



IN THIS ISSUE

Quality improvement

- Progress in public reporting in New Zealand since the Ombudsman's ruling, and an invitation

Education

- Procedural skills of Australian general practice registrars: A cross-sectional analysis

Medicines

- Association between academic medical center pharmaceutical detailing policies and physician prescribing

Clinical issues

- Advances in genomic testing
- What is overdiagnosis and why should we take it seriously in cancer screening?
- Causes of death up to 10 years after admissions to hospitals for self-inflicted, drug-related or alcohol-related, or violent injury during adolescence: a retrospective, nationwide, cohort study

Cross-cultural care

- Engaging young people with a chronic illness
- I am your trans patient

Health technology

- Telemedicine for management of inflammatory bowel disease (myIBDcoach): a pragmatic, multicentre, randomised controlled trial

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.

Quality improvement

 **Approved CME activity**
Click [here](#) for details.



Progress in public reporting in New Zealand since the Ombudsman's ruling, and an invitation

Authors: Shuker C, Bohm G, Hamblin R, et al.

This article looks at current developments on increasing the transparency of health care in New Zealand. In 2016, the Ombudsman recommended that the Ministry of Health and Health Quality and Safety Commission (HQSC) work together to annually update the sector's progress on selection, development and public reporting of quality of care measures. The Ministry, HQSC, ACC and the Health and Disability Commissioner have now jointly agreed to guiding principles regarding the publication of clinical performance and outcome data. The principles focus on quality improvements and patient safety, co-designed publications and measures, national standards, and accessibility and clarity.

The authors say that most current public reporting in New Zealand has a clinician rather than a consumer focus. Current registries include the All New Zealand Acute Coronary Syndrome Quality Improvement programme, the New Zealand Joint Registry, and the New Zealand stroke thrombolysis registry. They highlight the opportunities to now develop measures to report on based on the guiding principles, eg consumer-focused publication of risk-adjusted measures of the outcomes of aspects of patient care.

The authors argue for public reporting. They suggest reasons for public reporting and action include professional pride, organisational competitiveness, threat of reputational damage from publicising low performance, and the drive to perform at the top of the scope of professional practice. Measures should be developed with consumers, and should be consumer focused, comprehensible and accessible. Measures should also be relevant to clinical practice, able to be improved by clinicians, and should focus on the teams. It is noted that the outcomes of most modern interventions depend on multiple individuals from different disciplines and how they work together.

The authors call on the specialties, professional bodies and DHB boards to continue to engage with the Ministry and the HQSC in the pursuit of informed and effective reporting of outcome data at unit, organisation and provider levels.

Reference: N Z Med J. 2017 Jun 16;130(1457):11-22

Comment: On 28 June 2017, the Ministry of Health and Health Quality and Safety Commission published its **first annual update** on increasing transparency in New Zealand health care. It outlines the activities undertaken since the publication of the Ombudsman's opinion and the next steps.

Education



Procedural skills of Australian general practice registrars: A cross-sectional analysis

FREE

Authors: Aghajafari F, Tapley A, Sylvester S, et al.

The study investigated the type, frequency and rural/urban associations of procedures performed by GP registrars in Australia. The authors also compared the procedures performed with a core list of recommended procedural skills in general practice training (developed by Sylvester et al.).

The study involved a cross-sectional analysis of data from consultations between 2010 and 2016 from the longitudinal Registrars' Clinical Encounters in Training (ReCEnT) study.* A total of 1299 registrars (response rate 95.8%) contributed to data collection involving 182,782 consultations (283,616 problems or diagnoses).

Overall, 19,411 procedures were performed. Procedures were performed in 9.9% of consultations (95% confidence interval [CI] 9.8, 10.1) for 6.8% of problems/diagnoses managed (95% CI 6.7, 6.9). The most commonly performed procedures were intramuscular injection, Papanicolaou (Pap) test and cryotherapy.

Overall, performing procedures was significantly associated with registrars working in a rural than urban locations. Of the procedures on Sylvester's list, 85% were performed by the

registrars; the majority of these were infrequently performed. For the list of all procedures (core list plus supplementary list; n=191), one-third of procedures were not performed.

Performing procedures was significantly associated with registrars seeking help from their supervisor (9%; 95% CI 8.6, 9.4 versus 6.7%; 95% CI 6.6, 6.8; $P < 0.001$). Most of these were 'complex', 'advanced' or 'invasive', and requiring a higher level of skills, eg injection and/or aspiration of shoulders or knee joint, wedge excision for ingrown toenail.

