3.8% had no guidelines available and

5.1% were not assessable. Of all prescriptions, 57.0% were deemed appropriate, 38.1% were deemed inappropriate and 4.9% were not assessable. Respiratory tract infections had the highest percentage of inappropriate prescribing (20.3%). Overall, 22.0% of prescriptions were assessed as not requiring antibiotic therapy. Where antibiotics were required, prescriptions were assessed as inappropriate because the duration was too long (16.8%), incorrect dosage was prescribed (16.4%) or the spectrum was too broad (14.5%).

Implication(s) for practice: The GP NAPS identified many targets for improved antibiotic prescribing in the general practice setting and the requirement for implementation of antimicrobial stewardship strategies. Encouraging adherence to the TG should be prioritised as an initiative to improve antibiotic prescribing appropriateness.

8 Trends in the long-term use of opioids among patients with musculoskeletal conditions: evidence from a national sample of 2.1 million patients in Australian general practice

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Context: Musculoskeletal conditions (MSK) are common, representing the third most frequent problem managed by general practitioners (GPs). Management of chronic pain in MSK is challenging and frequently includes opioid analgesia. Prescribing opioids for chronic non-cancer pain is controversial and current guidelines do not recommend long-term use. There is a paucity of analysed, contemporary Australian data on the use of long-term opioids for MSK by GPs. **Objective:** To describe trends in the use of opioids among adult patients with a MSK diagnosis in Australian general practice and investigate the sociodemographic characteristics/clinical conditions associated with opioid prescribing. **Design:** Descriptive and longitudinal analysis of approximately 2.1 million patient records from 475 practices in the NPS MedicineInsight database. Analysis will also utilise logistic regression models, adjusted for confounders and presented as odds ratios with their respective 95% confidence intervals performed using the statistical software STATA 15.0. **Setting:** Electronic medical records from Australian General Practice. **Participants:** Patients of GP practices participating in NPS MedicineWise MedicineInsight aged 18 and over, with a diagnosis of osteoarthritis, fibromyalgia, or chronic back pain and having 3 or more prescriptions for opioids in a 12 month period. Patients with chronic cancer pain will be excluded. **Findings:** The expected results for Australia will be similar to trends in the US and UK over the same time period. **Implication(s) for practice:** By understanding current trends in opioid prescribing and which populations are more likely to be prescribed long-term opioids, we can target education and resources to areas of greatest need.

9 Caring for people who regularly use methamphetamine in general practice: barriers and enablers to the provision of structured healthcare

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Context: The most recent National Drug Strategy Household Survey demonstrated a drop in people reporting amphetamine use in the last 12 months. However it also noted an increase since the last Survey in both purity

(mainly due to increased prevalence of the crystalline form of methamphetamine), and respondents using at least weekly. Evidence for harms to both physical and mental health not related to intoxication from regular methamphetamine use is growing, and this pattern suggests a smaller proportion of users possibly exposing themselves to greater risk. There is evidence that people who regularly use methamphetamine (PWRUM) visit their GP more frequently than the general population. But many will not disclose their drug use and therefore it will not be taken into account by the GP when planning the patient's care. **Objective:** To identify barriers and enablers to accessing general healthcare in the GP setting faced by PWRUM. **Design:** Qualitative study using semi-structured interviews of GPs with purposive sampling to ensure an adequate sampling frame. **Setting:** The Sydney Metropolitan Area. **Participants:** GPs. **Findings:** The range of barriers and enablers will be analysed using a model of access to care proposed by Levesque et al (2013). This model conceptualises access as being dependent on qualities of both the health service user in their social context and the service itself. Ethics approval has been given. **Implication(s) for practice:** By identifying barriers and enablers, we can design better models of, and approaches to, care to meet the needs of this group.

10 The hidden cholesterol burden – pitfalls for the unwary

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Context: Less than 5% of patients who inherit Familial Hypercholesterolemia (FH) in Australia are ever diagnosed with most of those recognised remaining under-treated. **Objective:** To improve awareness, early diagnosis and management of patients with FH. **Setting:** Five General Practices in Western Australia. **Participants:** Patients at increased risk of FH. **Design:** Information from patient electronic records ($n = 61809$) was extracted to identify patients with potential FH ($n = 409$). High risk ($n = 107$) or known FH patients ($n = 38$) were reviewed by their GP. GPs were given education sessions on how to diagnose and manage patients with FH. This included the importance of cascade testing families. **Findings:** The complexity of determining high risk FH patients through clinical record review was challenging for some practices. The high-risk, inherited FH condition can be masked if absolute cardiovascular disease (CVD) risk calculations are used to justify non-intervention at clinical review. Cascade testing was especially challenging due to the lack of supportive infrastructure and competing multimorbidities in busy general practice clinical settings. **Implication(s) for practice:** The study unveiled deficits in clinical knowledge and management of FH. There is still much education needed regarding FH in the primary care area. Screening for FH meets all WHO criteria for a worthwhile screening activity. Cholesterol burden is present from birth requiring medication to control. Diet and exercise are not sufficient. Absolute CVD risk calculators should not be used. Cascade testing is important as 50% or 1 in 2 of parents, siblings and children of an affected patient will have the condition.

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11 Patient perspectives on bowel cancer screening and the role of general practice

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Context: Bowel cancer is the second most frequent cause of cancer death in Australia. National guidelines recommend biennial screening using Faecal Occult Blood Tests from ages 50–74, with free kits mailed through

the National Bowel Cancer Screening Program. However, uptake is low, at approximately 30%. Recently the Australian Government has released resources encouraging general practices to support the Program, but patients' views on this role have not been explored. **Objective:** To investigate patients' perceptions of the role of general practice in bowel cancer screening. **Design:** Qualitative study involving interviews (10) and focus groups (6), underpinned by phenomenology. **Setting:** Four general practices in metropolitan Adelaide. **Participants:** 40 active patients (identified by practices), aged 50–75, eligible for a free kit. **Findings:** Three key themes were evident: attitudes toward screening, potential roles for general practice and strategies to encourage screening. Participants structured the experience in terms of being proactive, ambivalent or avoidant. Roles for general practice centred on tasks as educators, trusted advisors, monitors and screeners. Participants demonstrated mixed views on the importance of general practice involvement, with some viewing this screening as out of scope of primary care services. Intergenerational, educational, and emotionally-driven strategies to encourage screening were also identified. **Implication(s) for practice:** General practices can play a complementary role in encouraging screening but ambivalence to this role was shown by some participants. Future research should centre on identifying which general practice patients who are not participating in bowel cancer screening would be most likely to be influenced by general practice engagement.

12 Perspectives of Victorian practice nurses working in the new government school program

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Context: The Victorian government introduced the school based health service (SBHS) also known as the doctors in secondary schools program, in July 2017. This is a 43.8 million dollar pilot program that funds general practitioners (GPs) and practice nurses (PNs) to provide medical care and advice to 100 disadvantaged government schools across urban and rural Victoria. **Objective:** My research project's overall aim was to find out the experiences of the PNs involved in the program, identify their specific roles, training needs as well as the key barriers and enablers of their role. **Design, Setting and Participants:** We recruited 14 PNs. Semi structured face-to-face or telephone interviews were conducted. Nurses were recruited through an existing GP network known to the researchers. An open invitation to participate in the program was sent to all the PNs involved in the program. Those interested were provided with a plain language statement and consent form to complete and were subsequently contacted to arrange a suitable time and venue for the interview. Interviews were approximately 45 minutes long and there were audiotaped, transcribed and analysed using N-Vivo software. 2018 Academic GP registrar, Dr Kelly Champane was responsible for undertaking individual interviews and is currently conducting data analysis under supervision of Professor Lena Sanci. **Implication(s) for practice:** The findings from this research will contribute towards identifying the common adolescent health related issues PNs face during their involvement in the program and whether, they are well equipped to deal with the above-mentioned issues. This will aid us in improving the current training program for PNs involved in the program and equip them with the relevant knowledge and skills to facilitate nurse-only led programs in areas of workforce shortage of doctors across the nation, especially in rural and remote areas. This research was conducted as part of the RACGP Academic Post Program in 2018 and results will be available mid-2019.

13 Digital health tools and the therapeutic relationship: can eCHAT help a vulnerable population in general practice?

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Context: The growing use of digital health tools is expected to progressively improve health outcomes. However, literature is scarce on how these tools affect the patient experience and therapeutic alliance. This is especially true within vulnerable population groups, including those affected by substance dependence. The electronic Case-finding and Help Assessment Tool (eCHAT) was designed in New Zealand as a digital health tool for general practice. eCHAT is a patient waiting room screening survey completed on a tablet computer. **Objective:** To understand the patient experience of eCHAT in patients with substance dependence and how eCHAT affects the therapeutic alliance. **Design:** Qualitative data analysis of interviews with patients and doctors. The data and transcriptions were processed by inductive thematic analysis by two coders and four wider team coding meetings. **Setting:** A general practice for patients with substance dependence. **Participants:** Interviews were undertaken with 12 patients and 2 doctors. The patients also completed the WAI-GP. **Findings:** The final themes found were reduction of stigma, restricted answers and the patient story, patient-related response factors, efficiency and security and privacy. **Implication(s) for practice:** eCHAT has potential to help vulnerable patients in general practice to engage more honestly with their doctors, but particular attention needs to be paid to how eCHAT is explained, which patients may benefit most, how patients consent and how eCHAT is linked into the consultation. Specific research into how vulnerable populations engage with digital health is critical to ensuring digital health tools are applied effectively.

14 General practitioners' knowledge and use of an urban, Australian hospital GP Liaison Service: a qualitative study

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Context: General Practice (GP) Liaison involves linking GPs and hospitals. Since 2012, direct funding of GP Liaison Units ceased in Victoria and rolled into hospital funding, with twenty hospitals continuing to support these Units. Our study took place in a region that previously had a GP Liaison Unit but during the time of the study, had no funded staff. **Objectives:** To: 1. explore the needs of GPs in linking with an urban Australian hospital 2. understand GPs' perspectives on development of GP Liaison within this hospital. **Design:** Semi-structured interviews with a purposive sample of GPs. Interviews were coded thematically using NVivo 11. Two researchers coded the interview transcripts to check for inter-coder reliability. The analytical process was iterative. **Setting:** The catchment area of a large, urban Australian hospital within a diverse community. **Participants:** GPs who had experience and interest in treating vulnerable patients. **Findings:** Confirming previous research, GPs found communication with the hospital challenging, particularly system navigation, referral pathways and discharge summaries. GPs had little knowledge of or contact with the previous service, but saw the potential of a GP Liaison service addressing some of their communication difficulties. GPs believed the position could be successfully filled by an experienced health professional who knew the hospital system, not necessarily needing it to be a GP. **Implication(s) for practice:** The results of this study provide insight into how GPs envision a successful GP Liaison Service and have the potential to inform future development of GP Liaison roles within health services.

15 A description of afterhours health care in the ACT: who, what for, and why do patients seek care in the afterhours?

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Context: The Royal Australian College of General Practitioners raised concerns about the safety and quality of afterhours primary health care (AHPC), and impact on continuity of care. While characteristics of A & E presentations have been documented, little has been written on the characteristics of patients presenting to afterhours general practice, home visiting services or nurse-led clinics. Preparing and developing effective models of collaboration between acute services and primary care requires insight into the characteristics of patients and presentations in the APHC setting. For this study, we define AHPC as between 6pm–8am weekdays and anytime on weekends. **Objective:** To describe patient presentations to AHPC in the ACT, and to explore patient and practitioner perceptions of urgency of care. **Design:** Cross-sectional survey Setting: General Practice, Nurse-Led-Walk-in-Clinics, and Public Hospital Emergency Departments after hours from a Thursday evening to Monday morning. **Participants:** Patients seeking care and AHPC practitioners providing care during afterhours from 6pm 30/05/2019 to 8am 03/06/2019. **Findings:** Descriptive statistics will show who accesses afterhours care, reasons for seeking afterhours care, and awareness of the types and locations of afterhours care in the ACT. Comparisons will be made between patient and practitioner views on the urgency of care. Results available June 2019. **Implication(s) for practice:** This information will highlight the contribution of AHPC in the ACT and may help identify strategies to direct patients to the most appropriate afterhours services. Overall, the information may support strategies to reduce burden on ACT public hospital emergency departments.

16 Developing a sense of place: creating a home through a healthy homes initiative

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Context: A healthy homes initiative delivered in a socioeconomically deprived area of Northland, New Zealand.

Objective: To determine whether a healthy homes initiative can deliver non-physical health benefits through creating a sense of ‘place’. **Design:** Qualitative interviews using a grounded theory approach to the thematic analysis. **Setting:** Participants were interviewed in their homes by a research assistant. Locations of homes included rural and urban settings near, and in, Whangarei, New Zealand. **Participants:** Ten participants in total were interviewed, the majority of whom were female. Six participants were Māori, one Cook Islands Māori and the remainder New Zealand European. **Findings:** Healthy homes initiatives were ostensibly designed to deliver physical health benefits and reduce the incidence of respiratory and infectious illnesses. However, this study demonstrated that healthy homes initiatives can also create a sense of ‘place’ in which participants felt that their home was more ‘home like’. As a result non-physical health benefits became apparent such as improved social and mental wellbeing, children becoming more child-like and peacefulness and contentment from homeliness.

Implication(s) for practice: Healthy homes initiatives should consider the role of ‘place’ in creating a healthy home environment. Wider health benefits may accrue through assisting people to create a home-like environment.

17 Management of hypertensive disorders of pregnancy (HDP) in Indonesian primary care settings: the views of stakeholders

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Context: Maternal mortality attributed to HDP in Indonesia is high. Primary care providers are involved in HDP management, but the way they manage the disease is limitedly known in the literature. **Objective:** This study aims to explore the way Indonesian primary care providers manage HDP and their recommendations for the future of HDP management in primary care. **Design:** This study applied a qualitative methodology. Participants were purposively recruited through the researchers' professional networks. Data were collected through interviews and the questions were informed by implementation science frameworks. Data were analysed using mixed of deductive and inductive approach of thematic analysis. **Setting:** This study was conducted with participants in Yogyakarta province, Indonesia. **Participants:** Stakeholders involved in HDP management and policy in primary care, including general practitioners, midwives, nurse, specialists, policymakers and patients with a past history of HDP. **Findings:** A total of 25 participants were interviewed. Three major themes were identified: community culture, continuity of care and providers' confidence. There were community beliefs that complications during pregnancy, including having hypertension, were 'normal'. It was not uncommon for Indonesian pregnant women to visit different providers, so their care was fragmented with little continuity of care. Providers also expressed a lack of confidence in their ability to handle maternal complications. They expressed a desire for more practical guidance to help them appropriately manage HDP. **The implication(s) for practice:** The development and implementation of a management pathway for HDP in primary care is recommended to improve the providers' confidence and management of HDP.

