

Welcome to the RNZCGP's first digest. The digest contains a selection of recent New Zealand and overseas journal articles and other publications that might be of interest to general practice and to those working in the primary care sector. Some of the articles are available in full via the links provided. Others will require an online subscription.



TOPICS IN THIS ISSUE

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- Public health

Health workforce



Influence of gender and other factors on medical student specialty interest

Authors: Boyle V, Shulruf B, Poole P.

General practice is the largest New Zealand medical workforce and contains a disproportionately high number of women. It is also the most threatened medical workforce, especially in rural areas. This study analysed career intentions of 711 graduating medical students at The University of Auckland from 2006 to 2011. Specialty interest was highest for general medicine, followed by subspecialty surgery, general practice and paediatrics. There were differences by gender for most specialities, but not for general practice. While primary care needs an estimated 50 percent of the future medical workforce to cope with an ageing population, the authors found only 30 percent of students had a strong interest in general practice. Only 3 percent of students had a strong interest in general practice alone. A positive clinical attachment, career flexibility, intention to work in a rural area, dependent children, income, and family status all contributed positively to an interest in general practice. Negative predictors included an intention to work in the city and the effect of medical role models.

The authors concluded that the levels of interest in general practice are too low for workforce needs. All clinical teachers and the health education system must be cognisant of how formative clinical attachments are in students' minds and be aware of their own critical roles in developing the New Zealand workforce. Having greater availability of general practice placements during the early postgraduate years might help to confirm general practice as the first career choice, rather than one kept in reserve after other specialities are tried.

Reference: N Z Med J. 2014;127(1403).

Health workforce



Patients report better satisfaction with part-time primary care physicians, despite less continuity of care and access

Authors: Panattoni L, Stone A, Chung S, et al.

Over the last decade there has been a shift in the primary care workforce toward a higher proportion of doctors choosing to work part-time. This observational study examined the relationships between doctors' clinical full-time equivalent (FTE), continuity of care, access to care and patient satisfaction with the doctor. The study was conducted in California in 2010 and included 104 family medicine physicians and 101 internal medicine physicians.

The authors found that doctors working full-time provided better access and continuity of care. However, findings suggested that doctors with lower clinical FTEs had higher patient satisfaction scores, after accounting for direct and indirect associations with continuity and access to care measures. The study suggested that primary care physicians who choose to work fewer clinical hours may have worse continuity and access outcomes, but they may provide a better patient experience. The authors concluded that, in the face of projected shortages of doctors, employers could be more supportive of doctors choosing to work part-time. Recruitment and retention might be improved with greater options for doctors to work reduced clinical hours.

Reference: J Gen Intern Med. 2014;DOI:10.1007/s11606-014-3104-6.

Education



FREE

GP supervisors – an investigation into their motivations and teaching activities**Authors:** Ingham G, O'Meara P, Fry J, et al.

General practice supervisors have been described as the cornerstone of general practice training, despite little being known about what actually happens in registrar-supervisor interactions. This Australian study surveyed supervisors about their motivation to become and remain a supervisor, and the frequency of selected teaching activities used.

The researchers analysed a total of 84 surveys from supervisors of registrars in their first or second year of training. The majority of respondents cited intrinsic motivators as reasons for becoming GP supervisors, including enjoying teaching (84%), contributing to the profession and community (82%), adding variety (78%), and workforce/succession planning (69%). Variation in teaching activities (e.g. opportunistic clinical discussion, direct observation of registrar consultations, and face-to-face teaching) used by supervisors did not appear to be associated with differing motivations. Overall, the study found that supervisors reported positively about their role.

Reference: Aust Fam Physician. 2014;43(11):808–12.

Clinical issues



FREE

Excessive occupational sitting is not a 'safe system of work': time for doctors to get chatting with patients**Authors:** Straker L, Healy GN, Atherton R, et al.

For office workers, on average over 75 percent of the office workday is spent sitting. There is now evidence that both overall sedentary time and the pattern of sedentary exposure are associated with substantial harm. Excessive total sitting time is associated with premature mortality, obesity, cancer (ovarian, endometrial and colon), Type 2 diabetes and cardiovascular disease. Conversely, regular interruption of sedentary time is beneficially associated with biomarkers for chronic conditions.

