

1988 ISSUE PAPERS PREPARED FOR THE BLUE RIBBON COMMISSION ON HEALTH CARE EXPENDITURES BY GRAHAM ATKINSON, D. PHIL.

- January 31 Costs, Revenue and Utilization, Maine and the U.S.
- <u>February 15</u> Definition of Quality, Access, Affordability. A Discussion of Some Aspects
- February 15 Discussion of Major Issues
- <u>February 22</u> Description of Some State Regulatory Systems for Hospitals and Nursing Homes
- March 10 The Collection and Use of Health Care Data
- March 30 Options for Regulation of Health Care in Maine
- <u>May 5</u> Projections on the Financing Systems for the 1990's
- June 7 Discussion Paper on Pooling
- June 7 Discussion Paper for Second Retreat
- August 8 Discussion Paper on Cross-Subsidization
- October 17 The Interaction of CON and the Payment System
- October 18 Outpatient Rate Deregulation, Cross-Subsidization and Pooling

NOTE: Issue papers are on file in the State House Law Library

6931m

COSTS, REVENUE AND UTILIZATION DATA

۰,

\$

MAINE AND THE U.S.

January 31, 1988

Prepared for: The Blue Ribbon Commission on Health Care Expenditures

Graham Atkinson, D.Phil. 1449 44th. Street, NW Washington, DC 20007

:

January 31, 1988

Data on Hospital Costs, Revenues and Utilization

The purpose of this paper is to summarize in a single place a variety of information on hospital costs revenues and utilization which will be useful for the Commission. The data generally compares the performance of Maine over time and with the U.S. as a whole. The Maine Hospital Association is in the process of putting together a more detailed analysis of the financial situation of the hospitals in Maine, and a comparison with the New England states. This additional information will be useful for the Commission, but because of time and economy constraints is not duplicated here.

Mark-ups

The mark-up is the proportion by which costs are increased to obtain charges. A mark-up is necessary in order to allow the hospital to recover its bad debts and charity care, shortfalls in governmental payments, profit margin, etc.

Maine in comparison to the US, 1985.

In 1985 Maine had a mark-up of 26.2%, in comparison with a national average mark-up of 25.1%. This is of particular interest in comparison with the mark-ups at the other regulated states. Graph 1 shows the mark-ups for Maine, the other regulated states, New Hampshire, some selected states and the US as a whole in 1985.

Maine over time.

The mark-up in Maine increased fairly steadily from 1978 through 1984 and since then has decreased sharply. The sharp decrease is in contrast to a national continuing upward trend with a slight decline in 1985. These changes are shown on Graph 2. The drop in the mark-up in Maine from 1985 to 1986 brings Maine in line with the other regulated states.

1

Increases in costs and revenues

Cost per adjusted admission²

Chart 3 shows the cost per adjusted admission for Maine and the US from 1977 to 1986. It can be seen that Maine is less expensive than the US average, and the gap has been increasing over time.

Chart 4 shows the percentage change from the previous year in cost per adjusted admission. From 1977 through 1983 cost per adjusted admission rose 112% in the US as a whole and 116% in Maine. From 1983 to 1984 the increase in the US was 7.4% and in Maine 7.3%, from 1984 to 1985 the US increased by 8.3% and Maine by 5.6%, and from 1985 to 1986 the US increased by 8.9% and Maine by 8.7%. Thus the cost per adjusted admission was increasing slightly faster than the national average through 1983 and since then has increased less than the national average.

Revenue per admission

Chart 5 shows the inpatient revenue per admission for Maine and the US from 1977 through 1986. It can be seen that Maine has always been less expensive than the US, and the gap has increased substantially in recent years.

Chart 6 shows the percentage change from the previous year in revenue per admission. From 1977 through 1983 revenue per adjusted admission rose 136% in the US as a whole and 154% in Maine. From 1983 to 1984 the increase in the US was 9.0% and in Maine 8.6%, from 1984 to 1985 the US increased by 7.8% and Maine by 1.6%, and from 1985 to 1986 the US increase was 10.7% and the Maine 2.8%. Thus the revenue per adjusted admission was increasing slightly faster than the national average through 1983 and since then has increased less than the national average, tracking the cost increases.

Total costs

The increase from year to year in total hospital costs is shown on Chart 7. From 1977 through 1983 total hospital costs rose 125% in the US as a whole and 123% in Maine. From 1983 to 1984 the increase in the US was 5.9% and in Maine 5.9%, from 1984 to

¹ The data for this analysis was taken from "Hospital Statistics", American Hospital Association, 1978 through 1986 editions.

² Adjusted admissions are admissions increased to take account of outpatient volume. This is a measure of the total output of the hospital, both inpatient and outpatient services.

1985 the US increased by 5.8% and Maine by 5.4% and from 1985 to 1986 the US increased by 7.8% and Maine by 5.7%. Thus the total cost was increasing at almost the same rate as the national average through 1983 and since then has increased at slightly less than the national average.

Total gross revenues

The percentage increase in total gross revenues is shown on Chart 8. From 1977 through 1983 total hospital revenue rose 151% in the US as a whole and 160% in Maine. From 1983 to 1984 the increase in the US was 7.3% and in Maine 7.1%, from 1984 to 1985 the US increased by 4.8% and Maine by 0.9%, and from 1985 to 1986 the US rose by 9.3% and Maine decreased by 0.4%. Thus the total revenue was increasing slightly faster than the national average through 1983 and since then has increased much less than the national average.

