

Summary of: International benchmarking of hospitalisations for impacted teeth: a 10-year retrospective study from the United Kingdom, France and Australia

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FULL PAPER DETAILS

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Background The United Kingdom and its national healthcare system represent a unique comparison for many other developed countries (such as Australia and France), as the practice of prophylactic removal of third molars in the United Kingdom has been discouraged for nearly two decades, with clear guidelines issued by the National Institute of Health and Care Excellence (NICE) in 2000 to limit third molar removal to only pathological situations. No such guidelines exist in Australia or France. The healthcare systems in England, France and Australia all use the International Classification of Disease (ICD) coding system for diagnostic categorising of all admissions to hospitals. **Aim** This study rested upon the opportunity of a universal coding system and semi-open access data to complete the first comparative study on an international scale of hospitalisations for removal of impacted teeth (between 99/00 and 08/09). **Results** Our international comparison revealed significant differences in rates of admission, with England having rates approximately five times less than France, and seven times less than Australia. Those results could be explained by the implementation of guidelines in the United Kingdom, and the absence of similar guidelines in France and Australia.

EDITOR'S SUMMARY

Someone once quipped that it was not the person who invented the wheel who was a genius but rather, it was the person who invented the other three. A witty observation but one which I think is very relevant to this research paper. In essence the underlying theme is that as well as discovery or innovation it is development and application which provide the route to human progress.

The starting point of this paper, from Australian authors, was the NICE guidelines issued in the year 2000 in relation to wisdom tooth removal in the UK. Developed by a committee (not always a recipe for success) of 24 experts in health economics, epidemiology, public health and surgery, the guidelines recommended that the practice of extraction of pathology-free impacted third molars should be discontinued. In the intervening years, this has dramatically reduced the number of hospital admissions in particular for this surgical procedure under general anaesthetic. Although the exact clinical value and benefits of the guidelines have

come under recent review and discussion in this journal, as in other forums, the interest of the authors of this paper has been to compare the effect of the guidelines with the health systems in two other countries, Australia and France, where no such restrictions apply.

Of great value is the finding that there appears to be very significant differences in the rates of hospitalisation for impacted teeth across the world. In terms of one country learning from another (the analogy of adding those other three wheels) the results raise the potential that the presence of good-quality clinical guidelines for dental procedures, especially those requiring access to sophisticated health system facilities, may have a beneficial influence on the future organisation and costs of healthcare; an area of third-party and personal expenditure coming under sustained and increasing pressure worldwide.

In this context the presence and application of the NICE guidelines in the UK (also reflected by the Scottish Intercollegiate Guidelines Network) provide a

very useful case study which may have resonances further afield. Similarly, there may be opportunities for UK-based researchers to study guidelines in other countries in other areas of oral healthcare which might have significant benefits to us here in these islands.

The full paper can be accessed from the *BDJ* website (www.bdj.co.uk), under 'Research' in the table of contents for Volume 216 issue 7.

Stephen Hancocks
Editor-in-Chief

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IN BRIEF

- Highlights that the global use of the International Classification of Disease could be a valuable tool to compare oral-health-related hospitalisations on an international scale.
- Suggests that the NICE guidelines may have prevented the trends of hospitalisations for impacted teeth removal in England from skyrocketing as they have in Australia and France.

AUTHOR QUESTIONS AND ANSWERS**1. Why did you undertake this research?**

Our group has been interested in oral health-related hospitalisation analysis since 2000. Our previous work indicated high trends of hospitalisations for removal of impacted teeth in Western Australia (WA). However, we could not find any published comparative study in this area of research to be able to assess whether the levels of hospitalisations in WA were excessive or not. We were surprised that no one compared England (with its unique guidelines) to other jurisdictions. In fact, no one has ever compared any oral health-related hospitalisations on an international scale.

Our hope was that this research would enrich the ongoing debate in England about the NICE guidelines and also encourage health authorities in other countries, such as Australia, to learn from the English experience and consider the implementation of high quality guidelines.

