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Recommended citation

The Royal Australian College of General Practitioners. GP20 research abstracts. East Melbourne, Vic: RACGP, 2021.

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ABN: 34 000 223 807
Published 2022

We acknowledge the Traditional Custodians of the lands and seas on which we work and live, and pay our respects to Elders, past, present and future.

ID-3356

Contents

A qualitative exploration of GP registrar burnout

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Background:

While theoretical models of medical trainee wellbeing have been the focus of much research, less is known about stakeholders' perspectives of what burnout involves. The present study sought to explore the nature and causes of burnout, as perceived by Australian General Practice Registrars.

Method:

Semi-structured interviews and focus groups were held with 47 registrars, supervisors, medical educators and program training advisors. Questions considered their understanding of burnout in GP registrars, causal factors and possible intervention strategies. Interviews and focus groups were audio recorded, transcribed and thematically analysed.

Results:

Descriptions of burnout fell under seven domains, primarily related to disengagement and impaired performance. Stakeholders noted that detection of burnout can be masked by non-specific symptoms such as flat affect and relational withdrawal. Key causes included resource deficiencies (e.g. low confidence, unsupportive practice culture), a high load of professional and personal demands, and aspects related to the medical culture itself (e.g. perfectionism, self-sacrifice). Subgroups of trainees experienced extra stressors (e.g. exams, the adjustment from the hospital setting to general practice). Recommended strategies considered individual resources (e.g. setting boundaries), the practice environment (e.g. registrar-supervisor relationship), training organisation requirements (e.g. empowering trainees), and changes to the broader medical system and culture (e.g. challenging stigma).

Discussion:

Our findings help to contextualise existing models of wellbeing and burnout. Whilst these findings have specific application to Australian GP registrar training they are also broadly applicable to the Australian GP context more generally.

Implications for practice:

The experience of GP registrar wellbeing and burnout is highly complex, and individualised. In addition to the need for registrar self-care, practices and training organisations also need to implement strategies to support registrars' wellbeing.

Agreement between clinician- and model-generated melanoma risk

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Background:

Improvements in clinical information systems has seen a growing use of risk prediction models in chronic disease management. For example, cardiovascular risk prediction models have been adopted into systems to assist with the risk stratification of patients and subsequent management of hypertension. We identified 28 published melanoma risk prediction models in a systematic review however none have been integrated into clinical systems to assist clinicians in estimating melanoma risk. We aimed to assess whether unassisted clinician-generated melanoma risk predictions agree with model-generated melanoma risk predictions.

Method:

We used a cross-sectional design. Participants were recruited through “GPs Down Under”, a Facebook group comprising over 6000 authenticated general practitioners (GPs) from Australia and New Zealand. GP participants completed an online survey with questions on: (1) their overall melanoma risk in both absolute and relative terms, and (2) melanoma risk factors as identified in a validated melanoma risk prediction model to enable the calculation of absolute and relative risk. The relation between clinician- and model- generated melanoma risk prediction (both absolute and relative melanoma risk) was assessed using Pearson correlation coefficients and correlation plots.

Results:

136 of the 150 GP respondents completed the online survey between June to August 2019. The Pearson correlation coefficient for clinician- and model-generated melanoma risk prediction was 0.20 (95% CI 0.03 to 0.36) for remaining lifetime absolute melanoma risk and 0.60 (95% CI 0.48 to 0.70) for relative melanoma risk. There was a tendency for participants to overestimate risk when it is low, and underestimate risk when it is high.

Discussion:

This is the first study to compare clinician-generated melanoma risk assessments against a well-validated and prospectively evaluated model. It showed poor correlation between clinician-reported against model-generated melanoma risk.

Implications for practice:

Further work is needed on understanding the clinical impact of risk discordance.

An educational intervention on lesbian, gay, bisexual, transgender, intersex & queer health

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Background:

Studies in Australia and internationally suggest that there is insufficient teaching on LGBTIQ health in medical training. A 2017 survey of medical school curriculum administrators in Australia and New Zealand indicated most (60%) of medical schools dedicated 0-5 hours to LGBTIQ health in pre-clinical years. This study aims to evaluate a 3-hour webinar on LGBTIQ health for medical students.

Method:

Prospective pre- and post- intervention survey for medical students in clinical years of training. Participants were asked to rate their responses along a 5-point Likert scale addressing statements relating to LGBTIQ health.

Results:

A total of 177 medical students across Victoria attended the webinar to completion; 141 (80%) students completed the pre-webinar survey; 101 (57%) completed the post-webinar survey. There was a significant increase ($p \leq 0.001$) in self-reported confidence in five out of five items, with a large effect size ($d \geq 0.8$); a significant ($p \leq 0.001$) increase in positive attitudes in five out of nine items, with a medium effect size ($0.5 \leq d \leq 0.8$); and a significant ($p < 0.001$) increase in knowledge in five out of ten items, with a medium effect size ($0.5 \leq d \leq 0.8$).

Discussion:

In the context of COVID-19, a significant proportion of medical education in general practice has transitioned to online delivery. The results of this evaluation suggest that a webinar format is a useful education tool, with a positive impact on student confidence and attitudes. Further work is required to adequately evaluate the impacts on student knowledge and practical clinical skills.

Implications for practice:

The results of this study has practical implications for GP supervisors and medical educators in utilising online platforms as a way of delivering medical education for LGBTIQ populations.

Antimicrobial Stewardship - Co-designing patient information sheets

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Background:

Antibiotic resistance is a threat to global health, and inappropriate antibiotic use can be associated with adverse effects. Developing tools to encourage better communication between patients and general practitioners may reduce expectation for, and inappropriate use of, antibiotics. Co-design is a collaborative approach that may increase the usability of an end-product.

Method:

We used a co-design methodology to develop patient information sheets on common infections to address antimicrobial stewardship (AMS) in primary care. Three co-design sessions were conducted with five primary care providers (three GPs, one practice nurse, one pharmacist) and six consumers between October 2019-March 2020 in Melbourne. Participants critiqued existing AMS tools, such as decision aids and information sheets, identified key elements required in information sheets and optimised resulting prototypes. Transcripts of video and audio recordings, field notes, images and written responses, were analysed thematically.

Results:

Primary care providers and consumers prioritised information such as when to see a doctor, management options, symptoms, danger signs and cause of infection differently, but they agreed content should be communicated in a plain, concise and logical manner, using inclusive and simple language (suitable for a grade 5 level). Illustrations were deemed important in enhancing information, and the sheets should be single-sided and A4-sized, appropriate for use before, during or after consultations.

Discussion:

Co-design provided a collaborative forum to systematically design and develop products that meet the needs of both clinicians and consumers. This resulted in the development of seven patient information sheets on common infections that encourage discussion of these infections, conservative management options and appropriate antibiotic use in primary care.

Implications for practice:

The patient information sheets are currently being piloted to assess their usability and acceptability in eight general practices across metropolitan and rural Victoria. They will be revised (subject to feedback) before being made available more broadly.

Audit of denosumab administration in general practice

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Background:

Osteoporosis represents a significant health burden to individuals, communities and health care providers. This burden extends to health care expenditure with the cost of osteoporotic fractures from 2013 to 2022 forecast at $2.2 billion (Sanders et al., 2017).

The Royal Australian College of General Practitioners (RACGP) recommends denosumab for the management of osteoporosis, which is administered as a 60mg subcutaneous injection at six month intervals (RACGP, 2010).

Method:

A large general practice in Perth, Western Australia, was audited to assess what proportion of patients prescribed denosumab for management of osteoporosis received injections at the interval recommended by the RACGP guidelines. Three injections per 50 patient cases were audited between October 1, 2018 to April 30, 2020. The latter two injections were assessed for timeliness.

Results:

26 patients (52%) had two serial denosumab injections administered within the recommended time interval.

Discussion:

The audit identified a shortfall of appropriately timed denosumab injections to patients with osteoporosis attending the general practice. Delay or discontinuation of denosumab is associated with rebound bone resorption and increased risk of vertebral fracture (Cummings et al., 2018).

Practice group discussion identified deficiencies in patient recall, patient complacency regarding treatment, and an increased prevalence of cognitive decline among the patient cohort as contributing to medication administration delays.

Changes planned for implementation before re-audit include coding injection administration on existing software to assist with data collection, sending reminders at five months with prescription, and sending follow-up reminders if patient hasn't attended.

Implications for practice:

The findings reflected current challenges associated with osteoporosis management in primary health care (Naik-Panvelkar et al., 2020). The audit offers an assessment of denosumab use with findings transferrable to other metropolitan centres.

References:

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Cardiovascular disease risk assessment in the Australian primary care setting

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Background:

In a primary prevention setting, Australian guidelines recommend that all adults aged 45 years and over have their 5-year cardiovascular disease (CVD) risk assessed. While recommending calculated risk assessment, the guidelines also identify clinical characteristics that indicate an individual may be deemed 'clinically determined high risk' without further assessment. This research aims to investigate the proportion of Australians with the appropriate CVD risk factors recorded to enable absolute CVD risk assessment and the proportion that are at clinically determined high risk.

Method:

MedicineInsight is a large-scale national GP data program extracting and collating longitudinal, de-identified patient health records from clinical information systems. The population was restricted to individuals; without prior CVD, aged 45-74 years, with a minimum of 3 visits in the prior 12 months (n=172,366).

Results:

Of this population; 65% had a TC:HDL ratio recorded, 85% had a systolic blood pressure (SBP) measurement, and 59% had both, within an appropriate time frame. When individuals were assessed against 'clinically determined high risk' criteria; 6% of patients had a TC greater than 7.5 mmol/L, 5.4% had a SBP above 180 mmHg and 0.3% had an eGFR of 45 mL/min or less. Diabetics with microalbuminuria, or aged 60 years and older, made up 4 and 7.3% of the population respectively. Overall, 18.5% of individuals would be classified as 'clinically determined high risk' based on recorded data.

Discussion:

A substantial proportion of eligible individuals do not have sufficient CVD risk factor data recorded to enable formal risk screening. A significant number of patients may not require a full absolute CVD risk assessment and should be automatically classified and managed as high risk.

Implications for practice:

Overall, a significant number of Australians may be at 'clinically determined high risk' and should be automatically managed with appropriate therapy.

Caring for country as primary health care

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Background:

The wellbeing of Aboriginal Australians is enhanced by stronger relationships with Country and greater involvement in cultural practices, and Aboriginal people in more remote regions have greater access to their Country and higher levels of wellbeing. However, this does not translate into improved health outcomes, and Aboriginal Australians in more remote regions suffer greater morbidity and mortality than Aboriginal people in non-remote areas, and other Australians.

The Interplay research project explored how Aboriginal Australians in remote regions experience high levels of wellbeing despite poor health statistics, and how services could more effectively enhance health and wellbeing.

Method:

We worked with Aboriginal Australians in remote regions to develop a wellbeing framework. This comprised interplaying government priorities of education, employment and health, and community priorities of culture and empowerment. To explore these priorities Aboriginal community researchers recruited participants from diverse Aboriginal organizations, including art, business development, education, employment, health and municipal services. Fourteen focus groups and seven interviews, involving 75 Aboriginal and ten non-Indigenous service providers and users were conducted, then analyzed through themes of the wellbeing framework.

Results:

Research participants highlighted Aboriginal land management as a source of wellbeing, through empowerment and strengthened identity, access to traditional foods, enjoyable physical activity, and escape from communities where alcohol is problematic. Aboriginal land management programs work across different sectors and provide comprehensive primary health care.

Discussion:

Developing primary health care to reflect distinctive health needs of Aboriginal Australians will enhance their health and wellbeing, which includes their communities and Country. Aboriginal land management consolidates aspects of comprehensive primary health care, providing both clinical benefits and wellbeing, and can provide a focus for service collaboration.

Implications for practice:

Radically different service provision, focusing on the needs of Aboriginal communities would bring together employment, education and health services in Caring for country and enhance wellbeing.

Characteristics of patients aged 50–74 years ordered an FOBT in general practice

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Background:

Bowel cancer imposes a large health burden in Australia, and screening reduces morbidity and mortality. Screening is currently suboptimal at 41% and to ensure effectiveness of the National Bowel Cancer Screening Program (NBCSP) participation needs to increase. In order to understand testing outside the NBCSP for patients aged 50–74 who were eligible for the NBCSP, we explored their sociodemographic characteristics, and the indications for and outcomes of general practitioner (GP)-ordered faecal occult blood tests (FOBTs).

Method:

A cross-sectional study was conducted using de-identified patient data from 441 practice sites in MedicineInsight, an Australian general practice database, from 1 January 2018 to 31 December 2019.

Results:

Of the 683,625 patients eligible for the study, 45,771 (6.7%) had at least one GP-ordered FOBT. The likelihood of having a GP-ordered FOBT was higher among patients aged 55–59 years (7.3%) than 70–74 years (5.8%), among Indigenous (9.1%) than non-Indigenous (7.0%) and among residents of New South Wales (9.1%), South Australia (8.9%) or Victoria (7.8%) than other states/territories. About 15% of the patients had an FOBT ordered for screening. The outcomes of the GP-ordered FOBT included specialist referral (34.0%), diagnoses such as polyps (2.2%), gastro-intestinal tract inflammatory condition (1.3%) and haemorrhoids (0.9%).

Discussion:

Our findings describe characteristics of patients with a GP-ordered FOBT and highlight population sub-groups that can be targeted to increase uptake of the NBCSP. 'Screening' was the reason for 1 in 7 patients with a GP-ordered FOBT.

Implications for practice:

Integrating the NBCSP with general practice could improve participation in the screening program. GPs could play an active role in providing information about the NBCSP and how to access the NBCSP test kits to patients who require screening.

Community pharmacist referral to GPs for suspected antibiotic-requiring infection. Pilot study.

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Background:

Interventions to minimise antibiotic use have focused on the GP and patient behaviour rather than the community pharmacist (CP). While CPs often refer patients to GPs for assessment, there is limited research exploring CP referrals rates to GPs for suspected antibiotic-requiring infections.

Method:

CPs and GPs were recruited independently using convenience sampling. CPs completed a prospective survey of 20 consecutive minor ailment encounters recording patient gender, age, referral reason and comments (if any). GPs also completed a prospective survey of 20 consecutive patient consultations, recording patient age, gender, reason for visit, and origin of patient referral including self-referral.

All data were analysed descriptively. Generalized estimating equations, multivariable logistic regression were used to investigate factors that may be associated with CP referral rates.

Results:

Nineteen CPs representing 466 minor ailments, and 19 GPs representing 394 consultations were recruited.

CPs referred 16.5% (95%CI 12.2-21.1) of all minor ailments for a suspected antibiotic-requiring infection, referring most patients to a GP (80.5%, 72.7-88.9). Overall, CPs referred 37.1% (32.7-41.7) of minor ailments.

None of the consultations for infection in GP data were documented as being referred by a pharmacist; majority were self-referred (77.3%; 69.3-86.1). Only 4 pharmacist referrals were documented overall.