Total net revenues

Chart 9 shows the percentage change in total net revenues in Maine and the US for 1983 through 1986. It can be seen that the net revenues in Maine continued to increase in spite of the slowing of the increase in gross revenues, but the increase in net revenues was still under the national average.

Utilization

Adjusted admissions

Chart 10 shows the change in adjusted admissions from year to year. While there are substantial fluctuations from year to year it appears that Maine is following the national trends, with increasing volume through 1980, and with generally declining volume since then.

Admissions

Chart 11 shows the percentage change in inpatient admissions from year to year.

Patient days

Chart 12 shows the percentage change in patient days from year to year. While the timing of the declines in Maine has been slightly different from the national declines in patient days, the overall changes are similar.

Occupancy rate

Chart 13 shows the average occupancy of the hospitals in Maine by

bed size category. The overall occupancy rate in 1986 was 66.6%, however that figure conceals some major variations between categories of hospitals, with the smallest hospital having an occupancy rate of 25% (average daily census of 3), and the largest hospital having an occupancy rate of 83.1%.

Summary

The summary data presented here shows that Maine has had utilization changes which generally mirror those taking place elsewhere, with inpatient volume having decl-ined quite drastically in the 1980s. The costs have gone up slightly less than the national average in recent years, but gross revenues have gone up much less than the national average. The larger hospitals do not appear to have problems with low occupancy, but the smaller hospitals do appear to have such problems.





 \sim

•



()





17

.



J









0

, •







DEFINITION OF QUALITY, ACCESS, AFFORDABILITY

A DISCUSSION OF SOME ASPECTS

February 15, 1988

Prepared for: The Blue Ribbon Commission on Health Care Expenditures

A

1

Graham Atkinson, D.Phil. 1449 44th. Street, NW Washington, DC 20007

•

February 15, 1988

A Discussion of some Aspects of the Definition of Quality, Access, and Affordability

The Act establishing the Blue Ribbon Commission on Health Care Expenditures (hereafter called the Commission) states that the goals of the health care system include " the provision of quality care, the accessability to care and the affordability of care." It goes on to say that "This study shall recommend the most appropriate form of health care regulation necessary to ensure these goals are met." The purpose of this paper is to discuss some aspects what could be meant by the terms quality, access and affordability in this context. The paper makes no pretense of making a complete definition of these terms.

In the discussion the following list of facets of these three terms are identified.

ACCESS

QUALITY

AFFORDABILITY

- 1. Geographic 2. Hi-tech services 3. Physicians
- 3. Insurer oversight
- 4. Insurance
- 4. Min. Util. stds.

1. Data access

- 5. Level of service 5. Licensure

2. Control

- 6. Preventive
- 7. Competition

3. Medicare

4. Medicaid 5. Cost shift

1. Insured

6. CON

7. Payor equity

2. Self-responsible

- 8. Site of care
- 9. Bad debts & charity

All of these facets will be discussed below.

ACCESS

There are two major problems with access, lack of access because of lack of facilities, and lack of access because of inability to afford care or purchase insurance. Both of these issues are of concern in Maine.

Geographic access

Because of the sparse population of much of Maine, physical availability of hospitals and other health care services within a reasonable distance is of great concern. Problems with geographic access may already exist and more could occur if hospitals in isolated rural areas were to go out of business. The Commission should consider which hospital services or other

types of health care services are critical for ensuring access to care for the population in sparsely populated areas.

Hi-tech services

With the growth in the use of expensive hi-tech services there is a justifiable concern that patients in isolated areas will not have full access to these services. This is partly because the services cannot be economically provided by the hospitals in these areas, and also because they may be unable to hire suitably trained personnel. Also, with some procedures there is a quality problem if the hospitals does not perform enough procedures that the staff remain adept.

Mechanisms for improving access to hi-tech services include: Transportation systems, sharing of services among groups of hospitals, formal referral arrangements.

Physicians

Access to primary care is of even greater concern than access to hospital care.

Insurance

The lack of access to insurance is possibly an even greater problem than the geographic lack of access to hospitals. Individuals may lack access to insurance for two reasons: 1) The insurance premiums are to high so the individuals or their employers cannot afford to purchase insurance, 'or 2) the individual may belong to a risk group which is unattractive to the insurance companies. The high level of insurance premiums is associated with the affordability of health care, so will be left for discussion under that heading. The access to insurance for high risk individuals is an important issue which should be discussed.

Level of service

Geographic access goes beyond simply having a hospital in close proximity. If the hospital is a primary care facility and the patient needs open heart surgery then the proximity of the hospital does the patient little good. What must be ensured is that the patients have reasonable access to care of all levels. Clearly this does not mean that every hospital should have open heart surgery, but it does mean that a hierarchy of services should be defined, and it must be ensured that patients do not have access problems, either geographic or financial, to the various levels in this hierarchy. For example, there should be a physician or primary care clinic within close geographical proximity, a hospital can be somewhat further away, and a hospital with a CT scanner or with specialty surgery capabilities can be located yet further away but still be considered to be providing reasonable access.

Preventive care

Preventive care is relatively inexpensive but poorly covered by insurance, and most medical care in the US concentrates on remedial care rather than preventive care. Problems with access to preventive care occur even where there is reasonable access to remedial care.

