



Appendix 2

**This appendix was part of the submitted manuscript and has been peer reviewed.
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Appendix to: Scott IA, Duckett SJ. In search of professional consensus in defining and reducing low-value care. *Med J Aust* 2015; 203: 179-181. doi: 10.5694/mja14.01664.

Appendix 2 Case studies in avoidance of low value interventions

Case study #1

An 82 year old patient with advanced dementia is admitted to hospital from a nursing home in a cachectic and malnourished state with clinical findings suggesting aspiration pneumonia. Her family is very concerned that she is not eating enough and request assisted feeding through a percutaneous endoscopic gastrostomy tube.

The consulting physician notes from the Choosing Wisely list that this procedure is of low value. Studies have found that such tubes do not result in improved survival, prevention of aspiration pneumonia, or improved healing of pressure ulcers. Feeding tube use in such patients has actually been associated with pressure ulcer development, use of physical and pharmacological restraints, and patient distress about the tube itself. Tube insertion is not without complications such as bleeding and site infections and many patients will dislodge or withdraw the tube when agitated. The patients family is made aware of this information and accede to assistance with oral feeding with a focus on comfort and human interaction more than nutritional goals in a patient with very limited life expectancy.

Case study #2

A previously healthy 53 year old man presents to the emergency department having suffered a syncopal episode while engaged in strenuous gardening. He regained consciousness quickly, was fully lucid with no focal neurological symptoms, and recalled prodromal feelings of lightheadedness. He has no cardiac history or vascular risk factors and physical examination, simple blood tests and electrocardiogram are normal. The treating physician considers ordering a CT head scan, 24 hour Holter monitor, electroencephalogram and carotid arterial duplex scan to rule out several differential diagnoses in the absence of a clearly evident cause. Consulting the Choosing Wisely lists indicates that all of these investigations are of very low yield in the absence of suggestive symptoms or signs, are expensive, and can generate false positive results. Vasovagal syncope is the most likely diagnosis and the patient is advised to keep well hydrated and avoid overly strenuous exertion, and represent if he has further episodes.

Case study #3

A 64 year old man consults his general practitioner (GP) in regards to his limiting exercise-induced leg claudication. The patient has formed the impression that he should undergo arterial revascularisation to ameliorate his symptoms and reduce the risk of future amputation, and requests referral to a vascular surgeon for consideration of femoral angiography with a view to possible endovascular angioplasty and stenting or bypass surgery. Consulting the Choosing Wisely lists, the GP notes the life-time incidence of amputation in a patient with claudication is less than 5% with appropriate risk factor modification. He recommends instead a trial of complete smoking cessation, risk factor modification, diet and exercise, and commencement of ACE inhibitor. The patient is reassured that he has a good chance of increasing his walking distance and pain threshold with this low risk, low cost intervention and he agrees to deferring the specialist referral.