

Choices, consequences and cost: low-value treatments and intensive care medicine

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Intensive care doctors are frequently faced with choices. What is the diagnosis? What is the best diagnostic test for this patient? Will admission of this patient to the intensive care unit add value by improving clinical outcomes, patient and family experiences or any other objective measure of value in health care?¹ Each of these decisions is coming under increasing pressures: cost implications of the high-resource intensity of ICU medicine, the ageing population, increasing community expectations and an increasing array of expensive medical technologies to choose from.^{2,3} International surveys show that most doctors agree that they have a responsibility to use their health care resources appropriately,⁴ but there is a significant gap between agreeing with this sentiment and actively contributing to responsible resource use. One important opportunity is to identify areas of waste or unnecessary treatments that may be associated with evidence of harm or simply confer no benefit.

Our focus here is to discuss reducing the amount of "low-value care" that the health system provides. We do not discuss the disheartening fact that in conditions for which we have evidence, patients only receive guideline-appropriate treatment about half the time.^{5,6} Reducing waste provides an opportunity to improve efficiencies; providing more care to some patients and reducing potential harms and costs to other, "over-treated", patients. Clinical excellence mandates provision of consistent, high-quality, evidence-based treatments, and part of this involves avoiding low-value treatments.

Critics of resource stewardship may denounce this as another attempt to ration ICU resources.⁷ However, actively avoiding wasteful care is patient centred, financially responsible and consistent with aspirations of professional bodies and expectations of policymakers, health care administrators and our social contract with the community.^{8,9} An alternative is to refer to the tests, treatments or procedures as low value.^{10,11} Researchers in Australia have identified over 150 potentially low-value health care practices.¹² The Minister for Health also recently announced a Medicare Benefits Schedule (MBS) Review Taskforce, to consider how the more than 5700 items on the MBS can be (re)aligned with current clinical evidence.¹³ As clinicians, we know that there is variation in decision making between us and our colleagues.¹⁴ Some of this variation should be encouraged, as it reflects our differing

abilities to interpret information or encourage patient preferences, but there are also many examples in which there are clear guidelines for practice that are not reflected in the choices made by clinicians.

An increasing proportion of the health budget is allocated to intensive care medicine, but there is a lack of evidence that increased spending improves clinical outcomes or quality of care. How will we, as a professional group, respond to an increasing demand for service delivery and variability in our clinical practice? Are there opportunities to explore the factors that influence clinical decision making? Can we, as a professional group, make a meaningful impact on such a huge and complex issue? Do we feel that we have the appropriate skills and expertise to lead this discussion with our consumers and colleagues?

The Choosing Wisely campaign

The Choosing Wisely campaign started as an initiative of the American Board of Internal Medicine (ABIM) in conjunction with Consumer Reports (<http://www.choosingwisely.org>). It aims to promote conversations between doctors and patients by helping patients choose care that is: supported by evidence; not duplicative of other tests or procedures already received; free from harm; and truly necessary. The Choosing Wisely campaign builds on ideals expressed in the 2002 United States Physician Charter that appropriate resource allocation is a professional and ethical responsibility of doctors, and work by the National Physicians Alliance to turn the concept of "less is more" into practice by the creation of lists of practices prone to overuse.¹⁵ The Choosing Wisely campaign was designed as a medical professionalism project and to promote shared decision making. One of its goals is to reduce unnecessary health care expenditure, but it was not intended to influence payment and insurance coverage decisions, nor has the ABIM aimed to evaluate the efficacy of the lists. Nonetheless, there is great interest in the potential savings from such a partnership and several academic centres are aiming to evaluate the success of the program. There are now over 70 specialty colleges that have joined the campaign.

