

Transitional funding: Changing Ontario's global budgeting system

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In 1988, Ontario introduced transitional funding, a collaborative process between the Ministry of Health and the hospitals to modify Ontario's global budgeting system. The goals are to achieve greater equity; encourage hospital efficiency, and promote a shift from inpatient to outpatient services. To implement these goals, inpatient care is being measured in terms of

case-mix groups, i.e., a classification system comparable to the diagnosis-related groups. However, since there is no patient level cost data, cost weights are being derived from patient-level data from New York State. Transitional funding draws attention to both positive and negative aspects of global budgeting.

Introduction

In recent years, Americans have been looking at Canada's health care system¹ with increasing interest because it has managed to assure universal access at a per capita cost appreciably lower than that in the United States (Iglehart, 1989; Relman, 1989; Fuchs and Hahn, 1990). Indeed polls in the United States find that many Americans would prefer such a system to their own (Blendon and Taylor, 1989).² Policy analysts have been particularly interested in the methods that Canadians use to pay for health care services because it is largely through these methods that costs are controlled and access to services determined.

Since almost 50 percent of Canadian health care expenditures are made for services provided by hospitals, hospital financing is of critical importance.³ Ontario, Canada's most populous province, implemented a hospital global budgeting system in 1969. While that funding mechanism has been attributed with considerable success in containing hospital costs (Detsky, Stacey, and Bombardier, 1983; and Detsky et al., 1990), the particular method used to establish the global budgets was increasingly criticized within the province (Ontario Hospital Association, 1988). The dissatisfaction with the budget allocation rules found public expression when the Minister of Health indicated at the Ontario Hospital Association

(OHA) convention in October 1988 that her ministry would undertake a comprehensive review of hospital funding with the objective of making "... the hospital funding process in this province as fair and equitable as we possibly can." The new budgeting system that developed is called transitional funding.

In revising the hospital budgeting system, the people in Ontario looked to the United States for some of the tools to be used in the new process. There they found methods for classifying patients into groups and assigning cost weight factors to those groups. Thus, while some Americans were expressing an interest in a Canadian-style single payer system to replace their fragmented and inflationary funding mechanism (Himmelstein and Woolhandler, 1989), Canadians were looking to the United States for ideas on how to revamp their global budget system in order to increase equity and efficiency. An examination of how American-style hospital incentives are being tied into a Canadian-style system is of interest in the United States in that it may lead to the answer of whether and how a happy medium incorporating both fiscal restraint and sound economic incentives might be achieved.

In this article, we describe the Ontario global budgeting system as it existed through most of the 1980s, with particular emphasis on how the budgets were adjusted to take into account changes in inflation, volume, and new services. We describe some of the particular problems that led to the 1988 speech by the Minister of Health, the process that was put in place to develop the new system, the basic decisions that were taken the first year, and some of the modifications that were made in the second year. We note that while the process may be particular to Ontario, the problems that were addressed were universal. We conclude with a discussion on the implications of the revised approach to global budgeting in the context of Canadian and the United States funding system differences.

Global budgeting system

When universal hospital insurance (Medicare) was first implemented in Ontario, the Ministry of Health (MOH) engaged in an extensive line by line review of each hospital's budget. While this approach to budgeting severely restricted administrative flexibility, since managers had to get ministry approval to shift

¹There is not a Canadian health care system. Each province is responsible for designing its own system subject to strict Federal guidelines. For example, in order to receive Federal cost sharing, each province's Medicare program must cover all of the residents in the province for a minimum set of services, benefits must be portable from province to province, and there is mandatory assignment. In general, there is no cost sharing for covered services.

²These poll results should be interpreted cautiously. Americans were asked whether they would prefer a system where "... government pays for most of the cost of health care for everyone out of taxes and the government sets all fees charged by hospitals and doctors ..." to the one they have now. It would be surprising if a majority of respondents answered no to such a question.

³A higher proportion of total health care expenditures are made for hospital services in Canada than in the United States. Although there are a number of reasons for this, the most important one is that in Canada, most of the high technology services are situated in hospitals.