18 Adapting and validating a scale to measure the supervisor registrar relationship in general practice

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Context: The educational alliance between a GP registrar and their supervisor is a central component of training. There were no validated tools to measure the supervisory relationship within the Australian GP context. The Short Supervisory Relationship Questionnaire (SSRQ) is a tool validated to assess the educational alliance within the context of clinical psychology. **Objective:** This paper describes the adaptation and validation of the GP Supervisory Relationship Measure for Registrars (GP-SRMR). **Design:** The GP-SRMR was developed by adapting the existing SSRQ to the Australian General Practice context. A Registrar Advisory Group reviewed the SSRQ, using a nominal group consensus method to determine an appropriate set of items to use within the Australian context. The resulting tool (GP-SRMR) was piloted and feedback integrated. Finally, the GP-SRMR was distributed to all registrars in Tasmania and South Australia. An exploratory factor analysis was conducted ($n = 238$). Computer adaptive testing (CAT) was completed to determine if the GP-SRMR could be shortened. **Setting:** General Practice Training. **Participants:** GP Registrars in South Australia and Tasmania. **Findings:** The final GP-SRMR is a 35 item scale. Factor analysis identified 4 subscales with high reliability (0.87 to 0.96). The subscales were: supervisor investment, registrar professionalism, safe base and emotional intelligence. CAT

simulation revealed that scale length can be reduced by 38% when reliabilities are set to a minimum of .80. **Implication(s) for practice:** The GP-SRMR has the potential to benefit registrars, supervisors, training practices and training organisations by providing a tool to focus support for practices and registrars, identify at risk placements and allow early intervention.

19 Evaluating an innovative app based tool to enhance experiential learning and reflection

Taryn Elliott, Sumanta Ghosh and Emily Kirkpatrick

GPEX

Context: Experiential learning and reflective practice are both core elements of GP training. To master skills across the broad curricula required, it is essential to experience a broad range of consultations during training. Evidence of this experience is required to fulfil GP training requirements. Traditionally, collating this evidence has been time-consuming, difficult and not easily linked to reflection and learning goal development. **Objective:** This paper describes the evaluation of an online and app based system that collates information on patient diversity and load and links this with reflection and learning. **Design:** GPEX, the GP training organisation in SA, developed an innovative app and online tool, GP Explore. GP Explore assists GP registrars, their supervisors and GPEX to better understand patient diversity and patient load. GP Explore was introduced to all GPEX registrars in 2018 ($n = 316$). An evaluation was completed focussing on the registrar, supervisor, medical educator and practice manager perspectives. Questionnaires were delivered via survey monkey to all registrars. Supervisors and practice managers completed surveys during workshops. **Setting:** SA General Practice training. **Participants:** GP registrars, supervisors and practice managers. **Findings:** 93% of GP registrars completed GP Explore. On average, data entry took less than 30 seconds per record. Medical educators reported that 100% of registrars who used GP Explore identified gaps in their consulting. 89% of supervisors reported that GP Explore was useful to identify gaps in registrar patient diversity and inform learning opportunities. **Implication(s) for practice:** GP Explore has assisted registrars and practices to efficiently review and improve registrar experiential learning opportunities.

20 Potentially preventable hospitalisation insights from big data analytics: a ‘proof-of-concept’ partnership between industry, a large public hospital network and academia

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Context: There is a growing number of people seeking admission to hospitals with multiple and complex health care needs. Many of these people can be successfully treated in primary and community care, without needing admission to hospital. Collaboration with experts in big data analytics, research and healthcare including administration are needed to produce timely evidence on where to focus to reduce possible avoidable hospitalisations. This data-driven project resulted from a data-driven partnership between Monash University,

Monash Health, and an industry partner in real-time data engineering and data science, Klarrio. **Objective:** To determine rates and patterns of hospital admissions in a large metropolitan health service, and identify potentially preventable hospitalisations. **Design:** Retrospective analysis of non-identifiable routine data from emergency department and inpatient admissions between January 2013 and December 2017. Application of machine learning techniques to identify spatial, socio-demographic and temporal patterns. **Setting:** Monash Health, Victoria's largest public health service services approximately 2,000,000 people living in the south east of Melbourne and Victoria. **Participants:** Routine care data from 381,920 patients with >1M inpatient admissions, and 496,502 patients with >1M emergency department visits. **Findings:** Preliminary data examination is underway by Klarrio to develop a proof-of-concept dashboard for visualising complex relationships in health service utilisation. **Implication(s) for practice:** Research traditionally takes place in disciplinary silos; however, partnerships such as this one with academics, informatics specialists, clinicians and a public health service has enabled an innovative and data-driven resource to be developed. Lessons from working within this multidisciplinary partnership will be shared.

21 New alumni EXperiences of Training and independent Unsupervised Practice (NEXT-UP): a cross-sectional study of early career general practitioners

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Context: There are evidence gaps around early-career GPs' post-Fellowship practice and how this practice is influenced by vocational training. **Objectives:** To establish: i) characteristics of early-career GPs' clinical practice; ii) associations of these characteristics, including associations with GP vocational training experiences; iii) early-career GPs' perceptions of utility of training experiences for post-Fellowship practice. **Design:** A cross-sectional questionnaire-based study. Questionnaire items elicited participants' current practice, and perceptions of their GP training experience. Where consent was provided, participants questionnaires were linked to previously collected vocational GP training data. Main analyses will use univariate and multivariable regression. **Setting:** Three Australian GP Regional Training Organizations (RTOs). **Participants:** RTO alumni who achieved Fellowship between January 2016–July 2018. **Findings:** Data collection has just concluded. Major outcome factors include: rurality and SES of practice; retention within RTO geographic footprint; average sessions of GP work undertaken; provision of After-Hours Care, Nursing Home Visits, and Home Visits; provision of advanced procedural skills; provision of registrar/undergraduate supervision in general practice; non-clinical GP work; and formal continued education. Results will be presented at ARC 19. **Implication(s) for practice:** NEXT-UP will be of importance in: GP workforce planning; policy decisions about distribution of registrars during training; training activity requirements; RTO education program content; determining areas of vocational training emphasis (for both in-practice and out-of-practice education); supervision models; and planning and policy on vocational training and Continuing Medical Education.

22 Acceptability and usability of the ‘One Key Question’ in Australian primary healthcare

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Context: It has been estimated that over 50% of pregnancies in Australia are unintended and approximately half of these end in abortion. Those that continue to antenatal care and delivery often do so without the benefits of pre-pregnancy or antenatal vitamin supplementation, or lifestyle modifications that benefit maternal and neonatal outcomes. Primary care is uniquely placed to improve use of contraception in women not wanting to conceive and to counsel women about preconception care should they wish to. The One Key Question® (OKQ®) tool facilitates a discussion of pregnancy intention and subsequent discussions regarding contraception or preconception care.

Objective: This study aims to assess the acceptability and usability of the OKQ® tool in the Australian primary care setting. Clinician and patient perspectives will be explored. **Design:** This is a mixed methods pilot study.

Setting: The OKQ® tool will be piloted in two general practice settings in urban Sydney. **Participants:** This study involves two populations; Women of reproductive age (18–40) presenting for any reason to the two GP sites; GPs working at these sites. **Findings:** The protocol has been submitted for ethics review. Data collection is anticipated to commence in June. Preliminary results will be presented that show the acceptability of asking about pregnancy intention with women and the usability of the tool by GPs. **Implication(s) for practice:** By offering preconception and contraception care in a proactive and routine discussion, the study hopes to find a simple way for general practitioners to optimise women’s reproductive health.

23 Outreach Pain Clinic service: increasing capacity thru connecting regional and rural community based care to specialist services

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Context: To address gaps in local pain management services in Southern NSW, The Department of Pain Medicine (DoPM), St Vincent’s Hospital, Sydney in partnership with ACI, SNSW LHD, and SENSW PHN COORDINAIRE, established a multidisciplinary Outreach Reboot service. The outreach service went live in 2016 and includes: upskilling of local primary multi-disciplinary clinicians, development of local group MDPMPs and linking of general practice with tertiary specialists using telehealth. **Objective:** To shift the management of chronic pain from the hospital to a local community model of care. To build capacity for local clinicians to develop local MDPMPs. To create local primary care expert hubs, linked with a tertiary specialist centre via telehealth for complex patients. **Findings:** *Workshop evaluation:* Six workshops were delivered by DoPM SVH staff, which were attended by 162 clinicians across several SNSW districts. Majority of participants reported that workshops met their learning needs and were relevant to their individual practice. *Telehealth evaluation:* Between June 2016–July 2018, 184 new referrals were made to the telehealth service and a total 269 telehealth consults were carried out. Telehealth was reported as convenient and both clinicians and patients were happy to use telehealth in the future. *Outreach Reboot program evaluation:* Ten Outreach Reboot programs were commissioned. Sixty-one participants attended these programs. All mean outcomes measures improved. **Implication(s) for practice:** The Outreach Reboot service has been successful in the development of local pain services in southern NSW. This model of care empowers rural and remote clinicians to manage their local community utilising technology to access city based tertiary pain specialist consultative services.

24 Diabetes and Oral Health (DiabOH): validating a periodontal risk assessment tool for non-dental practitioners

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Context: Poorly controlled type 1 and type 2 diabetes are predictors of periodontal disease. Patients with diabetes have a 3–4-fold increased prevalence of severe periodontitis resulting in premature loss of teeth, poor nutrition, poor long-term diabetes control, more cardiovascular complications and other mortality risks. Yet, non-dental practitioners lack decision-making support in determining patients' risk to periodontal disease. The DiabOH project has developed a non-invasive periodontal risk assessment tool (PRISK) for non-dental practitioners.

Objective: To assess the validity and reliability of PRISK. **Design:** Quantitative validation study. Eighty-two patients with diabetes, including 49 with periodontal disease, will be recruited. PRISK comprises two parts: part A consists of demographic and risk factor questions to be completed by patient; part B consists of a 'shine and look' examination completed by a general medical practitioner (GP) and a practice nurse (PN) separately. Validation will be determined by comparing results from PRISK with results from a dental assessment conducted by an oral health practitioner (OHP) using the community periodontal index. Reliability will be determined by comparing interobserver error between operators. **Setting:** A community health centre (CHC) in Melbourne, Australia. **Participants:** Two GPs, 2 PNPs, 1 OHP, and 82 adult patients with diabetes. **Findings:** Recruitment and data collection are underway. Results will be available for presentation by July 2019. **Implication(s) for practice:** This study will result in the first validated periodontal screening tool for non-dental practitioners. This will enable detection of periodontal risks in patients with diabetes, potentially leading to early intervention and improved health outcomes.

25 Use of translation apps and websites in health care settings: results of a survey across five NSW Local Health Districts

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Context: The use of translation apps and websites is expanding rapidly due to increasing sophistication and convenience. As use increases, there is a growing risk of misinterpretation and provision of inaccurate health information to patients. Prior research has focused on the accuracy of translation algorithms. There has been limited research on the nature and extent of use of translations apps in health care settings. A 2017 survey in Sydney found that 20% of health service staff had used translation apps during clinical encounters, suggesting that use may already be widespread. Questions remain about how translation apps are being used, and who initiates use. **Objective:** To understand the nature and extent of translation app and website use in state funded health care services in NSW. **Design:** An anonymous online staff survey conducted in March 2019. **Setting:** Five Local Health Districts across NSW, Australia. **Participants:** All clinical and non-clinical staff in the five participating Local Health Districts were invited to participate in the study. **Findings:** Preliminary findings will be presented with reference to the extent, purpose, initiation, nature and perception of app use amongst clinical and non-clinical staff. **Implication(s) for practice:** The convenience and immediacy of translation apps is appealing, however this needs to be balanced against the need for quality translation. This study provides the first empirical evidence

internationally on the extent and nature of the use of translation apps in health care settings. The findings may inform guideline development and policy responses.

26 Digging for the data: implementing the PHN Program Performance and Quality Framework

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Context: As the roles Primary Health Networks (PHNs) increase in Australian primary health care, there is increasing need for effective performance evaluation. The recent introduction of the PHN Program Performance and Quality Framework Version 2.0 (Framework) makes it timely to consider the challenges faced by PHNs in monitoring and evaluation. **Objective:** To examine one PHN's approach to implementing the Framework. **Design:** A broader ethnographic project examines how one PHN is meeting challenges implementing health care reform. In this sub-project, a research student had two roles: first, work experience assisting PHN staff implementing the Framework; second, research under academic supervision into PHN processes through recording participant observations and undertaking thematic analysis. **Setting:** An urban PHN. **Participants:** Ten staff attended meetings and completed the Framework data templates. **Findings:** Barriers include: time pressures, multiple deliverables, uncertain data, limited evaluation capacity, difficulties engaging with Department staff, and imprecision in the Framework. Facilitators include: consensus on capturing the right data, collaboration with other PHNs; commitment to organisational change to overcome obstacles. For future reporting the Department can improve its support by: facilitating PHN-Department and PHN-PHN engagement; providing reporting templates; clarity on expectations. **Implication(s) for practice:** Framework implementation can provide impetus for PHNs to develop PHN-wide systematic evaluation and quality improvement programs. This may require cultural shifts, enabling transparency, collaboration and organisational change. For the Department, Framework implementation provides opportunities to improve engagement with individual PHNs and foster cross-PHN collaboration. Our study indicates that the Department needs to provide more explicit reporting requirements and sufficient support.

27 Patient feedback on safety as a tool for improvement in primary care: results from a feasibility trial

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Context: Patients are important sources of information about contributory factors to safety incidents. Their feedback could be used as a tool for data-driven safety improvement and monitoring. The Primary Care Patient Measure of Safety (PC PMOS) is an innovative and validated tool that captures patient feedback on contributory factors to safety, yet its implementation as an improvement tool remains unexplored. **Objective:** To understand the enablers, barriers, acceptability, fidelity, and scalability of implementing the PC PMOS as a safety improvement tool in primary care. **Design:** A mixed-methods feasibility study. **Setting:** Six primary care practices across south-west Victoria, Australia. **Participants:** Patients attending their primary care practice. **Intervention:** Patient feedback on safety was collected using the PC PMOS. Results were shared with staff who developed and

implemented practice-specific safety interventions over six months. The PC PMOS was completed again at the end of the intervention period. **Findings:** The intervention was deemed acceptable by staff. The process of developing safety interventions varied between practices. Variability was attributed to the complexity of the patient feedback; shortages in staff; resources or time; and difficulty meeting patient expectations. Intervention fidelity was strong across all practices. Fidelity barriers included team dynamics and power distribution; engagement of wider practice staff; time; competing demands; and management support. Enablers included practice managers and administration staff involvement and leadership; practice capacity and readiness to change; and staff problem solving skills. **Implication(s) for practice:** Intervention feasibility was demonstrated, with recommendations for wider uptake and spread at a national or international scale.

28 Cardiovascular disease (CVD) risk identification and management in Australian primary care. Why an implementation strategy is needed

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Context: Cardiovascular disease (CVD) is a major cause of death and disability in Australia affecting 1 in 6 of the population. Studies a decade ago showed large evidence-practice gaps in screening and management of CVD risk. **Objective:** To evaluate change in identification and management of CVD risk in Australian primary care. **Design, setting, participants:** De-identified General Practice data was extracted electronically for active patients > 18 years (≥ 1 visits in last 6 months, and ≥ 3 visits in last 2 years). Participants included Aboriginal and Torres Strait Islander (ATSI) people 35+ years and all others 45+ years. High risk defined as established CVD, clinically high risk conditions or calculated 5-year risk $> 15\%$ using absolute risk calculator. Appropriate screening defined as having essential risk factors recorded for CVD risk within recommended timings. Appropriate management defined as: ≥ 1 BP lowering drug and statin for high risk without CVD and with an antiplatelet or anticoagulant agent for established CVD. **Findings:** 110686 patients included from 98 General Practices (55% female, 1.4% ATSI, 14% smoker, 15% Diabetes). 29% lacked sufficient information to calculate CVD risk. 26% were classified as high risk of which 11% had established CVD. 51% with established CVD were on appropriate treatment, vs 38% of those at high risk but without CVD. **Implication(s) for practice:** CVD risk screening and management has remained static in the last decade. Lack of change is no surprise given contextual issues have not been addressed. Strategies such as Quality Improvement supporting implementation of guidelines are required.

