

# Measuring the appropriateness of hospital use

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## Résumé

DANS CE NUMÉRO (PAGE 889), CAROLYN DECOSTER ET DES COLLÈGUES présentent un compte rendu sur la pertinence de l'utilisation des hôpitaux au Manitoba par les patients qui ont fait l'objet d'un diagnostic médical. Ils concluent qu'en 1993-94, 51 % des admissions effectuées dans les hôpitaux visés par l'étude étaient inappropriées et que 67 % des jours d'hospitalisation étaient inutiles. Ils n'ont trouvé aucune preuve à l'appui de l'hypothèse selon laquelle les services de soins actifs sont surutilisés par des patients dont la situation socio-économique est faible ou par des patients de descendance autochtone. Ils soutiennent que les examens de l'utilisation des hôpitaux devraient porter plutôt sur d'autres groupes de patients, notamment sur certaines catégories de diagnostics. Ils ne précisent toutefois pas qui devrait être chargé d'entreprendre ces études, qui exigent des ressources et un engagement considérables et présupposent l'existence de solutions de rechange à l'hospitalisation.

Twenty years ago, accumulated information on hospital utilization rates could be characterized as roomfuls of data untouched by human thought. Since then, increasing technical ability to analyse hospital utilization data has allowed variations in the rates of hospital procedures to be uncovered<sup>1</sup> and stimulated much research on the appropriateness of hospital care.<sup>2,3</sup> Such research has had a significant impact on the delivery of health care in hospitals. Increasing efficiency in hospital use in most countries with well developed health care systems owes as much to an acceptance that at least some care provision is inappropriate as it does to considerations of cost. The results have been far-reaching and continue to be reflected in bed closures and the restructuring of hospital services.

The appropriateness of care has 2 separate elements: the appropriateness of the intervention itself, and the setting in which it is provided. How are these studied? First, the effectiveness of an intervention can be determined through clinical experience, randomized controlled trials and systematic reviews. In the absence of clear evidence, strategies such as the Delphi method, the nominal group technique and consensus conferences have been used to resolve disagreements and develop guidelines for clinical practice.<sup>4</sup>

To determine whether care settings are appropriate, researchers can examine hospital utilization data. In general, elective surgical procedures and emergency admissions have been scrutinized most, because these are relatively discrete events and are thus comparatively easy to measure. One impact of such studies has been an increase in day surgery and a concomitant decrease in lengths of stay and surgical inpatients.

Little attention has been devoted to the appropriateness of hospital admissions for patients with medical diagnoses. Canadian studies have indicated that 24% to 90% of adult medical admissions and 27% to 66% of days in hospital are inappropriate.<sup>5-7</sup> However, such studies have proven to be technically difficult and time consuming.

The study reported in this issue by Carolyn DeCoster and colleagues (page 889) is timely and thought provoking. They used a valid and reliable instrument to assess, with reference to the acuteness of the patient's condition, the appropriateness of the hospital admission and of each subsequent day in hospital. They



## Editorial

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then linked these results with hospital utilization data to determine the appropriateness of hospital stays for adult medical patients. Finally, they identified which patient groups were likely to be treated in hospital.

DeCoster and colleagues found that between 323 000 and 534 000 days of hospital care were inappropriate and could have been allocated to alternative care, assuming that alternatives were in place. DeCoster and colleagues suggest that audit activities focus on certain categories of patients, i.e., those with stays longer than 1 week, those with nervous system, circulatory, respiratory or digestive diagnoses, elderly patients and those not admitted through the emergency department. They conclude that better targeting of utilization review could ultimately improve the allocation of health care resources.

There are limitations to the approach proposed. Four preconditions are required: (1) a commitment to fund the process, (2) the technical capacity to collect and analyse hospital data, (3) the existence of alternative care settings and (4) mechanisms to ensure that relevant action is taken. Several questions remain unanswered. Who is going to be responsible for performing this activity? This study was undertaken by an experienced and internationally respected team of health services researchers with stable government funding. That a small general hospital could undertake equivalent analyses in a timely and relevant fashion seems unlikely. Those of us who have worked with hospital utilization data do not underestimate the technical problems in producing meaningful and useful results.<sup>8</sup> And that is only the beginning. The real challenge is to communicate those results to the people who decide which patients should be treated in hospital. Another limitation is that the data were collected in 1993-94: the many changes that have taken place since then in the provision of hospital care may have already overtaken DeCoster and colleagues' results.

In spite of these limitations, the central message is clear. A substantial proportion of adult medical patients are unnecessarily receiving treatment in hospital. As the authors point out, this often occurs for want of an alternative. When confronted with the choice of discharging an elderly patient with a nonacute condition home with no social support, most people would accept that their stay in hospital was appropriate, regardless of guidelines or targeted audit activities.

Although it seems likely that the detailed, routine audit of hospital admissions data will become more and more common, this process is not a simple one. It is resource intensive and requires commitment. DeCoster and colleagues leave unanswered the question of who is ultimately responsible for utilization review and fail to emphasize that it must be continuous. Canada, along with the rest of the developed world, is currently making sig-

nificant reforms in health care provision. The measurement of appropriate, effective care in hospital is not just an academic exercise. It must include all of those who deliver hospital care and must not lose sight of the humanity of that care.

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