The authors recommended that doctors prescribe behaviour to reduce occupational sedentary exposure where this may exacerbate, or be exacerbated by, an existing medical condition. For example, a doctor who is aware that their patient has a prolapsed spinal disc would require the patient to refrain from lifting heavy objects at work. In the same way, a doctor who is aware that their patient's cardiovascular condition necessitates remaining active should inform the patient and their employer of the need for the patient to regularly move to maintain wellbeing.

Reference: Med J Aust. 2014;201(3):138–140.

Clinical issues



FREE

How common are symptoms? Evidence from a New Zealand national telephone survey**Authors:** Petrie KJ, Faasse K, Crichton F, et al.

Symptoms are a common daily experience and, in most cases, transient and benign. GPs frequently see many patients who present with symptoms but no medical diagnosis. This New Zealand study assessed the frequency of symptoms in a general population sample over the previous week. A representative sample of 1000 New Zealanders were recruited using random digit dialling during June/July 2013.

Reports of symptoms were very common with only 10.6 percent of participants reporting no symptoms. Patients reported between 0 and 36 symptoms; 23 percent reported 10 or more symptoms and 10 percent reported 14 or more symptoms. The most common symptoms reported were fatigue, back pain, headache, runny/stuffy nose and joint pain. Higher symptom reporting was strongly associated with previous GP visits, medication-taking and female gender.

The authors concluded that symptoms in the general population are common. Therefore, it is important to appreciate the potential for common symptoms to be misconstrued as indicating serious health conditions. Knowing the extent to which symptoms are part of normal human experience may reassure those with health concerns and reduce symptom misattribution.

Reference: BMJ Open. 2014;4:e005374.

Medicines

**Unhelpful information about adverse drug reactions****Author:** Tan K, Petrie KJ, Faasse, et al.

The authors of this New Zealand study looked at whether the information provided to patients about possible adverse drug reactions is helpful. They reviewed information from 136 drug information documents relating to 15 commonly prescribed drugs.

The study found a lack of consistency in information about the seriousness of adverse drug reactions. None of the information sources consistently provided the evidence underpinning the adverse drug reactions listed. Data from the previous *BMJ* article was used to list the 20 symptoms most commonly reported in the previous seven days (e.g. back pain, fatigue and headache). Nine of these symptoms were listed in more than half of the drug information documents; eight were listed as an adverse reaction to more than 90 percent of drugs studied. The authors stated that the substantial overlap between commonly experienced symptoms and frequently listed adverse drug reactions suggests a misattribution of such symptoms as adverse drug reactions.

The authors concluded that drug information is excessive, inconsistent, often poorly presented and overwhelmed by symptoms commonly experienced in daily life. The possible harms listed may deter patients from starting or continuing treatment, or might raise negative expectations and increase reports of adverse effects (the nocebo effect). The authors suggested that organisations providing information document the level of evidence that links the adverse effect with the drug and, where possible, provide numerical estimates of risk.

Reference: *BMJ*. 2014;349:g5019.

Medicines

**Direct-to-consumer advertising of prescription medication in New Zealand****Authors:** Every-Palmer S, Duggal R, Menkes DB.

New Zealand is an outlier in allowing direct-to-consumer advertising (DTCA) of prescription medicines. Internationally, regulatory measures have increased following a number of scandals relating to unethical marketing. In this article, the authors argue that DTCA is a controversial and harmful practice.

The *Family Health Diary* is one example of DTCA in New Zealand. It has been found that 94 percent of pharmacists believed *Family Health Diary* increased sales and 99 percent reported fielding customer enquiries about advertised products. Since the 1940s such industry funded 'health information' campaigns have been banned in almost all industrialised countries (except New Zealand and the US).

The pharmaceutical industry asserts that DTCA is informational – it empowers consumers with medical knowledge, encourages dialogue with doctors and enables informed choices about treatment. However, the authors argued that DTCA is a heavily biased source of health information that represents benefits over harm, and is associated with unnecessary prescribing, iatrogenic harm and increased costs to the taxpayer. There is a risk that consumers may misconstrue DTCA as public health messages, and fail to recognise the inherent commercial bias. The authors found little support for DTCA from consumers or health professionals in New Zealand. In conclusion, the authors did not believe that DTCA is an appropriate vehicle to increase the provision of accurate, accessible and independent sources of health information so that informed choices can be made about treatment.

Reference: *N Z Med J*. 2014;127(1401).