29 Primary Health Networks (PHNs) and chronic disease prevention

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The Australian Prevention Partnership Centre

Context: Chronic diseases are the leading cause of illness, disability, death and health system utilisation in Australia and the risk factors are well established and well known. Primary health care has an important role in the prevention of the most prevalent modifiable risk factors for chronic diseases. There is a key role for PHNs to

facilitate practice change, as well as to commission and coordinate new preventive services and programs and to integrate clinical and population health approaches to chronic disease prevention. What is less clear, however, is what this looks like in practice. **Objective:** The objective is to explore how PHNs can enhance preventive health practices in primary health care services. **Design:** Interviews were undertaken with 16 PHNs between December 2017 and February 2018 and an interactive workshop was conducted with 21 PHNs in August 2018, to better understand current approaches to preventive health initiatives within primary care and to surface and share lessons from approaches that are working well. **Setting:** PHNs across Australia. **Participants:** Representatives from PHNs and GPs. **Findings:** Generally, PHNs are committed to preventive health. Most agree that it will be necessary to harness existing resources to do so and to look at initiatives that are likely to be sustainable, however they are looking for direction and guidance to support them in their role in disease and illness prevention. **Implication(s) for practice:** The findings of this research will inform development of a framework/resources for PHNs that will support a systems approach in preventive health.

30 Diabetes and Oral Health (DiabOH): an interdisciplinary educational program for the management of diabetes and oral health – a pilot study

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Context: Diabetes and oral disease are becoming increasingly prevalent in Australia and share a bidirectional relationship. Despite this, collaboration between the medical and dental professions and their knowledge is limited. Interdisciplinary education on diabetes and oral health management is lacking. **Objective:** To pilot and evaluate a diabetes and oral health educational program, DiabOH, for general practitioners (GPs), primary health care nurses (PHCNs) including diabetes educators (DEs), community pharmacists (CPs) and oral health practitioners (OHPs). **Design:** Mixed methods pre-post design. The DiabOH program is a three-hour face-to-face workshop sandwiched between a 20-minute online module and a 10-minute online refresher module six months after. Pre- and post-impact and process evaluations are conducted online for the three components. Quantitative data will report on participants' self-reported knowledge and confidence, and the appropriateness of the program components. Qualitative data will explore the acceptability and implementation of the program, and the barriers and facilitators for healthcare professionals in participating. **Setting:** Melbourne, Australia. **Participants:** GPs, PHCNs, DEs, CPs and OHPs. **Findings:** Recruitment and data collection are underway. Results will be available for presentation by July 2019. **Implication(s) for practice:** This program could improve clinical competency of healthcare professionals and facilitate greater communication and interprofessional collaboration to ensure better care and improve quality of life of patients with diabetes or at risk of diabetes. Evaluation of the program will add to research into health professional education and continuing professional development and inform the development of interdisciplinary training for other disciplines, not limited to health or disease.

31 Diabetes and Oral Health (DiabOH): the effectiveness of interdisciplinary education – a systematic review

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Context: Diabetes and oral disease are becoming increasingly prevalent in Australia and share a bidirectional relationship. Despite this relationship, collaboration between the medical and dental professions and their knowledge regarding these conditions is limited. Interdisciplinary education on diabetes and oral health management is lacking. **Objective:** To assess available evidence of interdisciplinary educational programs on diabetes and oral health management and their effects on knowledge and confidence. **Design:** A systematic review of literature on randomised and non-randomised controlled trials and before-and-after comparison studies in the English language; no limits on year of publication. **Setting:** Not applicable. Review methods: Electronic databases Medline, EMBASE, Emcare and CINAHL were systematically searched and studies were critically appraised. **Participants:** Not applicable. **Findings:** Nineteen articles were identified from 411 for full-text screening. Four studies of a quasi-experimental design with a pre- and post-test evaluation were included in the review. Of these, three studies reported positive changes in the participants' knowledge of the roles of other healthcare professionals, three reported improved attitudes towards interprofessional collaboration and communication and one reported increased confidence with working in an interprofessional team. **Implication(s) for practice:** Interdisciplinary education should improve health professionals' attitudes and knowledge of the roles of other health professionals in the management of diabetes and oral health and their confidence in working with one another. However, given the limited availability of interdisciplinary education on diabetes and oral health management, continual development and further research in this area would improve the evidence base.

32 Patients' attitudes towards sharing their general practice EMRs for research

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Context: A wealth of information is stored in patient electronic medical records (EMRs) in general practices throughout Australia which could be used for research ('secondary use'). Ignoring the potential of secondary data use wastes an opportunity to improve Australian public health. Programs that collect primary care EMRs for research have been implemented internationally; however, concerns have been raised about privacy and lack of explicit patient consent. Although opinion polling shows that Australians are generally supportive of the idea of data being used for health and medical research, little is known about people's opinions when their own EMRs are used. **Objective:** To explore the attitudes of people about the secondary use of their own deidentified information extracted from their EMRs. **Design:** A pilot study using semi-structured in-depth interviews and inductive thematic data analysis. **Setting:** A metropolitan Melbourne general practice that contributes de-identified patient data to a research oriented primary care data repository. **Participants:** 8–12 English-speaking, adult, general practice patients. **Findings:** This project is in progress. A practice has been recruited and interviews will be completed by May, with findings ready to present by the 2019 AAAPC Annual Research Conference. **Implication(s) for practice:** The findings of this study can assist data custodians develop strategies to better acknowledge consumer perspectives when accessing health data for research and can inform a broader study of people's understanding and opinions about secondary use of health data for research purposes.

33 Hepatitis C – 5 years audit of case finding, treatment and monitoring in an Aboriginal community controlled health service

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Context: Factors such as socioeconomic inequality, higher rates of incarceration, and poorer access to treatment may contribute to higher prevalence of hepatitis C for Aboriginal people. **Objective:** To review case finding and monitoring for hepatitis C in an Aboriginal community controlled health service in regional NSW, as part of Quality Improvement, supported by the local health district. **Design:** We conducted an audit 2013–2018 of medical records of past and present patients with positive hepatitis C serology, assessing for completion of active case finding for DAA treatment, appropriate testing, treatment and reviewing for effectiveness of recall systems. **Setting:** ACCHO in NSW. **Participants:** People with positive hepatitis C serology. **Findings:** Of 138 current patients, 28 had SVR12 following use of interferon or new DAA and two had SVR12 but had become PCR positive again. 39 People had cleared HC, 24 people had no PCR on record, despite at least three recalls and 47 people had known positive PCR but had not completed testing or commenced treatment with DAA despite at least three recalls. 14 participants had been treated with DAA at the ACCHO, while others received treatment in gaol, via methadone clinic or the gastroenterology clinic. Almost no participants had responded to recalls via phone call, SMS or letter. Opportunistic promotion of testing and treatment appeared to be more effective. **Implication(s) for practice:** Many clients remained either incompletely tested, or untreated despite an active recall and monitoring system. Opportunistic promotion of testing and treatment appeared to be more effective than telephone, SMS or letter recalls, however recalls may still play a role in ‘sleeper’ effect in promoting treatment.

34 Deprescribing of Potentially Inappropriate Medications (PIMs) in the elderly – an observational study of deprescribing behaviour in GP registrars and GPs

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Context: Prescription of Potentially Inappropriate Medications (PIMs) is common in older patients and associated with considerable morbidity. GPs are urged to increase their deprescribing of PIMs, but there is very little evidence for GPs’ current deprescribing. **Objective:** To establish: A) in response to questionnaire-based clinical vignettes: Frequency of GPs’ intended deprescribing, of PIMs in older patients. Associations of GPs’ deprescribing of PIMs. B) in actual prescribing: Frequency of registrars’ initiation, and deprescribing, of PIMs in older patients. Associations of registrars’ initiation, and deprescribing, of PIMs. **Design:** There are two project components: Secondary analysis of ReCEnT project data: – ReCEnT is an ongoing cohort study of GP registrars in which registrars’ in consultation, clinical and educational experience is documented in 60 consecutive consultations in each of their three GP training terms. A cross-sectional questionnaire-based study of GPs’ intended deprescribing of PIMs. **Setting:** 1) Three General Practice Regional Training Organisations (RTOs) in NSW, ACT, Tasmania and Victoria. 2) One Primary Health Network (PHN) encompassing the Newcastle, Hunter, Central Coast and New England regions of NSW. **Participants:** 1) GP registrars in RTOs. 2) GPs in the PHN. **Findings:** The protocol has been submitted for ethical review. It is anticipated that fieldwork will begin in April with all data collected by June. Preliminary results will be presented that show multivariable logistic and linear regression, respectively, for PIMs prescribed and deprescribed in the ReCEnT analysis. **Implication(s) for practice:** An understanding of PIMs prescribing and deprescribing of PIMs will inform general practice educational practice and policy.

35 Co-design: challenges and opportunities – a youth perspective

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Aim and intended outcome/educational objectives: Participants will understand the concept of co-design and its relevance to health service design and primary health research. Participants will understand the different varieties of co-design and the different levels of service user participation. Participant will gain experience in two design methods – extreme personas and journey mapping. Participants will be able to identify the common challenges of doing co-design projects and have strategies and ideas to overcome these challenges in their work and research.

Format: 90-minute workshops, including: An introduction to the concepts of co-design and its role in primary health care service design, and primary health research. Lived experience examples from young people who have accessed the health system and have experience of co-design projects. Group activity to identify specific personas and undertake a journey mapping activity to develop insights. Group activity to brainstorm strategies to address some of the common challenges when undertaking co-design projects in health service design and/or research.

Content: The co-design of health services reflects the need for services not just to be efficient and effective, but also to provide a good experience to those who access them. Co-design efforts create a space for people with a lived experience to have their expertise as people who have experienced the service valued. Co-design can also be used in research to ensure research includes the views of those it seeks to impact. There is a range of ways that co-design can be undertaken in both health service design and research; these include different levels of participation and power sharing. There are many challenges when undertaking a co-design project, these range from issues of addressing power imbalances, to maintaining participation. In this workshop, we will explore the role of co-design in health service design and primary health research. We will hear from young service user advocates about the importance of co-design. Working through an activity to develop youth personas and a journey map, we will develop insights for health service design and research. Finally, we will work together to develop strategies to address some of the key issues in co-design projects. **Intended audience:** With the increasing uptake of co-design projects in Australia's health system and the focus on participation in research funding, clinicians and researchers will find this a helpful introduction to the concept of co-design. For researchers and managers leading co-design projects, they will find this a helpful way to think through some of the common challenges in co-design projects.

36 One record to rule them all

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What if we had one integrated electronic health record (EHR) that collated information on people from EVERY service they accessed, clinical and non-clinical? This idea may sound radical, given the backlash over My Health Record. However, the 2014 review of Australian mental health services recommended such a record (National Mental Health Commission 2014). Chronic and complex conditions don't fit within traditional linear health journeys, where a service user accesses one service and either gets referred or provided treatment. People with chronic and complex health issues usually access multiple services in parallel for a long time and require integrated team-based care. They also may need support from community-based social care services (e.g. NDIS). Information sharing processes such as referral letters and discharge summaries, though helpful in linear care

journeys, do not meet the needs of team-based integrated care (Gray *et al.* 2009). Care plans and treatment plans are one solution to these new information needs; however, their uptake is limited, and there are challenges with coordinating them across services (Brooks *et al.* 2018). Integrated electronic health records (iEHR) may be the solution to the information needs in these complex health journeys. Key attributes of an iEHR are that it is longitudinal, person-centred, prospective, and comprehensive (Garde *et al.* 2007). However, iEHRs are nebulous in their defining features, and many examples in the academic literature do not conform to any one definition. It is pertinent to differentiate between an electronic medical record used in individual health settings (e.g. practice management software) EHRs that operate across health service settings, and iEHRs that operate across all care services. There are concerns with EHRs and iEHRs that they will challenge ideas of privacy and confidentiality. This especially the case in mental health contexts that deal with particularly sensitive information about people. When we explore examples of EMR and EHR use, such as MyEHR in the Northern Territory, we see that having an EHR covering clinical and non-clinical services is not such a dangerous idea after all. Though My Health Record is currently a summary record that is accessible by clinicians and service users, what would it take to stretch our thinking, to Australians having a near-complete record of their health information available to all services? Such a record would mean that when in a crisis, social care and health care services would have access to timely information to provide the correct service or treatment. It means service users will no longer unnecessarily have to retell their stories or go hunting for their health information. When partnered with an electronic care plan, an iEHR may also help coordinate care between the many services people with complex and chronic conditions access. To make this dangerous idea a reality we will need to bring together clinicians, computer scientists, information systems people, ethicists, privacy scholars, health administrators, and most importantly, service users.

References

- Brooks HL, Lovell K, Bee P, Sanders C, Rogers A (2018) Is it time to abandon care planning in mental health services? A qualitative study exploring the views of professionals, service users and carers. *Health Expectations* 21(3), 597–605. doi:10.1111/hex.12650
- Garde S, Knaup P, Hovenga EJ, Heard S (2007) Towards semantic interoperability for electronic health records. *Methods of Information in Medicine* 46(03), 332–343. doi:10.1160/ME5001
- Gray LC, Berg K, Fries BE, Henrard JC, Hirdes JP, Steel K, Morris JN (2009) Sharing clinical information across care settings: the birth of an integrated assessment system. *BMC Health Services Research* 9(1), 71. doi:10.1186/1472-6963-9-71
- National Mental Health Commission (2014) The national review of mental health programmes and services [Online]. Sydney: NMHC. Available at <http://www.mentalhealthcommission.gov.au/our-reports/contributing-lives,-thriving-communities-review-of-mental-health-programmes-and-services.aspx>

37 The Information Continuum Project: uncovering information norms in mental health contexts

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Context: Information sharing between services is key to providing integrated care. This is especially important for people with a lived experience of mental illness who may access a number of health, mental health, and social care services. There are ethical issues when sharing information in mental health contexts related to sensitive

information and risk management. These ethical issues make privacy and confidentiality key concerns; however, we know that clinicians tend to make information sharing decisions based on contextual norms (e.g. trust). These decisions can be framed using the theory of contextual integrity, which defines privacy as the appropriate flow of information. **Objective:** The objective of this project is to uncover the contextual information norms that underpin information sharing in Australian mental health contexts. **Design:** Semi-structured interviews with clinicians, caseworkers and support workers were undertaken, covering topics related to barriers and facilitators to information sharing, consent and confidentiality. Contextual norms were constructed using thematic analysis. **Setting:** Participants were recruited from primary health, mental health, and social care services in Australia. **Participants:** Nine participants have been recruited, including five from social care, two from health care, and two from mental health care. **Findings:** Early results have uncovered contextual norms related to trust, risk versus confidentiality, and power. These norms are underpinned by a significant gap in the culture towards information between services, especially between health and social care. **Implication(s) for practice:** When designing new processes and technology (e.g. My Health Record) to facilitate information sharing, we should consider the current contextual norms.

