## Utilization review: Can it be improved?

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or many years after the introduction of universal health insurance physicians in Canada enjoyed a relatively high level of professional autonomy. They admitted patients to hospitals, ordered diagnostic tests and therapies and then discharged patients based on their clinical judgement with little supervision or "second-guessing" by government or other third-party payers. The "appropriateness" of their clinical decisions and their use of hospital resources were rarely challenged. However, the recent fiscal crisis surrounding health care in Canada has changed all that. In an environment where hospital budgets are under enormous strain, hospital administrators are trying to increase the appropriate use of hospital beds and reduce the inappropriate use that occurs because of unnecessary admissions and prolonged lengths of stay. Many physicians have found themselves the subject of practice profiling, where their patients' lengths of stay because of various conditions are compared with those of their peers using data routinely collected in hospital administrative databases.1 Questions have been raised about why some clinicians appear to have a much lower threshold for admitting patients than others and why lengths of stay vary widely for patients with apparently similar medical conditions.

The recognition of widespread practice variation has led to a whole industry devoted to "utilization review." Developed by the American health insurance industry, utilization review comes in many forms. One form involves the application of objective criteria to determine the appropriateness of hospital admission. A series of explicit, written criteria define when patients with a given condition should be admitted, whether each day in hospital is necessary and when patients should be ready for discharge or for transfer to another level of care. These criteria are applied to data abstracted from the medical record to determine whether both hospital admission and each subsequent day in hospital are "appropriate" or "inappropriate" at a specific level of care. Although these instruments were developed in the United States, they are increasingly being used in Canada and other countries to inform policy decisions regarding the utilization of hospital resources.<sup>2,3</sup>

In this issue (page 1809) Norman Kalant and colleagues describe a small but important study of 3 of the most widely used utilization review tools: the ISD (Intensity of service, Severity of Illness, Discharge screens), the MCAP (Managed Care Appropriateness Protocol) and the AEP (Appropriateness Evaluation Protocol).4 They retrospectively apply the criteria in these 3 tools to judge the appropriateness of hospital admissions and subsequent days in hospital for 75 patients with unstable angina or acute myocardial infarction admitted to the coronary care unit at their hospital. They then compare the ratings of appropriate days in hospital with the consensus assessment of 3 independent academic cardiologists, whose clinical judgement is used as the "gold standard." There was very good agreement between the tools and the cardiologists around the appropriateness of the initial admission decision. However, the instruments and the panel of cardiologists varied widely in their assessment of the appropriateness of subsequent days in hospital, leading the authors to suggest that the tools are not valid instruments to assess the appropriateness of hospital use.

Kalant and colleagues conclude by questioning whether these utilization review tools should be used at all, but I would like to suggest a more proactive response to their findings. Utilization review in one form or another is already widespread in most Canadian hospitals and is not going to go away. Hospital managers are increasingly going to want more detailed information to understand how beds in acute care hospitals can be best used. Rather than resisting the whole concept, Canadian physicians and researchers should work together to improve the methods and techniques of utilization review. When a significant number of "inappropriate" days are found in the assessments of various utilization review instruments, physicians and policy-makers need to try to understand the underlying causes. For example, there may indeed be many inappropriate days spent in hospital by cardiac patients waiting for important diagnostic procedures such as coronary angiography or treatments such as cardiac surgery.5 Long hospital stays may in many cases represent the lack of availability of appropriate social supports, home-care services or rehabilitation services for elderly patients. By documenting the reasons why patients stay in hospital for longer than expected, clinicians can work with policy-makers to initiate appropriate changes.

To date, the vast majority of utilization review tools used in Canada have been adapted from those created in the United States. However, this may not be appropriate in many circumstances because of differences in practice style and the availability of resources in Canada. Canadian physicians in various specialties need to define national consensus criteria regarding when patients with various conditions should be admitted to hospital and when they can be safely discharged. They could take the US utilization review criteria as a starting point and then modify them if necessary to reflect the Canadian experience. These criteria could

then be prospectively studied and validated in large multicentre observational studies against hard outcomes such as death rates and readmission rates.<sup>6</sup> At present, there are few quantitative data to support clinical decisions regarding the types of patients who need to be admitted to hospital and those who can safely be treated as outpatients. There is also an urgent need to study systematically whether recent reductions in hospital capacity have led to worse patient outcomes. By working to create a better alternative to the utilization review tools that currently exist, Canadian physicians can lead the effort to ensure the best use of hospital beds without compromising patient outcomes.

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