Choosing wisely or beyond the guidelines

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Recently it was estimated that up to 30 % of care delivered in America goes to unnecessary tests, procedures, doctor visits, hospital stays and other services that may not improve people's health, and may even cause harm.

The American College of Cardiology (ACC) and eight other US leading medical societies joined together to address these concerns about overuse or even misuse of health care resources in the United States. The largest independent nonprofit consumer organisation, Consumer Reports, is also participating. The primary goal is to promote 'wise choices' by clinicians and their patients to avoid unnecessary interventions, to improve health care outcomes and reduce costs, and to ensure patient safety. This campaign—very wisely—has been named: '*Choosing Wisely*'.

After months of analysing questionnaires sent to doctors and patients and critically comparing current guidelines to general practice data, the ACC staff and its standing clinical councils finally selected five recommendations for consumers and providers in cardiology:

1. Don't perform stress cardiac imaging or advanced non-invasive imaging in the initial evaluation of patients without cardiac symptoms unless high-risk markers are present.

2. Don't perform annual stress cardiac imaging or advanced non-invasive imaging as part of routine follow-up in asymptomatic patients.
3. Don't perform stress cardiac imaging or advanced non-invasive imaging as a pre-operative assessment in patients scheduled to undergo low-risk non-cardiac surgery.
4. Don't perform echocardiography as routine follow-up for mild, asymptomatic native valve disease in adult patients with no change in signs or symptoms.
5. Don't perform stenting of non-culprit lesions during percutaneous coronary intervention (PCI) for uncomplicated haemodynamically stable ST-segment elevation myocardial infarction (STEMI).

These recommendations should not be mixed up with European Society of Cardiology (ESC) and/or American College of Cardiology/American Heart Association (ACC/AHA) guidelines and are definitely no part of evidence-based medicine (EBM) as we have learned to know it and use in daily practice.

However, should we consider introducing a similar program in our country? The question that comes to mind is: are current cardiology practice and patient care in the Netherlands comparable to the American situation?

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First of all: many redundant diagnostic procedures and interventions may be money-driven. This applies for both situations.

Second: considerable numbers of unnecessary interventional procedures may be induced by the obligatory minimum standards for volume of coronary interventions for institutions as well as for individual operators. Health care providers, the National Health Inspection Board (Inspectie voor de Gezondheidszorg: IGZ) and hospital directory boards are not equipped to monitor this worrisome situation.

Third: defensive medicine, defined as superfluous diagnostic procedures to prevent legal issues or even lawsuits is still of great concern, also in the Netherlands. Overtesting and overtreatment is often performed to avoid malpractice suits.

Fourth: many imaging techniques, such as coronary CT angiography, performed on low-risk patients, carry a relatively high burden of radiation. It is without any doubt that this may be harmful, in particular in young women, and will not be outweighed by the net benefits of these diagnostic procedures. The number of diagnostic tests accounting for cumulative radiation exposure to individual patients has increased enormously over the past 15 years [1].

So, in general, the situation in both countries is comparable, although different recommendations may apply to the Dutch national health care system.

For instance, recommendation number 5 could be adjusted. Usually non-culprit vessels will not be stented in STEMI patients as it has no proven clinical benefit and may even carry an increased risk of worse outcome [2]. On the basis of the recently proposed concept of fractional flow reserve (FFR) guided therapy this could be replaced by: ‘Don’t routinely stent intermediate and angiographically more than 50 % stenosed lesions in elective PCI, but first measure FFR, and only proceed to stent placement when a significant value is found [3].’

Needless diagnostic procedures carry the risk of inappropriate medical findings that may lead to unjustified additional diagnostic and therapeutic procedures. This may subsequently lead to extra costs and be a medical threat to our patients.

The concerns over the possible relation between radiation and cancer should lead to the principles of ALARA (keep radiation As Low As Reasonably Achievable) although there is still much controversy regarding the cumulative effect of low doses of iatrogenic radiation in the range emitted by diagnostic imaging devices.

However, it is obvious that we should use methods to reduce radiation exposure in cardiac imaging, whenever possible, including not performing such tests when limited benefits are likely. In this respect it is also good to realise that, in particular for imaging tests, appropriate use criteria (AUCs) have been launched in order to order these when they are truly needed [4]. It still turns out that the appropriateness ratings vary according to the clinical setting and the speciality, implying that there is ample opportunity for improvement over the years to come.

Another reason why many common tests and treatments are often overused is because patients too often ask for them (and because doctors are all too willing to order them). This

is the reason why several consumer-oriented organisations have also joined ‘*Choosing Wisely*’, especially to help disseminate information and educate patients on making ‘wise’ decisions. In addition, they offer on-line helpdesk support and empower patients to actively participate in critical conversations about their care.

There is also serious criticism on the ‘*Choosing Wisely*’ campaign and program. One conservative monthly magazine made the following qualification: ‘The definitive tone of denial repudiates the Hippocratic oath and replaces it with the spirit of *The Hunger Games*’ [5]. The main objection is the perception that ‘*Choosing Wisely*’ is the first collective effort on the part of professional medical societies to decide how to practise medicine on the basis of cost first and foremost. Besides, low-risk patients are hard to identify on the basis of risk stratification alone, and the basic principles of ‘*Choosing Wisely*’ may interact with the primary objectives (cost-containment) of health care providers. Furthermore, each recommendation is preceded by the words ‘Don’t’ and this strongly brings the 10 commandments (in this case 5) to mind, which may not be directly associated with modern medicine.

It would be a major first step to carry out a similar Q and A procedure between doctors and the consumers, our patients, to formulate five major issues that can be applied to our national health care system. Other medical professional societies and consumer organisations could join in to validate this procedure and to build a strong case against unwanted involvement of politicians and external parties. The doctor and the patient will again be in the lead.

There seems to be an important task for the Netherlands Society of Cardiology (NVVC) to consider a comparable program in the Netherlands and to place the serious points of criticism into the right perspective.

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