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funds from one line to another, it was accompanied by a significant escalation in hospital costs. In 1969, hospital funding was converted to a global budgeting system. The global budgets are administered by the Ministry of Health and are designed to cover the hospital's operating costs and equipment depreciation; other capital costs and graduate medical education are funded through other methods.⁴ In addition to ministry allocations, hospitals receive approximately 20 percent of total hospital operating funds from sources other than those of the ministry (Ontario Hospital Association, 1989). This includes: revenues from the workers' compensation program, payments for care provided to people living outside Ontario, differential room charges,⁵ and income from endowments and parking lot fees. From this point we will largely concentrate on the methods that the MOH uses to set the hospital's global budget.

The starting point for a hospital's budget is the previous year's funding level. The funding level is increased each year to account for four different areas of designated increases: inflation, growth, new and expanded services, and life support.⁶ The increases in the global budget to account for inflation and growth are set by formula, while the other two are subject to negotiations between each individual hospital and the ministry.

Inflation

The ministry increases hospital budgets by an amount set to compensate hospitals for increases in the prices they must pay for the goods and services they purchase. The inflation adjustment, which is based on a forecast, is set by the Ministry of Health. From 1982 to 1985, the inflation adjustment was slightly higher than the estimated increase in the Ontario Consumer Price Index, while in more recent years the adjustment has been somewhat lower. Furthermore, OHA estimates that the inflation adjustment has been persistently less than the increase in the prices that hospitals have to pay for their inputs, i.e., the Ontario Market Basket (Ontario Hospital Association, 1989).

Growth

The growth payments are meant to pay hospitals for the increased costs resulting from the increase in the

volume of services, such as the increase in outpatient visits or the increase in patient days, provided by the hospital using its existing equipment and facilities. These payments are different from the payments made to hospital to cover the costs of providing new services or expanding old services. These payments cover the cost of growth that has already occurred (growth payments to the hospitals' global budget in 1989 were tied to the growth that actually occurred in 1987).

Prior to the initiation of transitional funding, growth in services was measured by determining the increase in the number of equivalent patient days a hospital provided. In calculating equivalent patient days, emergency and outpatient visits were considered to be equal to one-third of an inpatient day, while medical⁷ and surgical day care visits were equivalent to two patient days. The hospital then received an additional increment in its budget equal to its increase in equivalent inpatient days. This increment was limited to 2 percent of its funding. The growth formula sets a limit on volume increases in total hospital services (both inpatient and outpatient) that will be paid for.⁸ A hospital that experienced a decrease in equivalent inpatient days did not have its global budget decreased, but it did not receive any new growth funding until the number of equivalent inpatient days exceeded the previous peak.

New and expanded programs

If a hospital wants to add a new program or expand an old one, it is supposed to receive permission to do so from both the ministry and the local planning agency.⁹ The capital costs to support a new program can be obtained through fund raising and appropriations from the ministry; the operating costs associated with a program can be included in the budget only with ministry approval. New programs are budgeted on a line-by-line basis for up to 3 years; then they are rolled into the hospital's base. In Ontario, most high technology services such as diagnostic imaging equipment and laboratory services are available only in hospitals.¹⁰ Thus, control over the hospital's budget is the principal instrument used to limit the growth of service intensity in the province.

⁴In Ontario, all residency programs are associated with a medical school. The ministry allocates funds to the medical schools to pay for the residents' stipends and they in turn distribute funds to the teaching hospitals. Sometimes one particular hospital will act as the paymaster for the medical school, and it will pay residents their stipends as they rotate through different hospitals. The teaching facility is also paid by the medical school. There are some residency slots, however, that are not paid for by the MOH.

⁵Medicare (Canada) covers a stay in a bed in a ward room or in a private room if medically necessary. If people want to stay in semi-private or private rooms when it is not medically necessary, the additional amount can be paid for by out of pocket or by private insurance.

⁶The present tense is used if the statement continues to be true today during the transitional budget process. We try to indicate where the changes are made.

