

A CHOOSING WISELY LITERATURE SYNOPSIS

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Choosing Wisely New Zealand

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DETERMINING BENEFITS OF DIFFERENT CHOOSING WISELY RECOMMENDATIONS

Morden NE, Colla CH, Sequist TD, Rosenthal MB. Choosing Wisely — The politics and economics of labelling low-value services. N Engl J Med 2014; 370: 589—92. doi: 10.1056/NEJMp1314965

The article highlights the wide variation in the low-value interventions included on the US specialty societies' lists in terms of their potential impact on health, and discusses possible mechanisms to accelerate translating the lists into practice change. Good communication, public education, and more high-impact recommendations are critical for success. The Choosing Wisely campaign invites doctors to own their role as stewards of limited health care resources.

DISINVESTMENT IN PUBLIC HEALTH SYSTEMS

HealthPACT. Caring Wisely: Optimising patient care in Australia and New Zealand. Workshop report. 2015. www.health.qld.gov.au/healthpact/docs/report-caring-wisely.pdf

This report summarises a workshop to discuss what the Australian and New Zealand governments should do next in formulating effective policy around disinvestment in the public hospital system. Workshop sessions focused on identifying and prioritising interventions for disinvestment and the barriers in translating disinvestment policy into clinical practice. Key points of agreement included that identification of low-value care is important, information about current practice is a prerequisite, disinvestment information needs to be provided at a local level, and incentives for disinvestment may result in better adoption. A pre-workshop discussion paper is attached to the report. The paper gives background information about past and current disinvestment activities, including the Choosing Wisely Australia campaign, and the challenges of disinvestment for doctors, funders and policy makers.

ENCOURAGING IMPLEMENTATION/ADOPTION OF CHOOSING WISELY

Levinson W, Born K, Wolfson D. Choosing Wisely Campaigns: A Work in Progress. JAMA. 2018 May 15;319(19):1975-1976. doi: 10.1001/jama.2018.2202.

How can Choosing Wisely learn from the success and pitfalls of other movements in medicine? This viewpoint uses diffusion of innovation science to explore factors behind the spread of Choosing Wisely campaigns.

Compared with other health quality and safety innovations, the name “Choosing Wisely” and the statement “5 things physicians and patients should question” are plain language. This helps clinicians, patients, and the public associate addressing overuse with conversations and shared decision-making. Research demonstrates higher uptake if users can adapt or “reinvent” innovations to their own setting, so avoiding becoming a “top-down” strategy will help foster this grassroots engagement. Social and networks relying on personal influence are critical for diffusion with physicians, so maintaining physician leadership for Choosing Wisely will be critically important. Choosing Wisely offers an approach that can align physician, patient, and payer interests.

Choosing Wisely has begun to shift physician attitudes about overuse but broader adoption by individual physicians and healthcare organizations will require more evidence of the effects on outcomes. The campaign is akin to a tool that has many recommendations and a physician engagement strategy focused on leveraging professionalism to improve care. Whether there will be widespread use of that tool by delivery systems is still to be seen.

END OF LIFE CARE

Willmott L, White B. Stopping Futile Treatment- the Challenge for Doctors Health Services Research Association Australia NZ. Australian Centre for Health Law Research: 2016

A team of interdisciplinary researchers from the Australian Centre for Health Law Research, have undertaken a study, in which 96 doctors, at 3 Queensland hospitals were interviewed regarding their perceptions of provision of futile treatment to adult patients who are dying. These doctors were taken from a wide range of specialties including internal medicine, cardiology, geriatrics, surgery and emergency departments. The doctors reported their reasons for providing futile treatment fell into one of three categories; doctor related, patient related and relating to the institutional nature of hospitals. Of these, it was found that doctor-related reasons were just as, if not more important in the provision of futile end of life care. These include a medical cultural “aversion to death” and view of it as a failure to provide adequate care, wanting to satisfy patients, avoidance of difficult conversations with the dying patient and their family, and fear of legal consequences. The authors of this study stress the critical role of, and opportunity for individual doctors and the medical profession as a whole, to bring about change. They do not see that change will occur unless doctors are prepared to lead and act. The authors recommend doctors prioritize good communication with patients and family members, and undertake those difficult conversations, including patients’ and families’ values and goals of treatment. The importance of institutional support for doctors to do this was also acknowledged.

