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| <b>Title</b> | Predictors of inpatient rehabilitation after total knee replacement: an analysis of private hospital claims data |
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# Predictors of inpatient rehabilitation after total knee replacement: an analysis of private hospital claims data

**IN REPLY:** We welcome the debate about the choice of rehabilitation at home as an effective treatment option. Our study<sup>1</sup> supports the Rehabilitation Medicine Society of Australia and New Zealand (RMSANZ) position statement<sup>2</sup> and the comments of the Australasian Faculty of Rehabilitation Medicine of the Royal Australasian College of Physicians that recommend inpatient rehabilitation be based on patient need. We considered many clinically relevant patient factors identified in the position statement, including age, socio-economic status, comorbidities, living alone and surgical complications.<sup>1,2</sup> Large interhospital variation in inpatient rehabilitation persisted after adjustment for these factors. It seems implausible, given the large sample, that unobserved patient factors could explain the wide variation (76% in one large volume private hospital; 10% in another<sup>1</sup>), but we acknowledge our study could be improved with function and obesity measures in particular.

Same day inpatient rehabilitation was not classified as inpatient rehabilitation. The average inpatient rehabilitation stay in our study was 11 days.<sup>1</sup> The saving estimate was not based on the previous year's private hospital claims. It represents the potential savings if inpatient rates were reduced from 45% to 31% using a cost-differential from a recent Australian study.<sup>3</sup> We maintain it is relevant to highlight where other jurisdictions have achieved similar outcomes across settings. However, we note these samples are often biased to uncomplicated patients.

The work of the Australasian Rehabilitation Outcomes Centre (AROC) is commended for supporting quality collection and reporting of rehabilitation outcomes. Our article referred to a lack of corresponding data across settings<sup>1</sup> — functional independence measure for inpatients and the Lawton Scale for ambulatory patients.<sup>4</sup> We support AROC expanding outcome-reporting for ambulatory care. The use of consistent measures across settings would yield additional insights into low value care. While clinicians rightly focus on patient outcomes, from a system perspective, ignoring cost is not sustainable.

We concluded that rehabilitation decisions are not primarily driven by patient factors, and concur with the RMSANZ that:<sup>2</sup>

“In an environment where non-clinical drivers such as commercial interests, business models, consumerism and transport costs will often dictate the settings for rehabilitation care, the RMSANZ feel that there is a need to state the clinical indicators and minimum safety standards for rehabilitation settings post-[total knee replacement].”

We look forward to all stakeholders working together to advocate for best practice.

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**Competing interests:** Anna Barker is employed by Medibank Private and receives salary support from Monash University. Chris Schilling is employed by KPMG and received consultancy fees from Medibank Private to undertake the analysis discussed in this article. Stephen Wilson has previously received consultancy fees from Medibank Private in relation to development of rehabilitation in the home.

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