CPs were more likely to refer patients in remote areas (OR 2.8, 1.6-5.0) and those 2-12 years old (OR 2.8, 1.2-6.6) for a suspected antibiotic-requiring infection.

Discussion:

CPs refer 1 in 6 minor ailment patients for suspected antibiotic-requiring infections; however, the appropriateness of these referrals is unknown. On the other hand, most GP consultations for infection were documented as self-referrals. Both provide potential points of intervention.

Implications for practice:

Our data suggests new opportunities for CPs to help minimise unnecessary GP visits for infection; however, there is a need to explore the mismatch between CP referral rates and GP-reported referral source.

Consider ALL possibilities: A subtle presentation of Acute Lymphoblastic Leukemia

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Background:

Acute lymphoblastic leukaemia (ALL) is the most common form of paediatric cancer. Despite this, nonspecific symptoms are common and only high levels of suspicion lead to diagnosis. Prompt diagnosis leads to early intervention and better outcome. This can pose a key challenge in clinical practice.

Case:

A 4-year-old boy presented with left-sided dull neck pain on lateral flexion to the right without a traumatic history. Upon further questioning, it was noted he had been getting night sweats in the last few months. Examinations revealed a single tender cervical lymph node on the left lateral neck. Investigations showed neutropenia, leukopenia, low haematocrit and elevated ferritin. Haemoglobin was on the lower extreme of the reference interval, and LDH at higher extreme of reference interval. Ultrasound showed an enlarged but normal appearing lymph node. These non-specific findings raised suspicion, so the local paediatric team was contacted. Subsequent lymphocyte subsets revealed an elevated blast population. Definitive diagnosis of ALL was made with bone marrow biopsy and chemotherapy was commenced immediately.

Discussion:

Symptoms of ALL such as malaise, bruising and bone pain are often not present on initial history. This extends to examination findings of fever and organomegaly. Clinicians should therefore be vigilant and act on suspicious clinicals signs early by taking a broad history and examination. Having pathology results within the normal reference intervals can be misleading so they should be interpreted as a whole to lead to a pathogenic pattern.

Implications for practice:

Malignancy is an uncommon presentation in the paediatric setting but one that clinicians should not miss. This case reiterates that clinicians should maintain a high level of suspicion, particularly when investigation findings are at extreme ends of reference intervals. Importance should be placed on red-flag ‘B symptoms’. Urgent direct communication with the local paediatric team is essential in escalating patient care.

Contextual factors influencing antibiotic prescribing: A discrete choice experiment in GP registrars

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Background:

Few studies have explored how prescribing behaviours may change as the consequences of antibiotic resistance worsen. We conducted a discrete choice experiment to measure how contextual factors may influence antibiotic prescribing of general practitioner (GP) registrars under different scenarios.

Method:

Initial identification of attributes was informed by a systematic literature review of previous discrete choice experiments and the experience of the study investigators. A consensus group was established to confirm the attributes and select levels for the analysis. The discrete choice experiment employed a forced choice task based on hypothetical prescribing scenarios for respiratory infections, with attributes relating to contextual factors including levels of antimicrobial resistance and the consequences for treatment, presence or absence of incentives, and the support of supervisors for conservative prescribing. Conditional logistic regression was conducted to determine the impact of the attribute levels on choice of scenario for prescribing.

Results:

The survey was sent to 754 GP registrars, of whom 470 (62.3%) provided complete responses to the discrete choice experiment. All attributes had a significant impact on GP registrar choice of scenario. Level of antibiotic resistance in the community was the attribute with the highest impact, followed by PBS authority requirement; whether supervisor advocates for low antibiotic prescribing; and the presence of a payment provided to practices that meet a benchmark.

Discussion:

The responses of GP registrars indicate antibiotic resistance in the community has a greater impact on intention to prescribe than any other factors measured.

Implications for practice:

The findings highlight the importance of maintaining GP awareness of levels of antibiotic resistance and targeting antimicrobial stewardship messages using evidence of community resistance

Cost-effectiveness of field treatment for actinic keratosis

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Background:

Multiple actinic keratoses (AKs) (field change) in older patients are commonplace in general practice. Current guidelines do not offer clear recommendations regarding first line therapy. Given their high burden of disease, there is merit in determining the most cost-effective treatment for AKs to guide the utilisation of healthcare resources.

Method:

A cost-effectiveness analysis was conducted to determine which therapy for field change on the head area is the most cost-effective at 12-months post-treatment when comparing 5% 5-fluorouracil cream, 5% imiquimod cream, 0.015% ingenol mebutate gel and methyl aminolevulinate photodynamic therapy. A decision tree was modelled from the patient perspective, using TreeAge Pro. Efficacy data was derived from a single-blinded, multi-centre, prospective randomised control trial. Cost data was derived from Australian dermatology clinics and pharmacies. One-way and probabilistic sensitivity analyses were conducted to evaluate the robustness of the results.

Results:

5-fluorouracil was the most cost-effective treatment, with a cost-effectiveness ratio of $186.32. When varying 5-FU in its lower bound efficacy values and higher bound cost values, 5-fluorouracil continued to dominate all other treatments. Probabilistic sensitivity analyses showed almost complete certainty (99.98%) in 5-fluorouracil's dominance over the other three treatments.

Discussion:

The results of the base-case cost-effectiveness analysis showed that 5-FU cream was the most cost-effective field therapy for AKs at 12-months post-treatment. Despite this being a trial-based cost-effectiveness analysis, all economic evaluations are limited by the uncertainty of their input parameters. In this analysis, only four commonly used field therapies were compared, with alternative treatments like diclofenac and retinoids being excluded. Finally, cost-effectiveness analyses exclude auxiliary considerations relevant to clinical practice, including pain, downtimes, cosmesis and access to dermatology services.

Implications for practice:

From an economic perspective, general practitioners should consider topical 5-fluoruracil as the first-line field therapy for actinic damage.

Covid-19 Era Public Vs. Holistic Healthcare

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Background:

Humans are deeply wired with a need for social connection. (1) If isolated, our loneliness can manifest into mental and physical health problems such as depression, anxiety, and premature deaths comparable to smoking and obesity. (1-3) Since the start of the Covid-19 pandemic, multiple public health protocols to continuously wear masks, limit patient visitors, or to pre-emptively self-isolate patients with coughs and dyspnoea has been widespread. This study aims to understand the experience of patients and health providers navigating infection control policies that has limited interpersonal connection.

Method:

An anonymous survey relating to care experience was filled by 47 health providers and 20 patients at a rural Canadian hospital. Patients were in hospital during May and June, 2020 with an average stay of 18 days and mean age of 70.5 years. Health provider surveyed included rural hospitalist, general practice physicians, and allied health professionals. All surveys were then analysed and grouped into prevalent themes.

Results:

Patients experienced an increase in loneliness and disconnect with family and health providers. Health providers felt that strict protocols had stripped them of a person-centred care approach. Both parties identified strategies to reduce psycho-social implications such as the use of self-portrait print outs and telehealth technologies.

Discussion:

These findings suggest that psycho-social implications from prolonged adherence to isolation measures need to be mitigated when strict public health measures are necessary for a prolonged period of time.

Implications for practice:

The threat of Covid-19 should not be taken lightly, however, great patient care requires a holistic approach – treating the whole persons. Interpersonal connection should continue in a creative way so that public health measures are not compromised. Use of self-portraits, showing unmasked face prior to donning PPE, or use of audio amplifiers for the elderly can be easily incorporated into practice during these times.

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cRCT evaluating an educational program to improve hepatitis C virus (HCV) management

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Background:

The availability of direct acting antiviral (DAA) treatments sparked efforts to eliminate HCV in Australia. We evaluated an NPS MedicineWise educational program on DAA uptake using the MedicineInsight dataset.

Method:

Of 296 eligible general practices in MedicineInsight 11% opted out. Randomisation stratified by practice caseload allocated 130 practices to intervention, a 1-hour discussion among practice staff using audit and feedback data from MedicineInsight, and 129 to control. 78% of practices had data available for analysis. The primary outcome was number of patients initiated on DAAs in 6 months using the negative binomial regression model adjusted for DAA prescribing history and clustering by practice.

Results:

The intention-to-treat analysis included 101 practices and 2,469 DAA-naive patients with confirmed/possible HCV in the intervention arm and 100 practices and 2,466 patients in the control arm. At baseline 49.5% of practices had prescribed ≥1 DAA in the past year, 18.9% of HCV patients had already been treated with DAAs, the mean age of DAA-naive HCV patients was 42.6 years and 57.4% were male. Over 6 months, 43 patients in the intervention arm and 36 patients in the control arm initiated a DAA, however this was not statistically significant (adjusted IRR 1.19; 95% CI 0.67-2.11, p=0.55) and 27 vs 16 patients initiated DAA (adjusted IRR 1.77, 0.88-3.58; p=0.111) in the first 3 months.

Discussion:

There was a low number of DAA initiations in these practices and a facilitated discussion in HCV management did not lead to a significant increase, although the confidence intervals were wide. Alternative measures are likely required to address remaining barriers to DAA initiation in Australian primary care, like incentivising GP initiations.

Implications for practice:

Continued support for the vital team role GPs play in managing HCV is needed, for example with incentives, models of care that integrate nurse practitioners, multidisciplinary teams and telehealth services.

CST reminders for Aboriginal women in primary care

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Background:

Aboriginal women have a higher mortality from cervical cancer (Diaz, 2015) yet cervical screening rates are 30% lower for Aboriginal women than for other women (Coory, 2002). Primary care, including Aboriginal Community Controlled Health Services, can play an important role in promoting screening for cervical cancer.

Method:

Small randomised trial of reminder letter vs phone call/ SMS for routine cervical screening testing, in an Aboriginal Community Controlled Medical Service in NSW.

Results:

256 women aged between 25 and 74 who were current patients and had current reminders due for cervical screening were included, and were randomised to either receive a reminder letter (and up to two further letters if they did not respond) or phone call (followed by up to two SMS) to attend for screening. 24 women (17.6%) attended for CST within 3 months after a phone call or SMS reminder, compared to 15 women (12.5%) following a letter, although this difference was not significant (p=0.252). The time spent on phone calls/ SMS vs letters by staff was similar, although costs for letter printing and mailing was more than the cost of phone call or SMS.

Discussion:

Overall, the response to reminders was lower than expected. Choice of reminder type should be left to service preference. Automated SMS appeared to be the most cost-efficient recall and likely to be the most time efficient. Manual reminder systems were time consuming for staff. A number of women were not contactable due to lack of up to date address or phone number. Women who did not respond to three reminders were not likely to respond to further reminder attempts.

Implications for practice:

Opportunistic care should be used to remind women about the benefits of cervical screening. While there was no significant difference in effectiveness in letter vs phone call / SMS for cervical screening recalls, reminder systems can still play a role in encouraging women to participate in screening programs, in conjunction with national screening registers and reminder systems.

Dermoscopy usage in general practice

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Background:

Skin surface microscopy (or dermoscopy) has been shown to increase the accuracy of melanoma diagnosis. However, there is limited data at present that evaluates the usage and methodology of dermoscopy in the Australian general practice setting.

Method:

We conducted a survey of 380 GPs listed in the Barwon region regarding their usage of dermoscopy, methodology of dermoscopy analysis, and perceived benefits and barriers. This survey was based largely on the Eurodermoscopy questionnaire and received ethics approval from RACGP.

Results:

Out of 380 GPs surveyed, 54 returned completed questionnaires. Despite the majority (92.6%) of respondents having access to a dermatoscope, only 74% (n=40) used dermoscopy. 37% (n=20) of total respondents had never received any formal training in dermoscopy. For those using dermoscopy, there was no clear consensus with what particular algorithm was used for dermoscopy, and the option for selecting multiple algorithms was included. Most candidates selected looking for the ugly duckling (n=15), ABCD rule (n=12), pattern analysis (n=11), chaos & clues method (n=9), and 3-point checklist (n=9). Images were not routinely stored by practitioners. Most (87.5%, n=35) agreed that dermoscopy aided in their diagnosis of melanoma in early stage, and 87.5% believed more GPs should be trained in dermoscopy.

Discussion:

Primary care physicians are often the first point of contact for patients and need to be equipped with the tools and training necessary to evaluate potentially malignant lesions. This survey highlights multiple discrepancies in dermoscopy usage amongst general practitioners, in terms of how many GPs are using it, what methodology is applied, how images are stored, and how doctors are trained. Further guidelines, training, and implementation of dermoscopy in our clinical practice will aid general practitioners in this field.

Implications for practice:

This study demonstrates a need and demand for further education and training for dermoscopy in general practice.

Dietary improvement of HbA1c in diabetic patients

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Background:

A pragmatic follow-up study in general practice to investigate whether a low carb healthy fat (LCHF) diet in patients with diabetes type 2 (NIDDM) can improve their glycaemic control.

Method:

An audit of patients with NIDDM seen between May and August 2020 was conducted to compare the HbA1c values of patients who had been on a LCHF diet for 12 to 13 months with patients on a standard diabetic diet (control group) over this time.

The number of anti-diabetic medications and the number of people who had a 'non-diabetic' HbA1c (HbA1c < 6.5) were also compared between the 2 groups.

Results:

There were 22 patients who adopted the LCHF eating approach and 25 patients who remained on a standard diabetic diet. Their demographics were comparable.

The LCHF patients' HBA1C at the start of the audit was 7.8; after 12 months it had **decreased** by 1.2 to 6.6. The average number of anti-diabetic medications were 1.2, and the number with a non-diabetic HbA1c **increased** from 5/22 (23%) to 9/22 (41%).

The control group's HBA1C was 7.2 at the start of the audit; after 12 months it had **increased** by 0.5 to 7.7. The average number of anti-diabetic medications were 1.6, and the number with a non-diabetic HbA1c **decreased** from 6/25 (24%) to 5/25 (20%).

Discussion:

This audit shows the benefits of implementing LCHF eating for people with NIDDM, with a **difference in the HbA1c of 1.7** between the two groups after 12 months, more LCHF patients developing a non-diabetic HbA1c and requiring less anti-diabetic medications.

Two possible biases are the enthusiasm by the doctor to the LCHF group and the self-selection of the LCHF group.

Implications for practice:

GPs can markedly improve the diabetic control of their patients by encouraging their use of a LCHF diet.

Doctors' experiences of patients' questions and question lists - a qualitative study

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Background:

Patient questionpromptlists(PQPLs)have benefits for both patients and doctors when used effectively. However,doctors'attitudes to PQPLs and patient questions indaily practice has not been explored. Ourresearchaddressesthis gapinreal world PQPL implementation.

Methods:

Thirty-nine doctors-23specialistgeneral practitioners(GPs)and16 other specialists(e.g.physicians, surgeons)-werepurposively selected as leaders in their fields. Participants were interviewed individually (n=17) or participated in focus groupsof3-9participants. Interview guides included questions exploring doctors' perceptions ofpatient question-asking,PQPLsanda samplePQPLcreated using anAustralian government-fundedonline tool,"Question Builder".Recordingswere transcribed verbatim and data analysedthematicallyusing the methodbyBraun and Clarke.