EVALUATING THE IMPACT OF CHOOSING WISELY

Bhatia S, Levinson W, Shortt S, Pendrith C, Fric-Shamji E, Kallewaard M, et al. Measuring the effect of Choosing Wisely: an integrated framework to assess campaign impact on low-value care. *BMJ Qual Saf* 2015; 0: 1–9. doi: 10.1136/bmjqs-2015-004070

The article proposes an integrated measurement framework, using the example of low back pain imaging, which may be used to assess the effectiveness of a Choosing Wisely campaign. Unintended consequences (e.g. underuse of high-value care) as well as intended consequences are included. Measurement tools, including their pros and cons, are identified for assessing doctors’ awareness, attitudes and behaviour, and patient engagement and acceptance.

Chok L, Debrunner J, Jaeggli S, Kusic K, Bachli EB. An echo to Choosing Wisely® in Switzerland. *Int J Gen Med.* 2018 May 4;11:167-174. doi: 10.2147/IJGM.S155544. eCollection 2018.

This Swiss study reports the results of an initiative to reduce the number of unnecessary blood tests in patients at a hospital in Zurich. The recommendation “not to order daily routine blood tests without a specific clinical reason” was communicated through a combination of education sessions for resident doctors, teaching from medical consultants and weekly emails to staff from the medical director. When evaluated 3 months later, there had been a significant decrease in the number of blood tests after introduction of the recommendation. Before implementation, 46% of the patients had more than four blood tests per admission, which decreased to 39% after implementation. This study demonstrates that health professional behaviour can be influenced through simple educational approaches, to reduce low-value care. However this study was not designed to assess patient outcomes, and is unable to determine whether there were any positive or negative impacts on patients as a result of the decreased blood tests.

Rosenberg A, Agiro A, Gottlieb M, Barron J, Brady P, Liu Y, et al. Early trends among seven recommendations from the Choosing Wisely campaign. JAMA Intern Med 2015; 175: 1913–1920. doi:10.1001/jamainternmed.2015.5441

This United States study, using an insurance company's national claims data, looked at changes in frequency of seven Choosing Wisely services over the first two to three years. There was a significant decrease in use of two services (imaging for uncomplicated headache and cardiac imaging without history of cardiac conditions). Use of two services increased significantly (human papillomavirus testing in women under 30 and non-steroidal anti-inflammatory drugs for patients with chronic conditions that can be worsened by these drugs). Use of three services was unchanged (preoperative chest X-ray without indication, antibiotics for acute sinusitis, imaging for uncomplicated low back pain). Additional interventions rather than just the provision of information may be required to affect change.

Stinnett-Donnelly JM, Stevens PG, Hood VL. Developing a high value care programme from the bottom up: a programme of faculty-resident improvement projects targeting harmful or unnecessary care. BMJ Qual Saf 2016; 25: 901–8. doi: 10.1136/bmjqs-2015-004546.

The article reports the first two years' experience of reducing low-value care in a United States university medical department. Clinicians proposed projects to reduce low-value tests and procedures in their subspecialty, some of which were from Choosing Wisely lists. Opportunity for improvement was assessed from baseline data. Selected projects were implemented through education of the ordering clinicians and system-based change (e.g. electronic best practice alerts when ordering a test). Examples of success included a 90% reduction by two years in bone density scans of women under 65 years without risk factors for osteoporosis. The authors identified factors that affected project success and have developed a framework to assist future project selection based on complexity, value and controversy.

EVALUATION OF CHOOSING WISELY RESOURCES

Légaré F, Hébert J, Goh L, Lewis KB, Leiva Portocarrero ME, Robitaille H, Stacey D. Do choosing wisely tools meet criteria for patient decision aids? A descriptive analysis of patient materials. BMJ Open. 2016 Aug 26;6(8):e011918. doi: 10.1136/bmjopen-2016-011918.

