RNZCGP DIGEST

The Royal New Zealand College of General Practitioners
Te Whare Tohu Rata o Aotearoa

THE ROYAL NEW ZEALAND COLLEGE OF GENERAL PRACTITIONERS

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IN THIS ISSUE

Welcome to the RNZCGP 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 at the links provided. Others require an online subscription.

Health workforce

✓ **Approved CME activity**
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The role of medical generalism in the New Zealand health system into the future

Author: Atmore C.

The author of this New Zealand article argues for a need of more doctors with broad-based expertise (generalists) to work with doctors who are highly skilled in a narrow area (subspecialists) in order to meet the challenges of an ageing population, increasingly complex health problems, and a shortage of doctors outside major centres. Increased subspecialisation has led to the unintended consequences of loss of flexibility in the range of services provided at provincial hospitals, and increased costs associated with fragmentation.

The author proposes that, to be sustainable, the future medical workforce requires a greater focus on both generalism within the specialty colleges, and generalist doctors in hospital and community settings. She points to the Transalpine Health Service's generalist, specialist and subspecialist workforce model (West Coast and Canterbury health systems) as an approach for the future sustainable provision of a quality hospital experience as close to home as possible for people in provincial New Zealand.

For a sustainable future medical workforce, the author suggests the need for:

- Political will for change at the national 'high politics' end and within the health community.
- A change in the medical culture that spreads prestige from subspecialisation to generalism.
- Medical schools and teaching faculties to promote generalists as doctors who are highly valued for their broad knowledge and skills over a large spectrum of health issues.
- Incentives to be aligned to promote medical careers based in generalism to junior doctors, e.g. opportunities in academia and procedural work.
- HWNZ to direct more funding towards generalist registrar training within specialty colleges and the generalist college.
- Specialist medical colleges to more actively promote generalist training within their specialties, and endorse extended scopes of practice for generalist doctors with appropriate training.
- DHBs to continue developing regional networks that cross existing DHB boundaries.
- Effective local and regional health systems to be designed by the doctors, nurses, allied health professionals and patients with local management support and enablement.
- System-wide outcome measures to align to measure quality of care and patient outcomes appropriate to the community being served.

Reference: NZ Med J. 2015 Aug 7;128(1419):50–55.

Clinical issues

Time to consider the risks of caesarean delivery for long term child health

Authors: Blustein J, Liu J.

This opinion piece looks at the growth in the number of Caesarean sections performed over the past two decades and the necessity of such high rates. The authors argue that in an emergency, or when a foetal or maternal indication is present, the choice of delivery is clear. However, in 'cooler moments', such as repeat or maternal choice of Caesarean delivery, it makes sense to consider the risks and benefits of both Caesarean delivery and vaginal delivery. Both modes of delivery are associated with acute risks, but recent research also points to latent risks of chronic disease for Caesarean delivery.

Meta-analyses of cohort and case-control studies have found a positive association between Caesarean delivery and Type 1 diabetes, asthma and obesity. A fully adjusted analysis found that Caesarean delivery increased the relative risk of Type 1 diabetes by 19%, and similar increases were found with asthma and obesity. While most of the studies do not differentiate between essential and non-essential Caesarean sections, one recent prospective study showed that Caesarean delivery at maternal request is associated with an increased risk of childhood overweight. Interestingly, studies using non-twin siblings have not demonstrated the same level of risk. The authors also considered a randomised study which found that, at aged two years, children in a planned Caesarean group had significantly more medical problems in the past several months (20.8% vs 14.8% in the vaginal delivery group). However, they noted that this evidence does not link Caesarean delivery to any particular adverse outcome.

The authors conclude that knowledge about risks of chronic disease could affect decision-making in non-essential Caesarean delivery. They express concern that recent guidelines do not mention these risks, and advocate for further investment in randomised trials, and thorough discussion of the risks of Caesarean delivery for long-term child health.

Reference: BMJ. 2015 Jun 10;350:h2410. doi: 10.1136/bmj.h2410.

Medicines

Where are we now with paracetamol?

Authors: Dear J, Antonie DJ, Park BJ

Paracetamol was introduced into UK medical practice in 1956, and is the most widely used and prescribed drug in the UK. Recently, questions have been raised about its efficacy and safety.