Results:

Analysis showedthatpatient question-askingisviewedasa normal"part of [the] consultation process"as arePQPLs.Althoughdoctorsacknowledged that"questions are a good thing"they wanted to "see what's on the list" andhad to "decide how(they)are going to approach it all"particularly when thepatient agendais perceived toexceed the constraints of the consultation.

Time, patient factorsandmedicalcomplexityaffectedstrategies employed by doctorsto manage PQPLs:"Youhave to get a feel for what information they want...so it's very individual each consultation."

RegardingthesamplePQPL,availableconsultation timeand specialty influenced responses: "I'd just feel overwhelmed...it'll just take up so muchtime" (GP)compared with"I have the luxury of having plenty of time in my consultations. So I can…give them time tothink" (specialist).

Conclusion:

Doctors strive to manage patient expectations and maintain the benefits of PQPLsin practice. Clarifyingdoctor and patient expectations and agendasmay lead to more effective use ofPQPLs.

Implications for practice:

All stakeholders need to be involved in PQPL development to ensure their effectiveness in practice.

Does Peer Mentoring Influence Registrar Rural Retention?

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Background:

In 2013 GP Synergy developed the Peer Mentorship Program to help address potential isolation among new GP registrars transitioning from hospital to general practice. The Program sought to further support participants by matching Term 1 registrars with peer mentors from Term 3. This additional support was thought to potentially improve rural retention among GP registrars. The Program successfully grew from six pairs in 2013 to 130+ pairs in 2017 throughout NSW/ACT. However, empirical evidence for the value of peer mentoring for GP trainees was lacking.

The objective of this study was to explore the experiences of mentors and mentees in the GP Synergy Peer Mentorship Program, with a focus in this presentation on the influence mentoring has on rural retention among GP registrars.

Method:

A qualitative study using purposive sampling recruited 37 individuals who were involved in the Peer Mentorship Program between 2013-2019. Two focus groups (n=8) and 29 semi-structured telephone interviews were audio-recorded, transcribed, and thematically analysed.

Results:

GP registrars were generally positive about the peer mentoring opportunity, including the 12 interviewees that were in a rural/regional placement, although engagement in mentoring varied. When asked about the influence of peer mentoring on decisions to train or stay in a rural area, other factors were viewed as more influential, particularly family concerns, but also the pastoral support provided by GP Synergy, social/collegial activities provided by some rural/regional GP Practices and a pre-existing desire to live and work in the country.

Discussion:

Effective peer mentoring and supportive GP Practices can help reduce professional and social isolation of GP registrars in rural areas. However, greater consideration is needed to address family issues that may play a larger role in registrars' decisions about working rurally.

Implications for practice:

Training peer mentors in ways to consider family issues in interactions with rural/regional mentees may be beneficial.

Don’t Become That Man - Early Intervention

Kelly L[1]

[1]*Community Transitions*

Background:

The South Australian Government is expecting an increase in Domestic and Family Violence (DFV) in South Australia resulting from COVID-19. As the health impacts of the virus reduce and the economy opens up, the number of DFV reports is intensifying. The SA Government has commenced a media campaign called ***Break The Cycle*** to alert people about their own, or their partner’s behaviour, and to encourage everyone to reach out and get help. As part of this media campaign funding has been provided to Community Transitions for the **Don’t Become That Man** service, a new approach that will attempt to attract men to seek help and engage before they resort to violence or lethal violence.

The phrase ***Don’t Become That Man*** was created to encourage and facilitate early intervention and prevention programs for men who have concerns about their current controlling behaviour, and even more concerns about how that behaviour might escalate to violence. Following highly publicised and significant domestic violence events, particularly those involving lethal violence, men have contacted helplines all over Australia looking for help so that their lives don’t end up creating a similar disaster for their partners and families.

Many men said ‘I don’t want to be *that* man’ when seeking support and intervention. They were genuinely concerned about losing control. These catastrophic events can become pivot points for major positive change. It is our intention that this phrase will encourage men to think about their controlling behaviour, and the consequences of it escalating to violence, and make a phone call to us to get assistance. We also want partners and family members to call us if needed if a family member or partner needs help.

Method:

Action Research. The service commenced in June 2020 and is building with public recognition and promotion. The service is undertaking ongoing evaluation as the service evolves and more work being completed

Results:

This is still ongoing – at this stage, however results are live, with engagement with men around their accountability, and practicing safety for women and children

Discussion:

Men are seeking support, that enables them to address their behaviours and/or concerns about their behaviours and their impact on their partner and children. The ability to engage in a non-threatening manner, to intervene early and ‘don’t become that man’ is increasingly important. The service offers phone and web-based contact to increase engagement and accountability.

Implications for practice:

Opportunity to provide men (and women and children) the opportunity for early intervention and increase safety and accountability.

Drive-through clinics – an approach to receiving the flu shot during COVID-19

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Background:

The COVID-19 pandemic has forced many Australian general practitioners to take innovative measures to provide healthcare, drive-through clinics (DTC) was one such measure.

Method:

During April-May 2020, 1201 patients received the influenza vaccine in seven DTC conducted at St Andrews Medical Centre, Toowoomba. The vaccinees (i) drove to the carpark (ii) were assessed by a nurse/medical student and supervising doctor (iii) received the vaccine (iv) monitored for 5 minutes for adverse reactions (AR).

Results:

Efficiency improved throughout the trial period with the number of patients vaccinated increasing from 38 per hour to 65 per hour in the last clinic. On the busiest clinic day, 300 vaccines were given with only 1.5% of the documentation being insufficient. Most patients attending the DTC were aged 60-74 years. Women were ~1.5 times more likely to attend compared to men. When the previous vaccination history of a random sample of vaccinees was considered, it was noted that the current pandemic may have encouraged people to get vaccinated, particularly those in the 70-79 age group. There were no AR, no motor vehicle accidents and no needle stick injuries recorded.

Discussion:

DTC demonstrated improved efficiency when compared to in-room vaccination clinics and illustrated that complete uptake of seasonal influenza vaccination during a pandemic could be possible if accessibility is improved. The appropriateness of the recommended 5-minute post-vaccination observation period was also confirmed by the audit.

Implications for practice:

DTC are a viable and efficient way for GP's to provide necessary healthcare. Future planning could include running shorter clinic days with higher vaccinee numbers per hour and marketing to men.

Effect of violence on physical health outcomes

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Background:

The long-term effects of intimate partner violence (IPV) on physical health outcomes, and health-related behaviours are under researched in comparison to the effects on mental health and pregnancy. This systematic review examines the recent research in this area from 2012 through 2019.

Method:

SCOPUS, PubMed, EBSCOhost and grey literature were searched using the keywords “intimate partner violence” and “health”. To meet inclusion criteria, studies needed to be original research, and focus on IPV during adulthood and its effects on the physical health, or health-related behaviours of women. 52 studies were qualitatively analysed, with results grouped into broad categories of effects, including cardiovascular, endocrine, infectious diseases, and health screening.

Results:

IPV was shown to have negative effects on physical health outcomes for women, including worsening the symptoms of menopause and increasing the risk of developing diabetes, contracting sexually transmitted infections, engaging in risk-taking behaviours including the abuse of drugs and alcohol, and developing chronic diseases and pain. It also has significant effects on HIV outcomes, worsening CD4+ cell depletion. Results varied regarding the effects of IPV on cardiovascular health outcomes.

Discussion and Implications for practice:

The result of this review demonstrates that women who have experienced violence and abuse are at significantly increased risk of poor health outcomes in a variety of areas and so require specialised and tailored primary care. This review highlights significant gaps in this field of research, particularly in relation to cardiovascular disease, self-reported physical health, and utilisation of health screening services. It demonstrates a need for additional long-term studies in this field to better inform the healthcare of women who have experienced IPV, and to establish the physiological mediators of these outcomes.

Environmental sustainability in general practice

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Background:

The 'black summer' bushfires put climate change front of mind for many Australians. Healthcare is a carbon intensive industry and accounts for 7% of Australia's carbon footprint. In 2019, the Royal Australian College of General Practitioners released a position statement calling on general practice to reduce its emissions. Despite this, few practices have taken steps to improve their environmental sustainability.

Method:

The aim of this study is to explore facilitators and barriers to environmental sustainability in three general practices aspiring to improve their environmental impact. We are using a qualitative, case study approach, conducting interviews with staff at each practice including nurses, doctors, administrative and allied health staff. Ethnographic observation of day-to-day routines and practices that relate to environmental sustainability will also be undertaken where permitted by COVID 19. Twelve interviews and an observation of the first practice have been completed and analysed using thematic analysis. Interviews are ongoing for the second and third practices.

Results:

Important facilitators identified so far include concomitant financial or efficiency benefits, leadership open to change, and a systematic approach to implementing and sustaining environmentally friendly changes. Barriers identified include a lack of knowledge of environmentally sustainable products and services available, and a lack of time.

Discussion:

A key finding to date is that environmentally sustainable change is more likely to occur if there are additional benefits, for example, cost savings over the long-term. Another preliminary finding is that having a reputation as an environmentally friendly practice is not a major motivation to change. Changes weren't made with a view to attract patients or staff to the practice.

Implications for practice:

Identifying key facilitators and barriers will allow effective targeting of policies to improve environmental sustainability in general practice and enable sharing of successful strategies across the general practice community.

Evaluating a GP-led COVID-19 respiratory clinic

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Background:

The COVID-19 pandemic has necessitated innovations in the delivery of general practice. GP-led respiratory clinics and drive through facilities have been developed to clinically assess and test people with mild to moderate COVID-19 symptoms. However, the safety and efficacy of these models have not been evaluated. This study evaluated a GP-led respiratory clinic with a 'drive-through' testing clinic, in Melbourne, Australia, to identify risks and risk mitigation strategies.

Method:

Evaluation over two six-week periods (April-May 2020 and July-September 2020) included: observations, field notes, infection control checklists, opportunistic interviews and in-depth interviews with clinic staff and patients, patient satisfaction surveys, and protocol review sessions with clinic staff. Video recordings, interviews and field notes were thematically analysed. Risks and mitigation strategies were discussed with clinic staff.

Results:

Infection control risks included: appropriate hand-hygiene and personal protective equipment use, and need for social distancing in areas of congregation. Ergonomic, psychological and OH&S risks were also identified. Public safety risks included safety around moving vehicles. Risk mitigation needed to be responsive to on-going changes in infection prevalence as well as changing policy. This included splitting the workforce into two teams to reduce the impact on the operation of the clinic should a staff member contract COVID-19. Both staff and patients expressed feelings of safety and satisfaction working and attending the clinic.

Discussion:

This GP-led respiratory clinic model provided a flexible framework to respond to constantly evolving regulations, restrictions and risks. The collaboration between academic Department of General Practice and the clinic has resulted in research which can be rapidly translated into practice.

Implications for practice:

The evaluation supports the finding that a GP-led respiratory clinic, with 'drive-through' testing facility, is a safe and effective model of care if adequately resourced. Protocols that minimise risk can be adapted to other primary care settings.

General practice experiences during the COVID-19 pandemic

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Background:

The COVID-19 pandemic has affected all areas of work and life, with general practices on the frontline. We aimed to describe the impact of COVID-19 and associated public health response on general practices.

Method:

General practitioners, practice managers, and practice nurses in Australia and New Zealand (NZ) were invited to participate in online surveys every 2-4 weeks since May 2020. Each survey comprises repeated "core" questions, and up to five changeable "one-off" questions. Quantitative and qualitative responses are collected.

Results:

To date, Australia has conducted eight surveys, and NZ six. Responses range from n=45 to n=254 in Australia, and n=150 to n=231 in NZ.

The pandemic has strained practices, with up to two-thirds of Australian and NZ respondents reporting high to severe impact. Respondents describe exhaustion and ongoing stress, and feeling devalued by the health system. There is an appreciation for effective teamwork within general practice.

In addition to their own stress, most respondents reported an increase in mental health presentations, and a moderate to significant impact of the pandemic on vulnerable patients in terms of isolation / loneliness and general fear/anxiety.

Face-to-face consultations are preferred where possible, however telehealth is considered a useful adjunct. Its use fluctuated with restrictions and the number of COVID-19 cases.

Where telehealth is used, telephone is more common. Video-based telehealth is used by less than half of Australian respondents. Video consultations have been used more widely in NZ with only one-third not using it at all at the height of the pandemic lockdown.

Discussion:

The COVID-19 pandemic has disrupted the usual business of general practice, and been stressful for those working in primary care. Telehealth has been used as an adaptive response, subject to some limitations.

Implications for practice:

These survey series provide real-time information on the impact of the COVID-19 pandemic on general practice, and rapid feedback to policy-makers.

GP registrars' antibiotic prescribing for infective conjunctivitis

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Background:

Over-prescription of antibiotics for common infective conditions is an important and ongoing public health issue. Infective conjunctivitis represents one of the most common eye-related complaints in general practice. Despite its self-limiting nature, there is evidence of frequent GP antibiotic prescribing for this condition, which is inconsistent with evidence-based guidelines.

Method:

A cross-sectional analysis of the Registrars Encounters in Clinical Training (ReCEnT) ongoing prospective cohort study, which documents GP registrars' clinical consultations. The outcome of the analyses was antibiotic prescription for a new diagnosis of conjunctivitis. Patient, registrar, practice and consultation variables were included in univariate and multivariable logistic regression analyses to test associations of these prescriptions.

Results:

2,333 registrars participated in 18 data collection rounds from 2010-2018. There were 1,580 new cases of infective conjunctivitis (0.31% of all problems). Antibiotics (mainly topical) were prescribed in 1,170 (74%) of these cases, with chloramphenicol being the most common. Variables associated with antibiotic prescription included patient Aboriginal and/or Torres Strait Islander status (OR=17.6), registrar organisation of a follow-up (OR = 1.42) and earlier registrar training term (more junior status) (OR=0.68 (registrar being in later training term)).

Discussion:

GP registrars, like established GPs, prescribe antibiotics for conjunctivitis in excess of guideline recommendations, but prescribing rates are lower in later training terms. Despite stable patterns of antibiotic resistance, these excessive prescribing patterns have important social, economic and educational ramifications.

Implications for practice:

To our knowledge, this is the first study internationally to analyse the frequency and associations of antibiotic prescribing by GP trainees for conjunctivitis. This research serves to inform educational strategies to promote rational antibiotic prescribing for GPs and registrars, and has broader implications on a public health and community level given the over the counter availability of topical antibiotic agents.

GP registrars' prescribing trends for menopausal symptoms

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Background:

Menopause is a common general practice presentation. Menopausal hormone therapy (MHT) use in Australia declined rapidly following publication of the WHI study (2002), and then plateaued. Many non-hormonal (non-MHT symptomatic) medications are potential alternatives to MHT. We aimed to assess trends in MHT prescribing following the documented plateau in prescribing. We also aimed to assess trends in MHT versus non-MHT symptomatic medications prescribing.