These Canadian researchers reviewed all Choosing Wisely Canada patient materials on the website, using the International Patient Decision Aid Standards (IPDAS) criteria for qualifying patient decision aids. Out of 24 patient materials, only 2 met the 6 IPDAS criteria to qualify as patient decision aids, and neither of these 2 met the 6 certifying criteria. Almost all decision aids neglected to state the decision required, none provided balanced information on option benefits/harms or cited the evidence. None of the aids included an updating policy. The researchers concluded that a number of modifications to the Choosing Wisely Canada patient materials would help to ensure that they qualify as patient decision aids and thus as more effective shared decision-making tools. This is relevant feedback for Choosing Wisely New Zealand, as many of the patient resources in New Zealand were adapted from Choosing Wisely Canada resources.

EVIDENCE OF LOW-VALUE/UNNECESSARY CARE

Brownlee, S et al. Evidence for overuse of medical services around the world. The Lancet 2017; 390: 10090, 156 - 168

As part of the four-part Lancet *Right Care Series*¹ on medical underuse and overuse published in January 2017, this paper reviews what is known globally regarding the scope and consequences of overuse: “the provision of medical services that are more likely to cause harm than good”. Overuse is difficult to measure, as it not only includes clearly ineffective interventions, but also “grey zone” interventions for which the balance between benefits and harms varies substantially among patients.

Most studies of overuse have been done in high-income countries, for example with findings that 40% of patients in the USA with low back pain are receiving unnecessary MRIs, and 23% of low risk surgery patients have a pre-op chest X-ray, and in Poland, Sweden, and the UK, half of patients with viral upper respiratory infections receive unnecessary antibiotics. But there is growing evidence that overuse is a global problem. Inappropriate use of medication (especially antibiotics), inappropriate use of screening tests and overuse of imaging are all common. For example, South Korea’s aggressive use of ultrasound screening has led to a 15-fold increase in incidence of papillary thyroid cancer, yet the death rate from this cancer has remained unchanged, and it is estimated that 99.7–99.9% of screen-detected thyroid cancers in Korea represent overdiagnosis. In many countries, evidence exists for the overuse of aggressive care for dying patients and simultaneous underuse of appropriate palliative care. Overuse can coexist with underuse and unmet health-care needs, particularly in low and middle-income settings.

Overuse is likely to cause physical, psychological and financial harm to patients, and drain resources from other public health and social spending. In Australia for example, the rising volume of medical services, many of which are overused, has been identified as the greatest threat to the financial position of the government, and a bigger cause of health-care cost increases than population growth or ageing.

HEALTH PROFESSIONALS’ PERSPECTIVES

Colla CH, Kinsella EA, Morden NE, Meyers DJ, Rosenthal MB, Sequist TD. Physician perceptions of Choosing Wisely and drivers of overuse. *Am J Manag Care* 2016; 22:337–343.

This survey of doctors practising at a large United States ambulatory care provider assessed awareness of Choosing Wisely almost two years after its introduction and views on possible drivers of overuse. The response rate was 72%. Awareness of Choosing Wisely was significantly higher among primary care physicians (47%) than medical specialists or surgeons. Primary care physicians reported feeling significantly more pressure from patients for interventions than other doctors. Support for doctors in dealing with uncertainty associated with conservative management and that addresses drivers of overuse may be beneficial in reducing overuse.

Zikmund-Fisher BJ, Kullgren JT, Fagerlin A, Klamerus ML, Bernstein SJ, Kerr EA. Perceived barriers to implementing individual Choosing Wisely recommendations in two national surveys of primary care providers. *J Gen Int Med* 2016 doi: 10.1007/s11606-016-3853-5

This United States study examined primary care providers’ perceptions regarding which Choosing Wisely adult primary care recommendations were difficult for them to follow, difficult for patients to accept, or both, and particular barriers to reducing overuse. National surveys of private sector primary care physicians and federally funded primary care providers were carried out with response rates of 34% and 48%, respectively. There was variation in reported difficulty to follow and a high level (36 to 87 %) of reported difficulty for most patients to

¹ <http://www.thelancet.com/series/right-care>

accept for recommendations related to medication use (sinusitis, insomnia/agitation/delirium) and imaging (syncope, low back pain). for symptomatic conditions. Malpractice concerns, patient requests, the number of interventions recommended by specialists, and lack of time for shared decision-making with patients were most frequently rated as major barriers to reducing overuse. Findings were largely consistent between the two groups which suggest that such concerns are not predominantly driven by reimbursement issues. Variations in attitudes across recommendations suggest implementation efforts will need to be adapted to the specific barriers in implementing each Choosing Wisely recommendation.