The authors conclude that there is suboptimal registrar exposure to relevant clinical procedures. There may be a need for greater use of laboratory-based training to encourage supervisors to involve their registrars when performing procedures. They also suggest a review of the expectations of the scope of procedural skills in general practice.

Reference: Aust Fam Phys. 2017 Jun;46(6):429–434

Comment: In 2011, Sylvester et al. developed (via a Delphi process) a list of 112 core procedures, plus a supplementary list containing 79 other procedures. The 112 core procedures were deemed those that a GP registrar should have experience in performing during their general practice training. The ranked list provides a resource to use as the basis for a procedures training curriculum. The list is available from the [Australian Family Physician](#).

Medicines



Association between academic medical center pharmaceutical detailing policies and physician prescribing

Authors: Larkin I, Ang D, Steinhart J et al.

This research investigated whether doctor prescribing behaviour changed after US academic medical centres (AMCs) implemented policies that limited sales activities by pharmaceutical representatives (a practice called 'detailing').

The researchers reviewed 16,121,483 prescriptions issued between 2006 and 2012 in 19 AMCs, and by 24,593 matched control group physicians. During this period, the AMCs enacted a range of different policies intended to limit or ban pharmaceutical representatives from providing meals, branded items and educational gifts. Seventeen of the AMCs also placed limits on hospital access, such as bans on salespeople in patient areas and requiring salesperson registration and training. Eleven AMCs also introduced penalties for salespeople and/or clinicians for non-compliance.

Implementation of any form of policy to restrict detailing was associated with a mean decrease in market share of 'detailed' drugs of 1.67% (95% CI -2.18 to -1.18; $P < .001$), and an increase in the market share of non-detailed drugs by 0.84% (95% CI 0.54 to 1.14; $P < .001$). More than 95% of non-detailed medicines prescribed were generic drugs. Therefore, the introduction of policies that restricted detailing was associated with a modest but significant shift away from detailed drugs and towards generic drugs.

Reference: JAMA. 2017 May 2;317(17):1785–1795. doi: 10.1001/jama.2017.4039.

* ReCEnT is an ongoing, multicentre cohort study of general practice registrars' in-consultation clinical and educational experiences. Registrars recorded 60 consecutive consultations during each six-month training term.

Clinical issues



Advances in genomic testing

FREE

Authors: Downie L, Donoghue S, Stutterd C.

This paper outlines recent advances in genomic technology and the use of genomic testing in clinical practice. Next-generation genomic sequencing (NGS), a high-throughput sequencing platform, is improving the diagnostic yield for patients with suspected genetic disease. Limitations of NGS testing arise from challenges to accurate sequence detection, and gaps in the understanding of benign and disease-causing genomic variations and the significance of results.

Since 2009, NGS has been applied to numerous cohorts of patients with unclassified genetic disease, which has been paralleled by a rapid rate of gene discovery. Three types of next-generation sequencing currently used are gene panel testing, whole-exome sequencing, and whole-genome sequencing.

In gene panel testing, NGS technology simultaneously sequences a specific group of genes that are known to have mutations associated with a particular disease or clinical phenotype. The test is suitable for predictive testing of asymptomatic relatives. The authors illustrate its application in a case of hypertrophic cardiomyopathy. Whole exome sequencing is the simultaneous sequencing of all of the exons, the protein-coding regions of the genome. A 'clinical exome' sequences only those genes that have a known association with disease. Its application is highlighted by a case of a child with developmental delay. Genome-wide association studies (GWAS) identify genetic variants that increase the risk for common complex, multifactorial

disorders, such as cardiovascular disease, diabetes mellitus and schizophrenia. At present, GWAS rarely has an impact on clinical practice.

The authors conclude that genomic testing is becoming increasingly available, and rapidly being integrated into routine clinical care. This in turn is increasing the opportunity for accurate genetic diagnosis and improved patient care.

Reference: Aust Fam Phys. 2017 Apr;46(4):200–204



What is overdiagnosis and why should we take it seriously in cancer screening?

FREE

Authors: Carter SM, Barratt A.

This article considers overdiagnosis in relation to cancer screening. The authors explain that an overdiagnosed cancer is correctly diagnosed, but would not have produced symptoms or premature death if left undetected. Treating these cancers can result in patient harm, rather than benefit.

A paradox of screening for cancer drives overdiagnosis. First, cancer is complex and heterogeneous. Secondly, screening programmes are more likely to detect slow-growing, less aggressive cancers rather than fast-growing, more aggressive cancers. Slow-growing, less aggressive cancers are an important source of overdiagnosis in screening programmes.