Method:

A longitudinal analysis from the ReCEnT study. In ReCEnT, registrars document 60 consecutive consultations, six-monthly, on three occasions.

The outcome factor was MHT (estrogen and/or progestogen) prescribed. All menopause-related problems were included in the primary analysis. The secondary analysis included only menopause-related problems for which MHT or non-MHT symptomatic medicines were prescribed. Associations of MHT-prescribing, including year (2010-2017), were assessed by univariate and multivariable logistic regression.

Results:

1,736 registrars documented 1,569 menopause-related problems for female patients aged 25 years or-over. There were 756 menopause-related problems for which patients were prescribed MHT or a non-MHT symptomatic drug; 626 (39.3% [95% CI 37.4- 42.5] of the total) were prescribed MHT at the index consultation. There was no linear trend in MHT prescription over time. 130 (17.2% [95% CI 14.6-20.1] of the total) had a non-MHT symptomatic drug prescribed. For the ratio of MHT prescription to non-MHT symptomatic menopause medications, there was no significant time-trend.

Discussion:

MHT and non-MHT symptomatic drug prescribing remained constant in the period eight to 15 years following WHI publication. This is despite the publication of follow-up studies that might be thought to encourage less restrictive MHT use. It may still be too early to see a rise in MHT prescribing, given the generally slow uptake of research evidence into practice.

Implications for practice:

In this complex situation, there is a role for more targeted education of GPs (including registrars) in evidence-based menopausal prescribing.

Guidance GP: Pilot of an Antimicrobial stewardship quality improvement activity

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Background:

There is a high rate of antimicrobial 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. There is growing interest in the development of antimicrobial stewardship (AMS) in general practice.

Method:

Implementation study of AMS quality improvement (QI) program, consisting of (1) data extraction tool to passively extract antimicrobial prescription data from the electronic medical record (EMR) during two-week audit period (2) feedback report and webinar (3) guidelines embedded within the EMR (4) QI support. Evaluation included: (1) Assessment of antimicrobial prescribing (number of prescriptions, appropriateness and compliance with guidelines (2) in-practice validation of audit (3) focus groups with GPs and interviews with practice managers (4) review of completed QI activities.

Results:

Three general practices and 31 GPs in Melbourne participated.

Audit results:

Data related to 231 antimicrobial prescriptions were analysed in the first audit period (14/11/19 to 27/11/19) and 73 in the second (17/8/2020-31/8/2020). In both audits the most frequent indications were skin and soft tissue infections, acute cystitis, respiratory tract infections, ENT infections. Proportion of prescriptions compliant with TG (37% vs 36%) and assessed as appropriate (63% vs 59%) was consistent over both audit periods.

Preliminary qualitative results:

Practices liked the feedback reports, would participate in an AMS QI program as part of accreditation, and felt that the program should be aimed at GPs who prescribe a high volume of inappropriate prescriptions. COVID-19 reduced general practice attendance and presentations for respiratory tract infections. Technical requirements associated with the data extraction tool need to be minimised to optimise practice participation.

Discussion:

An AMS QI program provided useful feedback to practices and information to guide further implementation and improvements.

Implications for practice:

AMS QI programs are feasible; further developments aim to offer this program at scale.

Guide for investigating symptoms of lung cancer

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[1]*Cancer Australia*

Background:

General practitioners are integral to the early detection of lung cancer, as most patients with lung cancer first present to primary care settings, often seeing a GP ≥4 times before a diagnosis is made.1,2

Cancer Australia developed Investigating symptoms of lung cancer: a guide for all health professionals (the Guide) to provide a systematic approach to investigating unexplained, persistent symptoms and signs that may be due to lung cancer.

Method:

Cancer Australia used an evidence-based, systematic methodology to develop the Guide:

1. convening a multidisciplinary Expert Reference Group co-chaired by a GP
    - reviewing current national and international clinical practice guidelines
    - undertaking targeted systematic reviews
    - consulting with clinical colleges and consumer bodies, and
    - focus testing with GPs.

Results:

The Guide and its supporting Evidence Report includes information on lung cancer risk factors; different population groups; symptoms and signs of lung cancer; imaging modalities; optimal timeframes for investigation and referral; and the importance of multidisciplinary care.

The Guide is a Royal Australian College of General Practitioners' Accepted Clinical Resource, and is endorsed by 11 organisations.

Discussion:

Lung cancer is the leading cause of cancer burden and cancer death in Australia.3 Early diagnosis and treatment lead to improved survival, however, non-specific symptoms and smoking-related stigma may delay diagnosis.4,5,6

Additionally, during the COVID-19 pandemic, it is important to consider respiratory symptoms as presentation of lung cancer not COVID-19.

GPs need to be alert to the key steps and optimal timeframes for investigating this disease, to support rapid referral of patients into the multidisciplinary diagnostic pathway.

The Guide provides opportunities for practice improvement through audits of investigation modalities and timeframes for investigation and referral.

Implications for practice:

Access to up-to-date evidence on best-practice lung cancer care is critical for improving outcomes for lung cancer patients. Widespread adoption of the Guide among GPs will support this quest.

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Health access barriers: Our issues or their issues?

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[1]*Your Community Health,* [2]*La Trobe University*

Background:

Whileseveralstudies have examined the nature of cultural barriersthatdeterrefugee and immigrant womenfrom accessing preventative screening services such as cervical and breast cancer,little research attention has been given to the perspectives and preferencesof womenand what they would like to see in suchscreeningprograms.The purpose of this presentation is to highlight the health service access barriers for refugee women and to explore what a refugee women's health screening program would look like if their views were incorporated

Method:

In-depth interviews with 30 refugee women resettled in Melbourne, Australia and a narrative systematic review of recent evidence

Results:

Barriers to accessing health services were not only attributed to refugees, but also with healthcare professionals and health services. (1) issues related to refugees, including refugee characteristics, sociocultural factors and the effects of previous experiences; (2) issues related to health services, including practice issues and the knowledge and skills and poor cultural competency of health professionals; and (3) issues related to the resettlement context, including policies and practical issues. Where two practice models were identified by women to access cervical and breast cancer screening: a doctor-initiated model involvingopportunisticscreeningduring consultations for other purposes;andagroupscreening model.

Discussion:

Available cervical and breast cancers screening services are not attuned to refugee women's views where this study focuses attention on the roles and practices of doctors in preventive health care for refugee women. Merging their perspectives with those of providers and policymaker's can fill the existing gaps and support to formulate the new interventions that will improve women's access to such preventative services. Understanding such barriers is the first step in developing strategies to overcome them. The skills and knowledge of healthcare professionals are important in facilitating access to healthcare among this vulnerable population.

Implications for practice:

The barriers associated with health professionals and health services have been linked to trust-building, and these need to be addressed to improve the accessibility of care for refugees. In this study refugee, women resettled in Melbourne said that group screening or doctor-led care would be appealing to them.

Health Assistant-Scribes in a GP-led Respiratory Clinic

Alexander K[1], Biezen R, Hunter B, Hallinan C, Monaghan T, Somasundaram K, Manski-Nankervis J

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Background:

Countries experiencing the dual problem of an aging population and a decline in numbers of GPs have delegated roles to other health providers, including health assistants (HAs) and medical scribes. HAs are trained in administrative and clinical assisting roles, whilst scribes document clinical consultations, in real-time, into the health record. The existing health emergency required rapid deployment and training of staff from a variety of medical and nonmedical roles to become HA-scribes. In a GP-led COVID-19 respiratory clinic HAs directly assisted GPs with patient management and scribes operated remotely via video-call (tele-scribes).

An evaluation of acceptability and safety of a Melbourne respiratory clinic explored HA-scribe perceptions about their role and risks around infection control, and assessed the quality of scribe records.

Method:

Mixed methods included six semi-structured interviews with HA-scribes and a retrospective, blinded review of 200 respiratory clinic encounters, remotely recorded by 22 scribes. Two GP-researchers used a modified version of a validated tool, QNote, scoring seven elements of the encounter as fully/ partially acceptable or unacceptable, missing or not-applicable.

Results:

Thematic analysis of interview transcripts indicated HA-scribes were motivated by a desire to serve the community during the pandemic. They felt confident with levels of personal protective equipment and satisfied with job-variety, but had to be highly flexible in their role. Mental health stressors associated with COVID19 work were largely mitigated through training, practice policies and procedures. Clinical record review showed more than 90 percent of encounters were deemed acceptable.

Discussion:

HA-scribes upheld quality and safety of procedures in the respiratory clinic. Quality of GP records could be measured using the QNote tool.

Implications for practice:

HAs-scribes could be employed in routine general practice. Future research could explore professional boundaries, training and competence, cost-effectiveness and patient and GP acceptance of the HA-scribe role.

Health literacy and chronic kidney disease

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Background:

Chronic kidney disease (CKD) is a serious health condition with devastating impacts, especially for Aboriginal and Torres Strait Islander (respectfully referred as Indigenous hereafter) peoples.

Aim:

To describe Indigenous patients understanding of CKD and suggestions for providing information in a primary health care setting.

Method:

Indigenous male and female patients with a diagnosis of CKD, attending an urban Indigenous primary health care service participated in semi-structured digitally recorded interviews. Each interview was transcribed and thematically analysed. The 'Consolidated criteria for reporting qualitative studies (COREQ)' guidelines were followed.

Results:

Twenty male and female participants aged between 39 and 80 years described three themes related to health literacy: understanding of CKD mainly related to the blood tests and treatments; need for comprehensive information about kidney disease; and suggestions for providing information.

Participants wanted to gain a more comprehensive understanding of CKD, including information on kidneys ('what are they'); implications of phrases like 'kidneys playing up'; causes of CKD; relationship with other chronic conditions; greater understanding of the ' number' obtained from blood tests.

Some suggestions for providing person-centred information included asking patient the type of information needed; information to be provided in simple language and in format desired by patient.

Discussion:

The study findings have highlighted the importance of provision of comprehensive information on all aspects of CKD. GPs play an essential part in ensuring that person-centred information about CKD is provided at diagnosis and with progression of CKD.

Implications for practice:

The National Strategic Action Plan for Kidney Disease has emphasised the important role of GPs in management of CKD; importance of health literacy in management of CKD and training of primary care professionals. The descriptions from voices of consumers will increase GPs awareness of information needs of people with CKD and some strategies in meeting these needs.

Herpes Zoster immunisation for preventing cardiovascular disease

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Background:

The incidence of stroke, transient ischaemic attack (TIA) and myocardial infarction (MI) increases following Herpes Zoster. Other vaccine preventable diseases including influenza and pneumococcal infection have also shown increased subsequent risk of cardiovascular disease and guidelines recommend immunisation of at-risk groups.

Australia introduced the National Shingles Immunisation Program in November 2016. Adults aged 70-79 are offered immunization with zoster vaccine (Zostavax) free of charge. Zostavax has shown a reduction in incidence of Herpes Zoster by approximately half.

Therefore, the aim of this study was to investigate if Herpes Zoster immunisation reduces the risk of subsequent cardiovascular events.

Method:

A retrospective matched cohort study was performed using the National Prescribing Service MedicineInsight database. MedicineInsight is an Australian primary care record containing anonymized demographic and medical encounter data for 2.3 million active patients from 419 general practices across all states and territories. It represents approximately 10% of Australian general practice encounters. Every adult patient who had the Herpes Zoster vaccine between 31st October 2016 to 30th June 2020 were matched by age and sex to two unvaccinated individuals.

Univariable analysis for time to stroke, TIA and MI by Herpes Zoster vaccination will be examined using Kaplan-Meier curves and logrank test. Secondary outcomes include time to herpes zoster and herpes zoster opthalmicus. Multivariate analysis will be performed using Cox proportional regression models. Analysis will be conducted using SAS software version 9.4.

Results:

Data analysis is currently in progress.

Discussion/Implications for practice:

Despite evidence of increased risk between Herpes Zoster and subsequent cardiovascular disease, there is minimal literature investigating if immunisation can reduce this risk. Findings will inform current immunisation policies and could lead to more targeted vaccination strategies focusing on patients with higher cardiovascular risk.

Home-based self-collection for cervical screening

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Background:

In 2020 the COVID-19 pandemic resulted in a number of population-based approaches to restrict interaction between individuals to reduce transmission of the SARS-CoV-2 virus. These approaches caused healthcare practitioners to adapt to being able to support patients whilst reducing face to face interactions.

Method:

The protocol being developed to facilitate remote Human Papillomavirus (HPV) self-collection under clinical supervision involves a healthcare practitioner sending a request form to VCS Pathology with appropriate patient details. The patient is then assessed, with assistance from the National Cancer Screening Register, for meeting the criteria for self-collection (≥30 years of age, more than two years overdue for screening). If the patient is suitable for self-collection then a pack is sent out to them including instructions on how to collect a sample and how to return the specimen to the laboratory.

Results:

This protocol is currently being trialled at VCS Pathology and results of uptake, acceptance, and HPV positivity rates will be presented.

Discussion:

Learnings for this novel approach to population-based screening in a time of telehealth and social distancing will be discussed.

Implications for practice:

During the current COVID-19 pandemic new ways of facilitating access to healthcare are being adopted across a range of areas. Self-collection for HPV-based cervical screening was available prior to 2020 and as such the model being trialled is scientifically valid but it is hoped that this novel approach within the Australian National Cervical Screening Program will increase access in an under- or never-screened population without increasing the risks of attending a healthcare setting. It is also expected to support improved access to screening in remote areas or where there is a shortage of clinicians to provide conventional screening.

Hydroxyurea-Induced Squamous Cell Carcinoma

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Background:

Hydroxyurea-induced squamous cell carcinoma (SCC) is a rare but important side effect of long-term hydroxyurea treatment. The sudden-onset of a photo-distributed rash, multiple actinic keratoses, Bowens disease or SCC should alert the clinician to a potential hydroxyurea-associated drug reaction.

Method:

We report a case of HU-induced SCC and review the other 20 cases reported in the literature.

Results:

An 84-year-old woman was taking hydroxyurea for 13 years for the management of essential thrombocythaemia. She developed an aggressive SCC and multiple hypertrophic actinic keratoses which were disfiguring. Her GP and radiation oncologist were unaware of the entity of hydroxyurea-induced SCC and her hydroxyurea was continue for a further year before review with a dermatologist. The hydroxyurea was ceased but her SCC and hypertrophic actinic keratoses progressed and were refractory to treatment.

Hydroxyurea-induced SCC can progress despite cessation of HU in about half of cases. Of the 20 previously reported cases, eight continued to develop new lesions and/or had progression of their SCC despite cessation of the HU, eight had complete resolution of their SCC with treatment, two died and the other two outcomes were not recorded[1].

Discussion:

Hydroxyurea-induced SCC is a rare complication with only 20 other reported cases in the literature[1].

