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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.



Health literacy: from the patient to the professional to the system

Authors: Walsh C, Shuker C, Merry AF.

This editorial looks at health literacy, defined by the Health Quality & Safety Commission (HQSC) as “the degree to which individuals can obtain, process and understand health information and services they need to make appropriate health decisions”. Low health literacy is associated with higher mortality in older adults, missed opportunities, mismanagement and misadventure.

The authors explain that the division between communication and comprehension is often attributed to the skills of the individual patient and whānau alone. However, it is health staff who have a central role in empowering patients. Health literacy is an organisational value and should be considered core business. Thus, it is likely to be more effective to teach health care providers to communicate well than to try to increase patients' capacity to cope with a poor system and poor communicators.

Experts now advise health professionals to assume that all patients may have some degree of difficulty, rather than evaluating an individual's health literacy and identifying those ‘in need of help’. Thus, health professionals should ascertain

what patients already know, share clear information with them, and then actively help them to understand their health issues and the proposed treatment.

The authors note that in 2011 the NZ Guidelines Group recommended prioritising the upskilling of the health workforce to understand and apply principles of adult learning theory to the delivery of health services. The HQSC's tool, *Let's PLAN* for better care aims to help patients prepare for, understand and engage with their health carers to ensure clarity, confidence and a satisfactory level of comprehension. The authors conclude that ‘good’ health literacy means that patients will obtain, process, and understand information sufficiently to make good health decisions. Although both patients and professionals are responsible, the onus lies primarily on health professionals and the organisations they work within.

Reference: N Z Med J. 2015;128(1423):10–16.

Comment: The HQSC has a number of resources on health literacy available [here](#).

Clinical issues

**Managing medically unexplained illness in general practice**

FREE

Author: Stone L.

This paper considers strategies for GPs who are consulted by patients with medically unexplained symptoms. Both doctors and patients can feel frustrated and lost without a diagnosis. The patients may experience significant disability and many have a history of trauma, which complicates the doctor–patient therapeutic relationship.

The author discusses three types of common presentations and outlines specific approaches. *Elusive illnesses* occur when the doctor and patient believe that a biomedical disease is likely, but a diagnosis cannot be determined. The goal for managing elusive illnesses is to minimise harm and provide supportive care. *Contested illnesses* occur when a patient is committed to a diagnosis that is not accepted by the doctor. The goal for managing contested illnesses is to maintain the doctor–patient therapeutic relationship, and develop trust but hold clear boundaries. *Chaotic illnesses* occur when symptoms are over-determined; there are many possible diagnoses, but none fully explain the patient's distress. Strategies for managing chaotic consultations include ensuring regular opportunities to conduct an overview of clinical care and performing preventive activities.

The author concludes that all the patients need support to manage distressing symptoms and disability. GPs are in a unique position to provide appropriate care and to monitor potential red flags that indicate a known diagnosis.

Reference: Aust Fam Physician. 2015 Sep;44(9):624–9.**Elder abuse**

FREE

Authors: Lachs MS, Pillemer KA.

This US paper reviews research and clinical evidence on elder abuse (ie abuse of those aged 60 years or older) and identifies the doctor's role in recognising cases and in intervention. The estimated overall prevalence of elder abuse is 10%. It may be physical, verbal or psychological, sexual, financial, and/or in the form of neglect. Victims have increased rates of psychological effects, an increased risk of death, and are more likely to be hospitalised or placed in a nursing home.

The paper identifies risk factors for elder abuse, which include:

- older women
- the 'young old'
- shared living environments, particularly if living with a larger number of household members other than a spouse
- low income
- isolation and lack of social support
- functional impairment and poor physical health.

Identifying victims can be challenging due to victim and/or perpetrator concealment, as well as the likelihood of false positive and false negative findings because of the high burden of chronic disease in older people. Successful interventions are typically interprofessional, ongoing, community based, and resource intensive. While doctors play a key role in the medical component of intervention, the authors suggest their most important tasks are recognising cases, coordinating care, and facilitating the formation of an interprofessional team in the local community. Elder abuse

victims are often isolated, so rare interactions with a doctor provide critically important opportunities for recognition, intervention and referral.

Reference: N Engl J Med. 2015;373:1947–1956. doi: 10.1056/NEJMra1404688.

Medicines



Randomised controlled trials cited in pharmaceutical advertisements targeting New Zealand health professionals: do they support the advertising claims and what is the risk of bias?

Authors: Ma A, Parkin L.