INDICATORS FOR LOW-VALUE CARE

Chalmers K, Badgery-Parker T, Pearson SA, Brett J, Scott IA, Elshaug AG. Developing indicators for measuring low-value care: mapping Choosing Wisely recommendations to hospital data. BMC Res Notes. 2018 Mar 5;11(1):163.

Having indicators for low-value care is critical to be able to measure the baseline of low-value care and to evaluate the impact of the Choosing Wisely Campaign. These Australian researchers sought to develop indicators of low-value care, based on selected Choosing Wisely (CW) recommendations, applicable to routinely collected hospital data.

They assessed 824 recommendations from the United States, Canada, Australia and the United Kingdom CW lists regarding their capacity to be measured in administrative hospital admissions datasets. They selected recommendations if they met the following criteria: the service occurred in the hospital setting (observable in setting); a claim recorded the use of the service (record of service); the appropriate/inappropriate use of the service could be mapped to information within the hospital claim (indication); and the service is consistently recorded in the claims (consistent documentation).

The authors identified 17 recommendations (15 services) as measurable, and developed an operational indicator for each, based on routinely available hospital datasets. It is concerning that only 17 of the 824 original recommendations were measurable in routine public hospital datasets, although this is consistent with previous research. Unfortunately, only one of these is a CW New Zealand recommendation (don't use epidural steroid injections for patients with axial low back pain who do not have leg dominant symptoms originating in the nerve roots). This means further work is needed to develop practical measures of low-value care in New Zealand, in order to assess the problem of low-value care and to evaluate the CW campaign.

INTERNATIONAL CHOOSING WISELY INITIATIVES

Hurley R. Can doctors reduce harmful medical overuse worldwide? BMJ 2014; 349:g4289. doi: 10.1136/bmj.g4289

The article reports some of the views from an international Choosing Wisely meeting and what other countries are doing. It outlines the Choosing Wisely approach of engaging doctors to identify and reduce low-value care and communicating to patients that more care is not always better. Patients need to be encouraged to ask their doctor a series of questions about a proposed intervention. The key point is shared decision-making.

Levinson W, Kallewaard M, Bhatia RS, Wolfson D, Shortt S, Kerr EA. 'Choosing Wisely': a growing international campaign. BMJ Qual Saf 2014; 0: 1—9. doi: 10.1136/bmjqs-2014-003821

The article presents the experiences from 12 countries in planning or implementing Choosing Wisely. It identifies key elements of a Choosing Wisely campaign and five principles (physician led, patient focused, evidence based, multi-professional, transparent) essential to its success that should be incorporated in a Choosing Wisely campaign in any country. The goal of a Choosing Wisely campaign is to change the culture of medical care that has historically supported overuse of unnecessary interventions to provide high-quality care, prevent harm and decrease the use of unnecessary care.

Wolfson D, Santa J, Slass L. Engaging physicians and consumers in conversations about treatment overuse and waste: a short history of the Choosing Wisely campaign. Acad Med 2014; 89: 990–995. doi: 10.1097/ACM.0000000000000270

The leaders of the Choosing Wisely campaign, the American Board of Internal Medicine Foundation and Consumer Reports, outline the history and purpose of the campaign, its structure and approach, lessons learned and future plans. Professional values and doctor-patient conversations to reduce unnecessary care underpin the campaign. Medical specialty societies have developed more than 250 evidence-based recommendations, some of which have consumer-friendly resources produced by Consumer Reports. Evaluation of the campaign's impact is needed.

Malhotra A, Maughan D, Ansell J, Lehman R, Henderson A, Gray M, et al. Choosing Wisely in the UK: the Academy of Medical Royal Colleges' initiative to reduce the harms of too much medicine. BMJ 2015; 350:h2308. doi: 10.1136/bmj.h2308

The article outlines the Academy of Medical Royal Colleges' approach to introducing Choosing Wisely in the United Kingdom in collaboration with other clinical, patient and healthcare organisations. The authors suggest that guideline committees should produce decision-making tools that assist informed discussion with patients. Decisions should be made on the best match between evidence about the benefits and harms of each intervention and the goals and preferences of the patient.