Competition

There is limited scope for competition in Maine because so many of the markets are basically monopolies or have monopolistic components. In those areas in which there is scope for competition there are, by definition, several providers, and so ensuring geographic access should not be a problem.

QUALITY

Quality is the most difficult of the criteria to define and quantify, but it is also one of the most important. The following headings cover some of the ways in which quality can be ensured.

Data access

The first prerequisite for monitoring and ensuring the quality of care is that some data must be available to allow for an assessment of the quality. There are a number of different data sources that are relevant for this purpose. At an aggregate level, medical record abstract data as currently collected by the state must be made available for analysis. This will allow for an assessment whether care is being provided at the appropriate level, and also allows for an evaluation of the need for additional services, and for those services for which a minimum utilization is required in order to ensure quality, whether that threshold is being reached.

In order to detect quality problems which are not observable from the discharge abstract data the payors, and other agencies concerned about the quality of care, must have access to detailed medical records.

The Commission should consider how to improve and continue access to the necessary data to ensure that quality is maintained.

Control

A major question is who controls the quality of care. Should the major control be with the insurers, the hospital, the physicians, or some other body? Clearly the physicians are the participants in the system who have the greatest influence on the quality of care, but they may not be the group who should be responsible for monitoring it.

Insurer oversight

The insurers are concerned about the quality of the care being provided to their beneficiaries. The insurers must continue to be provided with sufficient information that they can fulfil this responsibility to their beneficiaries.

Minimum utilization standards

For certain procedures there is a clear correlation between the number of times the procedure is performed and the quality of the care. The most obvious example is open heart surgery, where it has been documented that at facilities which do under 200 procedures a year the outcomes are less good than at facilities which perform over 200 procedures a year. There are, however, numerous other less dramatic examples, for example, hip replacement and some prostate surgery. Clearly quality would be enhanced by ensuring that the procedures for which it has been documented that the volume of service influences the quality of the care provided are restricted to those facilities which have sufficient volume to exceed the critical threshold.

A list of procedures which satisfy this criterion could be drawn up and some method established to ensure that the procedures are only performed where the quality and volume will be adequately maintained. The Commission should discuss who should perform this function.

Licensure

The state licenses both physicians and facilities. This licensure has certain quality aspects, principally by ensuring that certain minimum standards are met.

AFFORDABILITY

There are various aspects to affordability - affordability of what and to whom? These will be discussed below.

Insured

The insured have little concern about the level of hospital

charges per se, because they pay a very small percentage of the cost of their care directly. What they are concerned about is the cost of their insurance, and this in turn is influenced by the cost of the care provided. With the insured the question of affordability is whether the employer can afford to purchase health insurance coverage, because if the health insurance is priced too high and so the employer does not purchase it, then the employee will have problems with both affordability and access. Purchasing health insurance individually is generally much more expensive than purchasing it through a group, and if the individual does not or cannot purchase health insurance then the affordability problem turns into an access problem. The insured population therefore has an interest in seeing that the total cost of health care remains at a reasonable level so that health insurance remains affordable.

Self responsible

For the self responsible patient affordability relates to how much it costs for health care. The concern must be with the level of the charges billed by the provider. The self responsible hospital patient is therefore concerned to see that the charges of the hospital are kept at a reasonable level.

Medicare

Medicare is paying hospitals on its own Prospective Payment System. Its payments are thus largely independent of the actual costs or charges of the hospitals. The affordability is related to the copayments due from the Medicare beneficiaries.

Medicaid

If hospital costs increase then one of two things happens: 1) Medicaid pays more to the hospitals as a result of the increased costs, causing budget problems, and possibly cut-backs in coverage with ensuing access problems, or 2) Medicaid does not pay more, so the increased costs have to be entirely paid by the private sector thereby increasing the cost shift discussed below.

Cost shift

The Medicare program pays hospitals for inpatient hospital services under its Prospective Payment System. The payments may be less than the costs of the hospitals, and are almost always under the charges. For outpatient services it is also developing a new system which may pay hospitals less than their costs. To the extent that Medicare underpays the hospitals relative to their costs for providing services to Medicare beneficiaries the hospitals have been increasing the charges to the private sector to make up the difference. If Medicaid similarly underpays the hospitals additional cost shifts will occur. If the hospitals'

5

costs increase faster than the payments from Medicare, then this cost shift to the private sector will increase, and the impact on the charges to the private sector will be considerably greater than the percentage increase in the costs of the hospitals. This cost shift is steadily increasing in size and importance, and this in turn affects the affordability of hospital services to those payors having to pick up the shortfall.

Certificate of Need

:

Certificate of Need (CoN) places some limits on hospital capital expenditures, and so limits the rate of growth of operating costs for new programs. If the total costs of hospitals are allowed to rise at an excessive level due to new projects and services then not only will the services become less affordable as a result of the increase in the costs of the hospitals, but the cost shift from the governmental to the private sector will increase, thereby magnifying the effect of the cost increases and resulting in even larger increases in the charges to the private sector. The criterion of affordability thus requires that some limit be placed on the cost impact of Certificate of Need approvals.

Payor equity

If unlimited discounting is permitted, with the revenue losses being shifted to other payors, then the payors who have no option but to pay full charges will experience additional charge increases. The issue of payor equity is thus important for the affordability of care for the self insured and other payors who are not in a position to obtain discounts from the hospitals.