⁷Medical day care visits include categories like oncology clinics, continuous ambulatory peritoneal dialysis and blood transfusions. Generally, they include any medical visit that extends 3 hours and is prescribed by a physician.

⁸Growth payments to hospitals are allocated under an aggregate growth fund of about 1 percent established by the ministry. It is possible that if all hospitals experienced significant growth, that no hospital would be allocated a 2-percent growth increment because the growth fund would be prorated across the hospitals.

⁹The District Health Councils are responsible for regional health planning. Although their power has ebbed and flowed over the years, hospitals do not always wait to get permission from the ministry before expanding services or adding new ones and consequently they must absorb the cost within their global budgets.

¹⁰Ontario has just passed the Independent Health Facilities Act that allows for the establishment of freestanding surgical and diagnostic centers under strict conditions and subject to ministry approval.

Life support

A small number of programs are designated life support programs. These programs include services such as hemodialysis, cardiac surgery, parenteral nutrition, and so forth. The increase in the costs associated with these programs, which are based primarily in teaching hospitals, is funded through the life support program.

In addition to these four sources of funding, there is another ministry funding source designated as "other." Although the official government policy is that it will not make up hospital deficits, some of this "other" funding is used to cover them. In order to get such funding, the hospitals must be reviewed by a team of management experts from the Ministry of Health. In the past, such reviews usually have resulted in additional funding, although many suspected that the speed by which the review process occurred was directly proportional to the political influence of the hospital board (Markel, 1986).

In 1987, 91.9 percent of the hospitals' budget allocation from the ministry was accounted for by the opening balance (the previous year's funding), 6.3 percent by the designated increases and 1.8 percent by "other". Of the areas of designated increase, 59 percent was for inflation, 14.2 percent for growth, 23.3 percent for new programs, and 3.5 percent for life support (Ontario Hospital Association, 1989).

The global budgeting system has been associated with moderate increases in overall hospital expenditures as well as with lower increases in the cost per day and the cost per case than the United States. For example, Detsky, Stacey, and Bombardier (1983) found that from 1968 to 1979-80 the annual increase in the average cost per patient day and per admission was 4.87 and 3.69 percent in Ontario compared to 6.4 and 5.24 percent respectively in the United States.

Before turning to the problems that the Minister of Health challenged the OHA to help her address, we present some data on Ontario hospitals in order to place the Ontario and U.S. systems somewhat in perspective. Ontario has 222 hospitals and 49,658 beds (or 5.5 beds [3.6 acute care beds] per 1,000 population). Of these, 18 hospitals (with 12,489 beds) belong to the Ontario Council of Teaching Hospitals (OCOTH). Overall hospital occupancy rates are very high. In 1988, the occupancy rate for all hospitals was 87.7 percent while the rate for acute beds was 86.1 percent. (The occupancy rate of American community hospitals is 65.5 percent.) As a result of high occupancy rate, there are often long waits for elective admissions (Jacobs and Hart, 1990). The average length of stay in Ontario is quite long (8.7 days) relative to that in the United States (7.2 days). Evans has commented on the difference between Canadian and American hospitals by noticing that the hospital care resulting from the way that services are paid for favors intensive high-technology services in the United States and long term chronic care in Canada (Evans et al., 1989a).

Problems associated with global budgeting

Any health care delivery system is shaped in part by the financing system, and both providers and the ministry had concerns about the way the global budgeting system had evolved. The following are the most important criticisms of the system:

First, the formula was criticized as being inequitable (Ontario Hospital Association, 1990). When the global budgeting system was introduced in 1969, each hospital's then-current budget was taken as its base budget. Since then, the same inflation and growth formulas have been applied to all hospitals. However, there was no reason to believe that the initial funding levels were appropriate. Hospitals started off with quite different budgets depending in part on the wealth of their community, the generosity of the community towards individual hospitals and their ability to negotiate with the ministry during the earlier budgeting periods. In Ontario this was perceived as a problem of equity, and some hospitals were considered to be underfunded or to have funding imbalances.¹¹

