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Schwerpunkt

# Choosing Wisely – An international and multimorbid perspective

## *Choosing Wisely aus internationaler und multimorbider Sicht*

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ABSTRACT

Some medical diagnostic and therapeutic interventions are non-beneficial or even harmful. The *Choosing Wisely* campaign has encouraged the generation of "top five" lists of unnecessary low-value services in different specialist areas. In the USA alone, where the campaign was launched, these lists include a total of 450 evidence-based recommendations. Medical scientific societies in further countries such as Canada, Australia, New Zealand, England, Switzerland and Germany have since initiated Choosing Wisely campaigns. Besides implementing top five lists, these aim to change attitudes, expectations and practices in the culture of medicine. The field of internal medicine has initiated change in Switzerland (Swiss Society of General Internal Medicine: Smarter Medicine) and Germany (German Society of Internal Medicine: Klug entscheiden). Formulating Choosing Wisely principles in managing complex patients with multiple concurrent acute or chronic diseases, i. e., *multimorbidity* (*MM*), will present a particular challenge. Research is needed to determine the primary sources of overuse in specific combinations of diseases (i. e., MM clusters) and spearhead corresponding recommendations. National Choosing Widely campaigns may serve as a forerunner to a more global initiative.

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ZUSAMMENFASSUNG

Einige medizinische diagnostische und therapeutische Interventionen sind nicht vorteilhaft oder sogar schädlich. Choosing-Wisely-Kampagnen haben die Erstellung von „Top-5"-Listen unnötiger oder minderwertiger Interventionen („low-value services") in verschiedenen Fachgebieten gefördert. Allein in den USA, wo die Kampagne gestartet wurde, enthalten diese Listen insgesamt 450 evidenzbasierte Empfehlungen. Zahlreiche medizinisch-wissenschaftliche Fachgesellschaften in weiteren Ländern wie Kanada, Australien, Neuseeland, England, der Schweiz und Deutschland haben seitdem Choosing-Wisely-Kampagnen initiiert. Neben der Implementierung von Top-5-Listen sollen diese Kampagnen die Einstellungen, Erwartungen und Praktiken in der Kultur der Medizin verändern. Wissenschaftliche Fachverbände der Inneren Medizin haben in der Schweiz (Schweizerische Gesellschaft für Allgemeine Innere Medizin: Smarter Medicine) und in Deutschland (Deutsche Gesellschaft für Innere Medizin: Klug entscheiden) Choosing-Wisely-Kampagnen vorangetrieben. Das Formulieren von Choosing-Wisely-Kampagnen bei der Betreuung komplexer Patienten mit mehreren gleichzeitig bestehenden akuten oder chronischen Krankheiten, d. h. Multimorbidität (MM), wird eine besondere Herausforderung darstellen. Forschung ist erforderlich, um die primären Quellen der Überbeanspruchung bei bestimmten Kombinationen von Krankheiten (d. h. MM-Cluster) und entsprechende Empfehlungen zu entwickeln. Nationale Choosing-Wisely-Kampagnen sollen als Vorläufer einer globalen Initiative dienen.

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## The beginnings of Choosing Wisely

Modern medicine has produced an impressive range of diagnostic and therapeutic interventions [1,2]. Careful evaluation of their effectiveness suggests that some of these interventions have no recognizable benefit and can even be detrimental to the patient [3–5]. While acting in good faith, clinicians and their institutions may be unwittingly promoting overuse of health care resources, without adding value of care for patients, by delivering ineffective, harmful wasteful or unnecessary interventions [6,7]. This problem is estimated to account for as much as 30% of all medical expenditure in the USA [8,9].

Information to discourage the use of non-beneficial or harmful interventions may be collected from a wide variety of sources. However, high-quality knowledge in medical databases can be difficult to access and knit together for specific cases. Also, medical books are limited to generic principles and can soon become outdated. Online databases of medical research are growing so quickly that the sheer quantity of information can hinder the capacity of individuals to retrieve, process and use new knowledge to guide treatment decisions [10,11]. Systematic literature reviews often focus on favorable findings of effectiveness with little mention of safety and tolerability, [12,13] and the all too literal application of clinical guidelines may be wrong or even hazardous for the individual patient [14].