38 What's the catch: barriers and enablers to collecting urine samples from young pre-continent children in primary care

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Context: Urinary tract infections (UTI) are common in young children. Many febrile children require a urine sample to diagnose or exclude UTI, but collecting urine from pre-continent children (who cannot void on request) is challenging. Current collection methods all have limitations. Choice of collection method must balance time, resources, invasiveness, reliability, and contamination. International guidelines have conflicting recommendations for the optimal collection method. Recommendations are based primarily on hospital-based studies, and may not be suited to primary care settings. **Objective:** To understand the barriers and enablers to collecting urine samples from young pre-continent children in primary care. **Design, setting, participants:** An exploratory qualitative study. Semi-structured interviews explored the topic with Australian General Practitioners and Practice Nurses until data saturation was reached. Interviews were audio-recorded, transcribed verbatim, coded, and underwent content and thematic analysis. **Findings:** Twenty-five clinicians were interviewed. Non-invasive collection methods (Clean Catch, Urine Bags), were strongly favoured. Invasive methods (Catheterization, Suprapubic Needle Aspiration) were rarely performed, and considered more suited to unwell children in hospital settings. Key barriers to collection included lack of time and space in clinics, and parental and clinician preference for non-invasive methods. Key enablers were parental motivation, education about collection processes, and use of voiding stimulation techniques. **Implication(s) for practice:** This study has identified key barriers and enablers to inform education, policy and guideline recommendations for urine sample collection from pre-continent children in primary care. Guidelines must consider the primary care context to ensure recommendations are relevant and suited to real world practice.

39 Increasing patients' awareness, knowledge, and appropriate uptake of skin cancer checks: a descriptive comparative study of passive vs active educational material in general practice waiting rooms

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Context: The incidence of skin cancer continues to increase worldwide, thus there is a need to educate and inform patients about skin cancer and empower patients to seek appropriate skin checks. **Objective:** Provide further insight into how and what skin cancer education could be undertaken in the waiting room. **Design:** A comparative study was undertaken comparing visible posters on the wall in the waiting room versus handouts of the same material to the patient as a handout on arrival. A post-consultation survey was undertaken. The survey contained content from the poster/hand-out, risk factor questions and whether the patient had ever had a skin check or a previous skin cancer. **Setting:** Study undertaken in four general practice clinics across South Australia, locations chosen based on geography and patient demographics. **Participants:** 653 participants across four clinics. **Findings:** Handouts resulted in a significant and positive association between patient asking GP for a skin check and age (P value <0.0001) and education level (P value = 0.0068). A significant and positive impact on patient education was noted, when identifying a cancerous lesion [71% (no intervention), 78% (poster) and 90% (poster), P value <0.0001]. High acceptability, with 92% of participants reporting education handouts from reception staff was acceptable. **Implication(s) for practice:** This research addresses a knowledge gap, reporting a low cost method to increase patient awareness about skin cancer and skin checks.

40 Factors associated with the clinical reasoning skills of GPs at the commencement of vocational general practice training

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Context: Clinical reasoning skills are paramount for competent medical practice, particularly in general practice where GPs frequently encounter complex, unclear problems that require timely and accurate diagnoses. Understanding factors associated with clinical reasoning in early general practice training may help tailor education strategies for this critical skill. **Objective:** To identify demographic and practice factors associated with clinical reasoning skills in early-career trainee GPs. **Design:** A cross-sectional analysis of baseline data from a prospective longitudinal study was undertaken. Clinical reasoning was assessed using an online administration of the Diagnostic Thinking Inventory (DTI), a validated 41-item instrument that provides two domain scores: 'Flexibility in Thinking' and 'Structure of Memory'. Participant demographic and practice characteristics were obtained from the concurrent Registrar Clinical Encounters in Training (ReCEnt) study. Data were analysed using multiple linear regression. **Setting:** GP Synergy, the training organisation responsible for delivery of vocational general practice training across NSW/ACT. **Participants:** Trainee GPs undertaking their first core general practice training term within NSW/ACT in 2018. **Findings:** DTI response rate was 61% (n = 249). In multivariable analysis, higher 'Flexibility in Thinking' was associated with female gender (P = 0.038), older age (40–49 years, P = 0.018; 50+ years, P = 0.043; referent <40 years) and having an international primary medical qualification (P = 0.044). Higher 'Structure of Memory' was significantly associated with age-group 40–49 years (P = 0.002) and having an international primary medical degree (P = 0.007). **Implication(s) for practice:** Younger

doctors with potentially less life experience may benefit from additional support and teaching in clinical reasoning. Findings for international graduates was unexpected, warranting further exploration.

41 ‘It was a good idea in theory’: GP registrars’ experiences of peer mentoring

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Context: In 2013, GP Synergy established a peer-to-peer mentorship program for their GP registrars to assist them with the transition to GP training. The program links new GP registrars (mentees) with GP registrars near the end of training (peer mentors). Despite increasing program participation, limited evidence is available regarding the perceived value of peer mentoring for GP registrars. **Objective:** To explore the expectations and experiences of GP registrars regarding peer mentoring. **Design:** A qualitative study used purposive sampling to recruit participants for either a focus group or semi-structured individual interview. All interviews were audio recorded, transcribed, and analysed inductively for key themes. **Setting:** Mentorship program staff, mentors, and mentees involved in the GP Synergy Mentorship Program across NSW/ACT from 2014–2018 were invited to participate. **Participants:** Thirty-seven participants took part in either a focus group ($n = 8$) or individual interview ($n = 29$). **Findings:** The expectations and experiences of mentoring among participants varied widely. Engagement in peer mentoring existed across a continuum, with some participants exchanging as few as two emails, while other participants met face to face regularly, and developed an ongoing relationship. Significant barriers/enablers to relationship were distance, timing, matching on stage of life, and level of stress experienced during training. Irrespective of the level of engagement in the program, participants reported that peer mentoring was a ‘good idea’ and would recommend the program to others. **Implication(s) for practice:** GP registrars may struggle to organise their roles within a peer mentoring relationship. Implications for increasing engagement in peer mentoring will be discussed.

42 Use and performance of machine learning models for type 2 diabetes prediction: protocol for a systematic review and meta-analysis

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Context: Machine learning (ML) involves use of algorithms without explicit instructions. Though ML models have been widely applied for prediction of type 2 diabetes (T2DM), no evidence synthesis of their performance is available. **Objective:** To identify ML prediction models for T2DM and determine their predictive performance. **Design:** Systematic review of English language studies in 12 databases since 2009. CHARMS, TRIPOD, and Luo *et al.* (2016) guidelines will guide data extraction. Methodological quality assessment using bias assessment tool by van den Boorn *et al.* (2018). The extent of validation will be categorized by Reilly-Evans levels. Primary

outcomes include metrics of discrimination ability, calibration, and classification accuracy. Secondary outcomes include candidate predictors, algorithms used, and intended use of models. Meta-analysis of c-indices to evaluate discrimination abilities with pooling of c-indices per prediction model, per model type and per algorithm. Publication bias assessment through funnel plots and regression tests. Sensitivity analyses on the effects of study quality and missing data on primary outcome. Sources of heterogeneity analysis through meta-regression and subgroup analyses for primary outcome, should enough data be available. **Setting:** Studies reporting models on T2DM in clinical or community settings during the last 10 years **Participants:** Individuals with or without T2DM in studies describing ML models of T2DM. **Findings:** Protocol has been registered in PROSPERO (registration number: CRD42019130886). Findings will be published in a peer reviewed journal. The preliminary findings will be reported. **Implication(s) for practice:** This study will inform optimal application of ML for T2DM diagnosis and prognosis in primary care.

43 The successful recruitment of general practices and participants to the Flinders Quality Enhanced general practice Services Trial (QUEST)

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Context: Practice and participant recruitment is one of the most challenging aspects in the conduct of general practice research. Many general practice studies have struggled to meet recruitment targets and as a consequence have produced inconclusive findings. **Objective:** To describe how the recruitment challenges to a randomised clinical trial were successfully addressed by using an approach tailored to the general practice setting and previously described in the literature by the QUEST team. **Design:** Flinders QUEST (QUality Enhanced general practice Services Trial) is a pragmatic clustered randomised controlled trial of enhanced general practice services for people assessed by their regular GP as being at high risk of poor health outcomes and likely to benefit from enhanced GP services. **Setting:** General practices located in the southern region of metropolitan Adelaide. **Participants:** Twenty general practices, 92 GPs and 1044 patients (58 children and young people; 305 adults between 18–64 years; 681 older people aged 65 years and above). **Findings:** Practice and participant recruitment targets were achieved in very tight timelines. Critical factors for success included practice recruitment from a practice based research and teaching network, careful attention to minimising the administrative burden to practice staff, making the research attractive to practices and participants and a well-developed IT infrastructure. **Implication(s) for practice:** Building the evidence base for primary health care is necessary to develop an efficient and effective primary health care system. The successful implementation of Flinders QUEST provides a useful template for other large scale studies planned for general practice settings.

44 Diabetes and Oral Health (DiabOH): pilot of two screening tools at a community health centre

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Context: People with diabetes have increased prevalence of periodontitis and people with gum issues have higher risks of poor glycaemic control. Yet, patients with diabetes and/or periodontitis are not routinely screened. Unlike the widely used Australian Diabetes Risk Assessment (AUSDRISK) tool, currently there is no non-invasive screening instrument for periodontal risks. **Objective:** To pilot: 1. a periodontal risk assessment (PRISK) tool developed for non-dental health professionals with general practitioners (GPs), practice nurses (PNs) and diabetes educators (DEs); 2. the AUSDRISK tool with oral health professionals (OHPs). **Design:** Mixed methods exploratory study. PRISK is a non-invasive tool developed by the DiabOH research team in consultation with the project advisory group. This and the AUSDRISK tool were piloted with medical and dental staff at a community health centre (CHC). Practitioners then participated in focus groups and interviews to explore the tools' acceptability and feasibility. Quantitative data was analysed descriptively; qualitative data was analysed thematically. **Setting:** A CHC in Melbourne. **Participants:** GPs, PNs, DEs and OHPs at the CHC. **Findings:** Seven GP/PNs/DEs conducted 59 PRISK assessments resulting in 23 dental referrals; 7 OHPs conducted 28 AUSDRISK assessments resulting in 7 medical referrals. Eleven practitioners provided feedback after the pilot. Most found the screening tools acceptable and feasible although there were concerns about patients' receptiveness, time constraint and long public dental appointment waiting list. **Implication(s) for practice:** Further research to address the beliefs and barriers that impact on early detection and management would provide best-evidence care for patients with comorbid diabetes and periodontitis.

45 Understanding cultures and building capacity to bridge the cultural chasm: what are the perspectives of Chinese migrant about Australian general practice?

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Context: There is anecdotal evidence suggesting that Chinese people lack confidence and trust in the primary health care system as they perceive general practitioners (GPs) to be 'unsafe' and 'lowly'; preferring to consult more 'esteemed' specialists for even the most minute ailments. There is however a dearth of research exploring Chinese migrants' perspectives on general practice in Australia and the factors which may pose as barriers to their uptake of primary care services. **Objective:** To explore the experience of Chinese migrants with general practice and GPs in Australia and the influence of cultural differences and their past experience in China on their current perspectives. **Design:** Qualitative research using a phenomenological approach. Semi-structured interviews will be conducted with 10–12 Chinese migrants purposively recruited and selected to achieve maximum variation. Interview questions have been developed based on components of the General Practice Assessment Questionnaire (GPAQ) and General Practice Patient Survey (GPPS) to explore patients' perspectives on the quality of care provided by their general practice and GPs. The interviews will be audiotaped and transcribed, then thematically analysed. **Setting:** Melbourne, Australia. **Participants:** Chinese migrants from China. **Findings:** Recruitment and data collection are underway. Results will be available for presentation by July 2019. **Implication(s) for practice:** Findings are expected to help the general practice discipline in Australia understand the cultural factors influencing Chinese migrant patients' perspectives and inform the development, implementation and evaluation of engagement strategies. This will contribute to GP development in Australia, potentially raising the standard and quality of general practice.

46 Is it easy or hard to provide care that is patient-centred? Views of Australian dietitians

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Context: Patient-centred care (PCC) is widely recognised as a key feature of high-quality health care. Understanding the contextual factors that influence health providers' adoption of PCC is important to enable future strategies to be designed that can support improved care. Dietitians provide nutrition care to patients to support long-term dietary changes for improved health and wellbeing. Effective nutrition care requires a highly therapeutic relationship and strong focus on PCC. **Objective:** This study aimed to explore dietitians' perspectives regarding the barriers and enablers to delivering PCC. **Design:** Qualitative semi-structured telephone interviews were conducted using a constructivist-interpretivist paradigm to generate rich and contextual findings. Data were analysed thematically. **Setting:** Dietetic practices within Australian primary care clinics. **Participants:** Australian Accredited Practising Dietitians were interviewed between March–April 2018. Recruitment continued until data saturation was reached ($n = 12$). **Findings:** Seven themes were discovered inductively: dietitians value PCC, find it difficult to define PCC, feel they need additional education to support PCC, require a validated tool to evaluate PCC, workplace pressures/constraints, and expectations from other health professionals making it difficult to deliver PCC. **Implication(s) for practice:** There is opportunity to further clarify the definition of PCC for dietitians working in primary care to ensure it is practiced consistently. Competency standards, tertiary dietetic training and professional development require coverage of PCC so dietitians have the necessary knowledge/skills to enable high quality care. Monitoring PCC using validated instruments could be a valuable quality indicator in primary care to enable benchmarking and quality improvement initiatives within local settings.

47 Diabetes medication therapy management: have you considered a HMR for your patient?

Jia Min Liau

Optimal Health HMR

Context: Home Medicines Review (HMR) have been designed to enhance the quality use of medicines and reduce the number of adverse medicine events, by assisting consumers to better manage and understand their medicines through a medication review conducted by an accredited pharmacist in the patient's home. **Objective:** This audit aims to evaluate the accredited pharmacists' intervention when conducting HMR for people living with diabetes, using a patient-centred care model. **Design, Setting, Participants:** This study is of a mixed methodology design and features a retrospective audit of reports from HMRs carried out by two accredited pharmacists in metropolitan Melbourne, from July to August 2018. **Findings:** Of the eighty patients visited, seventeen had a diagnosis of Type 2 diabetes. The accredited pharmacists' interventions in these HMR are divided into clinical areas, lifestyle modifications advice and other areas. Clinical recommendations include drug deprescribing, additional drug therapy, drug substitution, dosage adjustment, drug interaction analysis, possible adverse drug reactions enquiry and laboratory evaluation. The accredited pharmacists also promote the importance of healthy eating habits, the benefits of being physically active and the overall health benefits of achieving a healthy weight during the HMR. **Implication(s) for practice:** This study described three areas of interventions in the HMR covering some aspects of the overall care of a patient with diabetes. The HMR interventions were aimed at improving the health and quality of life of patients by providing a medication review, lifestyle optimisation and promoting the quality use of medicines.