Second, the growth formula did not provide incentives for cost effective care. It only contained weak incentives to reduce the hospital lengths of stay and waiting lists. In fact, a hospital that maintained its occupancy rate, but increased its admissions and decreased its length of stay, would get minimal increases in its budget through the growth formula. Since such a shift would increase the demand on hospital resources, it would lead to a deterioration in the hospital's financial position. Consequently, it is difficult to determine whether the growth formula provided incentives to encourage outpatient activity relative to inpatient care. This would depend on the cost of providing outpatient care relative to the cost of the inpatient day compared with the implicit revenues associated with this care as indicated by their inpatient equivalency factors that were used in the growth formula as described earlier.

Third, the growth formula did not recognize changes in the characteristics of the inpatient population over time. With the exception of the new program funds, there was no way to adjust a hospital's budget for changing hospital case mix.

Fourth, there was some concern that the growth formula was not sufficiently responsive to the differences in the population growth in different communities or to patient preferences across hospitals. The 2-percent limit was applied to all hospitals regardless of what was happening with the demand for their services.

Finally, a number of hospitals found themselves in a persistent deficit situation and appealed to the ministry for budget relief. This led to a joint ministry and hospital review of the situation. The result of this review was a set of recommendations to the ministry: establish a "no deficit" policy, modify the global budgeting system to incorporate incentives to promote

¹¹A funding imbalance is not the same as a deficit.

cost-effective service delivery, and be fairer and more consistent in the hospital funding process (Ontario Hospital Association, 1988). It was this review that precipitated the transitional funding process.

Hospital transitional budgeting process

After announcing that her ministry would undertake a comprehensive review of the hospital funding, the ministry implemented the transitional funding initiative to evaluate and modify the hospital budgeting system in Ontario. In October 1988, a steering committee was established to develop options for consideration by the ministry. Membership on the committee consisted of hospital chief executive officers, and senior OHA, OCOTH, and ministry staff. This collaborative process was implemented both to gain the benefits of the expertise of the hospital community and to ensure greater understanding and acceptance of proposed changes. To stimulate the work of the committee, the ministry established two separate funds: an equity fund in which \$25 million was set aside for distribution to hospitals found to have been underfunded in the past, and an incentive fund in which \$10 million was set aside for distribution to hospitals that initiated certain types of projects.

The actual work of the initiative was carried out by four working subcommittees: Growth, Funding Equity, Peer Group, and Incentives Fund; a fifth subcommittee, the Ontario Case Costs, was created in the second year. Representatives of the ministry, OHA, OCOTH, and individual hospitals served on these committees. A consultant to the ministry coordinated the activities of all the committees.

The work of the committees was guided by two basic decisions. The first was that hospitals that provide similar patient services, and therefore have comparable resource requirements, are entitled to comparable levels of funding. The second was that the growth formula should be modified to recognize changes in admissions rather than changes in patient days. It was quickly recognized that to implement these decisions, it was necessary to control for differences across hospitals in the types of patients treated.

In order to measure case-mix differences, the committees had decided on a patient classification system and a method of weighing cases. The work was facilitated by the Hospital Medical Records Institute (HMRI) having already taken the initiative of gathering hospital discharge data for years. HMRI had already modified the DRG system to be compatible with the Canadian coding system, resulting in a grouping system called the case-mix groups (CMGs).¹² While it was relatively easy for Ontario to implement a case-mix classification system based on diagnostic data, it was very difficult to determine a method for weighing cases. Given the importance of global budgets, hospital billing systems throughout Canada are very rudimentary, and

in the absence of direct patient cost data, there was (and is) no way to develop cost weights using data from Canadian hospitals. The HMRI had to look elsewhere and patient-level cost data was obtained from New York State. Although the actual process for determining the CMG cost weights is quite complicated, the basic steps consisted of determining the per diem costs of each DRG using the New York State data, mapping the DRGs into the CMGs to calculate a pseudo per diem cost weight for each CMG, and then multiplying each per diem cost weight by the Ontario length of stay in order to "Canadianize" the weights. The resulting weights were resource intensity weights (RIWs) and were standardized so that the weight of the average case was equal to 1. Both the case-mix classification systems and the cost weights were reviewed and modified by the working committee. (The steering committee did not classify or weigh rehabilitation, psychiatric cases, or any of the outpatient cases.)