This study examines pharmaceutical advertisements that appeared in *New Zealand Doctor* and *Pharmacy Today* between July 2013 and June 2014. It assesses whether the advertisements were supported by the randomised controlled trials (RCTs) cited and examines the risk of bias in those trials.

Of the claims made in the 533 advertisements reviewed, 33% cited no supporting evidence, 31% cited material other than RCTs, and a small number (<1%) cited non-English-language material. Only 35% cited one or more RCT. In 19% of advertisements (25 of 133) that cited an RCT, the RCT did not actually support the claims made. In 11 instances, the subject of the claim was not examined in the RCT; in nine, the claim exaggerated the benefits of the drug; in four, the study population was different to that for which the claims were made; and in one, the claim was contradicted by the RCT.

The study found the risk of bias was low in 14% of the RCTs cited, unclear in 49%, and high in 37%. Notably, at least 78% of RCTs cited were sponsored by the pharmaceutical industry. Of the 133 instances where an RCT was cited in an advertisement, there were only 10 cases (8%) where the RCT actually supported the claim advertised and the risk of bias was low. The authors conclude that a high proportion of pharmaceutical advertisements fail to meet NZ regulatory standards, and suggest the need for greater monitoring of pharmaceutical advertising.

Reference: N Z Med J. 2015;128(1421):22–29.



Why the drug development pipeline is not delivering better medicines

Authors: Naci H, Carter AW, Mossialos E.

This article considers why many new medicines are entering the market, but only a few provide clinical advantages. Innovation is commonly measured by counting the number of new drug approvals. Most of the new drugs are relatively minor modifications of existing treatments rather than new breakthroughs, and only a minority of new drugs are clinically superior to existing alternatives.

The authors argue that both government and drug company practices contribute to the ongoing innovation deficit, stating that:

- much of the increased expenditure on drugs has resulted from increasing industry investment in 'me-too' medicines (ie a drug that is structurally very similar to already known drugs, with only minor differences) rather than clinically superior medications.
- the inconsistency and unpredictability of expectations across international borders adds to the complexity of research and development in the global market, and companies are required to tailor their drug applications to each market.
- government funding for research has declined and has only marginally correlated with disease burden.
- policies that aim to increase the use of generic drugs have indirectly contributed to the rise of me-too drugs.
- generic drugs have provided the fiscal space for governments to purchase expensive patented products despite the lack of evidence that they are better than older and cheaper alternatives.

- to minimise risk, industry invests heavily in already established areas.
- as marketing drives prescriber and patient behaviour and consequently industry profits, companies spend almost twice as much on promotion as they do on research and development.
- shareholders' interests in a firm's value may be at odds with the longer-term objectives of clinicians, patients, and policy makers. This encourages research on me-too products that provide more reliable returns on investment at the potential expense of breakthroughs in other areas.

The authors conclude that to improve the drug development process, collective, concerted regulatory action is required to send the correct signals to drug companies. One option is to identify priority therapeutic areas and make research in these areas more economically attractive. Reimbursing drugs that offer clinically meaningful improvements over existing alternatives could encourage true breakthroughs.

Reference: BMJ. 2015; 351:h5542. doi: dx.doi.org/10.1136/bmj.h5542

Cross-cultural care



Factors associated with nutrition risk in older Māori: a cross-sectional study

Authors: Wham C, Macted E, Teh R, et al.

This cross-sectional study examines the risk of malnutrition in Māori aged 75–79 from the Bay of Plenty and Northland.

Of the 67 participants surveyed, 67% were identified as being at high risk for malnutrition, using a validated questionnaire (SCREEN II). Most frequently reported as contributing to nutrition risk were a low intake of milk products (75%), meat and protein alternatives (60%), and fruit and vegetables (59%). Unintentional weight change (54%) and skipping meals (53%) were also common factors.

Participants for whom traditional foods are important, and who have access to those foods, were found to be at lower nutrition risk. Similarly, participants who rated language and culture as a little or moderately important were at lower nutrition risk compared with those who rated language and culture as not at all important. The authors suggest that facilitating cultural-based food practices may help to improve nutrition-related outcomes. For example, eating may be facilitated by the company of others because of the whānaungatanga (kinship) an older Māori person receives when others are present.

Depressive symptoms were associated with high nutrition risk, and participants with a higher waist-to-hip ratio were at lower nutrition risk. The authors suggest that health professionals may need education on the importance of traditional kai (food), and all should be aware of the nutrition risk associated with depression.