The authors explain that paracetamol is an effective mild analgesic, but may not work for all types of pain. It is effective for postoperative dental pain and headache, and has a small benefit for hip and knee pain (which might not be clinically relevant). However, there is insufficient evidence of benefit for the common cold, and it is no more effective than placebo for back pain. Liver injury is a well-established consequence of paracetamol overdose. At therapeutic doses, alanine transaminase activity may slightly increase in some, but serious liver injury is unlikely. Some studies suggest that paracetamol has the potential to increase blood pressure and promote blood clotting.

In 2012, UK guidance stated that treatment with the antidote acetylcysteine 'as per clinician judgement' should be considered for small therapeutic overdoses. Conversely, both the US and Australia use higher ingestion thresholds to trigger treatment. The authors conclude that, overall, paracetamol can be less effective than expected and further studies are needed to define efficacy in specific settings. The argument that paracetamol is first-line treatment because it is safe does not hold if it is ineffective. For now, prescribers should establish whether patients are getting symptom relief from paracetamol to avoid long-term exposure without benefit.

Reference: BMJ. 2015 Jul 10;351:h3705. doi: 10.1136/bmj.h3705.

Education

Changing first-year medical students' attitudes toward primary care

FREE

Authors: Beverly E, Reynolds S, Balbo J, et al.

This cross-sectional study looks at the effect of a week-long intensive course in primary care on first-year medical students' attitudes towards primary care. The study group comprised 125 students at a medical school in the Midwestern USA. The course aimed to introduce the students to primary care medicine and the patient-centred medical home model. Students were surveyed immediately prior to starting the course, and at its conclusion.

Positive improvements in attitudes toward primary care were observed in 20 of the 25 survey measures. The largest change was seen with the statement, 'Primary care is diagnostically challenging' (mean change=0.51, $P<0.001$), followed closely by 'Primary care doctors receive the same amount of training as other specialists' (mean change=0.72, $P<0.001$). The most common changes to perception about primary care were:

1. improved understanding of the scope of primary care (73%);
2. emphasis on the importance of primary care (25%);
3. recognition of the complexity of primary care (23%);
4. new-found respect for primary care (16%);
5. increased motivation to pursue primary care (13%); and
6. dispelled myths and stereotypes about primary care (13%).

The researchers conclude that curriculum can change attitudes and dispel negative stereotypes about primary care. The researchers plan to follow the same class of medical students over the next four years to determine whether the training influences choice of specialty. The study surveyed osteopathic medical school students; the authors note that attitudes toward primary care might differ between osteopathic and allopathic medical students as the osteopathic community has tended to provide greater support to primary care.

Reference: Fam Med. 2014 Oct;46(9):707–12.

'Lifting the carpet' on cheating in medical school exams

Author: Tonkin AL.

This UK article highlights a recent case of exam cheating at an Australian medical school as a real challenge for academic medical educators. Senior students had taken screenshots of a multiple-choice question exam that was undertaken using tablet computers, and then passed them on to students who had not yet sat the exam. The author says it called into question the school's ability to certify graduating students as competent and knowledgeable. Twenty-four students were disciplined, with penalties ranging from writing a reflective piece on an ethical topic to failing the exam.

The author states that cheating in exams damages the validity of assessment and the standing of the medical profession. Further, unprofessional behaviour at medical school has been associated with later unprofessional behaviour by practitioners. Although research into cheating is limited, the prevalence among medical students has been found to be 25–35% for self-reported cheating and up to 90% for self-reported plagiarism. The proportion of students engaging in exam recall behaviour ranges from 25% to 89%.

The author argues that any reluctance on the part of academic staff to tackle cheating can lead to a slippery slope effect; progressive acceptance of dishonest behaviour causes it to become more common and accepted as the norm. She considers a parallel between the use of illicitly obtained exam materials and the principles of patient safety and quality care, where there has been a move away from individual blame to examining the health care system. She concludes that medical schools must accept the reality of cheating

Education

behaviour, and encourage discussion of its unacceptability by both teachers and students. Sharing information on the prevalence of cheating and the outcomes of institutional responses would empower teaching staff to face the problem and take more effective steps to deal with it. The author also recommends increased international collaboration between medical schools to share information and tools for reducing student dishonesty and improving academic integrity.

Reference: BMJ. 2015 Aug 18;351:h4014. doi: 10.1136/bmj.h4014.