48 Cultural respect in general practice: a mixed method cluster randomised controlled trial

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Context: Australia is struggling to address the disparity in health of Indigenous Australians. The Ways of Thinking and Ways of Doing (WoTWOd) cultural respect intervention comprises a toolkit, one half-day workshop, cultural mentor support for practices, and a local care partnership between local Primary Health Networks and Aboriginal Community Controlled Health Services to guide the program and facilitate community engagement. **Objective:** To examine whether WoTWOd improves clinically appropriate anticipatory care in general practice and cultural respect displayed by medical practice staff as measured by rates of claims for MBS item 715 (health assessment for Indigenous Australians), recording of chronic disease risk factors; and changes in cultural quotient (CQ) scores of practice staff. **Design:** Mixed methods, cluster randomised controlled trial with a participatory action research approach. **Setting/Participants:** Fifty-six general practices in Sydney and Melbourne during 2014–2017. **Findings:** Complete data were available for 28 intervention (135 GPs, 807 Indigenous patients) and 25 control practices (210 GPs, 1554 Indigenous patients). Participants reported positive experiences. However, 12-month rates of MBS item 715 claims and recording of risk factors for the two groups were not statistically significantly different, nor were mean changes in CQ scores, regardless of staff category and practice attributes. **Implication(s) for practice:** While it was well-received, the WoTWOd program did not increase the rate of Indigenous health checks or improve cultural respect in general practice. Conceptual, methodologic, and contextual factors that influence cultural mentorship, culturally respectful clinical practice, and Indigenous health care require further investigation.

49 Opioids in general practice: use or abuse

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Context: Pharmaceutical opioid use has increased four-fold in Australia with increased deaths, mostly by accidental overdose. Pharmaceutical claims showed that 10–20% of the population visited at least four prescribers or three dispensing pharmacies or had 20+ scripts dispensed; 3% met all three criteria. These doctor-shoppers have twice the risk of drug-related mortality and opioid-related hospital admissions. **Objective:** To identify the demographic, service use and clinical associations of opioid use. **Design:** Patients who have been prescribed at least one opioid between 2000–2017 were identified in the UNSW electronic Practice Based Research Network (ePBRN) repository of linked data from EHRs. The prescription strength and dose were used to calculate oral Morphine Equivalent Dose (oMED) and visit information to calculate Usual Provider of Care (UPC), Doctor Shopping Quantity (DSQ) and Doctor Shopping Indicator (DSI). Associations with demographic and clinical data were examined. **Setting:** SW Sydney **Participants:** Fourteen general practices, 200+ GPs and 60,637 active patients. **Findings:** The 13,492 patients who were prescribed at least one opioid between 2000–2017 showed no gender bias, were mostly aged 41–70 years and 25% had mental health problems. Most opioid users visited only one practice, often see different providers within the practice and rarely visited more than two practices.

Opioid management appeared to be within guidelines with no significant doctor shopping for opioids found. **Implication(s) for practice:** Observational EHR data can be used for timely identification, assessment and monitoring of local cohorts and, in this case, associations of opioid abuse with cohort characteristics.

50 ‘No frills prils’. How Australian general practitioners choose which ACE inhibitor to prescribe

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Context: ACE inhibitors (ACEIs) are one of the most commonly prescribed blood pressure lowering medications in Australia. Nearly \$85 million dollars is spent by the PBS and patients on the two most popular ACEIs each year. The general patient charge for a month’s supply of an ACEI can vary between \$18.48 to \$27.94 depending on the ACEI prescribed. The nine ACEIs available in Australia are considered therapeutically equivalent; meaning that each ACEI has the same blood pressure lowering effect and similar side effects as another ACEI. General practitioners (GPs) prescribe a range of ACE inhibitors and to our knowledge, the reasons behind why an individual GP prescribes one ACE inhibitor compared to another are not well understood. **Objective:** This study aims to explore the factors that influence general practitioners (GPs) to prescribe particular ACE inhibitors. **Design:** This is a qualitative study that will use in-depth semi-structured interviews with GPs to answer the key research questions. Between 10 and 12 GPs will be recruited to participate in this study. **Setting:** Australian general practice. **Participants:** General practitioners. **Findings:** Pending. **Implication(s) for practice:** The findings of this research would provide an increased understanding of the factors that shape the way GPs prescribe ACEIs and would have immediate relevance to policy makers looking to decrease the spending on pharmaceuticals. The research findings may also inform current GP practice so that the cost of particular ACEIs can be taken into account during the prescribing process to reduce government spending and out of pocket costs for patients.

51 Can Get Health in Canterbury: an intersectoral partnership to improve access to comprehensive primary health care in a disadvantaged urban location

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Context: Canterbury is one of the most disadvantaged local government areas in New South Wales. The Can Get Health in Canterbury place-based intervention was developed in partnership with UNSW, Sydney Local Health District and Central and Eastern Sydney Primary Health Network to improve access to comprehensive primary health care, increase individual and community health literacy and identify and work with relevant stakeholders to address at least one social determinant of health. **Objective:** To design, implement, evaluate and sustain the place-based intervention in collaboration with community groups and project partners to address health

inequalities in a disadvantaged location. **Design:** Extensive consultation and data analysis involving key resident and community groups, local NGOs and government organisations to identify key priority groups, health issues and a plan of action. **Findings:** Objectives were refined and priority populations and focus areas were identified and agreed by the local Management and Advisory Committees. Key achievements to date include: Two community researchers employed (one Bangla/one Arabic speaking); Rohingya Little Local established: \$10,000 allocated to the Burmese Rohingya Communities of Australia to spend according to community priorities; numerous community education programs, including a Bangla women's circle. **Implication(s) for practice:** Improving access to comprehensive primary health care in a disadvantaged, urban location is possible through an evidence-informed approach in partnership with major stakeholders in the region. Building this infrastructure and trust requires genuine community engagement, academic leadership and health services who are committed to addressing health inequities and provide an investment of resources over decades rather than years.

52 Understanding the role of primary care access and appropriateness in hospital use: a cross-sectional survey of patients attending a public hospital in the south east of Melbourne

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Context: Access to appropriate primary care has been seen as an important influence on the avoidable use of emergency departments. **Objective:** To explore the relationship between patient-perceived access to primary care and appropriateness of primary care in Emergency Department (ED) visits and hospital admissions in vulnerable populations. **Design:** Cross-sectional survey of patients attending a community dental service and ED. The survey, developed as part of the IMPACT Centre of Research Excellence, included measures of: social vulnerability; health utilization; ability to reach, engage in and pay for primary care; and primary care appropriateness (measured as patient-perceived patient-centeredness). Consenting participants' surveys were linked to administrative data on ED and hospital admissions. **Setting:** Suburban emergency department and three sites of a community dental clinic, each within a large metropolitan health service. **Participants:** 459 patients, 245 from the dental service and 214 from the ED. Data linkage was achieved for 53.2% of participants. **Findings:** 7.0% lacked affiliation to a GP or practice. Patient-centeredness was high and was independent of primary care affiliation. Ability to access care was adequate, however 28.7% of participants reported not seeing a specialist in past 6 months due to cost. 5.9% reported difficulties getting healthcare as their reason for attending ED. Ability to access care and appropriateness appeared to not be associated with ED visits or hospital admissions. **Implication(s) for practice:** Primary care affiliation, access and patient-centeredness did not seem to influence ED attendance in this population. Interventions to reduce avoidable hospitalisation need to consider other contextual factors.

53 Prevalence and associations of GP registrars' deprescribing of inappropriate medicines in older patients: a cross-sectional analysis from the ReCEnT project

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Context: Prescription of inappropriate medicines is common in older patients. GPs are urged to increase their deprescribing, but there is very little evidence for GPs' current deprescribing. **Objective:** To establish the frequency and associations of GP registrars' deprescribing of inappropriate medicines in older patients. **Design, setting:** A cross-sectional analysis of the ReCEnT ongoing cohort study of GP registrars' in-consultation clinical and educational experience (2016–18), conducted in three Regional Training Organisations (43% of Australian registrars). Registrars record details of 60 consecutive consultations each training term, including medicines prescribed and deprescribed. Logistic regression was used to establish associations of deprescribing inappropriate medicines (defined by a composite of three existing guideline lists) in patients 65-years and older. **Participants:** Registrars in GP Terms 1–3. **Findings:** 1,113 registrars reported 19,581 consultations with patients 65-years and older. Inappropriate medicines were deprescribed in 2.6% (95% CIs 2.3%–2.8%) of consultations. Most-commonly opioids (19%), Proton pump inhibitors (9.2%), NSAIDs (9.0%), statins (7.8%), and antidepressants (6.6%). 43% had been prescribed for three months or longer. The most common reasons for deprescribing were: 'no longer indicated' (38%); adverse effects (26%); and lack of efficacy (20%). Significant adjusted associations of deprescribing included identifying as Aboriginal (OR 2.86, 95% CIs 1.38–5.93); continuity-of-care (ORs 0.71, 95% CIs 0.57–0.88; and 0.20, 95% CIs 0.07–0.53 for being new to practice and registrar, respectively); inner-regional compared to major-city location (OR 1.33, 95% CIs 1.06–1.68); the problem/diagnosis being chronic (OR 1.90, 95% CIs 1.54–2.35). **Implication(s) for practice:** These findings will facilitate design of strategies to facilitate registrars' (and GPs') rational deprescribing in older patients.

54 Registrars' Evaluation and Deprescribing of Inappropriate Medicines in the Elderly: the RE-DIME multicomponent educational intervention

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Context: Inappropriate medicines prescribing is common in older patients. GPs are urged to increase their deprescribing, but there are barriers to deprescribing in practice. **Objectives:** To: a) deliver a multi-component educational intervention providing skills to deprescribe inappropriate medicines in an evidence-based and safe manner; b) assess the efficacy of the intervention in increasing registrars' deprescribing of inappropriate medicines

in older patients. **Design, setting:** A non-equivalent control-group design nested within the ReCEnT cohort study of registrars' practice. The educational intervention consisted of an online module, a face-to-face registrar lecture, a webinar for their supervisors, and facilitation of registrar-supervisor dyad educational activities. The theoretical framework for the educational intervention was Michie's Behaviour Change Wheel. The primary outcome measure was deprescribing of medicines categorized as potentially inappropriate (using a composite of three existing criteria). Intention-to-treat analysis employed multivariable logistic regression. Variables in the model included treatment-group (intervention/control Regional Training Organisations (RTOs)), time (before/after) and an interaction term of treatment-group-by-time. The interaction term determined statistical significance of changes in prescribing. **Participants:** Registrars of three RTOs (one delivering the education and two controls). **Findings:** 1203 registrars (765 Intervention, 438 Control) provided data of 19,591 pre-intervention and 5,743 post-intervention consultations for patients aged >65 years. There was no significant increase in deprescribing in the education-receiving RTO (intervention-control/pre-post Interaction Term Odds Ratio 1.29; 95% CI 0.74, 2.24). **Implication(s) for practice:** We did not find a statistically significant increase in deprescribing. Longer-term analysis, once the educational changes are further assimilated into the RTO educational program, is indicated.

55 Is the use of retrospective continuous glucose monitoring associated with increased health service utilisation in people with type 2 diabetes? A secondary analysis of the GP-OSMOTIC Study

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Context: There is increasing interest in the use of technology to assist management of type 2 diabetes (T2D). Retrospective continuous glucose monitoring (r-CGM) involves the person with T2D wearing a sensor which measures glucose data every 15 minutes, which is later reviewed with their health professional to guide treatment intensification. It is not clear whether use of this technology is associated with changes in health service utilisation (HSU). **Objective:** In patients with T2D attending general practice, does r-CGM result in different HSU compared to usual care? **Design:** Secondary analysis of GP-OSMOTIC data (randomised controlled trial examining the effect of intermittent r-CGM use on HbA1c in people with T2D in general Practice) linked to MBS and Victorian hospitalisation data (VAED, VEMD) over 18 months (6 months pre-trial, 12 month trial period). Regression modelling will be used to estimate differences in HSU between the r-CGM and usual care groups. **Setting:** 25 Victorian general practices. **Participants:** 299 patients with T2D with HbA1c above target, despite prescription of at least two non-insulin hypoglycaemic agents and/or insulin. **Findings:** Data linkage is currently underway, and data analysis will commence May 2019. Preliminary results will be presented. **Implication(s) for practice:** r-CGM offers the possibility of analysing blood glucose values in new ways. In the next 10 years, it is estimated that about 20% of people with T2D will be using a CGM system. This study will generate evidence of the changes in health service utilisation associated with r-CGM, enabling evidence based clinical and health policy decisions.

56 A general practice end of life care minimum dataset: GP practice at the end of life

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Context: There is currently no way of observing what primary care end of life care (EoLC) is like, therefore no way of providing systematic EoLC improvement, and death rates are rising. We have developed a method to gather primary care data when a death is registered. This retrospective data collection tests the feasibility of the approach. **Objective:** To develop a minimum dataset from data automatically collected from general practice software, and GP observational data. **Design:** Cross-sectional retrospective data collection. **Setting:** Australian general practices in Queensland, Victoria and Western Australia. **Participants:** Eighty-two deceased patients reported by eleven GPs from the last two years. **Findings:** Most decedents (99%) lived at home or in a Residential aged care facility, (RACF). Most (72%) died from non-malignant disease. Death was expected in 71% of cases, and this judgement was from the GPs own observations. Home dwelling patients mainly died elsewhere (80%), but 14 of 16 RACF residents (88%) died in place. GPs felt the place of death met patient's physical and social needs and at least partly met the patient's preference. Many people did not express end of life care preferences to their GP. **Implication(s) for practice:** A minimum dataset is urgently required guide practice and policy changes to meet escalating numbers of deaths. GPs could anticipate most deaths, and that the end of life arrangements mostly met patient needs. Many GPs did not know the patients' preference for place of death, and many patients did not express their preferences for end of life care.

57 A general practice end of life care minimum dataset: GP communication and management practices at the end of life

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Context: There is currently no way of observing what primary care end of life care (EoLC) is like, therefore no way of providing systematic EoLC improvement. We have developed a method to gather primary care data when a death is registered. This retrospective study tests the feasibility of the approach. **Objective:** To develop a minimum dataset from data automatically collected from general practice software, and GP observational data. **Design:** Cross-sectional retrospective data collection. **Setting:** Australian general practices in Queensland, Victoria and Western Australia. **Participants:** Fifty-seven deceased patients reported by eleven GPs from the last three years. **Findings:** GPs provided extensive communication in the pre-death period. This included phone consultations (50%), home visits (60%), family meetings (49%), hospice or hospital consultations (22%), GP management planning (63%) and patient or family counselling (62%). GPs considered themselves as the principal care coordinator in 53% of reported cases, and part of the wider management team in 29% of reported cases. Most (68%) were satisfied at their level of involvement at the end of life. Palliative care units (87%) and hospitals (60%)

provided communication within the last week of the patient's life, mainly by fax or phone. RACFs communicated mainly by phone. **Implication(s) for practice:** A minimum dataset is urgently required guide practice and policy changes to meet escalating numbers of deaths. Communication and care coordination was a major part of these GP's roles, who were satisfied with the role they played. Facilities seem aware of the need to liaise with the patient's GP.

58 A general practice end of life care minimum dataset: patient physical and psychological symptom control

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Context: There is currently no way of observing what primary care end of life care (EoLC) is like, therefore no way of providing systematic EoLC improvement at a time when death rates are set to increase dramatically. We have developed a method to gather primary care data when a death is registered. This retrospective data collection tests the feasibility of the approach. **Objective:** To develop a minimum dataset from data automatically collected from general practice software, and GP observational data. **Design:** Cross-sectional retrospective data collection. **Setting:** Australian general practices in Queensland, Victoria and Western Australia. **Participants:** Fifty-seven deceased patient records reported by eleven GPs from the last four years. **Findings:** GPs reported that fatigue (62%), reduced appetite (60%), psychological problems (53%), and pain (52% were experienced by >50% of patients, symptoms that were not often well managed included fatigue (48%), reduced appetite (38%), and sleep (30%). The symptoms best controlled were pain (83% well controlled), nausea (79%), breathing problems (76%) and bowel problems (76%). **Implication(s) for practice:** A minimum dataset is urgently required to guide practice and policy changes to meet the challenge of escalating numbers of deaths. Symptoms with pharmacological solutions were considered well controlled, where symptoms without pharmacological problems were less well addressed. Providing training and treatment options for these latter symptoms may be beneficial.