Site of care

Affordability is influenced by the site of care in that the care is likely to be more expensive and less appropriate if the site of care is inappropriate. For example, if surgery could be done on an outpatient basis, but instead is performed on an inpatient hospital basis then the cost will be higher. If a patient should be in a nursing home but instead is retained in the hospital then the cost will be higher, and the quality of care lower because the care being provided in inappropriate for the needs of the patient.

Bad debts and charity

Bad debts and charity care are a major issue being addressed in many states. Medicare does not contribute to general bad debts and charity care (except for its own copayments and deductibles), so the entire load has to be paid by the non-Medicare paying patients. The main problem that must be addressed is that bad debts and charity care are unevenly distributed among the hospitals, causing either financial problems or raising the charges in precisely those hospitals which serve the greatest number of poor people and so where the increased charges have the greatest effect on the affordability of care.

٠.

7

og Fall al A

..

DISCUSSION OF MAJOR ISSUES

February 15, 1988

Prepared for: The Blue Ribbon Commission on Health Care Expenditures

×

Graham Atkinson, D.Phil. 1449 44th. Street, NW Washington, DC 20007 February 15, 1988

Major Issues to be considered by the Blue Ribbon Commission on Health Care Expenditures.

Introduction:

The intent of this paper is to present some discussion and background on the major issues which are to be considered by the Commission. This is a preliminary paper, not intended as a final product, but as a working document to provide a basis for discussion.

The charge to the Commission is to make recommendations on the most appropriate form of regulation for the Maine health care system. This appears to make the assumption that some form of regulation is required, and the question is what form should that regulation take? It would be worthwhile to start the discussion by checking whether this is the understanding of all the Commission members.

Certificate of Need:

The Certificate of Need process is currently causing much discussion. The two main points being discussed are the inconsistency of the application of CoN, with hospitals being subject to CoN review, but physicians being exempt, and the size and administration of the cap on CoN project expenditures in any one year.

One principle that should be kept in mind is that if hospitals (or other providers) are to be paid in full for a new project, and held harmless if it turns out to be a poor business decision, then some form of public review is appropriate and necessary. It would not be reasonable for a provider to make an expenditure without any public review, then expect to be paid in full for the expenditures involved if the project turned out to be financially infeasible because of lack of demand, or for some other reason. The need or lack of need for CoN review is thus tied closely to the payment system - if the project costs are not guaranteed and the provider is at risk then there is less need for a review than if the public is at risk for the project expenditures and the solvency of the hospital is guaranteed.

The current situation is that hospitals are subject to CoN review for major movable equipment, but physicians are not. This is inequitable, and drives high technology equipment out of the hospital setting. This phenomenon can currently be seen in Maine with Magnetic Resonance Imaging equipment. Two physicians have installed such equipment, but no hospitals have it yet.

When physicians invest in high technology equipment they have more of a personal financial interest in seeing the equipment fully used, and there is less control over utilization than there would be in a hospital, so there is a greater danger of overutilization. Also, physicians offices are not subject to the same licensing requirements as hospitals, so there may not be the same quality assurance and quality control as would be required in the hospital.

One counterargument is that physicians are not guaranteed solvency, while the current system of hospital revenue regulation does guarantee solvency to effective and efficient hospitals. If the hospitals are to be guaranteed payment for major equipment then some public review of the expenditure is in order. Thus the payment system is closely tied to the need or lack of need for review. It may be that some hospitals would be willing to give up the guarantee of solvency in return for less regulatory control, while others would want (or need) protection, and be willing to incur some regulatory review as a cost of that protection.

The Commission will have to make a judgement whether it would be worth proposing application of the CoN process to physicians. This issue has been discussed previously before the legislature, and defeated, and it can be expected that the physicians would launch a strong attack on any such proposal.

The conclusion of this argument is that the current situation is clearly unfair to the hospitals, and the CoN process should either be applied consistently to moveable equipment, both equipment to be installed in physicians' offices and equipment to be installed in hospitals. However, if hospitals want a guarantee that additional costs associated with the equipment will be paid then some public review will be required - there can be no public guarantees without some public accountability.

Some possible options are:

- 1 Apply CoN review to physicians.
- 2 Eliminate CoN review for equipment.
- 3 Increase the thresholds for review to reduce the problem.
- 4 A blended system with review for some hospitals but not for others, depending on the payment system.

A final decision on this issue should be delayed pending discussion of the payment system for hospitals, since the two issues are closely interrelated.

Hospital cost and revenue regulation:

The basic question that will have to be addressed by the Commission is whether to recommend elimination of rate regulation for hospitals (if that is an option given the charge to the Commission), complete redesign of the revenue regulation of hospitals, or modification of the current system. To set the scene for this discussion it will be worthwhile to discuss the goals of state hospital revenue and cost regulation systems, and which of these goals are relevant for the current health care environment.

Most of the state regulatory systems currently in operation were designed at a time when Medicare, Medicaid, and often Blue Cross, were paying on the basis of costs. The perverse incentives of this payment system, and the problems it created for hospitals with a high bad debt and charity load, combined with an excessive rate of inflation in hospital costs, and charges led several states to establish Commissions to regulate hospital costs and revenues. The situation has now changed, and this is an appropriate time to revisit what the systems should be designed to accomplish.