Given the RIWs and the CMGs, HMRI then calculated two measures of performance for each hospital. The first was the number of weighted cases, which was calculated by assigning a RIW to each discharge and summing across all discharges. The second was cost per weighted case which was determined by dividing total costs allocated to acute care inpatients by the number of weighted cases. In allocating costs to acute care, the cost attributable to outlier days, i.e., days passed a trim point were removed. These measures, cost per weighted case and number of weighted cases, were used in the allocation of the equity funds and in the revision of the growth formula.

As noted earlier, the MOH set aside an equity fund of \$25 million (this was increased to \$40 million in 1991) to be distributed to those hospitals which were deemed to have funding imbalances. A hospital was considered to be underfunded if its cost per weighted case was lower than the average cost per weighted case in hospitals that treated comparable patients in a roughly similar economic environment. After much discussion and negotiation, the Peer Group Committee recommended that seven peer groups be established: the OCOTH hospitals were divided into two groups according to their case-mix index; and the remaining hospitals were divided into five groups according to their size and whether they were located in a major urban area.

The Funding Equity Committee was responsible for recommending guidelines for allocating the \$25 million to fund hospitals for 1989-90. It first defined each hospital's funding imbalance (if it existed) as the amount of funds that would be required to bring the level of funding up the average (acute) cost per case for hospitals in its peer group. It then recommended that each hospital receive its proportionate share of the equity fund where that was defined as the hospital imbalance divided by the total imbalance across all groups. This recommendation was accepted by the ministry—hospitals that received equity payments were supposed to use those funds for operating purposes. In the first year, the total amount of underfunding was

¹²HMRI obtains hospital discharge information from hospitals across Canada including all Ontario hospitals, and prepares comparative utilization reports for their clients.

estimated at \$142 million, and hence, only a small amount of the imbalance could be corrected that year.

Under the old formula, growth was measured in terms of equivalent patient days. However, with the change to measuring inpatient activity in terms of weighted cases, the Growth Committee recommended that the growth formula be modified accordingly.

Since the growth in inpatient activity was to be measured in terms of weighted admissions, the Committee had to find another way of measuring the growth in outpatient activity other than in equivalent patient days. In addition, the MOH wanted to weight outpatient activity in the growth formula in order to provide incentives for switching services from the inpatient to the outpatient sector. The new growth formula can be presented as:

$$\text{Growth} = CWC (.5P) + \sum_i (IP_i \times MC_i \times INC_i \times S_i)$$

where

- CWC* = the change in the number of weighted cases
P = peer group cost per weighted case,
IP = Federal interprovincial rate for the specific set of services—an estimate of the average cost for services,
MC = marginal cost factor for that service (50 percent for outpatient care, 25 percent for day night care and 100 percent for surgical day care and emergency room visits),
INC = incentive factor designed to encourage certain services (it was set to 2 for most of the outpatient services), and
S = change in the number of services.

As with the earlier growth formula, the hospital's operating fund was increased by the growth factor up to a maximum of 2 percent.

Between phase one and phase two of transitional funding,¹³ a number of changes were made. The peer groups were modified, the two original OCOTH groups were retained, but the other peer groups were replaced with ones based on hospital size. A northern adjustment factor was added to compensate for higher operating costs in the northern region. The CMGs were revised; the weights were overhauled, and discharges were classified into typicals, outliers, deaths, and transfers (Botz, 1991; Hospital Medical Records Institute, 1990). Typicals were assigned a per-case weight, whereas the weights for outliers, transfers, and deaths were based on actual days of care.¹⁴ These weights were established through additional analysis of the New York State data base. The approach to determine whether a hospital was underfunded was the same, i.e., a hospital's costs per weighted case were compared with the peer group cost per weighted case; however, all costs attributed to acute

and newborn cases were in the numerator, and weighted cases calculated according to the new method were in the denominator. The growth formula remained essentially unchanged, except that weighted cases were defined according to the new method. The ministry was not happy with the new RIWs and the greater use of days versus cases in the determination of weighted cases, and the weights are being revised again (Lave and Jacobs, 1992).¹⁵

