ECONOMIC NOTE

Montreal Economic Institute
Ideas for a More Prosperous Nation

Activity-Based Hospital Funding: We've Waited Long Enough

by **Yanick Labrie**

With the Quebec hospital network's difficulties continuing to make headlines, especially when it comes to wait times,[1] calls to reform the way hospitals are funded have become increasingly common in recent months. At the beginning of the year, the director general of the McGill University Health Center and the Quebec Association of Health and Social Services Institutions each in turn proposed that hospitals should from now on be financed according to services provided, as is done in many countries.[2] The Quebec government has answered the call by convening a panel of experts whose mandate is to evaluate the feasibility of a pilot project on activity-based funding for the hospital network.[3] This is without a doubt a step in the right direction.

May 2012
Health Care Series

A funding model that needs to be re-examined

Currently, nearly all Quebec hospitals – and nearly all Canadian ones, too – receive their funding in the form of global budgets based essentially on amounts spent in the past. These expenditures increase every year to take into account the rising costs of labour, prescription drugs, technology and medical equipment.

Decision makers have always regarded this funding model as easy to administer and useful for reining in rising costs.[4] However, this cost control – which has not in fact prevented expenditures from rising – has historically come at the price of service rationing: given continually increasing demand, hospitals have had no choice but to limit admissions in order to stay within budget.[5] The chronic problem of waiting lists in Quebec and in the rest of Canada is therefore rooted in part in hospitals' funding models.

Furthermore, global funding offers no incentives for hospital managers to innovate in order to reduce expenses and improve access and wait times. Under the current model, a manager who devoted time and resources to developing innovative measures to improve care quality and reduce wait times in his or her hospital would not be rewarded for such initiative.[6] On the contrary, an innovation that led to spending reductions would translate into an equivalent decrease in the hospital's next budget.

Similarly, an innovation that led to wait times being reduced and more patients being treated would produce increased pressure on the hospital's fixed budget. In either case, since patients are a source of additional expenses for the hospital, there would be no benefit to gain from greater efficiency.

Activity-based funding: a model with better incentives

The United States led the way in 1983, becoming the first country to fund hospitals on the basis of services provided for the treatment of patients who qualified for the public Medicare program. Since then, numerous developed countries have followed suit, opting for activity-based hospital funding to varying degrees.[7]

Although the details of the different activity-based funding systems vary from one country to another, the basic principle is essentially the same. Hospitals receive a fixed payment for each medical intervention (for example, a hip replacement), usually equal

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to the average cost of carrying out this treatment in hospital. This payment is adjusted, in most countries, to account for a series of factors specific to the hospital and to the patients it receives: geographical location, severity of cases and complexity of illnesses, specific patient characteristics, etc.

Thanks to this funding model, hospitals are motivated to increase their activities in order to receive additional revenue. Among other things, this formula encourages hospitals to reduce superfluous costs and length of stay, thus freeing up resources to treat more patients. The growth of activity stemming from such an approach also means that patients are treated more quickly, which does even more to improve access to health care for people on waiting lists.

Global funding offers no incentives for hospital managers to innovate in order to reduce expenses and improve access and wait times.

Although several other factors can influence wait times for care, we can nonetheless observe that in countries where activity-based funding is widely used, access to in-hospital care is generally quicker (see Table 1).

Does activity-based funding lead hospitals to skimp on service quality in order to reduce costs? Quite the contrary. Insofar as hospitals' income depends on the number of patients they can attract, it is imperative for them to offer quality services and maintain a good reputation. In Australia, for example, a recent study showed that activity-based funding pushed hospitals to improve care quality in order to avoid complications and the high costs generated by extended stays.[8]

The experiences of other countries

Of all the countries that have set up activity-based hospital funding, it is in Scandinavia and in England that we find health care systems that most resemble the Canadian system. Grappling with the problems of chronic waiting lists and overcrowded emergency rooms, these countries all introduced incentives into their hospital funding models over the past two decades in order to increase productivity.

Scandinavia

In Norway, hospital funding reform was enacted in 1997. The choice of whether or not to resort to the new model was left up to the different counties. From the start, fifteen of the nineteen counties decided to adopt activity-based funding, and the four others followed their lead over the next three years.

Table 1
Activity-based funding and waiting times for surgery in various OECD countries

Country	Activity-based funding as a percentage of hospital budgets	Percentage of adults who wait four months or more for elective surgery
Canada	9%	25%
Norway	40%	21%
Sweden	55%	22%
U.K.	70%	21%
France	80%	7%
Germany	80%	0%
Netherlands	84%	5%

Sources : Francesc Cots et al., "DRG-based hospital payment: Intended and unintended consequences," in Reinhard Busse et al. (eds.), *Diagnosis-related groups in Europe: moving towards transparency, efficiency and quality in hospitals*, Open University Press, 2011, p. 81; Valerie Paris, Marion Devaux and Lihan Wei, *Health systems institutional characteristics: A survey of 29 OECD countries,* OECD, April 2010, p. 36; Cathy Schoen et al., "How health insurance design affects access to care and costs, by income, in eleven countries," *Health Affairs,* Vol. 29 (2010), No. 12, p. 2327.