Quality improvement

Depth of the patient–doctor relationship and content of general practice consultations: cross-sectional study

Authors: William S, Merriel D, Salisbury C, et al.

This article reports on research exploring how differences in the depth of the patient–doctor relationship affects the content of consultations in general practice. The researchers analysed 229 videotaped consultations involving 190 participants who consulted 30 GPs in 22 practices in the UK. They identified the length of the consultations and the number of problems and aspects of the problems raised during the consultation. Patients completed the Patient–Doctor Depth of Relationship scale (an eight-item questionnaire that captures patients' perceptions of their relationship) and the General Practice Assessment Questionnaire – communication (GPAQc).

The researchers found that patients who had a deep relationship with their GP discussed more problems (mean 2.8) and issues (mean 4.7) compared with those who had a moderate (2.4 problems; 4.0 issues) or shallow (2.3 problems; 3.8 issues) relationship. Patients with deep relationships had longer consultations that were on average 118 seconds (95% CI=1–236) longer than those with shallow relationships. Adjustment for participant and GP factors attenuated these relationships, although the main trends persisted. The authors concluded that a greater number of problems and issues may be raised in a consultation when patients have a deeper relationship with their GP. Over several clinical encounters each year, this may be associated with significant benefits to patients and efficiencies in GP consultations, and warrants further investigation.

Reference: Br J GP. 2015 Aug;65(637):e545–51. doi: 10.3399/bjgp15X686125.

Access to care

Good progress for children coupled with recalcitrant inequalities for adults in New Zealand's journey towards Universal Health Coverage over the last decade

Authors: Matheson D, Reidy J, Tan L, et al.

This New Zealand article explores the effect of primary health care policy on primary care access, equity and avoidable hospital admissions by analysing national Ambulatory Sensitive Hospitalisations (ASH) data trends by age, ethnicity and area-level deprivation between 2002 and 2014.

From 2004, ASH rates decreased significantly for children, especially in the 0–4 age group. Decreases were most marked for Pacific children, and those from the most deprived neighbourhoods. Inequalities in ASH rates for children between ethnic groups and levels of deprivation decreased substantially. However, there was a significant increase in ASH rates and inequalities for Pacific peoples in the 45–64 age group. Māori in the same age band showed a modest reduction in ASH rates, and the rest of the population remained unchanged. Inequalities in ASH rates between 45–65-year-olds living in different levels of deprivation remained large and unchanged.

The major policy initiatives that significantly affected access to primary care include the NZ Health Strategy, the creation of DHBs and PHOs, free care to under-six-year-olds, and high-level target setting by Ministers. The authors conclude that government health policies have had a positive impact on children, but the situation for adults is either deteriorating or not improving. They suggest intensifying the success in reducing inequality in access to primary care for children, and applying the same principles to the adult population.

Reference: NZ Med J. 2015 May 29;128(1415):14–24.

Access to care

Actual availability of general practice appointments for mildly ill children

Authors: Freed GL, Bingham A, Allen AR, et al.

In light of concerns that a lack of available primary care appointments in greater Melbourne might contribute to the higher rates of emergency department (ED) visits, the authors sought to assess actual same-day availability of GP appointments using 'secret shopper' techniques. Phone calls were made to 225 general practice clinics by research assistants posing as parents seeking treatment for children with non-urgent, low-severity conditions. Same-day appointments were sought for paediatric patients based on one of two clinical scenarios.

The study found that 78% of clinics (175/225) offered same-day appointments to see any doctor. Availability to see a specific doctor in the practice was more limited. About half of the clinics contacted (111; 49%) were able to offer an appointment within four hours. A further 9% offered walk-in appointments. Appointments were more likely to be available in clinics that provided bulk billing for paediatric appointments; 82% could offer an appointment compared with 67% of fee-paying clinics ($P=0.01$).

The authors conclude that most community members attempting to procure such an appointment would be able to do so on the same day and with no out-of-pocket cost. The increasing attendance of children at EDs is unlikely to be driven primarily by an actual lack of same-day availability of GP appointments. Public perception that GP appointments are not available may be a contributing factor. Thus, the public should be made aware of the ready availability of GP appointments.

Reference: Med J Aust. 2015 Aug 3;203(3):145.

