NEW ZEALAND MEDICAL STUDENTS' ASSOCIATION: TESTS, TREATMENTS AND PROCEDURES MEDICAL STUDENTS AND TRAINEE INTERNS SHOULD QUESTION

1. Ensure the test, treatment or procedure is indicated and will make a difference to the course of patient care

A consideration of how the result of an investigation or test will change your management should be undertaken. Any investigation that will have no influence on management should not be performed. In these situations, the test will incur a cost (to both the patient and the health care system), but provide no benefit to the patient.

Supporting evidence:

- Cardona-Morrell M., Kim JCH., Turner RM., Anstey M., Mitchell IA., Hillman K. (2016). Non-beneficial treatments in hospital at the end of life: a systematic review on extent of the problem. Int J Qual Health Care, 28 (4): 456-469. doi: 10.1093/intqhc/mzw060
- Owens DK, Qaseem A, Chou R, Shekelle P. (2011). High-Value, Cost-Conscious Health Care: Concepts for Clinicians to Evaluate the Benefits, Harms, and Costs of Medical Interventions. Ann Intern Med, 154:174-180. doi: 10.7326/0003-4819-154-3-201102010-00007

2. Provide an opportunity for the patient to discuss the necessity of tests, treatments and procedures

Patient expectations/ideas and requests of medical care can influence decision making regarding tests, investigations and procedures. An open discussion about the necessity and harms of these can help reduce patient requests for non-beneficial interventions. Justify why the particular test/investigation is non-beneficial and provide alternatives for the patient in a shared decision making process.

Supporting evidence:

- Cardasis J., and Brush D. (2011). Responding to patient requests for nonindicated care. American Medical Association Journal of Ethics 13(1): 16–20.
- Cassel CK, Guest JA. (2012). Choosing Wisely. Helping Physicians and Patients Make Smart Decisions About Their Care. JAMA, 307(17):1801-1802. doi:10.1001/jama.2012.476
- Williamson, L. (2014). Patient and Citizen Participation in Health: The Need for Improved Ethical Support. The American Journal of Bioethics, 14(6), 4–16. http://doi.org/10.1080/15265161.2014.900139

3. Establish discussion regarding tests, treatments or procedures if you question their necessity in a patient's management

Medical students and Trainee interns should be able to have discussions about the necessity of tests, treatments or procedures in patients under their care. The hospital is a learning environment and facilitating open discussion regarding benefit and harms of interventions is critical for development into competent clinicians. Thus, requires an environment where students feel safe to ask supervisors questions without fear of repercussions or bullying. This also extends to patient's requests. In the case of a patient requesting a test that is unlikely to be of benefit, rather than acceding to avoid conflict, question why they are requesting this test, treatment or procedure.

Supporting evidence:

- Moser Em, Huang GC, Packer CD, Glod S, Smith CD, Alguire PC, Fazio SB. (2016). SOAP-V: Introducing a method to empower medical students to be change agents in bending the cost curve. J Hosp Med, 11(3), 217-20. Doi: 10.1002/jhm.2489

4. Ensure you are only suggesting tests, treatments or procedures for the benefit of the patient, rather than to gain further clinical experience

All investigations and procedures should be done for the benefit of the patient. It is unacceptable to suggest these for the sole purpose of gaining experience.

Supporting evidence:

- Otago Medical School, Faculty of Medical and Health Sciences University of Auckland. Code of Professional Conduct for Medical Students at the Universities of Auckland and Otago. University of Otago, University of Auckland, 2015.

5. Ensure decision about tests, treatments or procedures are joint decisions with the patient

Patients bring their own experience of illness and attitudes to risk that may affect their preferences for certain test, procedures of treatments. They may have cultural and/or religious beliefs that need to be considered. These patient factors need to be considered alongside the diagnosis, prognosis and treatment options when making decisions. This integrated approach is expected to lead to better outcomes through improvement of communication, acceptability of tests/treatment/procedures.

Supporting evidence:

- Horvat L, Horey D, Romios P, Kis-Rigo J. (2014). Cultural competence education for health professionals (Review). Cochrane Database of Systematic Reviews, 2014(5), 1-98. Doi:10.1002/14651858.CD009405.pub2
- Medical Council of New Zealand. Statement of cultural competence, 2006

6. Consider less invasive options, and weigh up the risk of harm versus chance of benefit

The options for an investigation, treatment or procedure will come with differing levels of invasiveness. There are situations where the least invasive approach may provide the same outcomes with minimal harm, for example ultrasound is the preferred initial consideration for imaging examination in children and young adults with suspected appendicitis. Thus, the least invasive options should always be considered first before those options that may be associated with potential harm.

Supporting evidence:

- Grady D., Redberg RF. (2010). Less Is More. How Less Health Care Can Result in Better Health. Arch Intern Med, 170(9):749-750. doi:10.1001/archinternmed.2010.90
- Vegting IL, van BM, Kramer MH, Thijs A, Kostense PJ, Nanayak-kara PW. (2012). How to save costs by reducing unnecessary testing: lean thinking in clinical practice. Eur J Intern Med; 23:70–5.

7. Not ordering a range of non-indicated tests, treatments and procedures just in case the senior clinician might want/expect them

In the effort to not look inadequate in front of a senior clinician, it is can be tempting to order a range of investigations to ensure everything has been covered. These investigations are unlikely to provide further information and be of relevance to the patient. Senior clinicians should instead encourage delivery of high value and appropriate health care.

Supporting evidence:

- Detsky AS, Verma AA. (2012). A New Model for Medical Education: Celebrating Restraint. JAMA, 308(13):1329-1330. Doi:10.1001/2012.jama.11869
- Zhi M, Ding EL, Theisen-Toupal J, Whelan J, Arnaout R. (2013). The Landscape of Inappropriate Laboratory Testing: A 15-Year Meta-Analysis. PLOS ONE, 8(11): e78962. doi:10.1371/journal.pone.0078962

How was this list created?

This list was created by the New Zealand Medical Students Association (NZMSA), which represents all the medical students in New Zealand. The model on which this list was created is based upon “Six Things Medical Students and Trainees Should Question” developed by the Canadian Federation of Medical Students, and the Fédération médicale étudiante du Québec. A subgroup of four medical students created the above recommendations with guidance from the Council of Medical Colleges (CMC). Seven recommendations were developed and approved by both NZMSA and a CMC Executive Committee.

PROMOTION TO STUDENTS:

To help promote Choosing Wisely and help students remember these key concepts, we have come up with the acronym “**WISE”**. We aim to have lanyards with the “WISE” acronym and will also include tips on how to establish conversation regarding Choosing Wisely.

Why? *What will this test, treatment or procedure change?*

Is there an alternative? *Less invasive, less resource intensive?*

Seek clarification. *Clarify why the doctor ordered this test*

Explore/explain. *Be the patient’s advocate. Explore concerns, take time to explain why a test, treatment or procedure is/isn’t necessary*