Activities and efficiency both grew significantly from the very first years of the new system, while the share of funding for activities in hospital budgets increased gradually from 30% in 1997 to 60% in 2003.[9] The reform entailed an increase in the annual growth rate of hospital activity while public health expenditures remained relatively stable or even decreased (taking inflation into account).[10]

The new funding method not only improved the efficiency of Norwegian hospitals, but its implementation also coincided with a significant reduction in wait times.[11] From 2002 to 2006, hospital admissions jumped by 24% and average wait times for elective surgeries and other non-urgent treatments fell by 30%.[12]

Sweden reformed its hospital funding beginning in 1992. Just in the county of Stockholm, hospitalizations increased by 8%, outpatient consultations increased by 15% and day surgeries jumped by 50% during the first year.[13] Since the 2000s, Sweden

has among other things experienced a significant reduction in the length of hospital stays, partly because of activity-based funding. Counties that use this type of funding tend to have shorter stays than those that do not.[14]

England

Before 2003, hospitals in England were funded mainly with global budgets and, mirroring the current situation in Canada, the population seemed resigned to long wait times before receiving treatments. Since then, just about all hospital care has been reimbursed through an activity-based funding system, including ambulatory care and emergency services.[15]

It did not take long for results to be seen. Average length of stay fell rapidly after the reform was implemented. Better use of resources by hospitals led to more patients being treated with no reduction in care quality.[16]

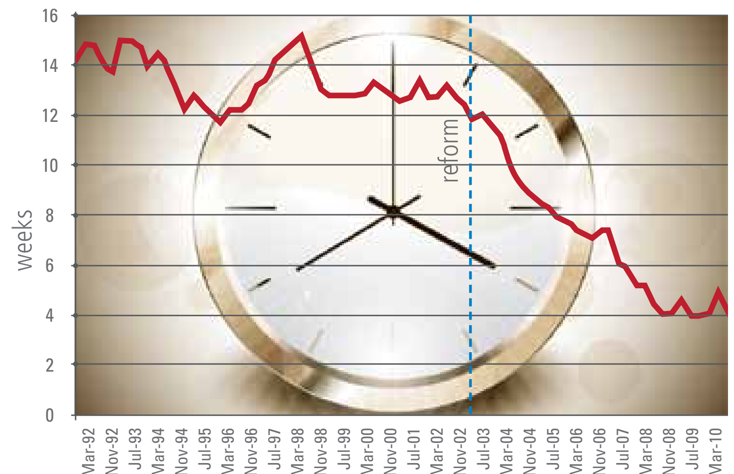
Reforming hospitals' funding model also paved the way for other changes to the English health care system that have produced beneficial results. Patients can now choose the hospital in which they will be treated, and hospitals compete to attract them. This increased competition, which stems directly from the funding reform, has played a key role in the improvement of hospital management and in the quality of care provided for patients.[17]

In countries where activity-based funding is widely used, access to in-hospital care is generally quicker than in countries with global budgeting.

As illustrated by Figure 1, the median wait time for elective surgery in England has fallen significantly over the last decade, so much so that in 2010, it is only a third of what it was in the year 2000. In addition, according to a recent study examining changes in wait times for hip and knee replacements, as well as cataract removals, the reduction has been even more pronounced for patients from less well-off areas.[18] Therefore, contrary to widespread worries at the time, the reforms did not lead to less equitable access to care.[19]

Thanks to activity-based funding and to the other incentives provided to hospitals, the speed with which patients are admitted in emergency rooms has also improved substantially, without causing other aspects of care to suffer.[20] The most recent data compiled indicate that 97% of patients who show up in emergency rooms receive a doctor's diagnosis within four hours, the targeted time frame.[21]

Figure 1
Evolution of median waiting times for elective surgery in England (1992-2010)



Source: U.K. Department of Health, *Inpatient and Outpatient Waiting Times statistics.*

Moreover, concerns that activity-based funding might encourage hospitals, especially those in the private sector, to select less complex cases have proven to be largely baseless.[22] Like most countries that have adopted this type of funding, mechanisms were developed in England to identify atypical cases and to take into account the additional costs involved in treating such patients when determining hospital payments.[23]

Conclusion: toward a cultural change

Certain Canadian experiments based on incentivized payments for hospitals, especially in Ontario and British Columbia, have also proven to be effective in reducing wait times[24] and could serve as sources of inspiration to the Quebec government for its pilot project. However, the implementation of hospital funding reform in Quebec will likely face certain challenges.

Activity-based funding will require, among other things, changes to hospital administration rules. Currently, doctors enjoy a great deal of freedom in their practices and are remunerated directly by the Quebec Health Insurance Board. The responsibility for optimizing resource use and reducing service costs, which must make up part of the role of hospital administrators, could be difficult to take on if they cannot make the necessary decisions with regard to the allocation of resources, both human and material, within their hospitals.

This increased competition, which stems directly from the funding reform, has played a key role in the improvement of hospital management and in the quality of care provided for patients.

This obstacle is not insurmountable, however. The experience of other countries shows that hospital funding reform can be accompanied by terms and conditions that will be embraced by health professionals and administrators alike.[25]

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