The time from commencing hydroxyurea to developing hydroxyurea-induced SCC ranges from two to 13 years[1].

Treatment includes surgical excision, topical imiquimod, topical 5-fluorouracil, topical diclofenac, radiotherapy, photodynamic therapy and oral retinoids[1].

Implications for practice:

Hydroxyurea is a commonly prescribed medication and, although rare, hydroxyurea-induced SCC is a complication that GPs need to be aware of. This presentation includes dramatic images of hydroxyurea-induced SCC and hypertrophic actinic keratoses.

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IMMINENT CATASTROPHE: GP can avoid

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Background:

Fasting has been a well-known modality for weight loss since olden times but its efficiency and safety profile has not yet been established. The metabolic effects can be deleterious if unnoticed.

Case report:

A 56 years old gentleman with past h/o Gout, on allopurinol, on light alcohol intake, came for checking insulin resistance. On further questioning, he came with h/o fasting for last 15 days and was sustaining himself on black coffee, green tea and electrolytes. He claimed to have lost 13 kilos since then but was feeling fine. His vitals were stable and systemic examination was normal. He was explained the risk of metabolic complications of prolonged fasting viz hypoglycaemia, dyselectrolemia, ketoacidosis and multiorgan failure. Patient was firm for his diet but got willing for routine bloods in addition to insulin resistance. He was explained the red flags. His bloods were deranged, UEC: low bicarb: 20 (normal 22-32 mmol/L), high Uric acid: 0.88 (normal: 0.21-0.43 mmol/L), high anion gap: 25 (9-19mmol/L), high creatinine: 130 (normal: 60-110micromol/L), rest was normal including FBC, LFT, BSL, insulin, HbA1C. Patient denied going to ED despite being advised and he wanted to achieve acidosis only for improving his insulin resistance. Repeat tests next day revealed that anion gap increased to 28, bicarb reduced to 19, urine glucose: nil, urine ketone: 3+, venous blood gas: pH: 7.26 (normal: 7.31-7.41), HCO3: 16 (23-29mmol/L), pO2, pCo2: normal range. There was no dyselectrolemia or hypoglycaemia. He was advised for ED for urgent medical attention, observation and hydration. He started eating normally before leaving for hospital and thus kept for few hours for observation in ED and discharged afterwards. He was followed up later, bloods was normal. This was a case of asymptomatic euglycemic starvation induced ketoacidosis which could have led to catastrophe if not picked up on time.

Conclusions:

Given the present day popularity of fasting, health care providers should be aware of euglycemic metabolic acidosis as a possible complication. A good patient doctor relationship can avoid potential danger in asymptomatic settings.

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Immunising older Australians: Determinants in registrar consultations

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Background:

Despite the benefits, immunisation coverage of older Australians is suboptimal. Uptake of some vaccines has even been falling in recent years. As adult immunisation occurs almost exclusively in primary care, general practice registrars are often the key health professionals involved.

Methods:

A cross-sectional analysis of data from 2010-2019 collected as part of the Registrar Clinical Encounters in Training (ReCEnT) cohort study. General practice registrars collect data on 60 consecutive patient encounters per six-month training term. Univariate and multivariable regressions were conducted to detect associations between a recommended vaccine being prescribed and a number of patient, registrar, practice and consultation factors. The sample included patients aged ≥65 years as well as Aboriginal and Torres Strait Islander patients aged ≥50 years.

Results:

The key patient predictors of lower odds of immunisation were: Aboriginal and/or Torres Strait Islander background (OR 0.69; 95% CI 0.49-0.96); those attending practices in outer regional, remote and very remote areas (OR 0.74; 95% CI 0.57-0.97 compared to major cities); and attending practices in areas of greater relative socioeconomic disadvantage (OR per decile 1.03; 95% CI 1.00-1.05). Patients who were new to the practice, or to the registrar had higher odds of receiving a recommended immunisation with Odds Ratios of 2.48 (95%CI 2.08-2.96) and 2.01 (95% CI 1.86-2.17), respectively.

Discussion:

Although an exploratory study, these findings suggest that general practice registrars may be conducting thorough initial assessments with preventative health in mind. It also affirms the findings of previous studies regarding the determinants of aged immunisation.

Implications for practice:

This study lays the foundations for improvements in GP registrar education around immunisation of the elderly. It also indicates that further study is required to explore how to improve immunisation provision to the most vulnerable older populations.

Immunising older Australians: perspectives from GP training

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Background:

The benefits of vaccines for older patients are well established. However, most research and education is focused around immunising children. Consulting adults about immunisation presents different challenges and requires specific skills relevant to the patients' age. Little is known, however, about how registrar immunisation behaviours develop, the barriers they face, and what roles supervisors and educators play in the development of adult immunisation skills.

Method:

A descriptive qualitative study which involved semi-structured interviews with GP registrars and supervisors purposively sampled from around Australia. Data were analysed through a process of iterative thematic analysis.

Results:

23 semi-structured interviews were conducted with 14 registrars and 9 supervisors from 3 states and 2 territories. Participants' experiences were broadly reflected in 4 key themes: (i) immunisation confidence and competence, (ii) managing vaccine hesitancy, (iii) variable focus on immunisation in the context of prevention and (iv) importance of a strong immunisation culture. A number of suggestions for improving older patient immunisation were also suggested: (i) software optimisation, point-of-care integration and education, (ii) centralised, age-appropriate reminders, (iii) financial incentives and (iv) publicised vaccine coverage and disease data.

Discussion:

This study highlights a gap in immunisation education with registrars feeling unprepared to manage the complex needs of older patients. There is a specific need to focus on incorporating preventative health into routine practice, navigating challenging consultations and building a strong practice immunisation culture.

Implications for practice:

Understanding the barriers GP registrars face when delivering immunisation to older patients and how their habits develop will enable targeted educational interventions. This study also provides suggestions on improving immunisation uptake from a consultation, practice and public health point of view.

Implications of the ACC/AHA 2017 hypertension guidelines

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Background:

In 2017, the American College of Cardiology/American Heart Association (ACC/AHA) updated blood pressure (BP) guidelines to revise the definition of hypertension to 130/80mmHg or greater from 140/90mmHg, and to target treatment to less than 130/80mmHg. Changes were also made regarding the decision of which individuals should be recommended to commence antihypertensive therapy.

Method:

11247 participants were recruited by the Australian Diabetes, Obesity and Lifestyle Study (AusDiab), a cross-sectional survey conducted between May 1999 and December 2000 throughout Australia. Data was provided including BP measurements, laboratory results and questionnaire responses relating to medication use and risk factors such as smoking and diabetes. By applying our exclusion criteria, a total of 4682 participants were eligible for calculations.

Results:

By following the ACC/AHA guidelines, the prevalence of hypertension would be 41.2% (95% CI, 39.75 – 42.57), 20.3% higher than the Australian Heart Foundation (AHF) 2016 guidelines, which would label 20.9% as hypertensive (95% CI, 19.70 – 22.03). Participants diagnosed by the ACA/AHA guidelines were younger with a mean age of 57.6 years (95% CI, 57.14-58.07) and displayed lower cardiovascular risk, cholesterol (LDL and total) levels. In those eligible for treatment, 8.1% would be recommended to commence BP lowering therapy, 3.2% greater than AHF guidelines.

Discussion:

Similar findings have been reported in countries such as the United States and China. The updated ACC/AHA guidelines have been controversially received worldwide with differing opinions regarding the potential harms and benefits of applying these guidelines in clinical practice. Implications for practice: These guidelines may significantly impact the delivery of health care in Australian general practice. A greater number of Australians with lower cardiovascular risk and fewer comorbidities would be classified as hypertensive. Moreover, in comparison with the AHF 2016 guidelines, a higher proportion would be recommended for antihypertensive treatment.

Insights from the REFRAME Osteoporosis Clinical Audit

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Background:

Osteoporosis is underdiagnosed and undertreated in Australia. This audit assessed Australian GPs' management of osteoporosis compared with best practice guidelines.

Method:

GPs participated in a chronic disease management program, using a PDSA process designed to improve identification and management of patients at risk of initial or subsequent osteoporotic fracture. Patients not previously diagnosed with, or treated for osteoporosis were identified by screening of medical records, specifically:

1. Patients aged 70+;
    - Patients with suspected fragility fracture since age 50.

Eligible patients were recalled for bone health assessment and GPs collected data on relevant history, osteoporosis risk factors and management.

Results:

A total of 740 GPs from 490 practices completed 3,799 patient assessments between 31/3/2017 and 31/12/2019.

Among 3,634 patients aged 70 years and over, 3,466 (95%) were referred for DXA bone density assessment, with 56% having poor bone health (T-score < -1.0). Of the 18% of patients with a T-score ≤ -2.5 (i.e. osteoporosis), 81% received pharmacotherapy as per RACGP guidelines.

In the 70+ group, 462 patients (12%) had a prior fragility fracture. DXA results were available for 444 patients of which 111 (25%) had a T-score ≤ -2.5. In this sub-group, 94 (85%) received pharmacotherapy. In the 192 patients with T-score > -2.5 and < -1.0, 71 (37%) were treated.

There were 156 patients aged 50-69 years with prior fragility fracture (9 with no prior fracture were excluded), and only 83 (53%) of these received pharmacotherapy. Treatment was prescribed for 92% of those with T-score ≤ -2.5 (48 of 52), and for 29% of those with T-score > -2.5 (25 of 85).

Across the overall cohort, the most common reason for not having DXA was patient refusal (29%), followed by 'more urgent conditions to treat' (7%) and 'patient too old' (7%, mean age 90 years).

Discussion:

The findings from the REFRAME Clinical Audit confirm that osteoporosis remains under-recognised in Australian general practice. However, it also demonstrated that, even though GPs had not done so, they were readily able to identify patients at risk of fracture.

Implications for practice:

The wider use of a systematic process for the identification and management of patients with poor bone health could enable GPs to manage fracture risk according to best practice guidelines, and has the potential to significantly reduce the osteoporosis management gap.

Kawasaki disease - Australian hospitalisations, 1993-94 to 2017-18

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Background:

Kawasaki disease is the leading cause of acquired heart disease in non-Indigenous Australian children. Its cause remains unknown, but its incidence increasing worldwide. We aimed to assess trends in Kawasaki disease in Australia.

Method:

Analysis of National Hospital Morbidity Database hospital separations with a principal diagnosis of Kawasaki disease. Limited to persons aged under 20 years.

Results:

There were 6,368 hospitalisations for Kawasaki disease between 1993-94 to 2017-18. Pre-school-aged children were over-represented with 15.8% of separations in infants less than one year and a further 58.7% for those aged 1-4 years. Hospitalisations were also more common for boys (male to female ratio 1.5:1). The hospitalisation rate increased from 5.2 separations per 100,000 population in 1993-94 to 12.4 per 100,000 in 2019-2018.

Discussion:

Kawasaki disease is uncommon in Australia, but its incidence is increasing. Prompt treatment with intravenous immunoglobulin significantly reduces cardiovascular complications such as coronary artery aneurysms from 25% to 4%. GPs are likely to assess children with persisting fevers who may have Kawasaki disease.

Implications for practice:

Kawasaki disease is a clinical diagnosis, and it may not present with the classical features such as oropharyngeal erythema, bilateral conjunctival injection, rash, or unilateral cervical lymphadenopathy. Children with persisting fevers are likely to be seen in primary care, so general practitioners need a high degree of suspicion to detect this uncommon but important condition.

Management of osteoarthritis and cardiovascular disease risk

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Background:

Osteoarthritis (OA) of hip and/or knee and cardiovascular disease (CVD) risk are both commonly managed issues in general practice with known research translation gaps. Our aims were to assess alignment of current GP management of CVD risk and OA (hip/knee) with current Australian guidelines.

Method:

Two sub-studies of OCEAN study, a national, cross-sectional study of GP clinical activity where GPs record details of 100 consecutive encounters with consenting patients. Each GP answered questions about management of OA (hip/knee) for 30 encounters, and on CVD risk for 30 encounters.

Results:

Of 30 GPs, 14 completed both sub-studies, providing responses for 247 patients aged 40+ for the OA study and 193 patients aged 45-74 for the CVD study.

OA hip/knee patients were primarily managed with advised physical activity (83.3%/76.9%), weight management advice (33.3%/23.1%) and physiotherapist referrals (41.7%/46.2%). Few were managed with knee arthroscopies, opioids or glucosamine. The main concern was the use of x-rays in patients without severe symptoms.

Only one patient was deemed at high CVD risk by their GP, yet 12 patients were taking cholesterol medication and 22 were taking antihypertensive medications, suggesting possible misalignment between prescribing and CVD risk guidelines. Formal assessment of CVD risk was performed for only 15.3% of recommended patients in the previous 2 years.

Discussion:

Apart from questionable use of x-rays, overall GP clinical care of osteoarthritis of the knee and/or hip aligned with RACGP guidelines.

The low rate of formal CVD risk assessment may be due to missing blood pressure (BP) and cholesterol levels as GPs did not record BP and/or cholesterol levels for 44.4% of targeted patients.

Implications for practice:

Access to BP and cholesterol levels may increase CVD risk assessments. More testing, improved recording and/or retrieval of test results may be required. Further education/awareness may align x-ray use with guidelines.

Medicinal cannabis prescribing outcomes in Australian GP

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Background:

Medicinal Cannabis became available for prescription in Australia in February 2016. In 2019 the RACGP updated its position statement to emphasise "the need for further high-quality research as current evidence is limited and inconclusive". It also documented that after current evidence-based treatment options had failed a "specialist-general practitioner should be able to prescribe appropriate medicinal cannabis products according to legislative frameworks".

Method:

The review examined medicinal cannabis prescriptions from August 2018 to August 2020 for a single general practitioner based at two Melbourne general practice locations. Data was collected from practitioner TGA Special Access Scheme-B (SAS-B) records and Authorised Prescriber (AP) records.

Results:

Over this three-year period 102 patients received prescriptions for medicinal cannabis. 50% of prescriptions were for inflammatory chronic pain, 16% neuropathic chronic pain and 9% cancer-related chronic pain. Other indications included: anxiety (15%), insomnia (3%), multiple sclerosis (3%), Parkinson's (3%) and autism (1%). 50% of prescriptions were for cannabidiol-dominant oils, 48% were for balanced cannabidiol and tetrahydro-cannabinoid oils and 2% were for dried flower product. 43% of patients over the three-year period continued with treatment for greater than 6 months. Barriers to longer term treatment included cost (23%), no clinical benefit (12%), lost to follow up (12%), doctor costs (4%), driving (3%), interrupted cannabis supply (2%).

Discussion:

The majority of cannabis prescriptions were for chronic pain. Less than 50% of patients continued with prescribed medicinal cannabis long-term. Cost was the main barrier for treatment continuation. 27% of long-term treated patients were able to be deprescribed from other medications.