Reference: N Z Med J. 2015;128(1420):45–54.

ICT health



FREE

Identifying patients with asthma in primary care electronic medical record systems: Chart analysis-based electronic algorithm validations study

Authors: Xi N, Wallace R, Agarwal G, et al.

This Canadian study explores the potential of Electronic Medical Record (EMR) systems in primary care to improve quality of care. The researchers developed and tested the ability and accuracy of 35 EMR search algorithms to identify asthma in adult patients (16 years and older). A retrospective analysis of 600 randomly selected charts from two large academic primary care clinics was undertaken.

The search algorithms used unique information fields with clear search parameters and exclusion criteria that could be used to identify asthma disease status. The five fields included: electronic disease registry, cumulative patient profile, billing diagnostic code, medications and chart notes. Researchers selected approximately equal cohorts of patients likely to have:

- asthma (positive test)
- chronic obstructive pulmonary disease (to ensure differential ability)
- other respiratory conditions (also to ensure differential ability)
- non-respiratory conditions (as a 'healthy' control).

A total of 398 charts were fully reviewed using a standardised data collection form to ascertain which of the four categories a patient belonged to. The researchers found the most accurate algorithm searched for patients who had asthma in their cumulative profiles or for whom an asthma billing code was used. Researchers also noted that the algorithm operating characteristics were similar between the two clinics studied.

They conclude that the ability of a doctor to efficiently and correctly create a registry of asthma patients is a useful tool for monitoring outcome and care, as well as enabling targeted quality improvement initiatives. In future, similar algorithms could be developed for other chronic diseases.

Reference: Can Fam Physician. 2015;61:e474–83.

Models of care



FREE

Patients' and providers' satisfaction with shared medical appointments

Authors: Egger G, Dixon J, Meldrum H, et al.

Shared medical appointments (SMAs) or group visits are comprehensive medical visits conducted with groups of patients, and run by two to four health professionals, including a GP. This article reports on patient and provider satisfaction, and subjective outcomes of SMAs in Australia.

The researchers measured patients' and providers' attitude towards and satisfaction with SMAs after attending at least two. A total of 24 SMAs were conducted in eight medical centres in New South Wales, South Australia and Queensland. Satisfaction and subjective outcomes from these sessions were tested after more than 200 attendances. The appointments focused on Type 2 diabetes, chronic pain, weight loss, and chronic disease in Aboriginal and Torres Strait Islander men.

The study found that overall satisfaction with SMAs was high among patients and providers; only 5 out of 80 patients (6.25%) in 219 visits failed to attend after their first visit without a reasonable excuse. Those who attended two or more sessions indicated they would like the choice of attending SMAs on a two- to three-monthly basis. Reasons commonly cited for enjoying the SMA were peer support, not feeling alone with their disease, more time to ask questions, interest in others' ailments, and the relaxed atmosphere. All health care providers wished to continue to be involved as an alternative form of clinical management.

There was overwhelming satisfaction with the process by Aboriginal and Torres Strait Islander men, with the authors

noting that group 'yarning' in a gender-specific environment is a common cultural practice in these communities and appeared to be more natural to this population than a single medical consultation.

The authors conclude that SMAs could be a valuable process tool in managing chronic disease in Australia. There are no data to support the use of the traditional delivery of health care in a one-to-one situation over any other, and this study demonstrates support for SMAs in general practice.

Reference: Aust Fam Physician. 2015 Sep;44(9):674–9.



Pharmacy: finally part of the team?

Author: Bond C.

This British editorial looks at recent changes in pharmacy in light the UK Royal College of General Practitioners' call for GPs to work more closely with pharmacists. In 1986, the Nuffield Committee of Inquiry recommended that pharmacists and GPs collaborate to improve the effectiveness and efficiency of prescribing. Since then, there have been successive policy papers seeking to use pharmacy's untapped health care resource to address capacity issues in primary care.

In the mid-1990s, pharmacists started working closely with doctors in primary care in a wave of small-scale projects. Although evidence of benefit was initially inconclusive, the number of pharmacists working in prescribing support roles increased. Pharmacists are now increasingly running their own clinics, with some limited evidence of benefit. However, there is growing evidence that pharmacists can be key players in improving the safety and effectiveness of prescribing. In particular, the PINCER study showed that a pharmacist-led, information technology-based intervention is an effective way of reducing a range of medication errors in general practice where patients on known high-risk prescribing regimens are targeted.