59 General practitioner, practice nurse and practice manager attitudes to sharing de-identified patient health information for research: a qualitative study

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Context: There is increasing interest in utilising data from general practice consultations for research which can be used to inform clinical practice and policy. Software is available which can automatically de-identify and extract patient health information from general practice consultations to create large datasets for use in research. For researchers to access this data, general practices must agree to provide it to them. There is, however, little

research exploring what the key general practice personnel who may influence this decision think about providing de-identified patient information to researchers. **Objective:** To explore general practitioners', practice nurses' and practice managers': (a) attitudes and beliefs about the sharing and use of de-identified patient health information for the purposes of research; and (b) perceived barriers and facilitators for the provision of de-identified patient health information for the purposes of research. **Design:** Exploratory qualitative study utilising purposeful sampling to recruit approximately 10 participants to undertake a questionnaire and individual semi-structured interview which will be recorded and thematically analysed. **Setting:** Primary care practices in Victoria. **Participants:** General practitioners, practice nurses and practice managers. **Findings:** This is a study in progress. Participant recruitment is complete and data collection and thematic analysis is currently being undertaken. Preliminary themes will be presented and discussed. **Implication(s) for practice:** Findings from this study could assist in designing a larger study to help inform policy and practice around the secondary use of de-identified patient health information in research, directly impacting the availability of data for primary care research.

60 GlycASSIST: a new tool to support treatment individualisation and intensification in the management of type 2 diabetes

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Context: GPs play an integral role in type 2 diabetes (T2D) management, which is becoming increasingly complex due to emerging treatment options and the need to individualise treatment. **Objective:** To co-design a clinical decision support tool (GlycASSIST) that draws on electronic medical record data in real-time and uses evidence-based guidelines to provide GPs and people with T2D with recommendations for setting HbA1c targets and intensifying treatment. **Design:** A three-part co-design and refinement process was used. A literature review on T2D-related CDS tools informed the initial design. **Participants:** Twelve clinicians (four GPs, five endocrinologists, three diabetes educators) and six people with T2D participated in interviews and focus groups to provide feedback on the initial GlycASSIST design. Following refinements, eight GPs participated in mock consultations testing GlycASSIST and six people with T2D viewed a similar consultation. Participants provided feedback on the functionality of GlycASSIST, as well as how GlycASSIST supported treatment individualisation and intensification via shared decision making (SDM). **Setting:** General practices and focus groups in Victoria. **Findings:** Clinicians and people with T2D felt GlycASSIST would support shared, evidence-based decisions regarding treatment individualisation and intensification. Participants recommended that GlycASSIST include less information, while keeping relevance and credibility, and use graphs and colours to enhance usability. Maintaining clinical autonomy was important to GPs, who wanted GlycASSIST to allow them to override recommendations if needed. Clinicians requested easier screen navigation and greater prescribing guidance and capabilities. **Implication(s) for practice:** GlycASSIST is being refined based on these study findings to prepare it for experimental testing.

61 ‘It gave me information immediately on what I needed’: co-design and simulation of a new clinical decision support tool for antibiotic prescribing in general practice.

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Context: There is a high rate of antibiotic prescribing in Australia. Inappropriate prescribing contributes to the development of antimicrobial resistance, over-medicalisation of self-limiting conditions, and places patients at risk of side effects without clinical benefit. As a result, there is growing interest in the development of antimicrobial stewardship (AMS) in general practice. One AMS strategy is to improve access to guidelines for appropriate prescribing at the point of care. **Objective:** To explore the usability and required design features of a clinical decision support (CDS) tool integrated with the electronic medical record (EMR) that provides access to Therapeutic Guidelines and patient resources. **Design:** Simulation study incorporating two clinical cases with simulated patients, questionnaires and Think Aloud Interviews. **Setting:** General practice simulation laboratory. **Participants:** Eight general practitioners (GPs) practicing in Victoria. **Findings:** Seven of the eight GPs were satisfied with the usability of the CDS tool and all thought the consultations were representative of a general practice consultation. Analysis of the Think-Aloud interviews found: (1) The CDS tool assisted with clinical decision making and informed appropriate prescribing; (2) The tool would be of increased benefit to GPs who were less experienced or not familiar with Therapeutic Guidelines; (3) Demonstrating guidelines was helpful to ‘convince’ patients when antibiotics were not necessary; (4) The patient information section provided relevant evidence-based information for patients, which enhanced communication between the GP and the patient. **Implication(s) for practice:** The CDS tool will be further developed and implemented in a pilot AMS quality improvement program in general practice.

62 Exploring the experiences and views of young people with type 1 diabetes about diabetes management and care in Australian schools

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Context: Type 1 Diabetes (T1D) is prevalent amongst school-aged children, yet there is limited research about the perceptions of young people about the management and care that they received. This knowledge is important to informing the development of policies on diabetes management in Australian schools. **Objective:** To understand T1D management and care in schools from the perspective of affected young people and to understand some of the barriers to optimal diabetes management and care in schools. **Design:** Qualitative phenomenological approach. Focus groups and/or interviews will be conducted with young people with T1D aged between 18 and 25 years. Data will be collected through key questions regarding types of care and support in place for T1D, and general views of young people based on their experiences when they attended school. The focus groups and interviews will be audiotaped and transcribed, then analysed using a constant comparison and thematic analysis approach. Some themes will be elicited deductively, and others will be inductively elicited as data is interpreted. **Setting:** Melbourne, Australia. **Participants:** Young people aged 18 to 25 years with T1D. **Findings:** Recruitment and data collection are currently being undertaken. Preliminary results will be available for presentation at the AAAPC conference in July 2019. **Implication(s) for practice:** This research has the potential to identify barriers and facilitators in the existing school-based health and care frameworks with regards to T1D. Understanding young

people's needs will contribute information for policy-makers to improve current strategies to provide for the needs of school children with T1D.

63 Feasibility of the PhyzX2U program to improve chronic disease outcomes in underserviced rural communities in Central West NSW

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Context: Multidisciplinary team care is effective for people with chronic disease to successfully increase their physical activity and reduce the burden of ill-health. However, access to primary care clinicians especially allied health is limited in rural and regional communities. **Objective:** To determine the feasibility of the PhyzX2U program, a mobile 12-week service providing face-to-face consultation via mobile clinics, supported by weekly remote exercise tracking and ehealth/telehealth coaching, for improving health outcomes for people living with chronic disease in remote and rural NSW. **Design:** Prospective cohort study with six-month follow up. **Setting:** Rural and remote NSW. **Participants:** 62 adults with at least one chronic disease, living in Central West NSW, with a GP Management Plan and Team Care Arrangement in place. **Findings:** Participants set a total of 123 health goals to achieve over the 12-week program, 54% of which related to physical activity, 30% to weight loss and 16% other. Follow-up data was provided by 39 participants (63%), of whom 59% reported achieving their goals. There were no significant changes in quality of life ($P = .24$). There were 23 (37%) participants lost to follow up. Reasons for this loss included: clinicians' difficulty maintaining contact with some clients over the study period, changes in participants' personal circumstances and medical deterioration. **Implication(s) for practice:** A mobile service has potential to increase access to allied health for people in rural and remote areas. Strategies to reduce the loss to follow up are required. Further research is needed to understand the 'dose' of health coaching required to achieve goals.

64 Perspectives of people with multiple chronic conditions and complex needs about person-centred care: a qualitative study of an integrated care program

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Context: Person-centred care is a core element of high-quality health care. Integrated care programs, which aim to improve a person's capacity to manage their chronic conditions and thus reduce their use of acute health

services, are based on principles of person-centred care. While many programs improve single disease-specific outcomes and health service use, clients' experiences of person-centred care are unknown. **Objective:** To explore the extent to which person-centred care is incorporated into an integrated care program in a large health service. **Design:** Qualitative design comprising interviews with clients and staff; with data analysed thematically. **Setting:** Monash Health's Complex Care Program in south-east Melbourne, with population groups disadvantaged in accessing services due to cultural, linguistic, or socio-economic factors. **Participants:** We interviewed 18 staff, 23 clients with multiple chronic conditions and complex needs, and/or their carers (7). **Findings:** We will present findings from interviews, exploring themes based on principles of person-centred care, including (1) involving clients in planning, (2) using information to make decisions, and (3) having their needs identified and met. Results will also provide insight into barriers and enablers to providing person-centred care. We will present the characteristics of care that matter most to clients. **Implication(s) for practice:** Findings will describe person-centred elements of care delivered to and experienced by people with multiple chronic conditions. Similar programs aiming to improve disease management to achieve better health outcomes and reduce health service use can adopt these elements.

65 A hermeneutic literature review of workplace-based assessments in postgraduate medical education

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Context: Since the introduction of the mini-CEX, workplace-based assessments (WBAs) have proliferated throughout postgraduate medical education. Yet, research examining their effectiveness has yielded mixed findings. **Objective:** To form the background for an Education Research Grant from the RACGP, we aimed to generate a thematic overview of the literature examining WBAs in postgraduate medical education. This was guided by three scoping questions concerning acceptability, effectiveness, and assessment training. **Design:** We conducted a hermeneutic review, involving iterative thematic analysis of published articles to deeply engage with the literature in relation to the scoping questions. During the three rounds of coding, we refined and added questions and themes until saturation was reached. **Setting:** Four databases were searched to identify articles examining WBAs in postgraduate medical education from Australia, New Zealand, UK, Canada, the Netherlands and Scandinavian countries. **Participants:** [NA] **Findings:** Stakeholders consistently identify the assessment of trainees' performance in an authentic context as the fundamental advantage of WBAs over other assessments. Acceptability and effectiveness of WBAs relate to multiple factors, including feasibility and engagement. Furthermore, the effectiveness of WBAs depends on interactions between the tool, the users and the context. WBA training must encapsulate tool-based, psychological, clinical and organisational factors, and be provided to all relevant stakeholders within a conducive training organisation culture. **Implication(s) for practice:** This thematic overview demonstrates that complex factors involving users, tools and context interact to determine the importance, acceptability and effectiveness of WBAs. These results have contributed to an overall framework for WBA implementation in general practice training.

66 A meta-analysis and qualitative analysis of flagging and exam performance in general practice training

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Context: Arguably the most intuitive form of validity is predictive validity – whether a measure predicts important future outcomes. Flagging involves identifying learners perceived to not be meeting minimum expectations, and implementing assistance mechanisms for them. A useful outcome to evaluate the effectiveness of flagging mechanisms is exam outcomes. **Objective:** As part of an Education Research Grant from the RACGP, we aimed to produce an overview of flagging systems across General Practice (GP) training in Australia. **Design:** Meta-analytic techniques were used to pool data from Regional Training Organisations (RTOs) examining the relationship between flagging and RACGP exam performance. We qualitatively pooled data from interviews and focus groups with stakeholders to understand their flagging protocols. **Setting:** Data was collected from Australian General Practice RTOs. **Participants:** Exam performance and flagging data were collected for GP registrars who sat RACGP exams in 2018. Interviews were conducted with key personnel involved in flagging procedures from RTOs, whilst focus groups were conducted with supervisors and medical educators. **Findings:** Although the meta-analytic results suggested flagging variably predicts exam performance, analysis of the qualitative data suggested that flagging is perceived as a valuable exercise in ensuring GP registrars fellow as safe and competent GPs. Notably, RTOs report a great diversity of flagging procedures, yet each facilitates the identification of registrars in need of assistance. **Implication(s) for practice:** This project identifies the strengths and weaknesses of different models of flagging. These should be reviewed by RTOs to improve the effectiveness of their flagging procedures.

67 An inquiry into patient and general practice attitudes to financial quality-care incentives in primary care: pre-intervention data from the EQuIP-GP trial

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Context: There are major challenges in delivering economically sustainable healthcare in Australia. The RACGP funded EQuIP-GP trial is investigating a general practice funding model that provides targeted, continuous quality incentive payments for activities related to higher quality care such as increased continuity of care of a patient by the one general practitioner (GP). **Objective:** To report preliminary baseline analyses of interviews with patients, GPs and practice managers investigating attitudes to, and beliefs about, quality improvement incentive payments to GPs. **Design:** Nested qualitative case studies within a cluster randomised controlled trial. **Setting:** Thirty-three general practices in three Australian states recruited to the EQuIP-GP trial. **Participants:** Two practices were purposively selected in each of the three states. Eighteen interviews were analysed across the practices using a framework approach. **Findings:** Across the varied geographic and socioeconomic contexts of the practices, patients and practice staff alike believed the care provided was of good quality. Among participants in these preliminary analyses, quality was synonymous with patient-centred care. Whilst GPs and practice staff believed quality care cost more to deliver, most patients were ambivalent about this link. **Implication(s) for practice:** The

results of this study may assist understanding perceptions of the link between quality of care delivered by Australian general practice and financial considerations. The financial implications of providing high-quality care are poorly appreciated by patients. Shared understandings between GPs and patients may enhance acceptability of financial incentives for high quality general practice care.

68 Flinders QUality Enhanced general practice Services Trial (QUEST): overview and baseline data

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Context: Internationally there is emerging evidence that enhanced general practice services that promote (1) relational continuity of care (seeing the same GP consistently), (2) longer GP consultations, and (3) assertive follow up of patients following discharge from hospital are associated with better patient health outcomes. Whether these research findings generalise to the Australian context however is not known. **Objective:** To conduct a high quality randomised controlled trial to test whether enhanced general practice services improve patient health outcomes and health service usage. **Design:** Flinders QUEST (QUality Enhanced general practice Services Trial) is a pragmatic clustered randomised controlled trial of enhanced general practice services for people identified by their regular GP as being at high risk of poor health outcomes and potentially likely to benefit from enhanced GP services. **Setting:** General practices located in the southern region of metropolitan Adelaide. **Participants:** Twenty general practices, 92 GPs and 1044 patients. **Findings:** At baseline participants reported poorer health status compared to the general population and on average had experienced mean = 0.8; SD = 1.6 hospitalisations or ED presentations in the previous 12 months. Significant variability at the practice and participant level was evident with respect to continuity of care (defined as the proportion of appointments made with participant's preferred GP) and the distribution of appointment lengths. **Implication(s) for practice:** The results from Flinders QUEST will be used by policy makers to support decision making, inform resource allocation, and empower Australian primary care providers to make systematic improvements.

69 Providing care to refugees through mainstream general practice in Southern New Zealand: what are the perspectives of general practitioners and practice nurses?

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Context: Health systems face growing pressure to respond effectively to refugees' needs, internationally and in New Zealand (NZ). Health professionals face the challenging task of endeavouring to meet these needs, often with limited support. Research investigating refugee health delivery from the viewpoint of service providers is critical to identify opportunities for improvement, yet NZ evidence remains scarce for primary health care (PHC). **Objective:** To explore general practitioners' (GPs) and nurses' accounts of providing care to refugees. **Design:** Qualitative exploratory design. Semi-structured interviews with fifteen participants. Transcripts subjected to thematic analysis. **Setting:** Nine general practices enrolled in the Dunedin Refugee Resettlement Programme.