Implications for practice:

This is the first audit of medicinal cannabis prescribing outcomes in Australian General Practice. Medicinal Cannabis is a relatively new treatment option in Australian. Due to the variety of indications for prescription in chronic complex illness general practitioners are well placed to include medicinal cannabis in their therapeutic armamentarium. However, the long-term benefits and outcomes require further monitoring and assessment.

Melanoma risk conceptualisation among GPs: qualitative study

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Background:

Australian general practice prevention guidelines recommend a stratified approach to melanoma screening based on individualised risk levels. Melanoma risk prediction tools, based on multiple risk factors, may assist general practitioners (GPs) in risk estimation and targeting melanoma screening. Several melanoma risk prediction tools have been developed and validated, but none are routinely used in clinical practice. The future implementation of prediction tools could be supported by understanding GPs' current approach to melanoma risk estimation and their perspectives on clinical implementation.

Method:

Participants were recruited through "GPs Down Under", a Facebook group comprising over 6000 authenticated GPs from Australia and New Zealand. The GP participants were purposively sampled for semi-structured telephone interviews, which were audio-recorded and professionally transcribed. The transcripts were analysed using Grounded Theory method as described by Corbin and Strauss. Earlier analytic insights informed latter data collection (theoretical sampling) which continued until saturation was reached.

Results:

Twenty Australian GPs were interviewed. The explanatory model that emerged consisted of six major themes. These themes showed GP's conceptualisation of melanoma risk estimation in practice could be understood as a linear clinical process that connects five of the six themes: patient selection, clinical assessment, risk estimation, management recommendation, and patient education. The GPs perceived prospective roles for melanoma risk prediction tools at each clinical process theme.

Discussion:

GPs' estimation of melanoma risk may not reflect practice guidelines, in terms of the risk factors considered and the risk factor analysis. Their perceptions on the role of melanoma prediction tools were informed by existing tools and they were willing to consider using melanoma risk prediction tools in clinical practice.

Implications for practice:

Explicitly aligning the incorporation of a risk prediction tool to the identified themes may improve its implementation in general practice.

Menstrual cup associated IUD expulsion

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Background:

Menstrual cups are reusable devices that are inserted vaginally to collect menstrual flow. Their popularity is increasing in Australia because of their reduced environmental impact, financial benefits and convenience.

Clinical staff at Sexual Health Quarters (SHQ) had reported an anecdotal increase in the number of patients experiencing intrauterine device (IUD) expulsion following concurrent menstrual cup use. Although few studies have been published on this topic, recent research suggests menstrual cup use may increase the risk of IUD expulsion. The mechanisms posited are that cup removal may catch the IUD strings or apply negative pressure to the cervix.

The purpose of this review was to determine the proportion of IUD expulsions at SHQ associated with concurrent menstrual cup use.

Method:

A retrospective chart review of SHQ patients with IUDs inserted from 31.1.19 to 31.1.20 was conducted. The following was documented for each patient: demographics, IUD type, whether IUD expulsion occurred, and whether expulsion was documented as associated with menstrual cup use.

Results:

520 IUDs were inserted over the time period: 352 Mirena, 144 Copper T standard, 21 Copper T short, 4 Multiload. There were 22 IUD expulsions (4.23% of IUDs inserted), with 10 (45.5%) associated with menstrual cup use (6 Copper T standard and 4 Mirena).

Discussion:

The next stage of the investigation will involve determining the proportion of cup users amongst the study population, with an eventual aim of establishing whether concurrent cup use is a risk factor for IUD expulsion. Future studies will aim to clarify whether there is evidence supporting recommendations including cutting IUD strings flush with the cervix.

Implications for practice:

SHQ clinicians now routinely ask patients about menstrual product use, and menstrual cup users are counselled about the correct removal technique (breaking the seal and avoiding IUD strings).

Multimorbidity guidance at the point of care

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Background:

Readily available guidance on managing patients with multimorbidity in general practice is limited. Decision-making frameworks for managing multimorbidity have been developed but these do not extend to a practical tool to assist with clinical decisions. This study reports on general practitioners' (GPs) views on the guidance needed at the point of care. Clinical information in existing guidelines was reviewed to support development of a tool.

Method:

Two focus group sessions (n=9, n=10) involved academic and practicing GPs (Brisbane, Australia). Participants were asked to propose tool features and identify the clinical information needed to support management of patients with multimorbidity. The availability of this clinical information was assessed by reviewing fifteen existing clinical guidelines for eight conditions commonly seen in general practice.

Results:

Participants emphasised the importance of accessing summarised clinical information quickly, with the ability to obtain more detailed information when needed for specific decisions-. Ten categories of clinical information for inclusion in a point of care multimorbidity tool were identified. The review of existing clinical guidelines revealed gaps between what GPs need and the information provided.

Discussion:

As patients with multimorbidity are often excluded from clinical trials, the desired evidence to support moderation of treatments is commonly not available. Clinical information included in existing clinical guidelines is insufficient to support development of a multimorbidity tool at the point of care. A checklist for general practice guideline writers could improve the relevance of information included. Panels of relevant specialists and GPs could provide interim guidance based on clinical expertise. In addition, an information source providing the relative benefits of medications in the context of multimorbidity, and patient age is recommended.

Implications for practice:

Improved guidelines and the ability to quickly access information on managing multimorbidity in general practice would improve patient care.

Multisource feedback: Comparison of PEP and AGPT

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Background:

Multisource Feedback (MSF) is an evidence-based and validated tool used to provide clinicians feedback on their professional and interpersonal skills. MSF is mandatory for participants in the RACGP Practice Experience Program (PEP) and for some Australian General Practice Training (AGPT) Registrars. Given the recency of the PEP, there are currently no benchmarks available for comparison within the PEP and to other comparable cohorts such as AGPT registrars. General practice trainees should demonstrate similar scores given their common goal of fellowship, which will be investigated.

Method:

Data comprised the MSF results of PEP participants and AGPT registrars, between January 2018 and April 2020, for statistical comparison. MSF includes up to three measures, the patient questionnaire, colleague questionnaire, and self-evaluation.

Results:

PEP doctors demonstrated significantly lower scores on the patient feedback items ability to listen (.98%), explanations (1.1%), express concerns (1.07%), Respect shown (.95%) and time for visit (1.64%). With respect to colleague feedback, colleague responses to PEP doctors (overall average 88.58%) tended to be lower than for AGPT doctors (89.08%). However, this difference was not significant except for the item Communication with patients (2.13%). PEP doctors were rated significantly better for the item Ability to say 'no' (1.78%)

Discussion:

The colleague feedback for AGPT registrars and PEP doctors was relatively similar, although communication with patients was rated lower for PEP doctors. This supports the findings from the patient survey where PEP doctors were rated less favourably on several items seemingly related to communication (ability to listen, providing explanations, etc.).

Implications for practice:

We now have a better understanding of how PEP doctors compare to AGPT registrars with respect to professional and interpersonal skills. Based on the demonstrated differences, the PEP program might benefit from the addition of education programs that include activities to target the less developed skills.

Neglected skin cancers in the elderly population

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Background:

Advanced, neglected skin cancers are frequently seen in the elderly population. Denial is the most frequent reason for delay in the presentation for diagnosis and treatment of non-melanoma skin cancers, accounting for 70% of cases.[1]Self-neglecting behaviours associated with dementia, alcoholism, depression and other mental illnesses, physical impairments and health illiteracy may also underlie advanced presentation of skin cancers in older adults.[2,3]

Case:

An 80-year-old nursing home resident with a history of moderate dementia presented for an influenza vaccination when he was noted to have a large 10 cm fungating lesion with rolled edges on his right chest. Histopathological examination from an incisional biopsy showed an ulcerated, moderately differentiated squamous cell carcinoma (SCC). The SCC was classified as high risk for metastasis given the depth of its invasion to subcutaneous fat and diameter of >2cm.

Discussion: Reasons for denial include factors relating to patients' psychological unwillingness to accept the severity of their condition and the need for care.[1]In some cases, denial may be indicative of a lack of recognition or understanding of the issue.[1]Other factors that can lead to a delay in patients seeking medical advice include male sex, living alone, social and geographical isolation, multiple medical comorbidities, low socioeconomic status, inadequate hygiene, incorrect initial diagnosis and fear of treatment.[4–6]

Implications for practice:

Knowledge of risk factors including self-neglecting behaviours associated with advanced presentation of skin cancers in the elderly population may enable prompter diagnosis and treatment of patients before more significant morbidity occurs. It is important that general practitioners are familiar with the consequences and management of advanced skin cancers in geriatric patients. The ceiling of care discussion with elderly patients and their families needs to carefully consider skin cancers such as this, which can lead to significant morbidity and untimely death.

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OGTT bias? Short suffer, tall triumph

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Background:

The oral glucose tolerance test (OGTT) is the gold standard for diagnosing Gestational Diabetes (GDM). A diagnosis of GDM increases detrimental interventions, without evidence for improved outcomes unless diabetes is overt, or macrosomia extreme. Sensible diagnosis of GDM is paramount, given the test is undertaken by a majority of pregnant women. This study assesses whether a standard 75g glucose load for women of all statures presents an unfair metabolic burden to shorter women and makes a positive OGTT more likely.

Method:

This is a retrospective cohort analysis performed at a single centre in Perth, Western Australia. All women who delivered at this centre in 2019 were considered for the study (n=2557); women were excluded if they did not have an OGTT or had a pre-pregnancy diagnosis of diabetes. Results from the OGTT were analysed against maternal height and controlled for body mass index.

Results:

There is a positive relationship between maternal height and one and two-hour blood glucose levels, and this trend persists across all BMI categories.

Discussion:

These results suggest that there is a relationship between maternal height and blood glucose levels in response to the 75g glucose load of the OGTT, supporting the hypothesis that the OGTT poses an unfair metabolic burden to shorter women.

Implications for practice:

The OGTT discriminates unfairly; consideration should be given to altering the glucose dose or diagnostic parameters to produce a fairer test that does not disadvantage shorter women.

Parents' perceptions of their child's weight

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Background:

Overweight and obesity is a problem for children in Australia and worldwide and the prevalence is increasing. The causes of childhood obesity are complex; however, parents play an important role in guiding their children's diet and physical activity.

Method:

Analysis of qualitative and quantitative data from the 2014-2017 Kindergarten Health Checks (KHC).

Results:

20,427 children participated in the KHC between 2014-2017. 7% underweight; 78% healthy weight; 15% overweight/obese. 7% of parents reported having concerns about their child's weight. 23% of parents had inaccurate perceptions of their child's weight; e.g. only 10% of children who were overweight or obese were perceived as such by their parents.

Parents' comments were generally explanatory in nature and ranged from concern of underweight among children of healthy Body Mass Index (BMI) to scepticism of BMI as a useful indicator in children who were overweight or obese.

Discussion:

Most parents described their children as being of healthy weight and few were concerned about their child's weight, even among overweight or obese children.

Implications for practice:

Identification of a problem is needed in order to address it. General practitioners are well-placed to discuss potential issues with children's weight with their parents when needed, whether that be to allay concerns for parents where appropriate, or to support parents where children are of unhealthy weight.

Patient activation and Type 2 Diabetes self-management

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Background:

Patient activation is a major driver of self-management behaviours. T2DM clinical outcomes are responsive to changes in scores. This study aims to identify the minimum clinically important difference (MCID) of the Patient Activation Measure (PAM) for T2DM self-management outcomes in primary care settings.

Method:

This is cross sectional study. A self-administered questionnaire and clinical data extraction were used for data collection.

Results:

A total of 347 T2DM patients participated in the study. Most of the participants (53.6%) were passive (level 1) and only 6.3% were highly activated (level 4). Logistic regression analysis indicated that for an additional score increase in the PAM scale, the odds of improving diabetes clinical outcomes improved by 6-10%. The MCID of the PAM score ranged from 6.2 to 14.4 points.

Discussion:

This study finding suggests that achieving a clinically and behaviourally significant difference in T2DM self-management outcomes requires improving at least one level across the PAM levels ranging from level 1 to level 4.

Implications for practice:

Primary care is a key setting for T2DM self-management and the PAM is a reliable indicator of T2DM self-management outcomes. Our finding suggest that the PAM can be used to achieve clinically significant improvement in T2DM clinical outcomes in GP setting. The PAM is user-friendly and can be used very easily by GPs or PNs during the patient visit.

Pre-training assessment and predicting Fellowship examination performance

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Background:

RACGP Fellowship examinations assess the competency of registrars for unsupervised general practice. Early identification of registrars at risk of failure facilitates pro-active educational strategies to help registrars meet competency benchmarks. We aimed to explore the relationship between individual components of GP Synergy's intensive Pre-GPT1 Assessment (PGA) and performance in RACGP Fellowship examinations.

Method:

A retrospective cohort study was undertaken. GP Synergy administered, from 2011-2015, a written short-answer 5-case Key Feature Problems (PGA-KFP) and an Objective Structured Clinical Examination (PGA-OSCE) involving a 30-minute simulated consultation. Univariate and multivariable linear and logistic regression was used to examine the relationship between PGA-KFP and PGA-OSCE scores and a)first-attempt RACGP-AKT, RACGP-KFP and RACGP-OSCE standardized scores, and b)failure on any examination. Registrar demographics and training-related factors were covariates.

Results:

On univariate analyses, higher PGA-KFP and PGA-OSCE scores were significantly associated with higher RACGP-AKT, RACGP-KFP, and RACGP-OSCE scores (all p-values ≤0.002) and with passing all three examinations (p=0.003). On multivariable analyses, higher PGA-KFP and PGA-OSCE scores were significantly associated with higher RACGP-AKT, RACGP-KFP, and RACGP-OSCE scores (p values ≤0.018) except for RACGP-OSCE/PGA-KFP (p=0.050). Higher PGA-KFP scores were also predictive of passing all three RACGP exams on first attempt (p<0.001). R-squared for the six linear regression exam score models were 0.24-0.32. For the two logistic regression exam pass/fail models, AUCs were 0.81 and 0.77.

Discussion:

In the context of an assessment conducted prior to commencing an educational program that strives to lift under-performers to benchmark levels, these findings are of clinical and statistical significance. Further consideration of cost versus benefit is needed in determining the overall practical utility of these assessments. Further research is warranted for establishing early identification strategies for 'at risk' registrars.

Implications for practice:

An intensive PGA has utility in the early identification of registrars at risk of exam failure, possibly facilitating early intervention.

Prevalence of violence and abuse

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Background:

The Women's Healthy Ageing Project (WHAP) began in 1990 with a cohort of healthy women aged 45-55, who were currently menstruating, had a uterus and at least 1 ovary, and who were not taking hormone replacement therapy. 438 women agreed to participate and formed the WHAP cohort. Participants in WHAP were assessed annually until 1999, with biomarkers, neurocognitive assessments, quality of life data, socioeconomic data, and physical parameters being collected, analysed and stored, with regular follow-up in the years since.