Medicines

**A new web-based Medication Error Reporting Programme (MERP) to supplement pharmacovigilance in New Zealand – findings from a pilot study in primary care****Authors:** Kunac DL, Tatley MV, Seddon ME.

While the majority of medication errors do not result in patient harm, those that do (aka preventable adverse drug events) are costly and responsible for significant patient morbidity and mortality. This small pilot study sought to determine whether primary care clinicians would report medication errors using a new web-based system.

The Medication Error Reporting Programme (MERP) was piloted over an eight-month period and involved 38 general practice and 28 community pharmacy staff. A total of 376 reports were submitted using the new web-based system; 55 (15%) reported patient harm. Wrong dose (25%) and wrong medicine (22%) were the most common error types, occurring predominately during the prescribing and dispensing of medications. In general practice, the most frequent contributing factors to error were problems in the process of prescribing. In contrast, in community pharmacy they related to product name and packaging factors. Time pressures, workload and interruptions were commonly cited reasons for both settings.

The authors concluded that the web-based system can successfully harvest reports from busy primary care health professionals and yield useful information about medication errors in the primary care setting. It has the potential to inform initiatives for improving patient safety. In the future, MERP will be extended to a wider group of primary care reporters.

Reference: *N Z Med J*. 2014 Aug 29;127(1401):69–81.

Rural practice

**Influence of rural background and rural medical training on postgraduate medical training and location in New Zealand****Authors:** Shelker W, Zaharic T, Sijnja B, et al.

Both the Otago and Auckland medical programmes have implemented initiatives aimed at recruiting medical students to train in rural medical practice. In this retrospective cohort study, the authors evaluated the influence of the Otago medical programme's rural entry pathway and rural immersion programme (i.e. where fifth-year students train in rural settings for one year) on postgraduate medical training and location. The authors analysed the rural background/training and postgraduate medical training and location of medical school graduates from 2008 to 2011.

The study found that 112 of 733 (15.3%) students had rural background/training. Significantly more students with rural background/training were training in rural hospital medicine or general practice after graduation. Almost twice as many students with rural background/training were working in non-major urban centres. The authors concluded that both rural background and rural training were associated with higher rates of training in rural hospital medicine or general practice after graduation, which is consistent with other international reports.

Reference: N Z Med J. 2014;127(1403).

Rural practice

**Medical careers – nature or nurture?****Author:** Wilkinson TJ.

In this editorial, Tim Wilkinson, Associate Dean of University of Otago, Christchurch, considered the previous article and incentives to increase the rural medical workforce. He noted the three pillars influencing the medical workforce that need to be aligned: selecting the right people, giving them the right experience during medical school and in postgraduate training, and providing incentives for people to work there following qualification.

In New Zealand, medical schools have a role in influencing the medical workforce. Role models and intra-medical school experiences influence career choices. Recent research has also shown that experiences outside medical school are possibly more influential at least in choosing a career in general practice. This includes portrayal of various medical disciplines by the media and television shows, and the views of peers and family. Professor Wilkinson also argued that the health service is likely to benefit from tertiary-based super-specialists who have had rural exposure. Such a person is likely to be more understanding of the context and issues affecting real practice when faced with a referral from a rural-based doctor. Although medical careers are both nature and nurture, the job also needs to be made sufficiently attractive at the end to ensure the initiatives are sustained.

Reference: N Z Med J. 2014;127(1403).

IT health

**Should patients be able to email their general practitioner?****Authors:** Gunning E, Richards E.

Email communication between GPs and patients is commonplace in Denmark, but patchy in the UK. In this article, clinical teaching fellow Elinor Gunning and GP academic Emma Richards go head to head arguing for and against the use of email services in primary care in the UK.

The 'yes' arguments focused on workload, patient safety, and patient proximity and communication.

- If the service is well planned and managed, then email can be a more efficient way to manage some routine conditions and requests.
- Studies have found that patients are mindful of overloading their GP with too many, or inappropriate, emails.
- Patients' communications are generally brief, formal and medically relevant.
- A 2012 Cochrane review found no evidence that using email caused harm.
- Many resources exist to help minimise risks. Comprehensive patient education, adequate email triaging systems, a secure server and patient consent are crucial.
- Email can help follow-up after a consultation, and promote and maintain the doctor-patient relationship through continuity of care.

Models of care

The main counterarguments included an unclear benefit, professional unease and insufficient safeguards.