Participants: GPs and nurses involved in providing care to refugees. **Findings:** Three themes relating to PHC for refugees were identified: relational engagement with refugees, refugee health care delivery, professional role shaped by complexity. Building meaningful connections involved acknowledging refugees' journeys by 'getting to know them as people' and listening to their stories. Putting aside assumptions about 'what is best to do' and avoiding 'treating everybody the same' reflected a rich understanding of cultural difference. Participants encountered challenges when providing care to refugees: time-limited consultations, variable use of interpreter services, care fragmentation, adaptability of delivery arrangements, lack of appropriate health infrastructure, and the business model of NZ general practice, which was perceived as compromising the system's responsibility to refugees. **Implication(s) for practice:** The findings highlight the importance of relationship-centred care to foster culturally-appropriate practice. The findings raise concerns about the fit of the mainstream general practice model to meet refugees' complex needs.

70 Optimising osteoarthritis management in general practice: understanding patient-identified factors that influence outcomes of total knee replacement

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Context: Osteoarthritis is a common primary care presentation with significant associated morbidity. Total knee replacement (TKR) is a cost-effective treatment for end-stage knee OA but is only recommended after other non-surgical treatment options have been exhausted. Research shows that rates of GP referrals to non-surgical interventions for osteoarthritis are low, compared to higher rates of referral to orthopaedic surgeons. However, 12–20% of TKR provide no clinically meaningful benefit. A decision-assisting tool (DAT) which calculates risk of both a patient progressing to TKR and the outcome of TKR is in development. To inform development and implementation of this tool, it is important to consider patients' perspectives of what influences TKR outcome.

Objective: To understand and explore patient-identified factors that may influence outcomes of TKR. **Design:** Semi-structured interviews, designed using Federal Drug Administration Framework for Patient Reported Outcomes domains of 'evaluation', 'feeling' and 'function' and adapted reflexively, will be analysed using inductive and deductive coding to identify emerging themes. **Setting:** A public metropolitan hospital in Melbourne, Australia. **Participants:** Up to twenty purposively-selected participants who underwent TKR for OA 6–12 months prior. Exclusion criteria: under 18, interpreter required, cognitive impairment preventing study participation. **Findings:** Interviews will be concluded by early April, with findings publishable by June.

Implication(s) for practice: Findings from this study will help contextualise and refine the DAT for use in the GP setting. An effective DAT may help navigate patient- and practitioner-associated barriers to appropriate knee OA management and improve knee OA outcomes in the GP setting.

71 What next for access to primary health care for vulnerable communities? Lessons from the IMPACT Centre of Research Excellence

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Context: IMPACT, a 5-year Canadian-Australian Centre of Research Excellence used a participatory approach to address the challenges faced by vulnerable populations in accessing needed primary health care (PHC). **Objective:** to inform a research and policy agenda to improve access to PHC for vulnerable communities. **Design:** Oriented to Levesque's model for access to health care, IMPACT was delivered within community-academic partnerships in both nations. Background work (an international environmental scan, scoping and realist reviews, and reanalysis of the international Commonwealth Fund survey) informed the development and mixed method analyses of interventions addressing access to PHC care for vulnerable communities. **Setting:** Six regions in 3 Canadian provinces and 3 Australian states. **Participants:** Vulnerable communities, policy makers, managers and clinicians. **Findings:** Levesque's access model helped our community academic partnerships design and implement new approaches to improving access to PHC. We saw how prior access interventions had over-emphasised 'supply side' interventions and revealed major access inequities within and between nations. Highly sensitive to context, outcomes from our access Interventions showed the importance of mechanisms promoting patient abilities to reach and afford needed PHC. While IMPACT's measurement tools helped us understand the impact of access interventions, their complexity acted as a barrier to patient participation.

72 Supporting general practitioners and allied health professionals' involvement in primary care research: the Kardinia Health model

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Context: The Royal Australian College of General Practitioners' has long advocated for prioritising research in primary care. Australia's Medical Research Future Fund aims to build stronger partnerships between researchers, healthcare professionals and the community. However, in the real world of primary practice, healthcare professionals (HCP) lack research track records, time, support or research skills that enable them to apply for competitive research grants let alone conduct research. **Objective:** A key mission of the KH Board was to conduct research and in 2014 established the KH Research Committee chaired by the Dean of Medicine (Deakin University) with senior representation from Barwon Health, Deakin and the Western Victoria Primary Health Network. **Design:** The Board allocated seed funding to support research, matched by Deakin and then in 2017 employed a research manager. **Setting and participants:** Kardinia Health (KH) opened in 2010 as an Australian Government funded GP Super Clinic (not for profit organisation) employing 41 HCP. **Findings:** Research proposals were sought with three programs funded; 'Exploring patient perspectives on chronic disease prevention' (GP led), 'Improving the prevention of cardiovascular disease in general practice' (jointly GP/Deakin led) and a 'Fertility education program targeting lifestyle literacy in adults of reproductive age' with the HCP (practicing

dietician) subsequently enrolling in a PhD. The funding has allowed KH to employ two research fellows in addition to supplementing HCP income for their time. **Implication(s) for practice:** The KH model appears to support the development of research skills of not only practice-based HCP, but the organisation as a whole.

73 Improving access to the delivery of medical abortion in Australian general practice: what models of care work?

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Context: Despite the availability of mifepristone in Australia since 2013 there has been limited integration of Medical Termination of Pregnancy (MToP) into Australian general practice. Understanding the models of care instituted by those GP currently providing MToP can help facilitate increased access for Australian women.

Objective: To describe the models of care used by GP MToP providers that facilitate service delivery **Design:** A qualitative study will involve thematic analysis of semi-structured interviews conducted with current GP MToP providers.

Setting: General Practitioners in Australia. **Participants:** Up to 20 GPs, who provide MToP services in their practice. **Findings:** Interviewing and analysis is in progress. The presentation will outline the preliminary results describing the models of care that facilitate GP MToP service provision. This is anticipated to include information regarding the personnel involved, appointment scheduling, training undertaken, professional relationships with pharmacists, pathology and radiology providers, billing practices and referral pathways.

Implication(s) for practice: The results of this study will inform a framework for increasing GP MToP provision in Australia, which may encourage other GPs to provide MToP services in their own communities. These findings are a preliminary element in the NHMRC Centre of Research Excellence in Sexual and Reproductive Health (SPHERE)'s body of work to improve MToP delivery and access for Australian women.

74 General practice nurse interactions supporting lifestyle risk communication

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Context: General practice nurses (GPNs) are ideally placed for prevention and self-management strategies in chronic disease management (CDM). It is important to consider GPN-patient dynamics supporting behaviour change. **Objective:** To explore nonverbal (NV) communication behaviours and GPN perceptions of lifestyle risk interactions in general practice. **Design:** A concurrent mixed-methods study used non-participatory video observation and semi-structured GPN interviews. Video coding used the Nonverbal Accommodation Analysis System (NAAS) (D'Agostino and Bylund 2011) and GPN-computer eye contact time was measured. Interviews were audio-recorded and thematically analysed. **Setting:** Participants were from 15 general practices across urban and rural centres, and corporate and small business models in South Eastern Australia. **Participants:** Fifteen GPNs and 36 patients presenting for CDM consultations. **Findings:** Using the NAAS, convergent (behavioural adaptation/similarity) to divergent (behavioural distance) NV accommodation were analysed. Joint convergence was most frequent (44.0%) through laughing (66.7%), smiling (58.3%) and eye contact (50%). GPN gesturing increased during consultations ($Z = -2.245$, $P = 0.02$). Patient-GPN eye contact time significantly decreased over

the course of the consultation ($Z = -3.182, P = 0.001$). Patient speech rate results showed convergent (30.6%) or divergent (27.8%) behaviours potentially indicating GPN active listening or dominance. Overall convergent behaviours shown indicate high levels of person-centredness. Interview data identified (i) communication techniques and (ii) relational continuity as essential for effective GPN lifestyle risk communication. **Implications for practice:** Utilising and expanding person-centred interactions and behaviours by GPNs has potential to improve CDM and prevention of lifestyle risk, informing GPN education and practice improving patient outcomes.

References

D'Agostino TA, Bylund CL (2011) The Nonverbal Accommodation Analysis System (NAAS): initial application and evaluation. *Patient Education and Counseling* **85**, 33–9.

75 Nutrition care for prediabetes: a qualitative exploration of patient experiences

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Context: Prediabetes signifies an opportunity to implement dietary and other lifestyle modifications to prevent or delay the onset of type 2 diabetes (T2D). Primary care is the optimal setting for supporting lifestyle modifications but it is unclear whether individuals with prediabetes receive nutrition care in this setting. **Objective:** To explore individuals' experiences of receiving nutrition care during and following a diagnosis of prediabetes. **Study Design and Setting:** Qualitative interviews were conducted with individuals located across Australia, using a semi-structured protocol. Thematic analysis was completed independently by two researchers and all investigators agreed upon a final list of themes. **Participants:** Participants were recruited from a larger cohort study, the 3D Longitudinal Study, which is exploring how diet changes with a T2D diagnosis. Forty-five participants who reported to have been previously diagnosed with prediabetes were invited to participate. **Findings:** Four themes were identified: i) receiving a vague diagnosis of prediabetes implies it is not serious; ii) little nutrition advice is received and patients feel unsupported in their nutrition care; iii) patients' ability to improve their diet depends on individual circumstances and level of motivation; and iv) realising that prediabetes ultimately ends with T2D is challenging to accept. **Implication(s) for practice:** Participants reported they would have liked to receive more individualised nutrition support during the prediabetes stage. There is an opportunity for enhanced nutrition care practices for individuals with prediabetes and a need to support health care professionals in providing this care.

76 How to create an enduring Community of Practice to support local general practitioners: a qualitative study

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Context: Communities of Practice (CoPs) are groups of peers committed to expanding their knowledge in a common area of interest through sustained interactions and shared learning. They have been shown to be effective

tools for practice improvement and relationship-building across industries, including general practice. We trialled a region-wide CoP on diabetes care to support GPs in Fairfield, NSW, where a high proportion of the workforce is based in solo practices. **Objective:** To explore participant perspectives on the acceptability and sustainability of using CoPs to support knowledge- and relationship-building in the local GP workforce. **Design:** A qualitative design using thematic analysis of data from semi-structured interviews, evaluation surveys, and researcher field notes documenting two face-to-face CoP meetings held in September 2018. **Setting:** Fairfield, NSW. **Participants:** Eight GPs, ranging in experience from 1.5 to 25 years. **Findings:** Participants found excellent value and novelty in the trial CoP. They valued the relevance of the content to local context, including availability of regional diabetes services, and tailoring diabetes education to local patient cultures. They perceived the CoP as a rare opportunity to share diverse clinical experiences and connect with colleagues in an informal, GP-driven setting. Lack of time was identified as a major barrier to sustainability. Participants felt the CoP had potential for quality improvement by setting and working towards clinical benchmarks as a group. **Implication(s) for practice:** CoPs offer a valuable opportunity for GPs to enhance their practice by sharing experiences and building relationships within a busy, and potentially fragmented local workforce.

77 Reporting guidelines for primary care research – what are the needs?

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Context: There is increasing interest in increasing the reliability and transparency of published health research. Despite a plethora of reporting guidelines published in recent years, no specific guidance exists for the reporting of primary care research. **Objective:** To assess how often the reporting of primary care research is problematic for researchers and other end-users. **Design:** Online survey (Qualtrics), five-point Likert scales (Always – Never), open questions. **Setting:** International, interdisciplinary primary care research community in late 2018. **Participants:** 286 respondents (113 USA, 47 Australia, 14 UK, 12 the Netherlands). 153 family physicians, 158 with a doctoral degree, 204 researcher/investigators, 20 patients. **Findings:** 51 found research findings difficult to implement about half the time due to the reporting. Qualitative studies were most problematic (63 said reports were insufficient at least half the time). 56 said reports were insufficient for meta-analysis most of the time and applying research to clinical practice, policy and teaching was also a problem at times. Reports did not always outline the theory informing the research or patient involvement. Contextual information about patients, practitioners, and health systems were emphasised as important issues. **Implication(s) for practice:** These initial results demonstrate unmet needs that may be met by the development of primary care research reporting guidelines. Our international group is working to develop Consensus Reporting Items for Studies in Primary Care.

78 What makes general practice consultations positive for low-income patients with obesity? Using video recording to improve our understanding

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Context: The National Patient Experience Survey shows fewer low-income patients report a good consultation experience compared to those in higher income groups. This is compounded in patients with stigmatised conditions, including obesity. Despite these population differences, patients within these groups do identify GPs whose consultations leave them feeling respected, having been listened to, and enough time spent with them.

Objective: To investigate low-income patients' perception of a good consultation experience with a focus on obesity. **Setting:** General practices in low-income areas of Melbourne. **Participants:** Low-income patients with obesity who report a good consultation experience. **Design:** Mixed methods study informed by principles of Appreciative Inquiry and by prior Dutch work exploring consultations for Medically Unexplained Symptoms.

Practices will be recruited from the MonReN database with attention to a diversity of practice location and size. GPs will video record a day of consultations, and patients will complete surveys (pre/post) to identify those with low-income, obesity and a positive consultation experience. Then we will interview low-income patients with obesity using the video recording as a prompt. The patient will be asked to reflect on how and why the consultation was positive. The patient interviews will then be transcribed and analysed using a constructivist grounded theory approach. **Findings:** NA. **Implication(s) for practice:** The findings will inform healthcare provider training for working with low-income patients and those living with stigmatised conditions like obesity. The method we are piloting will also inform our future work in characterising high quality, effective GP consultations.

79 Communicate primary care study: investigating the use of Aboriginal interpreters in Top End primary care

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Context: There are over 100 Aboriginal languages and dialects spoken in the Northern Territory. Low uptake of Aboriginal interpreters has been demonstrated in a tertiary hospital (Ralph *et al.* 2017) but current use of Aboriginal interpreters in the primary care environment is unknown. **Objectives:** 1. Describe current use of the Aboriginal Interpreter Service in primary care. 2. Describe health professionals' perceptions of using Aboriginal interpreters in primary care. **Design:** The study will use a multi-method approach: 1. Retrospective observational analysis of Aboriginal Interpreter Service primary care bookings data from 2000–2018. 2. Cross-sectional online survey of individual health professionals followed by focus groups at invited primary care services. **Setting:** The Northern Territory Government Top End Health Service region, which incorporates Darwin, East Arnhem and Katherine regions. Primary care services within this region include Aboriginal Community Controlled Health Organisations, Northern Territory Government clinics and privately-operated clinics. **Participants:** Health professionals within the target setting. **Findings:** It is expected that data will be presented demonstrating baseline use of Aboriginal interpreters in Top End primary care (objective 1). Preliminary survey data may also be presented to assess factors such as barriers and enablers to this use (objective 2). **Implication(s) for practice:** To contribute to improved cultural safety and effective health communication for Aboriginal patients accessing Northern Territory primary care services. Findings may inform future interventions to address barriers identified.

References

Ralph AP, *et al.* (2017) Low uptake of Aboriginal interpreters in healthcare: exploration of current use in Australia's Northern Territory. *BMC Health Serv Res* **17**, 733.

