Acting on potentially inappropriate care

Measuring inappropriate care should rely on evidence available at the time, with anomalous practices evaluated by clinical panels

"we remained wary of coding errors, and designed our analysis and recommendations to take them into account"

ur recent *MJA* article¹ and accompanying report² set out a model for harnessing clinical expertise and government resources to address the issue of inappropriate care.

This model involves four steps. First, a credible, independent body would review clinical evidence to identify potentially inappropriate treatments. Second, the same body would monitor use of those treatments. Hospitals providing the treatments more frequently than the national average rate would be advised of that fact. Third, if a hospital's abnormal practice persisted, they would face an external clinical review in which they could justify their practice to peers. Finally, if the reviewers found this justification unsatisfactory, only then might there be financial consequences.

It is hard to see how this cautious and clinician-led model is punitive, as Sherlock labels it.³ We do not recommend taking potentially inappropriate treatment options away from clinicians. Instead, we recommend monitoring their use and initiating clinician-led reviews of unusual practice patterns, recognising that even do-not-do treatments may be justified in some circumstances.

Our model recognises that health care is dynamic and the evidence often changes, so that procedures seen as inappropriate in one year could be regarded as good practice the next. We took care in our study to ensure that we were only analysing treatment choices that were inconsistent with the prevailing evidence at the time our data were collected. Evidence that was outdated or published after our study year was not taken into account. Therefore, we disagree with the critiques of our findings by Sherlock³ and Clark.⁴

Clark⁴ questions our identification of vertebroplasty for osteoporotic spinal fractures as potentially inappropriate, but the current NICE guidance (https://www.nice.org.uk/guidance/ta279) and forthcoming trial that they refer to were not available during our study year. Although 2003 NICE guidance (https://www.nice.org.uk/guidance/ipg12) supporting use of vertebroplasty was available during our study year, it had been contradicted by the more recent landmark trials published in 2009.^{5,6} This change in prevailing evidence was reflected in the subsequent recommendation by the Medical Services Advisory Committee (MSAC) to defund the procedure.⁷

Sherlock likewise refers to evidence that was not current during our study year. MSAC report 1054.18 was published too late to influence clinicians' treatment choices when our data were collected, while MSAC report 10549 recommendation of time-limited support for certain conditions requiring hyperbaric oxygen treatment had lapsed well before our study year.

We accept that the 4500 admissions that we identified did not involve 4500 people; unfortunately, our data did not allow us to identify the number of individuals treated. Our dataset also did not include Medicare Benefits Schedule item numbers. We therefore relied on the International Classification of Diseases 10th revision (ICD-10)-coded diagnosis and Australian Classification of Health Interventions procedure codes available in the hospital discharge abstract.

We were conservative in our approach to identifying potentially inappropriate care, excluding all cases where a patient had a diagnosis that was an indication for the treatment. To use Sherlock's example, a patient with a primary diagnosis of "waiting for residential care" who also had a diagnosis of diabetic ulcers would not have been counted as a do-not-do patient in our study, as they had a comorbidity (diabetic ulcers) that may have legitimated hyperbaric oxygen treatment.

Despite our exclusions, we remained wary of coding errors, and designed our analysis and recommendations to take them into account. We excluded hospitals with very low rates of relevant procedures or patients. As a result, an isolated coding error could not result in an above average rate of questionable treatments. If numerous coding errors did lead to a false positive, these would have been uncovered during our proposed clinical reviews. If the result of adopting our model is more accurate coding, in addition to appropriate care, that is an added benefit.

We do not believe that the criticisms from Sherlock and Clark invalidate our findings, but we do welcome debate about our approach. It shows that there is a strong interest in making sure that measurement of practice variation and potentially ineffective treatment is robust and clinically meaningful.

We have proposed a practical method for moving from talking about the issue to acting on it. We do so in a way that involves significant clinical input, as we acknowledge that overcoming the problem of inappropriate clinical variation requires strong clinical leadership. ¹⁰ Doing nothing is not an option. Provision of clinically inappropriate care incurs a cost to both patients and the health system. Not acting on our findings means that people will suffer and we waste resources.

Competing interests: No relevant disclosures.

Provenance: Commissioned; not externally peer reviewed.

© 2016 AMPCo Ptv Ltd. Produced with Elsevier B.V. All rights reserved.

References are available online at www.mja.com.au.

Stephen J Duckett DSc, FASSA, FAHMS

Peter Breadon

Danielle Romanes BA(Hons), GradDipAppEc

> Grattan Institute, Melbourne, VIC.

stephen.duckett@grattan.edu.au

doi: 10.5694/mja15.01241

- Duckett S, Breadon P, Romanes D. Identifying and acting on potentially inappropriate care. *Med J Aust* 2015; 203: 183e.1-183e.6. https://www.mja.com.au/journal/2015/203/4/ identifying-and-acting-potentially-inappropriate-care
- 2 Duckett S, Breadon P, Romanes D, et al. Questionable care: avoiding ineffective treatment. Melbourne: Grattan Institute, 2015. http://grattan.edu.au/wp-content/uploads/2015/08/828-Questionable-Care3.pdf (accessed Dec 2015).
- 3 Sherlock S. Inappropriate care in medicine. Med J Aust 2016; 204; 70-70.el.
- 4 Clark WA. Vertebroplasty is not a do-not-do treatment. Med J Aust 2016; 204: 71-71.e1.
- 5 Kallmes DF, Comstock BA, Heagerty PJ, et al. A randomized trial of vertebroplasty for osteoporotic spinal fractures. N Engl J Med 2009; 361: 569-579.
- **6** Buchbinder R, Osboren RH, Ebeling PR, et al. A randomized trial of vertebroplasty for painful osteoporotic vertebral fractures. *N Engl J Med* 2009; 361: 557-568.
- 7 Doidge J, Merlin T, Liufu Z, et al. Review of interim funded service: vertebroplasty and new review of kyphoplasty. MSAC application 27.1. Canberra: Commonwealth of Australia, 2011.

- http://www.msac.gov.au/internet/msac/publishing.nsf/Content/27.1-public (accessed Nov 2015).
- 8 Medical Services Advisory Committee. Review of interim funded service: hyperbaric oxygen therapy (HBOT) for the treatment of chronic non-diabetic wounds and nonneurological soft tissue radiation injuries. MSAC application 1054.1. Canberra: Commonwealth of Australia. http://www. msac.gov.au/internet/msac/publishing.nsf/ Content/1054.1-public (accessed Dec 2015)
- 9 Medical Services Advisory Committee. Hyperbaric oxygen therapy for the treatment of non-healing, refractory wounds in non-diabetic patients and refractory soft tissue radiation injuries. MSAC application 1054. Canberra: Commonwealth of Australia, 2003. http://www.msac.gov.au/internet/msac/ publishing.nsf/Content/1054-public (accessed Dec 2015)
- Scott IA, Duckett SJ. In search of professional consensus in defining and reducing low-value care. Med J Aust 2015; 203: 179-181. https://www.mja.com.au/journal/2015/203/4/search-professional-consensus-defining-and-reducing-low-value-care