It should be noted that the equity and growth payments are not prospective payments, rather they are payments made into a current budget based on relative cost performance and relative growth 2 years earlier. Until the method for establishing the weights is stabilized, it will not make sense for hospitals to respond to marginal changes in the weights.

Discussion

The goal of the Ontario transitional funding initiative is to build a better budgetary payment system. Thus, the funding system with its overall government control has not been abandoned. The goal of the initiative is to achieve greater equity and to improve allocation of resources within the given budget constraint. It is in this context that we highlight some of the strategies, features, and problems of the Ontario process.

The transitional funding process is being developed through a collaborative process between the government and the hospitals although the final decisionmaking resides within the ministry. The process has been a relatively open one with the hospitals and other stakeholders not on the working committees being informed through newsletters, conferences, and meetings.¹⁶ Although the process that Ontario is following is quite different from the processes followed in the United States, it should not be considered as typically Canadian. The province of Alberta is also modifying its global budgeting system, and it has been considerably less open than Ontario about its decisions and the reasons for them.

The strategic decisions that were taken the first year, i.e., to base growth on weighted admissions, to provide incentives for outpatient activity, and to (begin to) implement the principle that hospitals with comparable kinds of patients in comparable environments should receive comparable funding, are likely to prevail. However, the tactical decisions are transitional. In order to calculate the CMGs, the RIWs, and the operating cost per case, the Ontario committees had to make a number of decisions where each one would influence the financial status of individual hospitals that were represented on those committees. The

¹³Some experts who were brought in to review the phase two weights found them to be seriously flawed. These criticisms are being addressed in the revision. The technical details, however, are not relevant here.

¹⁴The OCOTH hospitals and large teaching hospitals are disproportionately represented on the working committees. Preliminary results from a survey of hospitals about transitional funding indicate that the communication process has not been entirely successful.

¹³The term used in Ontario is phase one and phase two—to date each “phase” has taken a year.

¹⁴In phase two, a non-parametric approach was used to define an outlier case. An outlier case was one which stayed longer than the sum of third quartile plus two times the interquartile range.

committees continue to work and decisions are modified as new analysis are undertaken and as new data become available. The HMRI has a detailed research agenda in place to support this activity, and a number of outside consultants have been hired to supplement these resources.

Many of the problems being addressed have a familiar ring to American observers. Among the more familiar areas that are receiving immediate attention are: revisions of the case-mix classification system, re-estimation of the RIWs, and the determination of peer groups.

The RIWs are perhaps the most important component of the system, and there is some disagreement about how the weights should be assigned. As noted, previously, during the second year, different weights were assigned to typical cases, deaths, transfers, and outlier cases. (HMRI traditionally used this case classification when it gave hospitals information on its comparative length of stay data, i.e., hospitals were given data on how the length of stay of its typical cases compared with that in the data base.) The hospitals in general prefer this breakout, and there is tension between them and the ministry over this issue. There is also tension over how much weight should be based on case data, and how much should be based on the actual length of stay of individual patients. The weight to be assigned to long stay outliers is of particular concern, and the position that participants take on this issue is determined in part by whether they believe that hospitals can control length of stay of those patients. Each one of the 2 years represents two extremes: in the first year, typical cases represented 83 percent of all weighted cases; in the second year, they represented about 60 percent.¹⁷

The calculation of Ontario based RIWs has been hampered by the absence of patient specific cost information. In Canada, because of the global budget payment method, data are collected by functional centers and little data are collected at the patient level. The process of building up patient-level cost data (called the global dimension) from functional-level data based on financial information and functional-level workload units is the subject of a major national effort termed the Management Information Systems (MIS) Project (Management Information Systems Project, 1985). The Ontario Transitional Funding Initiative has developed an Ontario Case Costing Committee, whose initial report recommended that hospitals begin initiating costing projects in order to be able to conduct patient level costing (Ontario Case Costs Subcommittee, 1991).

