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## Rationing: an open secret?

he NHS in England has announced that, as part of its strategy to save money and move towards a sustainable healthcare provision model, it will potentially no longer provide 17 surgical treatments routinely. Some of these are surprising at first glance and impact directly on orthopaedic surgeons. Two orthopaedic procedures - knee arthroscopies for osteoarthritis and injections for non-specific back pain – are only to be provided on an individual request, with limited evidence of clinical effectiveness cited. Further procedures - subacromial decompression, carpal tunnel surgery, ganglion excision, trigger finger release, and palmar digital fasciectomy - are to be offered only when very specific criteria are met (usually the exhaustion of conservative options).

Whilst this is an overt attempt to ration – and there are other examples (for example, triage for joint arthroplasty in New Zealand is, in many areas, now based on the Oxford score) – the rest of the world is also struggling to pay for its health care and is taking different approaches.

In the United Kingdom, Australia, New Zealand, and most of Europe – but not in the United States - the cost of health care is taken into account in terms of 'cost-effectiveness' when making funding decisions. In the majority of the world, the incremental cost-effectiveness ratio (ICER) is used to establish which treatments will be funded first-line, which will be funded second-line, and which will not be funded at all. This is what has happened in the NHS. A treatment doesn't just have to work, it also has to be good value. The overall costs are calculated using the costs to the individual, society, and the healthcare provider. This can include the finest detail, such as care costs, travel costs to appointments, lost tax revenue, and income. The effectiveness is usually measured in utility scores, which are assigned based population surveys and most often

measured in quality-adjusted life years (QALYs), with a value of '1' representing a year of perfect life. These are then used to calculate the ICER (lower being better), which can be used to compare treatments.

Perhaps most interesting is the decision about what is worth paying for. The figure of \$50000 per QALY is widely used as the 'cost-effectiveness' threshold. This was based on work with renal dialysis patients, and is somewhat historical. Worryingly, there has been work undertaken as far back as 2008, again with renal dialysis patients, 1 suggesting that \$129000/QALY would be a better figure, a far cry from the £30000/QALY applied by the United Kingdom's National Institute for Health and Care Excellence.

With the rest of the world cutting treatments and slashing entitlements to funded health care, how is the United States managing to cover the costs of its own healthcare system? With the insurer-pays market, each insurance company and each policy is priced to provide certain benefits, which is relatively straightforward. Medicare, however, is different. There is rationing, but it comes in the form of waiting lists - and there is change in the air. Bernie Sanders, one of America's most liberal senators, is using the term 'cost-effectiveness' to allude to implementation of a more European or Canadian model. With headlines including news that the average call-out cost of an ambulance is around \$2700 (for a non-emergency transfer),<sup>2</sup> many patients in the United States are starting to rely on Uber for transportation to the emergency room. Like every system, there is only so much money available, and 30% of Medicare's budget is used in care for people within a year of their death.

What about those procedures that the orthopaedic community is getting upset about in the United Kingdom, which are now not going to be so easily funded? There is NICE

guidance recommending as a treatment both carpal tunnel release and palmar digital fasciectomy, making them, at first glance, a surprising inclusion in the 'cut-back' list.

However, the story for these two procedures is different. There is no doubt that palmar fasciectomy has a lower recurrence rate and is suitable for treatment of more complex contractures than the most cost-effective alternative option (percutaneous needle aponeurotomy (PNA)). It is nowhere near as cost-effective, though, so in instances where either treatment is suitable for the patient, the open surgery is only preferred from an ICER perspective when PNA has over a 58% chance of failure or an 84% or higher chance of recurrence. According to analysis from the Canadian Institute for Health, this essentially makes PNA more cost-effective, aside from in patients with diffuse disease or with fixed joint contractures, in turn making the quidance seem reasonable.3

Carpal tunnel decompression (CTD) is a different story. Recent evidence from the United States and Canada<sup>4</sup> suggests that the ICER actually climbs if carpal tunnel release is delayed, so whilst a steroid injection may seem cheaper, if the patient ends up with a CTD later on down the line, this reduces the cost-effectiveness of the treatment as the benefit is seen over fewer years.

An understanding of the clinical arguments for and against specific treatments is important. However, the health economic arguments are becoming stronger as healthcare providers throughout the world try to become self-sustaining. Sadly, as clinicians we do not really hold any of the cards. With a cost/QALY set at an unsustainably low rate, and with funders able to simply pull the plug on specific treatments, the only way we will be able to argue that our treatments are worthwhile is to undertake well-designed cost-effectiveness studies.



2. DiGangi C. USA Today. This man's 2-mile ambulance ride cost \$2,700. Is that normal? https://eu.usatoday.com/story/money/ personalfinance/2017/05/20/ambulance-health-care-servicescosts/334338001/ (date last accessed 4 July 2018).

- 3. Baltzer H, Binhammer PA. Cost-effectiveness in the management of Dupuytren's contracture. A Canadian cost-utility analysis of current and future management strategies. Bone Joint J 2013;95-B:1094-1100.
- 4. Cheung K, Kaur MN, Tolliver T, et al. A Tale of two health-care systems: cost-utility analysis of open carpal tunnel release in Canada and the United States. Plast Surg (Oakv) 2017;25:7-13.

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1. Data on file, Firstkind 2017

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