- No evidence shows that email is effective in improving access or saving money.
- The Cochrane review found no difference in outcomes such as patient understanding, health status or behaviours.
- Telephone facilitates two-way discussion in real time which cannot be done with a single email. Email would direct resources away from face-to-face contact with patients.
- Elderly and infirm patients may struggle to engage with email because they lack the facilities or know-how.
- The UK lacks consistent guidance on how to run email services. Practices need systems to maintain confidentiality and patient safety. It is suggested that the Department of Health first issues clear guidance on what can be safely and appropriately communicated by email and what resources are needed.

Comment: The RNZCGP was recently asked about using email to inform patients of test results. The College would not generally recommend conveying results to patients by email as it is not secure. However, this situation will be improved with the current development of patient portals.

Reference: BMJ. 2014;349:g5338.



Under the same roof: co-location of practitioners within primary care is associated with specialized chronic care management

Authors: Rumball-Smith J, Wodchis WP, Koné A, et al.

Chronic diseases are the leading cause of death worldwide. International and national bodies promote interdisciplinary care (a shared collaborative approach) in the management of people with chronic conditions. In this article, the authors examined one factor in this team-based approach – the co-location of non-physician disciplines within the primary care practice.

Survey data from 330 general practices in Ontario, Canada and New Zealand were used. An increase in the number of non-physicians was associated with an increase in the availability of special sessions/clinics for patients with diabetes, hypertension, and the elderly. Co-location was also associated with the provision of disease management programmes for chronic obstructive pulmonary disease, diabetes, and asthma; the availability of equipment in the centre; and the extent of nursing services. A desire for co-located social and health services was a dominant theme of feedback from New Zealanders with chronic conditions. The authors concluded that co-location of practitioners may improve access to services and equipment that aid chronic disease management.

Reference: BMC Family Practice. 2014;15:149.

Medico-legal and ethical issues



FREE

Accident Compensation Corporation: how it deals with complaints

Author: Office of the Auditor-General

In this report, the Auditor-General noted that ACC staff showed a commitment to customer service and the principles underlying the Code of ACC Claimants' Rights. However, it was found that some people do not receive the standard of service expected from ACC and make complaints. Complaints are commonly the result of ineffective communication, people feeling they have not been kept fully informed, treated fairly, or treated with dignity and respect. Furthermore, the Auditor-General raised concerns that ACC does not count matters raised and quickly resolved by frontline staff in local offices as complaints, and ACC tries to distinguish between service delivery matters and disagreements about cover and entitlement. Overall 22 percent of complainants surveyed were satisfied with how ACC handled their complaint.

The Auditor-General concluded that the current complaints system is not effective. Issues that need addressing include:

- low satisfaction level on complaint handling
- limited organisational learning from complaints as a result of a disconnected complaints system and recording of complaints
- a lack of consistency throughout ACC's complaint system
- a need to better equip staff to handle complaints
- a need to do more to understand people's experiences of the complaints system and why some people do not complain.

The Auditor-General noted that ACC's recent approach to privacy could be adapted to the complaints system.

Reference: Office of the Auditor-General, August 2014.

Medico-legal and ethical issues



FREE

Mandatory reports of concerns about the health, performance and conduct of health practitioners**Authors:** Bismark MM, Spittal MJ, Plueckhahn TM, et al.

Australia's mandatory reporting law is unusually far-reaching. Since 2010, health practitioners must report all 'notifiable conduct' that comes to their attention to the Australian Health Practitioner Regulation Agency (AHPRA). Notifiable conduct covers practising while intoxicated, sexual misconduct, and placing the public at risk through impairment or a departure from accepted standards. The authors carried out a retrospective review of reports received by AHPRA between 1 November 2011 and 31 December 2012 to provide baseline information on how the reporting regime is working.

The study found the incidence of mandatory reporting was 18.3 reports per 10 000 practitioners per year. There were 819 mandatory notifications, with 501 (62%) related to perceived departures from accepted professional standards, mostly standards of clinical care. Seventeen percent alleged that the practitioner had an impairment that placed the public at risk of substantial harm; 13 percent alleged that the respondent had practised while intoxicated and 8 percent related to sexual misconduct. Psychologists (47.4/10 000/year) had the highest rate of notifications, followed by doctors (41.4), then nurses and midwives (39.7). It was nurses and doctors who most often made the notification (89 percent of all notifications). Notifications against men were more than 2.5 times than for women. The incidence was much higher for those working in remote and very remote areas than those in major cities and regional areas. The profession of the notifier and respondent was the same in 80 percent of cases.