The primary objectives of state regulation of hospital revenues are to: 1) control the costs and revenues of the hospitals, 2) prevent undue price discrimination among payors, 3) prevent monopoly providers from charging excessive prices and 4) assure the solvency of effective and efficient hospitals. An important secondary function is the collection and dissemination of data on hospital costs, charges and performance. Each of these objectives will be discussed in the following sections.

Control of costs:

The control of costs can be explicitly through a budget review process, and/or implicitly through controls placed on revenues. The control of CoN projects is also intended to control costs.

Prior to the establishment of the Medicare Prospective Payment System (PPS) the regulated states had increases in cost per admission which were substantially (3 to 4% per year) below the national increase. Since the PPS was implemented this difference has dropped (to under 1% in 1984 and 1985, and 2.5% in 1986). This is understandable, since the Medicare program pays for about 35% of hospital costs. The cost containment pressures of the Medicare program appear to be transferring over to benefit the non-Medicare sector.

The conclusion of this argument is that explicit control over

costs is less necessary now, with Medicare providing strong cost containment pressures, than it was when Medicare payments were on the basis of costs, and so provided no pressure to contain costs.

Control of revenues:

The data paper already distributed shows that there has been a dramatic downward effect on mark-ups from costs to charges and thus on gross revenues as a result of the various state rate regulatory systems. However, the discussion at the last Commission meeting suggests that the mark-up in Maine has taken a jump in 1987 and will take a further jump in 1988. The Medicare PPS does not control revenues, and over the last several years the growth in gross revenues over the U.S. as a whole has consistently exceeded the growth in costs in hospitals. Some controls on revenues may be appropriate, particularly if solvency guarantees are to be provided to hospitals.

Preventing monopoly providers from charging excessive rates:

This issue is of particular importance in Maine where many hospitals are in a monopoly situation, at least for some services. The argument is sometimes made that community boards concerned about excessive charges will provide adequate protection against this. This clearly does have a controlling effect in some instances, but it far from a universal position of boards. This is understandable when you consider that the majority of the payments to hospital are from third party payors, and so from outside the immediate catchment area of the hospital. The infusion of money into the community from butside sources is often considered more important than the level of charges, few of which are paid by the community directly.

Preventing undue price discrimination among payors:

Any state regulatory system being established now can be only partially successful in this regard. The area of potential success is the private sector. Prior to the state regulation of hospital revenues Blue Cross plans in several states received substantial discounts from hospitals. In Maryland the average discount was about 14%, in Maine about 16%, and in New Jersey and New York in excess of 20%. This was not justifiable on economic grounds, and all these discounts have been reduced. This change is one of the reasons that the regulatory programs have been successful in controlling the increase in total gross revenues.

Where the regulatory program does not control the rates that are set by Medicare there is substantial cost shifting from Medicare to the private sector. This topic will be discussed separately at some length together with the Medicaid cost shift. Assuring solvency of effective and efficient hospitals:

The Medicare program underpays some rural hospitals, and the design of the Medicare Prospective Payment System (PPS) causes problems for small hospitals. Some, but not all, of the state programs set rates to assure that the other payors for hospital services pick up any shortfall in Medicaid and Medicare payments (more details on the various state programs will be provided in a later paper). All the state programs build into the revenues of the hospitals an allowance for charity care and bad debts. We should discuss alternative ways of dealing with these financial requirements which would spread them more equitably.

Possible options include:

Increasing the Medicaid payments to cover full financial requirements.

Increasing Medicaid eligibility levels.

Pooling of hospital funds to cover these requirements.

Use of general or other revenues.

Absorption of some of the shortfalls by the hospitals.

Data collection and dissemination:

In order to monitor the effects of any changes in the system, and to diagnose problems, it is necessary to have some organization collecting, organizing and publishing various data regarding hospitals. This function must be continued under any model of regulation chosen, or even if regulation is discontinued.

Viability of small isolated hospitals:

In order to understand the plight of these hospitals we need to obtain data on their financial situation. The problems they are generally suffering from are largely due to the fact that volumes of patients are declining, resulting in reduced revenues, but the costs of the small hospitals are relatively fixed. The hospitals need to find alternative sources of revenue, or ways of reducing their costs. This topic will require considerable further discussion. One method of increasing revenues would be to develop a mechanism for community support, possibly through some form of local taxation. Methods of reducing the fixed costs include merger with a larger facility which can then provide management services and share some clinical services, or redefining the role of the facility and possibly having it subject to reduced licensing and staffing requirements. This topic will be explored in greater detail in future papers.

It may also be necessary to define which facilities are needed for access to care, and which are not needed because adequate alternatives exist within a reasonable travel distance. If adequate alternative health care sources exist then it would not be reasonable to use broad based funds to support an institution which was otherwise not financially viable, but it may be appropriate for the local community to pay for the support of the facility.

~

Physicians:

It is very difficult for any one state to address problems of physician payment because physicians are sufficiently mobile that if they think that too many constraints are being placed on them they can move to another state. It is therefore suggested that the state not take any action to regulate physician fees at this time. The Medicare program is presently considering various methods for setting the payments for physicians, and it can be expected that within two or three years Medicare will be applying some additional regulation of physician fees. This regulation should be watched closely, and studied to see whether any of the techniques would be applicable for other payors in Maine, or whether the payment methods and levels will cause additional problems in persuading physicians to practice in certain areas of Maine.