PATIENTS' AND CONSUMERS' PERSPECTIVES

Silverstein W, Lass E, Born K, Morinville A, Levinson W, Tannenbaum C. A survey of primary care patients' readiness to engage in the de-adoption practices recommended by Choosing Wisely Canada. BMC Res Notes 2016; 9: 301. doi: 10.1186/s13104-016-2103-6

This Canadian study of primary care patients aged 50 or more years suggests provision of patient educational materials in waiting rooms can improve knowledge around the use of unnecessary care. The response rate was 53% -- participants were highly educated, mostly female (59%) and had a mean age of 63 years. Participants chose one topic from five common unnecessary interventions (annual electrocardiogram (ECG) testing, use of antipsychotic drugs for dementia, use of antibiotics for sinusitis, imaging for low back pain, and hypnotic use for insomnia) and rated their agreement to knowledge and behaviour statements in relation to the topic before and after reading a Choosing Wisely brochure on the topic. A subset also later had a semi-structured interview. Knowledge improved significantly for all topics after reading the brochure, irrespective of age, sex or educational status. Forty-eight percent said that they would discuss the material with a health care provider and 45% intended to incorporate the brochure's recommendations into their future health behaviour. The majority of the (small subset of) interviewed patients already espoused or were ready to adopt the principles of Choosing Wisely.

Boyes B. Medical Groupthink: is that surgery, procedure or medication really necessary? Real KM Evidence based. Practical results. 2016. <http://realkm.com/2016/03/17/medical-groupthink-isthat-surgery-procedure-or-medicine-really-necessary/>

This article gives a patient's voice to the experience of potentially undergoing unnecessary and potentially harm causing investigations and treatments. Bruce Boyes is an Australian man in his fifties, who came close to undergoing a coronary angiogram to investigate Q wave inversion on his ECG. Dr Boyes was concerned enough at the prospect of developing complications from having this procedure, that he found and reviewed some of his earlier ECGs done some 25 years prior. These ECGs showed exactly the same Q wave inversion pattern, hence discounting the cardiologist's opinion that Dr Boyes had experienced "a silent myocardial infarction". Dr Boyes relates previous health encounters that have coloured his approach to medical consultations and advice. These include his chance-reading about the use of imiquimod for treatment for basal cell carcinomas (B.C.Cs). Bruce's facial B.C.C was successfully treated with imiquimod, despite being told by a surgeon there was no alternative to surgical excision and skin graft of his BCC. Dr Boyes's insights provide good examples of the importance of patients being comfortable questioning the advice they are given by their doctor.

POLICY DEBATE ON CHOOSING WISELY

Atkinson P, Lang E, Mackenzie M, Hirandani R, Lys R, Laupacis M, Murray H. CJEM Debate Series: #ChoosingWisely - The Choosing Wisely campaign will not impact physician behaviour and choices. CJEM. 2018 Mar;20(2):170-175.

This editorial of the Canadian Journal of Emergency Medicine debates the claim that the Choosing Wisely campaign will not impact physician behaviour and choices. Is the CW campaign simply a re-branding of common sense? Or is it a novel evidence-based program that will both save money and improve the quality of care that we deliver? Is it an attempt to remove clinical judgment, replacing it with simplistic rules that do not recognize variability in populations? Or is the aim of the campaign to empower patients to facilitate improved communication with care providers and ultimately better choices? The affirmative team make the argument that the CW campaign is well intentioned; however without significant changes to the implementation strategies, it will not impact physician behaviour and choices. The rebutting team argue that the CW campaign is the most powerful approach we have for combatting unnecessary care, and that ultimately CW will change practice because of its broad engagement and supportive tools.

The debate makes for impassioned reading, but this type of healthy debate is crucial for the CW campaign to improve. A number of issues in the critique, such as the need for better data to measure over-treatment, the importance of a rigorous evidence base behind CW recommendations, the need to better educate clinicians working in a public health system about costs of care, and the need to ensure broad engagement within Colleges to include frontline staff in the development of CW recommendations, serve as useful reflection points for how the CW campaign could be further strengthened.