The cancers most likely to be overdiagnosed are prostate cancer from prostate-specific antigen testing of asymptomatic men, breast cancer from mammography screening, thyroid cancer from ultrasound of the thyroid and/or adjoining structures, and lung cancer from screening smokers using computed tomography.

The authors argue that the more a screening programme produces overdiagnosis, the less likely it serves its goal of reducing illness and premature death from cancer. Moreover, that some cancers do not need to be found, and the benefit/harm balance of screening is less favourable than originally hoped. In addition, any amount of overdiagnosis will increase

Clinical issues

the costs and decrease the cost-effectiveness of screening programmes. The authors conclude that it is vital that health practitioners and researchers hold open, scientific conversations about overdiagnosis.

Reference: Public Health Res Pract. 2017;27(3):e2731722

Comment: We note that the **Choosing Wisely** initiative in New Zealand includes recommendations on cancer screening. For example, the Royal College of Pathologists of Australasia recommend: “Do not perform PSA testing for prostate cancer screening in men with no symptoms and whose life expectancy is less than seven years.”



Causes of death up to 10 years after admissions to hospitals for self-inflicted, drug-related or alcohol-related, or violent injury during adolescence: a retrospective, nationwide, cohort study

Authors: Herbert, A, Gilbert R et al.

Emergency hospital admissions with adversity-related injury (ie self-inflicted, drug-related or alcohol-related, or violent injury) affects 4% of 10–19-year-olds in the UK. Their risk of death in the decade after hospital discharge is twice as high as that of adolescent admitted to hospitals for accident-related injury. The aim of this retrospective nationwide cohort study was to investigate the different causes of death between these groups and to inform preventive strategies to reduce the risk of harm for adolescents who are discharged from hospital for an adversity-related injury.

The authors used Hospital Episode Statistics (HES) to investigate admissions of adolescents to hospital. The HES data contained all emergency (acute and unplanned) admissions to the National Health Service (NHS) in England, including admissions to independent sector providers paid for by the NHS. The authors identified deaths using the Office for National Statistics mortality data linked to the HES data. The study looked at the data of 333,009 adolescents who were admitted with adversity-related injury and 649,818 admitted for accident-related injury.

The authors reported that adolescents discharged with self-inflicted, drug-related or alcohol-related injury had a five to six times higher risk of suicide than those who were admitted for accident-related injury. Furthermore, risk of suicide was

significantly increased after all types of adversity-related injury, except for girls who had violent injuries. However, current practice is that suicide risk assessments only occur with patients who present with self-harm. The authors recommend extending this risk assessment to all patients who present with adversity-related injuries.

Reference: Lancet. 2017 Aug 5;390(10094):577–587.
doi: 10.1016/S0140-6736(17)31045-0.

Cross-cultural care



Engaging young people with a chronic illness

FREE

Authors: Wilson, EV

This article highlights some important factors GPs should consider when looking after young people with chronic conditions. The author discusses the need for GPs to have good communication skills, manage the doctor's relationship with both patient and parent, and the need to help young people transition to adult care.

The author acknowledges that good communication is essential to doctor–patient relationships. However, this is crucial for young patients. For example, young people may understand 'confidentiality' in the strictest sense that the information will only remain between themselves and their GP. Therefore, if a GP discloses information to another health practitioner without informing the young person, they may interpret this as a breach of trust. Hence, it's important GPs explain at the start of the consult the meaning of confidentiality and any reasons why the GP may need to discuss the young person's condition with someone else.

The author argues that the dynamic between the GP, young person and parents needs to be carefully managed. Some parents dominate appointments, and this in turn can marginalise the young person. As an 11-year-old with cystic fibrosis points out, 'Some doctors still think dad or mum is more important than me, and they ask them instead of me. But it's no good talking to them. I'm the one with the cough.' However, some young people also appreciate the involvement of their parent, especially if the GP may have information which is distressing to them.

It is important that young people's voices are heard when they are transitioned into adult care and that this conversation occurs at least a year before the transition occurs. Elements for a successful transition may include ensuring good coordination, starting to plan the transition at an early age, discussing self-management with the adolescent and family, incorporating the young person's views and preferences and, if developmentally appropriate, seeing the young person alone as part of the consultation.

Reference: Aust Fam Physician. 2017;46(8):572–576.