IT health

Engaging primary care patients to use a patient-centred personal health record

Author: Krist AH, Woolf SH, Bello GA, et al.

This US research focuses on the effectiveness of techniques to encourage the uptake of an 'interactive preventative health record' (IPHR) in small to medium primary care services. The researchers hypothesised that practices could more effectively promote IPHR use by making it a part of patient care – and by using approaches and workflows customised by practices. The research was conducted in eight practices in Virginia from December 2010 to June 2013. During the study 112 893 patients had an office visit and 28 910 (25.6%) of these created an IPHR account. The uptake compared favourably with an earlier intervention that relied solely on mailing invitations to patients to use the portal (uptake of 16.8%).

The monthly increase in IPHR users in the trial group was almost linear, with an estimated monthly increase of 1%. Sixty-four percent of patients created an IPHR account after two office visits, and another 21.8% did so after four visits. Patients logged into IPHR an average of 3.7 times after creating an account and spent seven minutes per session. Only 26.7% visited the site once.

The authors noted that adopting a team approach to notify patients about the IPHR rather than relying on one clinician appeared to positively influence uptake. One successful workflow involved: front desk staff stapling information cards to registration sheets and explaining the IPHR; nurses discussing the IPHR and reviewing sign-up instructions when rooming patients; and clinicians reinforcing the IPHR's value.

Proactive reinforcement strategies seemed critical for overall uptake. In general, IPHR uptake was lower among smaller practices, practices that relied primarily on clinicians to notify patients about the IPHR, and practices that did not use the IPHR to inform patients of laboratory results.

Among patients, a key factor influencing uptake was having a comorbid condition and, surprisingly, the highest uptake was amongst patients aged 60–69 years old. Black and Hispanic patients were less likely to use the IPHR. However, the authors felt that enabling access to the IPHR by mobile phone would help to bridge the digital divide. Patients were also less likely to use the IPHR if their clinician was older, and also if their clinician was younger.

Reference: Ann Fam Med. 2014 Sep–Oct;12(5):418–26. doi: 10.1370/afm.1691.

Comment: The College's practical guide to assist general practices to introduce a patient portal can be found **here**.

Health information

General practitioner understanding of abbreviations used in hospital discharge letters

FREE

Authors: Chemall M, Hibbert EJ, Sheen A

This Australian article examines the potential risk of using abbreviations in hospital discharge letters to GPs. The researchers aimed to determine the frequency of abbreviations in electronic hospital discharge letters (eDLs) and GPs' understanding of abbreviations used in eDLs. They conducted a retrospective audit of abbreviation use in 200 sequential eDLs at Nepean Hospital, Sydney – a tertiary referral centre – from 18 December to 31 December 2012. The 15 most commonly used abbreviations and five clinically important abbreviations were identified, and a survey using these abbreviations in context was sent to 240 GPs in the area covered by the Nepean Blue Mountains Local Health District.

The authors found a total of 321 different abbreviations in the 200 eDLs audited. Most abbreviations were for investigations, examination findings, or management. The response rate to the survey was 55% (132 of 240 GPs). No abbreviation was correctly interpreted by all GPs, but 10 abbreviations (50%) were interpreted correctly by 97% of GPs. Six abbreviations were misinterpreted by more than a quarter of surveyed GPs, including: SNT (soft non-tender); TTE (transthoracic echocardiogram); EST (exercise stress test); NKDA (no known drug allergies); CTPA (computed tomography pulmonary angiography); and ORIF (open reduction and internal fixation).

The authors conclude that abbreviations used in hospital eDLs are not well understood by GPs, and this may adversely affect patient care in the transition from hospital to community. They suggest potential solutions to improve communication, including banning the use of abbreviations in eDLs, creating a list of approved medical abbreviations for use in eDLs and distributing it to GPs, or using computer software to auto-complete mutually exclusive abbreviations.

Reference: Med J Aust. 2015 Aug 3;203(3):147.

Time spent reading the RNZCGP Digest has been approved for CME for The Royal New Zealand College of General Practitioners (RNZCGP), General Practice Educational Programme GPEP Years 2 and 3, and Maintenance of Professional Standards (MOPS) purposes, provided that a Learning Reflection Form is completed. Please click **here** to download a CPD/MOPS Learning Reflection Form. One form per Digest is required.

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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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