Method:

The WHAP participants answered questionnaires about their experiences of violence and abuse. These surveys were conducted in 1997, 2012 and 2014. Childhood experiences, sexual violence, intimate partner violence, emotional abuse, and financial abuse were all surveyed. The WHAP utilised the Revised Conflicts Tactics Scale in the violence surveys, to ensure responses were devoid of emotion or cognitive bias, and the Vulnerability to Abuse Screening Scale (VASS) in the 2014 survey to screen participants for susceptibility to elder abuse.

Results:

51.5% of respondents reported any incidence of childhood sexual abuse, including but not limited to penetration and sexual touching. These women were more than four times as likely to experience rape or attempted rape in adulthood when compared to women who were not sexually abused in childhood. 8.9% reported being severely physically beaten on at least one occasion during childhood. 23.7% of women reported having had an unwanted sexual experience during adulthood, and 11.8% reported rape or attempted rape.

18.4% of respondents had experienced physical violence or abuse at the hands of their current husband or partner, and 4.5% reported their partner had threatened or attempted to kill them. 71.4% of respondents had experienced emotional abuse at the hands of their current husband or partner, 2.8% had experienced sexual violence, and 6.3% had experienced financial abuse.

Discussion and Implications for practice:

The WHAP cohort reported significant levels of violence and abuse, often at levels far exceeding national averages. This is likely due to detailed questionnaires that removed emotional bias. This analysis demonstrates the vast proportion of the female population for whom violence and abuse have at some time been a reality and serves as a starting point to analyse how these experiences impact their physical health, particularly as they age.

Refugee healthcare in regional northern Australia

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Background:

Australian Government policy aims to resettle refugees in regional Australia. Little is known about refugee healthcare experiences in these settings. A qualitative study was performed to examine refugee perceptions of healthcare in a regional centre of northern Queensland.

Method:

An interpretive approach to a narrative inquiry methodology was undertaken. Purposive sampling and an interview guide were developed in partnership with the local refugee settlement agency. Semi-structured interviews were performed with fourteen refugees and involved interpreters. Transcripts were thematically organised into a story, validated by participants. Using QSR NVivo 12, all researchers analysed the transcripts. Themes were validated at a community event.

Results:

Six themes were described: service issues ("you are the problem"), self-advocacy ("speak up"), knowledge and understanding that changes with time ("that time I didn't know but now I know"), interpreter issues ("on Fridays, there's no interpreters"), regional-metropolitan differentials ("everybody loves to live here"), and the influence of the past on present behaviour ("they use to be in the refugee camp and that's why").

Discussion:

A conceptual framework involving engagement, access, trust and privacy, and the old versus the new, can be used to describe refugees' unique challenges and experiences in regional Australia. Discrimination, transport, and reliance on family and peers may be experiences that are more prominent in regional Australia. Refugees spoke favourably about living in northern Queensland but perceptions of access in metropolitan cities affected their movement.

Implications for practice:

Refugees require high quality information sharing practices, formal support systems, and better models of service delivery for interpreting support. Better models of primary healthcare to engage with refugees in regional settings are needed. Clinicians need to be culturally respectful with their interactions. Further research is needed on refugees in regional settings in implementing policy and service delivery.

Registrars after-hours care participation – who and where?

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Background:

Access to after-hours care (AHC) is of increasing concern in Australia with current trends indicating fewer GPs are providing AHC. GP training within Australia offers a great opportunity for registrars to experience different types of practice, including contributing to their practice AHC roster, in preparation for independent GP practice. This analysis aims to establish the prevalence and factors associated with registrars' provision of AHC.

Method:

A cross-sectional analysis of questionnaire data (2017-2019) from the ReCEnT cohort study of GP registrars. Questionnaires are completed each six-month training term. The outcome factor was contribution to the registrar's practice's AHC roster. Independent variables were registrar and practice characteristics.

Prevalence of registrars performing AHC was calculated with 95% Confidence Intervals. Associations of performing AHC were established using univariate and multivariable logistic regression.

Results:

49% of 2083 individual registrars contributed to their current practice's AHC roster. Significant multivariable associations of providing AHC were enrolment in the rural pathway (OR 1.65 [1.14, 2.39], p=0.008), training in an inner-regional location (OR 1.75 [(1.16, 2.62] p=0.007) or outer regional/remote/very remote location (OR 1.74 [(1.07, 2.83] p=0.026) versus a major city, later training term (OR 1.27 [1.03, 1.57] p=0.025) for third versus first GP term), and training in a larger practice (OR 2.08 [(1.76, 2.50] p= <.001. There was considerable variation between training regions (adjusted for rurality).

Discussion:

Our findings suggest approximately half of GP registrars contribute to AHC during each training term. The associations identified with AHC-provision could guide efforts to encourage registrars to be involved in this valuable and important service.

Implications for practice:

These findings may further inform strategies within registrar training and practices to promote provision of AHC as part of holistic general practice care.

Rural practice in early-career GPs

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Background:

Attracting and retaining vocationally-trained GPs in rural areas remains a priority for GP workforce planning in Australia. Vocational GP training policies aim to encourage early-career GPs to practice rurally. Therefore, understanding training program predictors of rural practice post-fellowship is critical for informing ongoing workforce planning. This study aimed to establish associations of early-career GPs' practice in rural areas.

Method:

A cross-sectional questionnaire linked with routinely collected training program data (the NEXT-UP study). Participants were early-career GPs (6-to-24 months post-Fellowship) who completed vocational training in NSW, ACT, Tasmania, and Eastern Victoria. The study outcome, post-fellowship rurality, was determined using questionnaire-reported practice postcode to ascertain Modified Monash Model remoteness categories. Associations with a range of demographic, practice and training characteristics were explored using multivariable regression.

Results:

Of 354 early-career GPs (28% response rate), 31% currently practiced regionally/rurally (MMM2-7). Factors associated with regional/rural post-fellowship practice location included: rural training location (adjusted OR 19.7 [7.93,48.7], p<0.001), having a spouse/partner not in the workforce (OR 6.37 [1.25,32.6], p=0.026), regional/rural/small town schooling (OR 4.68 [2.14,10.2] p<0.001) and having worked at their current practice during training (OR 3.30 [1.51,7.20], p=0.003).

Discussion:

Although the associations found in this study cannot be used to establish causality, the effect size found for rural training location is very large and, together with the association of having worked at their current practice during training, is likely to reflect a substantive contribution of training to subsequent workforce distribution.

Implications for practice:

These findings may further inform GP workforce planning and policy decisions about distribution of registrars during training. Policies and systems within training organisations that promote rural training experience may be of at least medium-term benefit for rural GP workforce distribution.

Scoping review: Smartphone app-based healthcare chatbots

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Background:

Chatbots are promising tools that intuitively engage users and provide solutions autonomously and efficiently. Currently, chatbots already serve significant roles- from general symptom checkers to therapy for people with depression. Their benefits range from freeing up healthcare resources, to allowing patients greater accessibility to healthcare resources.

The objectives of this study are to map the types of chatbots and their features, including their purpose, conversational attributes, precautions, and usability; define systematic methods to the novel approach of searching and assessing chatbot apps; and provide direction and framework for future research in this field.

Method:

A systematic assessment of chatbots available on iOS and Android smartphones was performed, involving the search, selection and standardised assessment of included chatbots.

Results:

The search identified 2719 apps, of which 48 were relevant as healthcare chatbots and were included in assessment. Mental wellness and symptom checker formed the majority of chatbot purposes.

User input predominantly included combinations of text-based natural language input and constrained options, with few allowing free speech. Chatbot output was predominantly text-based, with some allowing additional speech output. Chatbots generally lacked personality and engagement.

Clinical safety and information security features were incomplete in most chatbots, and usability was generally poor and compromised by lack of user-friendly features.

Discussion:

App-based chatbots are strongly heterogeneous in features and serve a variety of healthcare functions with potential for greater efficiency and accessibility. As we eagerly adapt technology into our lives, it is crucial for us to consistently update our understanding of the available tools, their purposes, features, strengths and shortcomings. Doing so, we gain clearer insights and direction into how best to leverage tools like chatbots, how to improve future developments, and what precautions to be aware of.

Implications for practice:

With increasing smartphone ownership and acceptability of health-related apps among the public, smartphone app-based chatbots are poised to improve healthcare.

Screening for family violence in fourth trimester

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Background:

Domestic Violence (DV) in Australia is a key contributor to illness, disability and mortality of women aged 18-44 years[1]. The times when a woman is at the greatest risk for DV include are when she leaves the relationship and during the perinatal period[2]. Western Australia has the second highest rate of sexual and physical abuse against women in Australia[3]. The 6-8-week postpartum check is the best time to screen high-risk women who may otherwise not reach out for support. Universal screening for DV has been found to increase the number of disclosures by women and allows for GPs to take steps towards a tailored approach for supporting a victim[4].

Method:

Retrospective clinical audit. Study dates: 01/01/2019—31/12/2019). This audit was conducted in a WA outer metropolitan GP practice.

Results:

DV screening was conducted in 49% (*n*=55) of sample size presenting for the post-partum 6-8-week check. In contrast, 36% (n=55) were not screened and 15% were unable to be screened with a reason documented in the patient notes.

Discussion:

The perinatal period is a time when domestic violence (DV) can commence, or escalate if previously occurring. Women are more likely to disclose to their GP if explicitly asked about DV. It is recommended that GPs screen every woman at the 6-8-week check and during the woman's fourth trimester. This audit found that only 49% of women were screened for DV (Outer metropolitan GP, WA) warranting the need to implement strategies for improving the proportion that are screened.

Implications for practice:

Particularly in light of the evolution of COVID-19 and the implications of social isolation, the risk of DV has increased in our community. The 6-8-week check is an opportune time to ask about DV as women are more likely to have increased contact with their GP around this time of increased risk and dual vulnerability.

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Sharing Knowledge About Immunisation: Supporting GPs conversations with parents about childhood immunisation

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Background:

General practitioners (GPs) are well placed to address parents' questions and concerns about childhood vaccination. However, some GPs find these conversations unsatisfying and difficult. Supporting GPs to communicate with confidence is key to addressing vaccine hesitancy.

Methods:

Drawing on communication science, the Sharing Knowledge About Immunisation (SKAI) package was developed to support GPs and other immunisation providers in vaccination conversations with parents. Qualitative research with parents and healthcare workers, stakeholder consultations, and testing via simulated consultations informed and refined the package.

Results:

Findings indicated that strategies should be tailored to parents who are ready, questioning, and declining. The resulting SKAI package comprises an eLearning module and two websites. The eLearning module provides scenarios and activities that enable GPs to structure vaccination consultations with clear goals, and practice eliciting, recognising and responding to parents' concerns. The SKAI website for providers offers further resources such as discussion guides. The SKAI website for parents offers information about NIP vaccines, videos, and Q&A sheets for common questions.

Discussion:

The SKAI package was launched and disseminated progressively throughout 2019. Several thousand immunisation providers have engaged with the eLearning module, while the websites have collectively received over 50,000 visitors. Preliminary survey findings indicate that parents and providers find the websites visually appealing and useful, and that parents trust the information provided. Future plans includeintegrating SKAI into primary care pathways and practice management platforms to enable GPs to more easily access the training and resources, and adapting the SKAI concept to other target groups.

Implications for practice:

The SKAI package of resources provides a comprehensive integrated approach to any discussion about vaccination in primary care and aims to prevent or manage vaccine hesitancy and refusal.

Spinal TB case study

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Background:

The WHO reports an estimate of 10 million cases of tuberculosis per year worldwide[1]. Australia has one of the lowest rates, with 1,337 cases recorded in 2014 (a rate of 5.7 per 100,000 population)[2]. 15% of TB present as extra-pulmonary infections, such as lymph nodes, pleural, GI, bones, and skin.

Method:

The medical records of a 31 female who presented to our general practice clinic were reviewed and relevant data collected.

Results:

A 31-year-old Nepalese female presented with a 3-month history of lower back pain. She described left buttock pain shooting down her leg and worse on weight bearing. There was no trauma or significant past medical history. Clinical examination reproduced the pain on SLR of left leg, with no other examination findings.

Initial investigation with CT showed subchondral sclerosis and cortical irregularities of left sacroiliac joint. Blood tests revealed a normal WCC, CRP 15, ESR 86, and negative rheumatological tests (including HLA-B27, RF, anti-CCP, ENA, ANA, and anti-DNA Ab).

Further imaging included an MRI (showing minor degenerative changes in left SI joint), NM bone scan (inflammatory process in left sacroiliac joint), and a CT guided biopsy that revealed granulomatous inflammation with culture growing drug-sensitive Mucobaterium tuberculosis.

Discussion:

Imaging in spinal TB may prove challenging in early disease. CT may reveal bony destruction (in particular fragmentary type) and also assess for the presence of abscess formation. An MRI is more sensitive in recognising early inflammatory processes and localising disease. However it is unable to differentiate between inflammatory and infective pathology. Radionuclide studies (bone scintigraphy) may assist in evaluating the degree of inflammation. CT-guided biopsy is needed to confirm the diagnosis[3].

Implications for practice:

It is important for the clinician to be aware of spinal tuberculosis as a differential diagnosis in back pain, and to understand the limitations of radiographic imaging in the diagnosis.

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Study on women's experience of postpartum contraception

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Background:

Postpartum contraception gives women reproductive autonomy, reduces unplanned pregnancies and minimises short pregnancy intervals. A suboptimal uptake of postpartum contraception around the world was shown to be due to a lack of comprehensive counselling, social norms related to young motherhood and negative influence by intimate partners. In the Australian primary care context, there has been limited research into women's postpartum contraceptive experiences. The aim of this study is to explore Australian women's experiences and preferences regarding postpartum contraceptive care.

Method:

English-speaking women (18-40 years old) with children under 5 years old were invited to participate in a semi-structured telephone interview. Social media recruitment with a Facebook post and a website feature article was presented to a widely used Melbourne parenting group on Facebook (over 46,000 followers). A Qualtrics questionnaire was developed to determine women's eligibility, allowed them to view the explanatory statement and provide consent and contact information. The first twenty women were selected for the interviews, with demographics reflective of the local Melbourne region.

Based on Andersen's healthcare utilisation model, the interview schedule included questions on participants' pregnancy experience, contraceptive knowledge, postpartum contraceptive use and counselling. Participants were asked about their preferences for postpartum contraceptive care, interactions with healthcare providers and timing of counselling. The interview recordings were transcribed by a professional transcription service.

Findings:

The interviews will be transcribed in September. The transcriptions will be imported to NVivo 12 software for coding and analysis by the researchers using Braun and Clarke's reflective thematic approach, including data familiarisation, coding, generating themes, reviewing and defining the themes.

Discussion:

The discussion will be available after data analysis.

Implications:

The research will improve understanding of women's postpartum contraceptive experiences, identify factors influencing women's contraceptive decisions and their preferences of postpartum contraceptive care. The findings will help GPs and health providers to deliver quality postpartum contraceptive care.