REDUCING PRE-OPERATIVE TESTING

Matulis J, Liu S, Mecchella J, North F, Holmes A. Choosing Wisely: A Quality Improvement Initiative to Decrease Unnecessary Preoperative Testing. BMJ Qual Improv Report 2017 6 doi:10.1136/bmjquality.u21681.w6691

This article from the United States details a quality improvement study, which aimed to reduce rates of unnecessary pre-operative testing and reduce the average time taken for pre-operative appointments. It was

undertaken within the pre-operative service of a General Internal Medicine (GIM) Clinic at a rural, academic medical center over a 9-month period. Only patients undergoing low and intermediate cardiac risk surgeries were included. Of note, seven specialties participating in the American Choosing Wisely initiative recommend against performing routine pre-operative testing prior to low-risk surgery. Baseline data was extracted from the files of patients undergoing pre-operative evaluation identified that 36% of all patients received unnecessary testing. Prior to the intervention, researchers found no standardized process for either performing the pre-operative evaluation nor for the ordering of pre-operative tests. Important contributory factors leading to unnecessary testing were identifiable. These included; practice tradition, lack of familiarity with current guidelines, institutional pre-operative requirements and time constraints. The researchers developed a templated Electronic Health Record (EHR) Tool to guide clinicians through recommended documentation format, orders, patient instructions and billing. It was hoped this tool would also be adopted by physicians outside of the pre-operative clinic, and drive wider improved rates of appropriate testing. The researchers employed Nurse Practitioners and Physician Assistants to run the pre-operative clinics, and used standardized processes. Clinical access and scheduling flexibility for these clinics was noted to be improved compared to primary care physician (PCP) run pre-operative clinics. Results: a statistically significant reduction in unnecessary pre-operative testing was found between the group of patients seen in the intervention group (4%), and the patients receiving usual care (23%). Mean scheduled appointment duration was also significantly lower (40minutes versus 48minutes).

ROLE OF CLINICAL GUIDELINES IN REDUCING LOW-VALUE CARE

O'Donnell JL. Editorial. Evolve osteoporosis and other guidelines avoiding cognitive bias. Intern Med J 2016; 1129—1132. doi: 10.1111/imj.13212

The editorial suggests that standardised critical appraisal of clinical guidelines is more likely to have an impact on low-value care than some of the Royal Australasian College of Physicians' current Evolve (Choosing Wisely) recommendations, which are directed to other specialties rather than the speciality that derived it. Cognitive bias in clinical guidelines is illustrated using the example of bone mineral density scans for monitoring the effectiveness of treatment for osteoporosis.

STRATEGIES FOR REDUCING UNNECESSARY CARE

Academy of Medical Royal Colleges. Protecting resources, promoting value: a doctor's guide to cutting waste in clinical care. London: Academy of Medical Royal Colleges; 2014. www.aomrc.org.uk/wp-content/uploads/2016/05/Protecting_Resources_Promoting_Value_1114.pdf

This report by the Academy of Medical Royal Colleges makes a number of recommendations about reducing wasted clinical resources, including that colleges identify areas of waste and give leadership in tackling them through use of tools such as the National Institute for Health and Care Excellence 'do not do' database and a Choosing Wisely list for their speciality. A cultural shift is needed – “don't do something because it can be done; do it if it is necessary.” The report includes a waste reduction toolkit and gives examples of how health professionals can ensure that resources are used in the most effective way to provide the best possible quality and quantity of care for patients.

Colla CH. Swimming against the current — what might work to reduce low-value care? N Engl J Med 2014; 371: 1280—3.

The article discusses the pros and cons of policy tools aimed at patients (e.g. patient education) and healthcare providers (e.g. evidence-based guidelines) to reduce low-value care. Whilst the discussion focuses on the United States which has a fee-for-service system, the article includes a table summarising the various financial incentive and information policy tools that exist. More evidence of the effectiveness of these tools in reducing low-value care is needed.

Elshaug, AG et al. Levers for addressing medical underuse and overuse: achieving high-value health care. *The Lancet* 2017; 390: 191–202

As part of the four-part *Lancet Right Care Series*² on medical underuse and overuse published in January 2017, this paper seeks to provide an understanding of the system-level factors that drive overuse and underuse, as well as the various incentives at work during a clinical encounter. The authors classify these drivers into three clusters: (a) the flow of money and consequent effects on incentives and the integration of care; (b) gaps in knowledge, misleading psychological tendencies, and erroneous beliefs; and (c) asymmetries in power between patients and providers, impeding proper consideration of patients' aims and preferences.