The distribution of physicians within the state should be discussed. Discussion at the February 11 Commission meeting indicated that there are shortages in the physician supply in particular areas of the state, and of particular physician specialties. The Commission should consider possible mechanisms to persuade physicians to practice in the underserved areas. We will have to rely upon currently available information on this subject as we will not have the resources to carry out any formal surveys of physician distribution.

Nursing homes:

Maine, like the majority of states, appears to have a shortage of nursing home beds in skilled nursing facilities. This causes problems for the hospitals which have difficulty in discharging patients who require post-hospital nursing home care. This is both a cost and a quality problem. It is an inefficient use of an acute hospital bed to have it occupied by a patient requiring skilled nursing care, and the acute hospitals are not generally set up to provide the types of social support and rehabilitation that a skilled nursing facility can provide.

E

The state is unwilling to allow unlimited building of nursing homes because the majority of nursing home patients end up being eligible for Medicaid benefits. Even if a patient has substantial resources when they enter the nursing home, these resources are soon depleted by the payments for nursing home care, and so Medicaid becomes the payor. Thus more nursing home beds means more Medicaid payments for nursing homes.

The payment systems for nursing homes are quite primitive. The Medicaid program pays nursing homes a flat rate per day independent of the care requirements of the patients. This provides a financial incentive to the homes to take the patients in need of the least care, and who will be least disruptive to the running of the home. The patients who are severely debilitated in activities of daily living, or who hallucinate and scream, are difficult to place. It would be interesting to hear from the hospitals whether the experiences they have in placing patients follow this pattern.

Apart from Medicaid there is little third party payment for nursing home services. Medicare covers very little nursing home care, and there is little private insurance coverage for nursing home care, although this is a field that insurance companies are now exploring.

Other providers:

Hospice:

Hospices care for the terminally ill, and provide medical and emotional support to the patient and their family. They do not attempt to provide remedial treatment. The Medicare payments for hospice care are limited, and this has constrained the growth of hospices somewhat. There is an emphasis in many hospices in providing home care, with an minimum of time in an institution. This is an area which should probably be left for later unless there is some particular reason for the Commission to address it now.

Home care:

It is generally difficult to establish home care programs in rural areas with a low population density, because the travel time involved in the home visits makes the programs financially infeasible. Home care programs are sometimes adopted in the mistaken view that they will reduce total costs by reducing the amount of institutional care that is required. While there may be some substitution of home care for institutional care, the reservoir of demand for home care is such that the total costs of the system almost invariably rise as a result of providing a new service. What home care programs are currently available in

7
Maine? Is there any demand for expansion of these programs, or for new programs in other areas? This is another area which should probably be left off the Commission agenda.

Free-standing urgi-centers, diagnostic and ambulatory surgery centers:

The number of these types of facilities is growing, particularly in some of the more densely populated areas of the country. Is there any information on their penetration in Maine? These types of facilities can cause problems for hospitals by attracting paying patients away from the hospitals and leaving the patients unable to pay to go to the hospitals. Differential application of CoN requirements can also place the hospitals at a competitive disadvantage with these other types of facilities which may not be subject to CoN review.

\$

DESCRIPTION OF SOME STATE REGULATORY SYSTEMS

FOR HOSPITALS AND NURSING HOMES

February 22, 1988

Prepared for: The Blue Ribbon Commission on Health Care Expenditures

1

Graham Atkinson, D.Phil. 1449 44th. Street, NW Washington, DC 20007

(202) 338 6867

Description of some state regulatory systems for hospitals and nursing homes.

Introduction

In this paper I will describe briefly the state regulatory systems for hospitals in use in Connecticut, Maryland, New Jersey, New York, Massachusetts (no longer in place), and the system that was used in Rochester and the Finger Lakes areas of upstate New York through 1987. In addition I will provide an overview of the Medicare Prospective Payment System (PPS). In preparing these descriptions I have concentrated on explaining the essential features as simply as possible, and so the descriptions do not include all of the detailed adjustments that are made in the systems, or describe the process in its complete and sometimes excruciating detail. Where more detail is desired I can elaborate on the details in the discussion.

Before moving to the system descriptions, however, I will set the scene with a discussion of the major components of such regulatory systems, the key choices that must be made in designing any such system, and the influence that each of these choices has on the incentives, administrative complexity, and fairness of the system.

Major design components

Base costs

The first decision that must be made is what base costs to use in developing the payment rates. The base costs may be institution specific or some group average, or a blend of the two. The year to be used for developing the rates can be some very recent year, or some distant year with adjustments for changes that have occurred in the interim.

When state rate regulatory systems were first developed they all based their rates on hospital specific costs, usually with the application of some standards. Some still do this, but there is a movement to including some component of a standard average cost in the rate. The purpose of including a standard component is to provide a reward to hospitals which have historically been low cost, and so would have a low base if an entirely hospital specific cost base was used to develop the rates, and to penalize those hospitals which have historically had a high cost base. The fairness of the rewards and penalties generated in this way is dependent on whether the adjustments used in the system adequately account for differences between the hospitals in terms of the types of cases treated, and external factors outside of

the control of the hospital.

The Medicare system is now entirely based on a standard, the New Jersey and New York systems involve partly a standard and partly a historical cost base, and the Maryland and Connecticut systems use a historical cost base.