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Supporting innovative general practice research: the STAREE trial: https://www.monash.edu/medicine/staree/home

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Background:

1. STAREE will provide general practitioners with a research-based educational programme that will enhance practitioner's knowledge on evidence-based research techniques, utilising their own patient cohorts. STAREE is a general practice based NHMRC trial with no commercial sponsor. Its aim is to examine the benefits of statin therapy versus risks in healthy older people, determining whether atorvastatin maintains or improves quality of life in elderly patients. Outcomes may guide prescribing policies.

Method:

- STAREE is a statin-placebo controlled, double-blind, randomised trial enrolling men and women 70 years and over, comparing Atorvastatin 40mg vs placebo, aiming to recruit 10,000 nationally. Exclusions are existing cardiovascular disease, diabetes, dementia, plus participants need to live independently in the community
  - Co-Primary Endpoints:
    - Time to death, or development of dementia or disability
    - Time to major fatal or non-fatal cardiovascular events
  - Secondary endpoints
    - Cardiovascular death, Myocardial infarction, Stroke, Approved need for Residential Care, Unplanned All-cause Hospitalisation, New onset Diabetes, Cancer – fatal and non-fatal, All-cause Dementia, Quality of Life, Cost - effectiveness of Statin, Frailty / Disability, and Cognitive Decline.

Results:

- Recruitment still occurring nationally

Discussion:

- Communication is supported by GP educational newsletters. Recruitment will utilise existing GP practice recall processes, via computerised databases, supervised and supported at each practice site by the research team, with administrative support of $100 per randomised participant. Average follow-up is 5 years with 6th monthly research staff visits.

Implications for practice:

- Facilitate each GP's involvement and research knowledge acquisition, supported by a accompanying RACGP CPD audit programme.
- Develop, and maintain a national network of general practices by integrating research within existing practice systems

Survey of Australian GP opioid prescribing practices

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Background:

GPs prescribe 50% of Australian pharmaceutical opioids, and half of this is to manage chronic non-cancer pain despite best practice recommendations. The aim of this survey was to determine the factors influencing GP opioid prescribing decisions and explore self-reported knowledge, attitudes and beliefs.

Method:

A cross-sectional de-identified postal survey was sent to 4000 Australian GPs in September and October 2019. Key outcome measures included confidence in opioid prescribing, use of risk reduction measures, and prescribing behaviours in a case study of an elderly woman with low back pain. Parametric tests were used for normally distributed data and predictor modelling undertaken.

Results:

The response rate was 12% (482/ 4000). Participant demographics were representative of Australian GP: 43% aged over 55 years, and 50% male. 68% graduated in Australia, 54% practiced in NSW or Victoria. 73% had RACGP/ACRRM Fellowship.

The best GP predictors of self-reported use of opioid risk reduction strategies were being female (co-efficient -0.125) and overseas trained (co-efficient 0.166). The best GP predictors of self-reported confidence in opioid prescribing were being male (co-efficient 0.212) and aged over 55 years (co-efficient 0.120).

73% of participants felt their current prescribing practices did not need to change; 25% believed their opioid prescribing needed to decrease.

In the case study, 47% of participants prescribed *an* opioid when pain persisted 4 weeks later- most commonly tramadol or tapentadol, codeine and buprenorphine patch.

Discussion:

Surveyed GPs were generally confident in opioid prescribing and did not believe their practices needed to change. However, self-reported confidence was not associated with increased use of risk reduction strategies, or safer use of opioids in a case study.

Implications for practice:

GP confidence in opioid prescribing may not translate to safer opioid practices. Recognising factors contributing to prescribing decisions may help inform GP-targeted interventions and safer pain management.

Targeted recruitment of doctors to remote communities

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[1]Remote Vocational Training Scheme

Background:

Working directly with rural and remote communities, an established rural generalist and general practice training program has expanded its longstanding workforce retention and training model by directly recruiting doctors to targeted communities with high medical workforce need.

The 2018-20 pilot of the new strategy successfully secured the services of 11 doctors to 13 of the Australia's hardest to fill locations, including 4 remote Aboriginal Medical Services, bringing a more stable workforce and enhanced continuity of care to the communities.

Method:

By collaborating with Rural Workforce Agencies, State Government Departments of Health and remote communities, locations of high medical workforce need were identified and selected based on the following criteria:

Potential for providing continuing comprehensive whole-patient medical care

1. Geographic remoteness
    - Medical workforce need
    - Equity in geographic distribution across Australia

The recruitment of a doctor to a remote community was undertaken by linking candidates to locations identified as being of high workforce need. Entry to the 3-4-year rural generalist and general practice training program, was guaranteed, on the attainment of minimum entry standards.

Results:

The 2018-20 initial pilot of the program has successfully recruited 11 full-time doctors to 13 remote locations with longstanding medical workforce deficits, including; Cunnamulla (QLD), Mt Isa (QLD), Cooktown (QLD), Lightning Ridge (NSW), Bourke (NSW), Boggabri (NSW), Mallacoota (VIC), Queenstown & Rosebery (TAS), King Island (TAS), Wadeye & Warruwi (NT), and Nhulunbuy (NT).

Discussion:

This targeted recruitment model has brought a more stable workforce and enhanced continuity of care to the participating communities, as well as providing career progression to specialist qualifications for the recruited doctors.

Implications for practice:

Initial findings suggest that the linking of high-quality vocational training to a specific location is an effective strategy to recruit and retain doctors to rural, remote and Aboriginal and Torres Strait Islander communities with high medical workforce need.

The 3-Domains Toolkit for Assessing Elderly Drivers

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Background:

The 3-Domains toolkit has been designed to support driving medical assessments in older drivers (≥75 years) in General Practice. The toolkit measures across the three functional domains essential for driving: sensory, motor and cognitive, comprising visual acuity using a Snellen chart; the functional reach test; and the road signs recognition test. The three test scores are entered into an online calculator to generate an overall score predicting the likelihood the older driver would pass an on-road driving test.

We are investigating the feasibility of the 3-Domains toolkit in Australian general practice and its acceptability to general practitioners and older drivers (≥75 years).

Methods:

Pilot study using the toolkit for drivers ≥75 years presenting to General Practice for their annual driving licence medical assessment in ten general practices in Queensland.

Semi-structured interviews will be conducted with GPs, practice nurses, and older drivers after using the toolkit, to assess acceptability and utility of the toolkit.

Results:

Not yet available.

Discussion:

If the 3-Domains toolkit is feasible and acceptable it could be used regularly in general practice to inform clinical judgement during driving medical assessments in older drivers and to support discussions about the need to plan for eventual driving cessation or for on-road testing.

Implications for practice:

The 3-Domains toolkit has the potential to support potentially challenging consultations and on-going relationships between GPs and older drivers.

The impact of the 2019-20 bushfires on Australian general practice encounters

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Background:

The 2019–20 bushfire season was one of the worst in Australian history with widespread dispersal of smoke across the country. The impact of bushfire on hospital presentations has been previously described but there is limited data on its impact on primary care.

Method:

This study compared condition-specific clinical encounter rates before and during the bushfire season, on bushfire smoke affected and non-affected days, among patients visiting one of 258 general practices participating in MedicineInsight (a national general practice database) between September 2018 and January 2020. A bushfire smoke affected day was defined as one with a 24-hour mean particulate matter level that exceeded the 95th percentile of historical daily mean values and was ≥25 mcg/m^3. The analysis controlled for geographical location, day of the week and underlying trends in condition encounter rates from the previous year to the bushfire affected year.

Results:

When comparing encounter data from a bushfire affected day to the corresponding date in the previous year, there were 2 extra asthma encounters per 1,000 encounters (a 24% increase) on bushfire smoke affected days. In contrast, presentations for upper respiratory tract infections fell. There was a non-significant trend towards increased presentations of stroke and heart attacks. There were no significant differences in encounter rates for post-traumatic stress disorder (although this was significant in unadjusted analyses), depression or anxiety disorders.

Discussion:

As seen in studies using hospital data, the number of patients presenting with asthma increased on bushfire affected days. The potential effect of bushfire smoke on encounters for post-traumatic stress disorder, heart attacks and stroke requires further research.

Implications for practice:

On days which are affected by bushfires, there are significant differences in presentations to general practice as previously demonstrated in hospital settings. In periods of bushfire practices may need to be prepared for such changes.

Transdisciplinary generalism: A coherent philosophy and practice for primary care

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Background:

Generalist skills are of importance in those clinical disciplines that value whole person care that attends to biography as well as biology. Generalist researchers are often caught between reductionist (positivist) biomedical and social science (post-positivist) constructivist theories of knowing. Neither of these approaches approximate the complexity of the generalist clinical encounter. A theoretically robust research methodology is needed that acknowledges the complexity of interpreting these ways of knowing in research and clinical practice.

Method:

We undertook a conceptual review of literature that outlines the philosophy and practice of generalism in primary care setting and both the practical (Zurich) and philosophical or methodological (Nicolescuian) schools of transdisciplinarity.

Results:

Concurrence between generalism and transdisciplinarity were clearly identified in the literature, revealing alignment in their *broad scope, relational process, complex knowledge management, humble attitude to knowing,* and *real-world outcome focus*. These processes were described and named *Transdisciplinary Generalism* (a neologism developed for this inquiry).

Discussion:

This research challenges the assumption that specialist reductionist forms of research adequately represent the way knowledge is used in general practice. It examines the link between generalist and transdisciplinary philosophy and practice in a way that may offer insight into both the knowledge management skills of the generalist clinician, and the forms of knowledge that need to be considered in any research that purports to consider the whole person

Implications for Practice:

Transdisciplinary Generalism is a coherent epistemology and philosophy that could be used to define the goals, process and content of integrative research and clinical practice of whole person care. This could facilitate research that more closely aligns with the generalist setting, and therefore translation into practice. It could also facilitate increased self-respect from GPs for the work of the generalist: their participatory, reflexive, inclusive approach to the complex knowledge of the whole person.

Funding:

This research was undertaken as part of a PhD through The University of Queensland and funded by the Australian Government Research Training Program Scholarship and the Advance Queensland Scholar program 2016-2019.

1. Project BWsJ. Researcher/Practitioner Discourse: Strangulation and Domestic Violence. In:2014.

Understanding cross-cultural informed consent

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Background:

It is recognised that conciliatory attitudes, respect for medical professionals and avoidance of being direct can make health consultations with Burma-born patients difficult to navigate. This coupled with linguistic barriers, may make the sensitive nature of many women's health consultations particularly challenging. Little is known about current practices for obtaining informed consent in this context, or how culturally diverse understandings of informed consent between Eastern and Western cultures is navigated by clinicians, interpreters and patients. The objectives of this study are to explore current practices, barriers and strategies to obtaining informed consent in medical consultations with women born in Burma.

Methods:

Purposive, opportunistic and snowball sampling was used to recruit participants of different ages, gender, and years of professional experience, from clinics in Victoria that see a high volume of Burma-born patients. Thirty to sixty minute semi-structured interviews are being conducted with general practitioners, nurses and interpreters, and de-identified audio recordings are being transcribed for inductive thematic analysis. Coding of transcripts will be corroborated by 2 researchers.

Results:

Recruitment, data collection and analysis is underway. Some findings that have emerged thus far are: the importance of having an appropriate interpreter; the importance of reading non-verbal cues; various strategies employed by clinicians and interpreters to transcend linguistic barriers; and the manner in which to ask questions to facilitate honest, unbiased responses.

Discussion:

It is expected that saturation will be reached at or before 20 interviews and that findings will both confirm current observations as well as provide new insights into issues of key concern for practitioners managing this population.

Implications for practice:

The findings of this study will contribute to identifying practical ways in which the process of obtaining informed consent from women born in Burma, within the Australian healthcare context, can be optimised.

Validity of five MedicineInsight chronic condition algorithms

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Background:

MedicineInsight is a database containing de-identified electronic health records (EHRs) from over 700 Australian general practices. As there is not a single field in MedicineInsight that provides definitive information on the health conditions experienced by each patient, NPS MedicineWise (the custodian of MedicineInsight) has developed algorithms that use information from various fields to identify whether patients have nominated health conditions. This study examined the validity of MedicineInsight algorithms for five chronic conditions: anxiety, asthma, depression, osteoporosis and type 2 diabetes.

Method:

Patients' disease status according to MedicineInsight algorithms was benchmarked against their disease status determined through review of the original EHRs held in the participating practices. Fifty general practices contributing data to MedicineInsight met the eligibility criteria regarding patient load and location (Sydney or Melbourne). Five were randomly selected and four agreed to participate. Within each practice, 250 patients aged ≥ 40 years were randomly selected from the MedicineInsight database. This age restriction increased the prevalence of the evaluated conditions, thereby optimising statistical power. Trained staff reviewed the full EHR for as many of the selected patients as possible within the designated time.

Results:

A total of 475 patients were included in the analysis. All the evaluated MedicineInsight algorithms had excellent specificity, positive predictive value, and negative predictive value (above 0.9) when benchmarked against EHR reviews. The asthma and osteoporosis algorithms also had excellent sensitivity (above 0.9), while the algorithms for anxiety, depression and type 2 diabetes yielded sensitivities of 0.85, 0.89 and 0.89 respectively.

Discussion:

The MedicineInsight algorithms for asthma and osteoporosis have excellent accuracy and the anxiety, depression and type 2 diabetes algorithms have good accuracy.

Implications for practice:

This study provides support for the use of these algorithms when using MedicineInsight data for primary health care quality improvement activities, research and health system policymaking and planning.

Welcomeness in general practice for people with substance use disorders

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Background:

Historically, people with substance use disorders (SUDs) has been treated in settings separated from general practice. There is increasing awareness of the role of general practice in providing holistic care, which includes treatment of SUDs, for this vulnerable population. The aim of this research was to examine how access to, and experience of, general practice care is affected by having a history of SUDs, including prescription drug misuse, from the perspectives of women involved with the criminal justice system.

Method:

Qualitative interview study with pre- and post-release interviews, with thirty-nine women who identified themselves to have current or previous SUD and were in prison at the time of the first interview. Thematic analysis was informed by constructivist grounded theory.

Results:

Sixty-five interviews were undertaken. Participants considered that they were not as welcome in general practice as other patients, and that welcome could be conditional on not disclosing SUD or only requesting unrelated healthcare. The prescribing responsibility of GPs was strongly implicated in participants' expectations and experiences of care. The label of 'doctor shopper' was challenged, given they may need to attend multiple GPs to find a welcoming practice.

Discussion:

Women in contact with the criminal justice system who have past or current SUDs may not perceive themselves to be welcome in general practice, and may not disclose substance use. Prescription drug misuse is a particular challenge, where GPs need to avoid causing harm through the medications they prescribe, yet maintain a relationship with the patient that addresses their health needs. As we set in place initiatives to better manage SUDs in general practice, we must also consider how to ensure welcomeness for this group.

Implications for practice:

Welcomeness is crucial to equitable healthcare access, and requires particular consideration for people with a history of SUDs.

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