The authors concluded that some of the adverse effects of mandatory reporting forecast by critics and supporters (e.g. that it fuels professional rivalries) and visible benefits (e.g. it encourages employers and clinicians to address poor performance and improves surveillance of threats to patient safety) have not materialised.

Reference: Med J Aust. 2014;201(7):399–403.

Comment: For comparison, in New Zealand the Health Practitioners Competence Assurance Act 2003 makes it mandatory for doctors, persons in charge of organisations that provide health services, and employers of health practitioners to inform the Medical Council of New Zealand (MCNZ) if they believe a doctor may be unable to perform the functions required to practise because of a mental or physical condition. Reporting is also mandatory where an employee is dismissed or resigns for reasons of competence. In other situations, although it is not mandatory, doctors are encouraged to report a risk of harm.

Medico-legal and ethical issues



FREE

No appointment necessary? Ethical challenges in treating friends and family**Authors:** Gold KJ, Goldman EB, Kamil LH, et al.

In this US article, the authors considered the issue of doctors who are asked or choose to provide medical care to family members or to give informal or undocumented care to friends, neighbours or colleagues who are not their patients. Studies have shown that doctors often feel pressured and conflicted about requests to treat friends and family and that most doctors have declined at least one request or indicated that they considered declining a request.

The ethical risks of caring for relatives or friends or providing informal and undocumented care are substantial, but may be overlooked. The authors found that not all medical organisations have issued guidelines on this topic. However, all those that have published guidelines recommend against care for self or family other than in exceptional situations. The first code of medical ethics (by the American Medical Association) of 1847 recommended against doctors treating family members. Potential pitfalls in the care of family members include failure to ask about sensitive areas of the medical history or social situation, avoiding important or sensitive aspects of the physical examination, a lack of professional objectivity, conflict among roles if medical care does not go well, practising outside the scope of training, the possibility that patients will not be forthcoming, and lack of informed consent by the patient.

Many organisations recognise that there might be minor care or emergency situations for which no other physician is available (e.g. a surgeon in a rural area) where acute and limited care may be appropriate. Doctors who provide

treatment are advised to notify the patient's primary care doctor as soon as possible to allow for proper documentation.

Reference: N Engl J Med. 2014;371;13;1254–58.

Comment: The MCNZ's [Statement on providing care to yourself and those close to you](#) recognises that there are some situations where treatment of those close to doctors may occur, but should only take place where overall management of patient care is being monitored by an independent practitioner. Wherever possible doctors should avoid treating people with whom they have a personal relationship rather than a professional relationship.

Public health



FREE

Health effects of water fluoridation: a review of the scientific evidence

Author: Royal Society of New Zealand and Office of the Prime Minister's Chief Science Advisor

Tooth decay remains the single most common chronic disease among New Zealanders. Fluoride has a protective effect against tooth decay by preventing demineralisation of tooth enamel. A report was commissioned at the request of Auckland Council to review the scientific evidence for and against the efficacy and safety of fluoridation of public water supplies. The report was peer reviewed by international experts and by the NZ National Poisons Centre.

The report found compelling evidence that fluoridation of water at the established and recommended levels produces

broad benefits for the dental health of New Zealanders. Fluoridation is effective at reducing the prevalence and severity of tooth decay in communities where it is used. The only side effect of fluoridation at the levels used in New Zealand is minimal fluorosis (opaque white areas in the enamel), which is of no major cosmetic significance. No adverse effects of fluoride on brain development, cancer risk or cardiovascular or metabolic risk have been substantiated. Thus, economically and from an equity perspective, fluoridation remains the safest and most appropriate approach for promoting dental public health. This assessment suggested that fluoridation should be expanded to assist those New Zealand communities that currently do not benefit from this public health measure.

Reference: Royal Society of New Zealand and Office of the Prime Minister's Chief Science Advisor, August 2014.



We welcome your comments or suggestions. Please contact the RNZCGP's Policy Team at policy@rnzcgp.org.nz

The Royal New Zealand College of General Practitioners is the professional body that provides training and ongoing professional development for general practitioners and rural hospital generalists, and sets standards for general practice.

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