The over- and underuse of medical resources has long been the subject of debate in expert committees, specialist associations, professional and non-specialist media, governmental and non-governmental organizations, and the general public [15,16]. But this debate has been hard to initiate, to maintain and to apply. This is in part because research has focused more on underuse of health care. Furthermore, development of measures of overuse has met with various research, cultural, and political challenges, [17] and because efforts to bring the various stakeholders together has been slow [18]. Therefore, the *American Board of Internal Medicine* (*ABIM*) Foundation started Choosing Wisely in 2012 to encourage physicians and patients in the USA to enter into dialogue about overuse of unnecessary tests, treatments and procedures [19–22].

## Global development

Choosing Wisely invited a diverse array of specialist societies to determine in their own field of expertise a "top five" list of particularly prevalent low-value services. These lists have the character of recommendations based on evidence of inappropriate and potential harm. This medical campaign has been a great success. To date, over 60 medical societies in the USA have created a total of 450 recommendations through lists of five common tests, treatments or procedures for which there is strong scientific evidence that they do not benefit patients or may even cause harm.[12,13] *Wisely Canada* followed USA in 2014, with 21 societies, and supporting patient organizations, generating top five recommendations within two years [23–25] and a total of 264 recommendations [26]. *Choosing Wisely Australia* [27] began in 2015, with 21 societies generating by the end of 2016 a total of 123 recommendations.

Professional associations in further countries, including New Zealand, England, Wales, Japan, Italy, Holland, Denmark, Switzerland and Germany have since launched Choosing Wisely campaigns to reach and influence the professional field [28]. Choosing Wisely in the UK can build on the work of the *National institute for health and Care Excellence* (*NICE*) that has identified around 800 potentially unnecessary interventions [29]. Besides the top five lists, the key elements of the Choosing Widely campaigns relate to changing physician attitudes to practice, patient engagement and acceptance, key clinical practices (e.g., shared decision making), and better alignment with the healthcare system (e.g., with the payment system) [30–32,23]. Generally, these campaigns differ in stage of implementation, [23] sponsorship, structure, methods, organization, financing, and content. For example, the German initiative (Klug Entscheiden) considers both overuse and as well as underuse of beneficial procedures, having now generated 115 recommendations through 12 specialist societies and actively disseminated these in specialist literature [33].

## Smarter Medicine

The campaign in Switzerland, referred to as Smarter Medicine, has been spearheaded by experts and chief physicians in the field of internal medicine by the Swiss Society of General Internal Medicine (Schweizerische Gesellschaft für Allgemeine Innere Medizin), focussing on low-value and especially prevalent interventions for outpatients in 2014 and for inpatients in 2016 [34,35].

These recommendations could be taken as a general example of the style of recommendations of societies in Choosing Wisely campaigns. Thus, the Swiss campaign outlined five procedures to be avoided for outpatients:

1. Obtaining imaging studies during the first six weeks in patients with non-specific low back pain.
2. Performing the Prostate Specific Antigen (PSA) test to screen for prostate cancer without a discussion of the risks and benefits.
3. Prescribing antibiotics for uncomplicated upper respiratory tract infections.
4. Obtaining preoperative chest radiography in the absence of a clinical suspicion for intra-thoracic pathology.
5. Continuing long-term treatment of gastro-intestinal symptoms with proton pump inhibitors without titrating to the lowest effective dose needed.

For inpatients, procedures to be avoided include:

1. Ordering blood tests at regular intervals or routine extensive lab panels including X-rays without specific clinical questions.
2. Placing or leaving in place urinary catheters for incontinence or monitoring of output for non-critically ill patients.
3. Transfusing more than the minimum number of red blood (RBC) units necessary to relieve symptoms of anemia or to return a patient to a safe hemoglobin range.
4. Letting older adults lie in bed during their hospital stay. In addition, individual therapeutic goals should be established considering the patients' values and preferences.
5. Using benzodiazepines or other sedative-hypnotics in older adults as first choice for insomnia, agitation or delirium and avoid prescription at discharge.

## Choosing Wisely and multimorbidity

When recommendations from top-five lists are not relevant for a specific case, Choosing Wisely encourages prudent judgement as to what the clinician and patient should or should not do in order to counter overuse. For example, avoiding imaging studies in patients with "non-specific low back pain" (the first Swiss recommendation for outpatients) asks for very careful clinical evaluation to identify "specific low back-pain" and the identification of "red flags", i.e., symptoms or signs, that would support immediate use of imaging studies [36]. Such red flags in back pain also include morbidities such as immunosuppression, cancer and tumors and inflammatory diseases which may suggest a more severe, complicated or dangerous disease constellation. For example, a patient with kidney transplantation and therefore immunosuppression may develop back pain due to spondylodiscitis, i.e., he may have two or more

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