Unit of control

The unit of control is the main factor which determines the incentives of the payment system. What is meant by this term is the unit which the regulatory agency specifies and monitors. I distinguish between the unit of control and the unit of payment because these two might be different. Various possible units will be discussed:

Per diem:

Some regulatory systems control the revenue the hospital is allowed to charge per day. New York State had such a system until this year. The regulatory agency would specify that the hospital was allowed to charge, on average, a certain amount per patient day. The problem with such a system is that it encourages the provision of more patient days. The hospital has no financial incentives to cut length of stay, or to reduce admissions. It does have an incentive to reduce the resource use per day, so there is a financial incentive to reduce the amount of ancillary testing per day. If the number of ancillary tests is reduced the hospital will incur lower costs, but its allowed revenue will not be affected under a per diem control system. It is not coincidental that New York State hospitals have one of the highest average lengths of stay in the country.

Per diems are still commonly used to control specialty units and hospitals, as well as to pay for cases which are transferred to another hospital, and for the days at the end of an extended hospital stay. This will be explained further in the discussion of the Medicare payment system.

Per case:

Under a per case control system the regulatory agency sets the amount of revenue the hospital is permitted to charge per case, usually adjusted to account for the mix of cases being treated by the hospital. This provides the hospital with an incentive to control its resource use per case, because if the length of stay can be reduced, or if the ancillary tests can be reduced, then the costs of treating the patients will be reduced, but the approved revenue will be unaffected. There is still an incentive to admit more patients (unless an adjustment for volume corrects that misincentive in the system).

Individual charges:

Some regulatory systems control the individual charges the hospital is permitted to make for services, e.g. the daily rate for routine services, the charge per laboratory test, the charge per unit in X-ray, the charge per minute for operating room use. This is the method used by the Maryland system when it first started in 1974, and still used for specialty hospitals and some small hospitals in Maryland. This method is generally in disfavor now because of the poor incentives it provides to control resource use. There are basically no incentives to control length of stay or ancillary testing, and depending on the volume adjustment method used, there may be an incentive to provide too many services.

Total inpatient revenues:

The system can set the total inpatient revenue the hospital is permitted to generate. This provides the most comprehensive incentives to the hospital to control resource use, since its revenue is unaffected by reduction in length of stay, reduction in ancillary use, or reduction in the number of admissions (with the caveat that a volume adjustment may affect this statement somewhat), while the costs are reduced by any of these activities. The systems used in Rochester and the Finger Lakes in upstate New York established the allowable net inpatient revenue of each hospital.

Unit of payment

The unit of payment may be specified by the regulatory body, and may be the same as the unit of control. Some systems specify that the hospital must charge on the basis of a per diem or a per case payment, while others simply specify that charges must be controlled within the limits set by the regulatory agency. The normal units of payment are: Per diem, per case, or charge per unit of service. All inclusive per diems are losing favor as units of payments for acute general hospitals just as they are losing favor as units of control. They are still popular for specialty hospitals. As will be discussed below, per case payments are becoming quite popular, but have some complexities and inequities which are not at first apparent.

Several states are setting per case payment rates using Diagnosis Related Groups (DRG). The DRGs are a method of grouping inpatient hospital cases so that every case can be assigned to one DRG, which accounts for the diagnosis of the patient, whether major surgery was performed, whether there were complicating conditions, whether the patient died, and the age of the patient. They were designed to be relatively homogeneous in the resource use of cases in a given DRG. Each DRG has a weight assigned to

it reflecting the average cost of treating a case in that DRG. The systems set a charge for each DRG using that weight. There are usually extra payments if the patient has an unusually long length of stay, and possibly if there are unusually high charges.

This type of charging system works fine for major payors like Medicare, Medicaid, Blue Cross, or insurance companies, where variations from one case to another generally average out (although there are some problems even for these payors, which I will discuss later), but is less satisfactory for self pay patients. Self pay patients who have an unusually short length of stay get irate when they are charged the standard DRG rate for the case - e.g. a charge of \$5,000 for a 2 or 3 day hospital stay appears excessive to the patient. The systems using DRG per case charges have had to set up appeal mechanisms to deal with problems of this sort, and these mechanisms are administratively complex.

An alternative is to control the average charge per case, with adjustment for the mix of cases treated using the DRGs, but to allow the hospitals to charge individuals on the basis of the services used within the overall limits set. Maryland uses such a system for all payors, and New York sets DRG rates for the major payors, but has controlled charges for self pay patients.

Adjustment method

The hospitals are subject to inflation and other unavoidable costs increases, and some method must be included to adjust the rates each year for such factors. The basic options are: 1) A formula approach, 2) an annual detailed review of the cost and/or revenue budget of the hospital, or 3) a formula approach for most of the adjustments, with detailed review for certain elements and/or certain hospitals for which the formula is inappropriate.

The Medicare system is an example of a classic formula approach. The rates for one year are derived from the rates from the previous year by a simple accounting calculation, with no discretion for adjustments. This does not allow for sufficient flexibility to deal with unique circumstances, and so in its pure form is not recommended.

The option of detailed annual review of budgets is also not to be recommended. A detailed annual review is time consuming, expensive for the hospital and the regulator, and tends to set up an unnecessarily adversarial relationship between the hospitals and the regulator. The regulator in this situation has a tendency to get involved in management and spending decisions which are rightfully the prerogative of hospital management.