Comment: The College intends to develop guidance for GPs on the transition from child to youth. If you are interested in being involved in this work, please contact the Policy team at policy@rnzcgp.org.nz.



I am your trans patient

FREE

Authors: Lewis EB, Vincent B, Brett A, et al.

This article is written by transgender patients and is part of the *British Medical Journal* 'What Your Patient is Thinking' series. The purpose of the article is to highlight best practice when it comes to health care for trans patients. Although attention to trans health might be relatively new, trans people 'have always been here'.

As a GP may be the first person a patient talks to about transition, it is important that they are prepared for these conversations and know the right pathways and resources to direct the patient to.

The authors suggest several steps GPs can take to make the consult safe for a trans patient. These include:

- only bringing up a person's trans status when it is relevant to the consultation
- asking a patient what pronoun and title they prefer. For example, a patient may prefer the gender neutral title Mx (pronounced like a cross between 'Miks' and 'Muks.')
- following the patient's lead on how they talk about their body.

The authors also suggest 'thinking outside the M/F tick box.' For example, 'is a smear test relevant for all women (and only women)? Or is it relevant for everyone with a cervix.'

Comment: Currently, the Northern Region district health boards are in the process of developing a proposal for better care for trans people. In 2011 the Ministry of Health released a guide on *Gender Reassignment Health Services for Trans People within New Zealand*.

Reference: BMJ. 2017 June 30;357:j2963. doi:10.1136/bmj.j2963

Health technology



Telemedicine for management of inflammatory bowel disease (myIBDcoach): a pragmatic, multicentre, randomised controlled trial

Authors: de Jong MJ, van der Meulen-de Jong AE, Romberg-Camps M, et al.

The aim of this Dutch study was to compare the effects of telemedicine with traditional standard care of inflammatory bowel disease. Participants aged 18–75 with inflammatory bowel disease and without an ileoanal or ileorectal pouch anastomosis, who had internet access and Dutch proficiency, were randomly assigned to a telemedicine or standard care group.

The telemedicine group were given access to the telemedicine system MyIBDCoach, a secure webpage with an HTML application on tablet or smartphone. MyIBDCoach involves monthly monitoring modules that contained questions on disease activity, medication use, treatment adherence, treatment satisfaction and side-effects, including infections.

The system also includes questions on factors affecting the disease (for example smoking), and patient-reported outcomes on quality of life and work productivity. If the disease was in remission, patients were able to switch to completing a module every three months. The system also included more intensive monitoring (weekly in case of a flare), outpatient visit modules, e-learning modules, a personal care plan and an administrator page used by the health care provider. The administration page was checked by the health professional twice daily (on weekdays), and the administrator was able to receive alerts (red flags) if the monitoring modules exceeded predefined thresholds. In these cases, the health care professional would contact the patient. Patients were trained in using the system and were advised to book at least one routine outpatient visit per year. Additional visits were scheduled based on 'red flags' of myIBDcoach or at the patient's request. Patients in the standard care group continued with their routine follow-up visits and could also book visits if relapses occurred. At baseline and after 12 months, all participants received a paper questionnaire regarding perceived quality of life, self-efficacy, disease and medication-related knowledge, and smoking behavior.

At 12 months, the mean number of outpatient visits to the gastroenterologist for the telehealth group were significantly lower than in the standard care group. Patients in both groups reported high scores of quality of care at 12 months. Over this time period, the mean number of flares, courses of corticosteroid treatment, emergency visits, and inflammatory bowel disease did not differ between the two groups. However, the mean number of hospital admissions was significantly lower in the telemedicine group than in the standard group, and adherence to medication was also significantly higher in telemedicine group.

The authors argue their results show that telemedicine is a viable option for monitoring inflammatory bowel disease, and does not decrease quality of care. The authors also argue that telemedicine may provide a useful tool for ensuring quality of care of patients without increasing the cost.

Reference: Lancet. 2017 Sep 2;390(10098):959-968. doi: 10.1016/S0140-6736(17)31327-2. Epub 2017 Jul 14.



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.

Please note: A maximum of two hours can be claimed per digest. Total hours should be entered as CME credits on the MOPS page under 'CME reflected in PDP'. You do not need to return this form to the College, but will need to retain it should you be subject to a Medical Council of New Zealand audit.



We welcome your comments or suggestions. Please contact the College'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.

PO Box 10440, The Terrace, Wellington 6134 | **T** +64 4 496 5999 | **F** +64 4 496 5997 | **E** rnzcgp@rnzcgp.org.nz | **W** www.rnzcgp.org.nz