80 Delivering whole person care in general practice: what makes a difference?

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Context: Commitment to providing 'whole person care' (WPC) is a core value of general practice, and relevant in the context of increasing multimorbidity. Our research established that general practitioners (GPs) view WPC as an approach that considers patients as multidimensional persons; has length, breadth and depth of scope; is founded upon the doctor-patient relationship; and occurs within the context of a health care team. However, previous authors have suggested that GPs' commitment to WPC may not be reflected in practice. It is therefore important to define factors that may influence WPC provision. **Objective:** To determine Australian GP's views on factors that affect WPC provision. **Design:** Qualitative approach: Semi-structured interviews, conducted to theoretical saturation and analysed using grounded theory methodology. Transcripts were independently coded by at least two authors and consensus achieved. **Setting:** Australian general practice. **Participants:** Nineteen GPs and one GP registrar from six Australian states/territories. **Findings:** Australian GPs identify multiple factors that influence their provision of WPC. These include overarching factors (time, perceived value of WPC); and factors related to immediate (interpersonal GP–patient dynamic); local (practice structure; relationship between care providers) and broader (health system structure) contexts of care. **Implication(s) for practice:** These findings have relevance to individual GPs, practices, and health policy makers, as they identify factors that GPs believe act at each of these levels to affect WPC provision. They provide a framework to critically evaluate current and proposed practices, and develop measures to support quality WPC.

81 Designing a culturally appropriate intervention for new migrant mothers

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Context: The Canterbury region in Sydney is highly culturally and linguistically diverse, with 45% of residents speaking a non-English language at home. Services within this region have identified that non-English speaking mothers are less engaged with parenting programs. The first 2000 days of a child's life are critical for future health. As such, engaging non-English speaking migrant families with parenting groups is an important equity issue. **Objective:** We sought to re-design the recruitment processes, structure and content of parenting groups

delivered within Sydney Local Health District for two target groups – Bangla- and Mandarin-speaking women. This project is funded by Healthdirect Australia. **Design:** The intervention was developed in collaboration with the Child and Family Health Nursing Service from Sydney Local Health District and with Bangla- and Mandarin-speaking community members. **Setting:** The new parenting groups will be delivered in Campsie and Lakemba Early Childhood Health Centres (within Sydney Local Health District). **Participants:** Bangla and Mandarin speaking new mothers and grandmothers with a 0–6 month old baby will be invited to attend the new parenting groups. **Findings:** Working with the Child and Family Health Nursing Service and members of the target community enabled a cultural re-design of current parenting program recruitment processes, structure, delivery and content for Bangla- and Mandarin-speaking women. **Implication(s) for practice:** Working in partnership with the Child and Family Health Nursing Service and the community increases the sustainability of this intervention. If the parenting groups and recruitment processes are successful, they have the potential to be delivered on an ongoing basis.

82 Health Care Homes and whole person care: a qualitative study of general practitioners' views

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Context: Commitment to providing ‘whole person care’ (WPC) characterises general practice. This is relevant as primary healthcare systems internationally undergo reform in response to rising multimorbidity. The Australian government has recently extended their ‘Health Care Homes’ (HCHs) pilot, which reforms primary care for chronic disease. This pilot has evoked mixed responses from general practitioners (GPs). **Objective:** To determine how Australian GPs anticipate the government’s HCHs model will affect WPC provision. **Design:** Qualitative approach: Semi-structured interviews analysed using thematic analysis. Transcripts were independently coded by two authors and consensus achieved. **Setting:** Australian general practice. **Participants:** Nineteen GPs and one GP registrar from six Australian states/territories, including seven participants from practices associated with the HCHs trial. **Findings:** Participants were largely supportive of the concept underlying HCHs, but expressed guarded to negative views about the current trial. They believed the HCH concept could support WPC by increasing continuity, flexibility and multidimensionality of care, and by encouraging team-based care. There were mixed views regarding how shifting to a practice team-based approach would affect the therapeutic relationship underpinning WPC. Participants felt that some consequences of capitation funding, and HCH’s limitation to chronic disease patients, impeded WPC. They also identified HCH implementation struggles related to inadequate funding, practice restructure and technological issues. **Implication(s) for practice:** These findings provide timely and relevant primary evidence of Australian GPs’ views on HCHs and their impact on WPC. They enable evaluation and modification of the HCH pilot to support WPC while it is being piloted, prior to national roll-out.

83 A qualitative study exploring educator perceptions on teaching racism, privilege and cultural self-reflexivity within a general practice teaching program

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Context: General Practitioner (GP) educators have a central role in effective implementation of undergraduate Indigenous health curricula, however few studies have explored their preparedness to teach challenging content including racism, privilege and cultural self-reflexivity. These are considered core capabilities within the Aboriginal and Torres Strait Islander Health Curriculum Framework, a Commonwealth Department of Health document that provides curriculum implementation guidance for higher education providers. Research suggests these particular cultural capabilities are inadequately represented in general practice teaching programs.

Objective: To explore the barriers and enablers for GP educators in the effective delivery of cultural capability curricula. **Design:** Qualitative semi-structured interviews. Data analysis undertaken using grounded theory methodology. **Setting:** Department of General Practice, Monash University, Australia. **Participants:** Up to 20 participants will be recruited in early 2019 from the pool of educators who teach into the Year 4C General Practice program. **Findings:** We aim to identify: current approaches to, and gaps in, delivering content related to racism, privilege and cultural self-reflexivity in general practice; educators' strengths and challenges; areas of need for professional development or resource support. **Implication(s) for practice:** With a significant proportion of Aboriginal and Torres Strait Islander patients reporting experiences of racism within the health care system including general practice, and the known negative impacts of interpersonal and institutional racism on health outcomes, it is imperative that medical graduates are skilled in cultural self-reflexivity and anti-racist practice. This study will provide new, evidence-based insights for improving cultural capability education in general practice contexts.

84 Safer Prescribing And Care for the Elderly (SPACE): a cluster randomised controlled trial in general practice

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Context: High-risk prescribing, adverse drug events, and avoidable adverse drug event hospitalisations are increasingly common as more people are taking more medicines for multiple long-term conditions. In New Zealand, most on-going prescribing occurs in general practice. The most effective, cost-effective, and practical approach to safer prescribing in routine practice is not yet known. **Objective:** To test the effect of the Safer Prescribing And Care for the Elderly (SPACE) intervention on the rate of high-risk prescribing of non-steroidal anti-inflammatory and antiplatelet medicines, and related adverse drug event hospitalisations. SPACE comprises an audit to identify and generate for each GP a list of patients with high-risk prescribing, and a one-on-one session for each GP with a clinical advisory pharmacist to go through their list and for each patient indicate in a tick-box intended action (letter to patient, no action, change medicines). **Design:** Cluster randomised controlled trial. The clusters are general practices. Practice prescribing data at baseline, 6 months, and 12 months are compared.

Setting: General practices in the Auckland and Northland regions of New Zealand. **Participants:** Patients identified as having high-risk prescribing. **Findings:** Recruitment, intervention delivery and data collection are on-going. **Implication(s) for practice:** This study addresses an important translational gap, testing an intervention

designed to prompt medicines review and support safer prescribing in routine practice. If SPACE is shown to be effective and cost-effective it could be rolled out nationally and used routinely in practices to support safer prescribing.

85 Writing for publication

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Aim and intended outcome/educational objectives: Publishing your research is an important part of research. To publish, researchers need to know how to prepare a logical, structured scientific article. Writing skills are also important for writing research grant proposals, ethics applications and reports. This workshop aims to develop participants' knowledge and skills for preparing scientific papers and to develop generic writing skills. Participants will get basic information and practical advice on how to prepare a scientific paper and how to choose a journal. Participants will learn how to structure their material logically by answering the questions: Why was this important? (Rationale), What is already known? (Background), What knowledge gap does this research fill? (Aim), What did you do and how? (Methods), What did you find? (Results), and So what? (Discussion). Participants will also learn how to use consistent syntax. **Format:** There will be a short interactive presentation, including tips on avoiding common pitfalls and how to choose the most suitable journal for your work, followed by an interactive session. **Content:** Participants will work together in small groups identifying errors in a provided work and will have the later opportunity to practise rewriting this. The workshop will conclude with whole group report-back and discussion.

86 Improving patient care through enhanced access to occupational therapy services

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Context: The primary care sector is a complex dynamic multidisciplinary health care sector that has undergone significant growth and policy reform in recent years. Occupational Therapy Australia established a Primary Health National Reference Group to review current evidence in the field and provide recommendations for optimal occupational therapy practice. **Objectives:** To critically appraise the role of occupational therapists (OTs) in the sector in line with contemporary evidence in the field, client perspectives and expert opinion. To explore innovative and emerging approaches to OT in the primary care setting. **Design:** An evidence based critical appraisal of literature from both Australia and internationally. **Setting:** OT practice in the home or in community-based settings such as in general practices, other private practices, community health, local government, and non-government service settings. **Participants:** Older adults (> 65 years) and adults with chronic and/or progressive conditions. **Findings:** There is a growing body of evidence supporting the cost-effectiveness of early OT interventions in minimising the impact of chronic and/or progressive illness, preventing complications (e.g. falls prevention) and reducing unnecessary hospitalisations. **Implication(s) for practice:** OTs have a valuable service to offer older adults and adults with chronic and/or progressive conditions in the primary care setting. Through

their role in chronic disease management, OTs can help to ensure that resources are used effectively, and a diverse range of services are available to clients. There is enormous scope for innovative OT practice in this growing sector with early identification of need and transparent referral pathways.

87 Managing chronic disease in primary care: what do occupational therapists do?

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Context: Supporting people to manage and live with chronic disease is a key role for occupational therapists. Traditionally based in tertiary care settings, a growing number of occupational therapists now work in primary care. **Objective:** To examine occupational therapy practice in Australian primary care settings, focusing on chronic disease management. **Design:** A cross-sectional survey and secondary analysis of Australian Medicare Benefits Schedule (MBS) data. Descriptive statistics were used to analyse: (a) survey data regarding occupational therapy service delivery and (b) MBS data regarding in occupational therapy use between the financial years of 2004/2005 and 2017/2018. **Setting:** Australia. **Participants:** Australian occupational therapists; MBS chronic disease management item number 10958 (occupational therapy). **Findings:** Thirty two occupational therapists completed the survey. Of these, 11 participants were registered with MBS and provided a range of services including equipment prescription, chronic disease management, home safety assessments, and cognitive screening. Since their introduction in 2004, the use of occupational therapy Chronic Disease Management items has increased substantially from 1510 consultations in 2004/2005 to 75677 in 2017/2018, and are accessed by males (58.7%) more than females (41.3%). Children aged between 5 and 14 years accounted for 60.6% of all occupational therapy consultations. There is a marked discrepancy in use of occupational therapy items between states. **Implication(s) for practice:** This analysis highlights gaps and opportunities to further develop the occupational therapy role in primary care. Occupational therapists, working as part of the multidisciplinary team, can prevent disability and promote health and participation for people living with chronic disease.

88 Dangerous ideas

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Climate change: how will primary care respond? Climate change is the primary existential threat for the health and wellbeing of the global community. In respect to this challenge, all communities must consider their role in mitigating and adapting to climate change. Primary care as a community of practice must come to the table and engage with this issue, and there is little time to spare. Australia is a dry continent vulnerable to the health threats of climate change, including extreme weather events, increasing heat, drought and famine, pollution and changing patterns of infectious disease (WHO 2015). Patients and communities are experiencing both physical and mental distress induced by climate change, and this will increase with further temperature rise. Given the inclement effects climate change will have on human health, environmental sustainability and reduction of carbon emissions

is a public health imperative across all industries. The year 2030 was identified by the Intergovernmental Panel on Climate Change (IPCC) as the deadline for implementation of global carbon neutrality in order to preserve a future climate that gives the global population the best opportunity for a healthy life (IPCC 2018). If we are to limit global average temperature increases to 1.5°C, the least bad option for the global climate anticipated by the IPCC, we must achieve net zero global carbon emissions over the next decade. Optimally, this will begin with large scale reductions as soon as possible to reduce the cumulative greenhouse gas burden during the next decade. It can be anticipated that there will be economic penalties for business activities that generate carbon emissions or excess waste, whether these penalties occur at the state, federal or international level (Drew 2015). Transition to sustainable modes of energy, water and waste use will help keep general practices economically sustainable. The carbon footprint of Australian health care comprised an estimated 7.2% of Australia's carbon footprint in financial year 2014–15 (Malik *et al.* 2018). Most research regarding mitigation of emissions and sustainability in the Australian healthcare sector has been regarding hospitals to date. We need to know more clearly how general practitioners are understanding and responding to the issue of environmental sustainability at the practice level. This is a public health issue interwoven with how we connect to our businesses, patients and community, and there are many potential health co-benefits from embracing a positive response to climate change. As health professionals, one can argue that there is a moral obligation for general practices to reduce their contribution to the local and global health burden of climate change. As participants in a carbon-based economy, we are part of the problem – but we can choose to be part of the solution. In March 2019 WONCA emphasised the cumulative power of individuals working together to reduce the impact of climate change and the importance of primary care activity in this arena (WONCA 2019). There are strong health, environmental, economic and moral imperatives for reducing the carbon footprint of Australian primary care. What will it take to decarbonise general practice?

References

- Intergovernmental Panel on Climate Change (2018) Global Warming of 1.5°C, an IPCC Special Report, Summary for Policymakers. Available at http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf
- Drew G (2015) Carbon crisis: Systemic risk of carbon emission liabilities. Beyond Zero Emissions. Available at <http://media.bze.org.au/fossileconomy/CarbonCrisis.pdf>
- Malik A, *et al.* (2018) The carbon footprint of Australian health care. *The Lancet Planetary Health* 2, e27–e35. Available at [https://www.thelancet.com/pdfs/journals/lanplh/PIIS2542-5196\(17\)30180-8.pdf](https://www.thelancet.com/pdfs/journals/lanplh/PIIS2542-5196(17)30180-8.pdf)
- World Health Organisation (2015) Climate and Health Global Overview. Available at http://apps.who.int/iris/bitstream/handle/10665/208855/WHO_FWC_PHE_EPE_15.01_eng.pdf
- WONCA (2019) Declaration Calling for Family Doctors of the World to Act on Planetary Health. Available at <https://www.globalfamilydoctor.com/site/DefaultSite/filesystem/documents/Groups/Environment/2019%20Planetary%20health.pdf>

89 Giving Asthma Support to Patients (GASP) program evaluation: early findings

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Context: Asthma affects over 2 million Australians and it has been a challenge to provide ongoing structured asthma care in general practice. GASP is an educational program and computerised decision support tool

developed in New Zealand and modified for the Australian context by Asthma Australia. GASP aims to upskill practice nurses (PN) to undertake a structured asthma assessment, provide asthma education and follow up.

Objectives: To assess whether the use of GASP program improves asthma outcomes; and to assess the acceptability, feasibility and sustainability of the GASP program in Australian general practice. **Design:** Pre-Post mixed methods design. Quantitative measures: rate of exacerbations, measures of asthma control including rate of unplanned health service use, and measures of quality of asthma treatment. **Setting:** General practices in Western Sydney and the Illawarra. **Participants:** Adults and children with asthma. Qualitative evaluation involves semi-structured telephone interviews with a purposive sample of patients, PN and GPs. **Findings:** The project is in progress with 29 practices. In total 285 patients (mean age 38, range 6 to 83 years, 63.5% females) had a baseline GASP consultation. So far only about half have returned for one or more follow-up GASP consultations. Quantitative findings and early findings from interviews will also be presented. **Implication(s) for practice:** GASP requires substantial PN training and changes to the PN role to provide the autonomy and time to use the GASP tool. The rate of return for planned consultations has been sub-optimal and the reasons for this are being explored in the qualitative evaluation.