The authors propose a range of levers for eliminating medical underuse and overuse, using complementary “bottom-up” approaches, whereby patients, clinical professionals, and system leaders take a proactive lead (such as in *Choosing Wisely*); and “top-down” policies, where governments, medical societies, or private third-party payers take measures to improve the safety and quality of health care. They outline a list of policy options available for system leaders and government policy makers.

They note that levers that target underuse can easily have the unintended consequence of exacerbating overuse and vice-versa. For example, in Australia efforts to increase testing for vitamin D deficiency in primary care, rapidly gained popularity with a 4800% increase in testing over 10 years, much of which was clinically inappropriate and at a cost that could have achieved much greater health benefits if spent elsewhere.

Ideally, policies must move beyond the purely incremental; that is, policies that merely tinker at the policy edges after underuse or overuse arises. In this regard, efforts to increase public awareness, mobilisation, and empowerment hold promise as methods to enhance all other efforts to promote the right care.

Organisation for Economic Co-operation and Development (OECD) “Tackling Wasteful Spending on Health” (2017) http://www.oecd-ilibrary.org/social-issues-migration-health/tackling-wasteful-spending-on-health_9789264266414-en

The international *Choosing Wisely* initiative has been recognised by the Organisation for Economic Co-operation and Development (OECD) as an approach with significant potential to address low-value healthcare. A considerable part of health expenditure makes little or no contribution to improving people's health. This OECD report systematically reviews strategies put in place by countries to limit ineffective spending and waste. Persistent challenges include a lack of metrics to quantify wasteful care and the need to sustainably engage both clinicians and patients to change practices.

According to the OECD, sustainable change is achievable if patients and clinicians are persuaded the better option is the less harmful or least wasteful one. *Choosing Wisely* is highlighted as promising example of bringing together evidence with leadership from clinician groups. Promising progress from the USA's *Choosing Wisely* campaign is

² <http://www.thelancet.com/series/right-care>

described, but the report notes that Choosing Wisely initiatives should be fully evaluated in every country, including for any unintended harmful consequences. To support this, the OECD is working with the Choosing Wisely campaign to develop 3 internationally comparable indicators on wasteful care, on: CT and MRI for low back pain; antibiotics for upper respiratory tract infections; and on sedatives for the elderly.

VARIATION IN CLINICIAN'S REFERRALS

Referring Wisely. The Royal College of Physicians. 2017

The Royal College of Physicians (RCP) noted a great deal of variability in the pattern of referrals between generalist and specialist physicians, and so it invited all Medical Specialties to contribute to their work on "Referring Wisely". The aim was to gain a better understanding of the referral processes between General Medical Services (GMS) and Subspecialty areas, and identify areas of less appropriate referrals. It was hoped this could reduce unnecessary referrals, reduce fragmentation of care, reduce duplication of tests, and lead to more appropriate use of services and better use of limited resources. In doing this work, RCP expected that disagreements of opinion may occur, but hoped this could fuel further discussion. Subspecialty committees were asked to provide two lists. Firstly; a list of the 5 most common referrals from other medical specialty physicians. Secondly; a list of 5 commonly referred conditions from other physicians, where it was expected that the management required was within the knowledge domain of any physician, hence the referral was not needed. Twenty-three medical subspecialties responded with providing these two lists, and they are available for review in the full article. The lists show that many of the referrals made to subspecialties are for issues, which subspecialist consider, should be able to be managed by any physician. Why does this discrepancy in opinion occur? Suggestions include; lack of clear referral guidelines, lack of appropriate generalist resource, inadequate training for general physicians on specific conditions, patients' expectations of medical health care provision i.e. generalist versus subspecialist. Of interest for Geriatricians, the greater problem is other specialties do not always recognize the potential benefits of geriatric assessment and don't refer, rather than over-refer. It is hoped that formation of these lists may help streamline services and improve the appropriateness and quality of referrals, address areas needed for further education and target knowledge gaps for general physicians, and promote conversations regarding conditions requiring generalist versus subspecialist care. The RCP takes care to note that these lists are not to be used didactically, nor to discourage discussion between generalist and subspecialty physicians.