Implementation examples

The American College of Physicians has five 1-hour online cases that are available for points for continuing medical

Table 1. American Critical Care Societies Collaborative Top 5 list

- Do not order diagnostic tests at regular intervals (such as every day), but rather in response to specific clinical questions.
- Do not transfuse red blood cells in haemodynamically stable, non-bleeding intensive care patients with a haemoglobin concentration > 7 g/dL.
- Do not use parenteral nutrition in adequately nourished, critically ill patients within the first 7 days of an intensive care unit stay.
- Do not deeply sedate mechanically ventilated patients without a specific indication and without daily attempts to lighten sedation.
- Do not continue life support for patients at high risk of death or severely impaired functional recovery without offering patients and their families the alternative of care focused entirely on comfort.

education (http://hvc.acponline.org/physres_cases.html). Several institutions have developed education modules for residents, to support system change for the next generation of doctors.^{16,17} Several large integrated health systems have chosen to focus on certain elements from the Choosing Wisely campaign. They have chosen elements that they think have potential for improvement and are measurable, such as magnetic resonance and computed tomography imaging items for low back pain, and imaging for low-probability pulmonary embolism.^{18,19}

US Choosing Wisely collaboration

Our US intensive care colleagues have set an example for collaboration. The Society of Critical Care Medicine, American Thoracic Society, American College of Chest Physicians and the American Association of Critical-Care Nurses all contributed to a Choosing Wisely taskforce and created their Top 5 list.²⁰ They evaluated each suggested item on the basis of the strength of evidence, prevalence, aggregate cost, relevance to core critical care medicine, and innovation. The taskforce undertook an iterative process to narrow the list and then conducted in-depth evidence reviews for nine items, from which they chose five (Table 1).

The current Australian situation

In April 2015, National Prescribing Service (NPS) MedicineWise launched Choosing Wisely Australia, in collaboration with a founding group of professional associations and colleges.²¹ NPS MedicineWise is an independent, not-for-profit, national organisation known for its collaborative, evidence-based achievements in

improving quality use of medicines and, more recently, medical tests in Australia. The Choosing Wisely Australia initiative is clinician-led, and several professional bodies have developed and published lists of interventions of low value, in addition to joining the Consumers Health Forum of Australia to create materials for patients and a template of five questions patients should ask their doctors:

- Do I really need this test or procedure?
- What are the risks?
- Are there simpler, safer options?
- What happens if I don't do anything?
- What are the costs?

There is a planned second wave of colleges and professional bodies that have signed on to the Choosing Wisely Australia initiative, including those representing ICU clinicians. The College of Intensive Care Medicine (CICM) and the Australian and New Zealand Intensive Care Society (ANZICS) have formed a working party to explore an approach to creating a Top 5 list of low-value interventions in Australian intensive care medicine.

Through the integrated relationships at board level between the CICM and ANZICS, using the well established Centre for Outcome and Resource Evaluation database, and strong collaborative clinical and research networks, intensive care in Australia is well positioned to choose items that are measurable and can therefore lead to positive change in our hospitals.

Where to from here?

In order to make progress in the Choosing Wisely Australia campaign, and improve understanding of how intensive care medicine and its practitioners contribute to the Australian health system, we propose the following approach:

- consult with Fellows and Trainees of the CICM and members of ANZICS to develop a clear value proposition framework applicable to intensive care
- engage with interdisciplinary and consumer organisations to participate in the Choosing Wisely process
- develop and endorse a methodology to identify interventions of low and limited value in Australian intensive care practice
- validate the list of interventions with the Australian intensive care community.

This approach will rely on engagement with and feedback from clinical colleagues across the country in order to accurately reflect the context in which we practise and the potential capacity of our discipline to contribute to this important aspect of system reform.

Conclusion

Resource stewardship is a core responsibility of ICU specialists. Engaging with the Choosing Wisely Australia campaign is an opportunity to partner with the community and clinical colleagues to reduce interventions of low and limited value and provide sustainable access to high-quality intensive care medicine.

Competing interests

Matthew Anstey is a member of the Choosing Wisely Australia Advisory Group (NPS MedicineWise).

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