The issue of dealing with differences between hospitals that are not of a case-mix origin will also be familiar to American readers. As in many State systems, peer groups were used to capture differences among hospitals that are not captured by case-mix measures. The steering committee recommended that

¹⁷These numbers cannot be compared with the percent of the budget that is given to outliers in the United States; but they do show the importance of different weighing rules.

seven groups be adopted for phase one of the project, but this was only after much discussion and debate and with the understanding that the groups would be revised in subsequent years. These groups were modified in the project's second phase. The debate surrounding these issues is similar to that conducted in the United States. Individual hospitals argue that the CMGs do not take into consideration the severity of their case mix, and that the calculated weighted cases underestimate the costliness of the patients they treat. In addition, some hospital administrators argue that differences in the cost per weighted case reflect quality differences. To the extent that this is true, the current averaging method penalizes high cost and high quality hospitals. The cost of teaching is a contentious issue. Hospitals that are not members of OCOH but have some teaching activity argue that their higher costs are not recognized.¹⁸ Finally, hospitals argue that the peer groups do not account for differences in the economic environments in which they are located ("natural" differences). This topic is the subject of ongoing research and controversy.

The shift in the focus of the growth fund from patient days to weighted cases provides an incentive towards efficiencies that were not there before. The growth formula will show an increase in growth, whereas previously, there would have been no change in measured growth. The 2-percent cap, however, remains, and the existence of this cap means that it will be difficult for hospitals to accommodate a significant increase in the demand for their services.

Overall, the transitional funding system represents an improvement in the budgeting process. The equity funds are probably going to hospitals that have been on the short side of funding in the past,¹⁹ and so imbalances are being corrected and inequities addressed. The new way of measuring growth is an improvement over the old. As a result of these changes, the hospital's budget is slightly more responsive to case mix. The weighted case approach is a tool that the ministry is now using in the allocation of funds to the other category, and a more objective funding tool has been the result.

However, it is difficult to assess its impact on the efficiency with which hospitals will produce care. First, although hospitals will know whether they are high cost hospitals, they will not know why. The factors that make it difficult to calculate the weights are the same ones that make it difficult for hospitals to respond to the incentives in those weights. Most hospitals do not have the ability to group and evaluate their own patient data and their utilization situation quickly. They must await classification of their cases by HMRI. Further, as

¹⁸Between phase one and phase two, the subject of teaching hospitals received considerable attention. Network (1991) did a study of costs and teaching and their findings have yet resulted in policy changes. Ontario has to date rejected the approach of measuring teaching by the resident to bed ratio.

¹⁹This statement is based on the fact that, in spite of the difference in the weights between phase one and phase two, there was extensive overlap in the hospitals identified as receiving equity funding in both years.

they become able to compare their length of stay by CMG with the group norm lengths of stay (because HMRI provides them with that data), they cannot relate service use to specific patients and hence to case-mix because they have no patient-level cost data. Also, the new formulas do contain some incentives to decrease the length of stay of typical cases, but not of outlier patients. Furthermore, it is not clear whether the growth formula encourages an efficient use of inpatient and outpatient services. For example, the average weight assigned to day surgery cases is somewhat arbitrary, and the weights do not vary by type of surgery case. The current weights are such that if, other things being equal, a hospital shifted activity from the inpatient to the outpatient sector, it would be credited with negative growth. The hospital and the ministry recognize the problem and are working on the development of outpatient categories and weights.