The author says that while much of the research has looked at practice-based roles for pharmacy, there is also scope for an increased role for community pharmacists. She notes they have already proven their ability to deliver successful smoking cessation services, manage repeat dispensing, conduct medication-use reviews and treat minor ailments. The author

Models of care

concludes that pharmacy will continue to face challenges as labelling, prescribing, dispensing and supply of medicines becomes increasingly automated. Pharmacy can do much more, and closer liaison with general practice is needed to ensure the two professions work together in an integrated way to benefit patients.

Reference: Br J Gen Pract. 2015;65(639):e638–e639. doi: 10.3399/bjgp15X686797.

Public health



Improvements in US diet helped reduce disease burden and lower premature deaths, 1999–2012; overall diet remains poor

Authors: Wang DD, Li Y, Chiuve SE, et al.

This study assesses changes to the diet in the US, and its effect on improving population health. The authors relied on the Alternative Health Eating Index (AHEI), which measures the key components of healthy diets, including the higher consumption of plant sources, fats, fish, nuts, whole grains, fruit and vegetables and low consumption of partially hydrogenated fat, red meat and refined carbohydrates. Scoring on the resulting scale ranges from 0 (complete non-adherence) to 110 (complete adherence).

From 1999 to 2012, the mean AHEI across the US increased from 39.9 to 48.2. Reduction in transfat consumption contributed to about half of this improvement. Significant improvements were also noted in consumption of fruit, whole grains and nuts and legumes, while consumption of polyunsaturated fatty acids, sugar-sweetened beverages, and red and processed meat declined. Groups with low socioeconomic status and non-Hispanic blacks had comparatively poorer diet quality. Participants with higher education levels and healthier body weight had higher AHEI levels, and also made greater improvements over time. Cumulatively, the increase in AHEI between 1999 and 2012 was responsible for 1,064,840 fewer all-cause premature deaths, with 8.6% fewer cardiovascular disease cases, 10% fewer coronary heart disease cases, 5.1% fewer stroke cases, 1.3% fewer cancer cases and 12.6% fewer Type 2 diabetes cases in 2012 compared to 1999.

The authors note that overall the US diet remains far from optimal, but highlight the effectiveness of educational,

legislative and regulatory interventions (including mandatory labelling and a ban on hydrogenated oils in food) that successfully reduced the consumption of transfats. They suggest that a 35.6% reduction in the consumption of sugar-sweetened beverages resulted from education, voluntary restrictions, and regulations (eg banning of soda in schools and other public properties in Boston). They also note the very little change in the consumption of vegetables and long-chain omega-3 fatty acids, while sodium intake actually increased over time, and query the effectiveness of the corresponding interventions, which have largely relied on consumers' personal responsibility to make informed choices.

Reference: Health Aff. 2015 Nov;34(11):1916–22. doi: 10.1377/hlthaff.2015.0640.

Health care systems



Living in a country with a strong primary care system is beneficial to people with chronic conditions

Authors: Hansen J, Groenewegen PP, Boerma WGW, et al.

This research looks at the primary health care systems of 27 European countries and whether strong primary care is associated with improved health outcomes for the chronically ill. The researchers combined country-level and individual-level data focusing on people's self-rated health status, and whether or not they had severe limitations from untreated conditions. The strength of primary care was measured across five dimensions: structure, accessibility, continuity of care, coordination of care, and comprehensiveness of service delivery. The influence of the dimensions was assessed against patients' self-rated health, limitations in activities of daily life, and untreated conditions. In addition, the researchers attempted to analyse whether the benefits

of strong primary care had a stronger effect for people with multiple morbidities, primary care-sensitive conditions, or low levels of education.

The study found that a strong primary care structure and good coordination was important to the self-rated health of people with chronic conditions, while good access to primary care helped them to receive care for their conditions. For people with multiple morbidities, they found that their self-rated health status was higher in countries with a strong primary care structure, high continuity of care, and a comprehensive primary care system. The comprehensiveness of services provided was especially beneficial. For people with primary care-sensitive conditions, continuity of care appeared particularly critical.

No single dimension of primary care was found to be beneficial for all chronically ill patients. Instead, different groups of patients and different types of outcomes benefited

from different features of strong primary care. The authors conclude that there is a general need for primary care to be person centred, address the needs of subgroups of patients, and also find a balance between structure and service delivery.

Reference: Health Aff. 2015 Sept;34(9):1531–1537. doi: 10.1377/hlthaff.2015.0582



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 College's Policy Team at policy@rnzcgp.org.nz

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