2. What would you like to do next in this area to follow on from this work?

Our future work would include:

- Strengthening our new comparative methodology by gathering data from other jurisdictions such as the US, Canada and Japan. This might include collaboration with local researchers in those countries.
- Analysing the cost-effectiveness of the presence of guidelines. How much the NHS has saved by implementing the guidelines and how much could be saved by the healthcare system in Australia and France if they opted or had opted for similar guidelines.
- Trying to raise the awareness and concern in Australia over the frequency of this procedure, and learn from the English experience with the NICE guidelines (both the pros and cons) to suggest the introduction of good-quality guidelines in Australia.

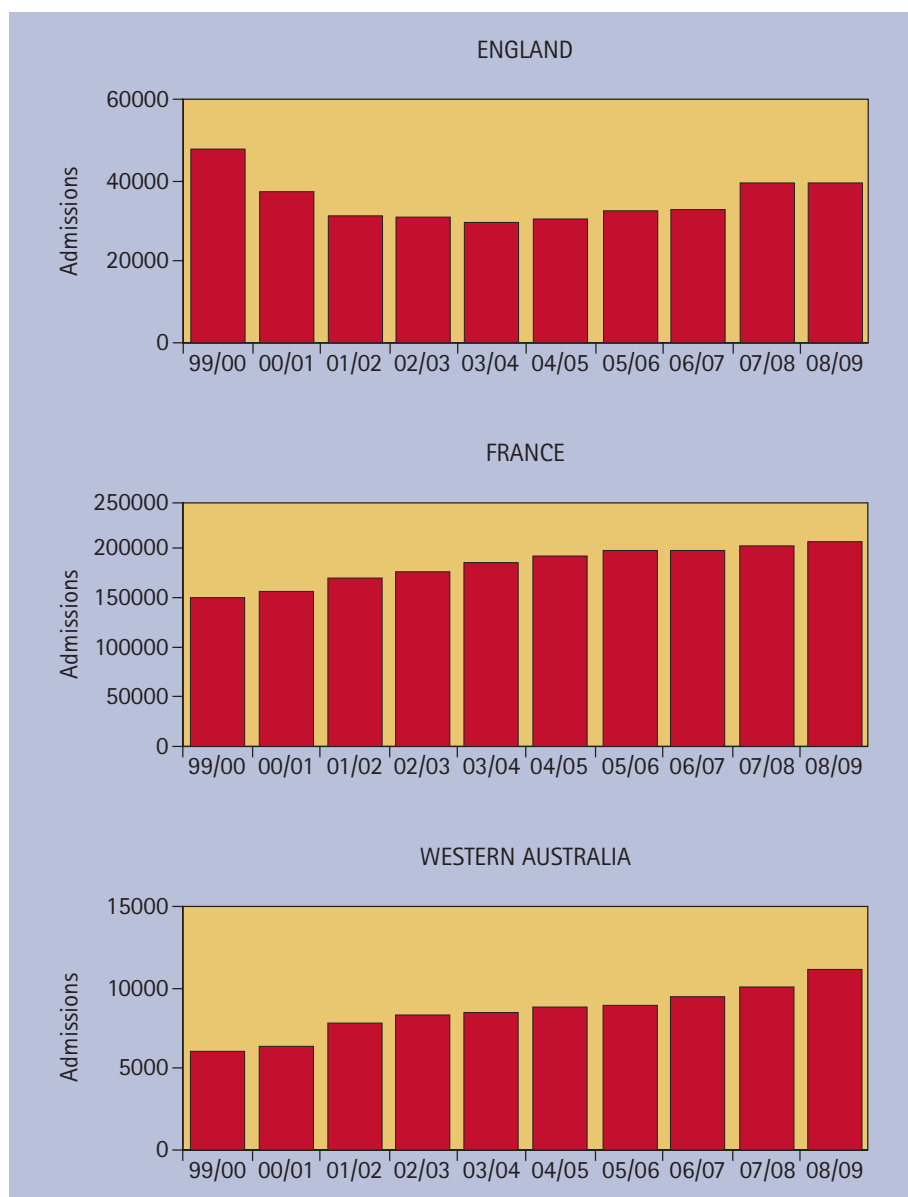


Fig. 1 Total number of admissions for impacted/embedded teeth in Western Australia, France and England for the period 1999/2000–2008/2009