It should be noted that most of the previous issues relate to data problems (which are very significant). What is needed are the correct numbers to fit into the weights and appropriate estimates of inpatient weights and outpatient per service rates. These numbers will only come with experience (and cannot be imported willy-nilly). However, the relevance of the changed form of the budgetary process should not be lost in the mire of data issues. The tools are now in place, as never before, to influence efficiency, to encourage shorter stays, and to increase outpatient care. It is obvious that hospitals are responding to the signals put out by transitional funding. Results from a survey of hospitals indicate that a significant proportion of hospitals believe that the new equity and growth formulas have led to an increase in cases, a decrease in length of stay, and an increase in ambulatory surgery (Lave and Jacobs, 1992). These changes should ease some access problems.

Within the overall budgetary framework, adjustment will continue to be made (though hopefully at a less frantic pace than in the first several years.) But most importantly, the budgetary framework will remain and overall budgetary control will be maintained.

The transitional funding system will not likely have a major impact on the process of care. In 1991, of a base of \$5 billion, only \$90 million is being influenced by the transitional funding process. Of this amount, \$40 million is allocated to equity funding, \$40 million to growth, and \$10 million to incentives. (The aggregate growth allocation continues to provide a global cap against which individual allocations are distributed.) Small increments such as these will not likely evoke significant behavioral changes. Nevertheless, hospital administrators now view their costs differently, and the ministry has a more sophisticated view of the budgetary process. For the first time, it has permitted groups to think in terms of output. Indeed, in comparison with the United States, a small amount of marginal money will probably make more difference to Ontario hospitals because resources there are so constrained. The transitional funding system was not a radical change. For example, the mission of hospitals was not redefined.

In April 1992, transitional funding was replaced by the Joint Funding and Policy Committee (JFPC), which was charged with making systemic changes in the health care financing and delivery system. The JFPC will build on the framework set by transitional funding.

Conclusions

The events in Ontario are important because they draw attention to both the positive and negative features of a global budget. The global budgeting process has been praised because of its simplicity and its ability to control costs. However, the factors leading up to transitional funding indicate that it is difficult to structure global budgets. It is not a simple matter of just increasing the budget by a given percent each year. It is difficult to make a non-unit payment system sensitive to patient mix and legitimate volume changes, although the new system does move in that direction.

The environment in which this system was developed and operates is the product of the Canadian parliamentary and political system, and some have argued that the system is so institutionally different from the United States' that wholesale adoption of it would not be feasible (Enthoven and Kranick, 1989). Nevertheless the system does address the seemingly intractable problem to Americans of cost control, and therefore, we feel that both the manner of implementation as well as the evolution of the funding mechanisms do offer valuable insights into the potential evolution of the American system.

The manner of implementing the system underlines the degree of consensus that is needed, and the Ontario case indicates one way in which a consensus was achieved. There are examples of all-payer payment systems (Zuckerman, 1987) and even all payer budgetary systems (Farnand, Jacobs, and Dickson, 1986) in the United States. Indeed, there is even a proposal for a national global budgeting system of hospital payment similar to Canada's (Himmelstein and Woolhandler, 1989). The incorporation of such systems in the United States probably requires consensus building²⁰ on the part of payers as well as providers. However, given that in some jurisdictions intermediate systems between a unit-based multi-payer system and a budgetary system have already been established, we believe that Americans can learn from the process and decisions that Ontario has taken.

The hospital global budgeting system as implemented in Canada has attracted considerable attention in the United States. Americans have been impressed by a system that not only appeared to contain costs but that was easy to implement. However, global budgets must be responsive to changing economic environments: The ministries that allocate the budgets must be able to account for inflation, changing patient characteristics, and changes in the level of demand for services provided by different institutions. The Ontario system

²⁰The term probably is used because some of the governments have changed the payments system without the same kind of interactions with the provider community that took place in Ontario.

is one such system that demonstrates having the flexibility to modify the systems that it has in place and to adapt to the recent advances in case-mix funding developed in the United States. It is also demonstrating that informational requirements of the new system are considerably more extensive than the old. While this system is still evolving, both the process and the results are worthy of further study in that they show how bureaucratic structures can adapt and change. Such further investigation may provide information to Americans that will help them choose where on the continuum between the unit based, multi-payer systems and global budgets based on all payers systems they want to be.

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