The system that most states are now settling on is one where most hospitals receive an automatic formula increase for most elements of their rates, but the regulator reviews by exception. Exceptions can occur because the hospital appeals on the grounds that it is in financial jeopardy, or considers there is an inequity in the system, or because the regulator has applied some screen and the hospital has failed that screen, or because some cost elements change in a manner which cannot be adjusted by formula. Malpractice insurance costs are one cost element which have been examined individually in recent years. This places less of a burden on both the hospitals and the regulator, and generally provides better incentives.

Adjustments permitted

Inflation is usually an automatic adjustment. Malpractice insurance is also often automatically adjusted to actual. Capital costs may be automatically adjusted, or may be reviewed whenever there is a major change. There are sometimes adjustments for changes in volume of service (this will be the subject of discussion below), or for changes in the case mix of the hospital. There are sometimes adjustments for new project costs, or for increases in costs due to medical technology.

Volume adjustments

The presence of adjustments for volume change, and the magnitude of such adjustments, have a substantial impact on the incentives provided by any system, and the stability of the revenue stream of the hospital. If the system sets a total inpatient revenue and does not adjust for change in the volume of patients treated then the hospital has a clear incentive to reduce the volume treated. If the change in volume results in a pro rata change in revenue then the hospital has an equally clear incentive to increase the volume of service provided. Most of the systems currently in use are moving towards having the revenues change in step with the volumes. The Medicare and New York State systems do this, and the Maryland system uses an 85% variable cost factor for this adjustment.

This topic may be discussed at more length in the discussions on system design.

Bad debts, charity care and governmental payment shortfalls

The systems must make some adjustments for bad debts, charity care and shortfalls in governmental payments. All the state systems to be discussed build a component into the rates of the hospital for bad debts and charity care. In New York State there

is some pooling of bad debts and charity care, and this is being proposed in Massachusetts. In the other states it is not pooled, and each hospital's rates are increased to allow it to recover its own bad debts and charity care.

Maryland and New Jersey are operating under Medicare and Medicaid waivers, so that Medicare and Medicaid in both states pay based on the rates set by the state Commission. They receive some discounts (6% off charges in Maryland and a smaller discount in New Jersey), and the effect of the discounts is to increase the rates to other payors.

New York, Connecticut and Massachusetts do not have Medicare waivers. The Massachusetts and New York systems basically ignore the Medicare shortfall, and do not adjust the rates of the other payors to compensate for it. Connecticut had allowed the Medicare shortfalls to be entirely passed on to the private sector, but has now frozen the cost shift from Medicare and Medicaid to the private sector at the 1986 level. That amount of shortfall is being picked up by the private sector rates, but any additional shortfall has to be absorbed by the hospitals. Legislation being proposed in Massachusetts would involve explicit payments from the state and the private sector towards the shortfall, and would continue to require the hospitals to absorb any excess of the shortfall over these explicit payments (\$50,000,000 from the state each year, and \$20,000,000 from the private sector from 1989 on).

Descriptions of State and other Regulatory Systems

Connecticut

The regulatory system in Connecticut sets a rate for a case with a DRG weight of 1, and the hospitals have to charge on the basis of the approved DRG rates. These rates are paid by all non-Medicare payors, but there is an appeal mechanism for self pay patients who consider that they have been overcharged. The base year for the rates is the fiscal year ending in 1986, so the rate is pretty much a hospital specific rate. This rate is adjusted forwards for inflation and a medical technology factor, with capital costs and malpractice costs being included at the actually incurred level. One important feature of the system is that the Medicare and Medicaid shortfalls are capped. The amount built into the private sector rates for the Medicare and Medicaid payment shortfalls is frozen at the level of the shortfall in 1986.

Psychiatric and rehabilitation units and hospitals have per diem rates.

Maryland

Maryland has a mixed system, with some rural hospitals having a total patient revenue system, most hospitals having an approved charge per case, but with some small and specialty hospitals having rates set per unit of service. The system is partly customized to the needs of the particular hospital.

A few rural hospitals with a relatively self contained service area are given a total revenue budget based on the historical revenue. This is increased each year for inflation plus 1% for new technology and 1% for population growth and aging. Certain appeal adjustments are also made, for example, malpractice insurance costs. There is no adjustment for change in the volume of patients treated. This system provides a predicable revenue to the hospital. The hospitals charge patients on the basis of the actual services provided within the total approved revenue.

The system which applies to the majority of hospitals sets a guaranteed revenue per case for inpatient services. The hospitals continue to charge patients on the basis of the services provided, but are constrained to be within the approved revenue per case after adjustment for the case mix treated. The rates are normally increased each year using a formula which provides for inflation plus 1% for new services. Volume adjustments are made, with hospitals getting 85% of the average cost per case for each case above the budgeted level, and losing 85% of the average cost per case for each case below the budgeted level¹.

Some small rural hospitals, and all the specialty hospitals, have rates per unit of service. Again a volume adjustment is made using an 85% variable cost factor. The rates are adjusted each year to account for the impact of inflation.

This system is partly formulistic, and partly by detailed review. The majority of hospitals receive an automatic formula adjustment to account for inflation and volume change, and certain other factors. Hospitals which are defined to be high cost receive less than inflation, or no adjustment, and hospitals which are low cost and require additional revenue can apply and be subject to a detailed review.

¹ The volume adjustment is actually somewhat more complicated, with a 50% variable cost factor for retroactive adjustments, and an 85% variable cost factor for prospective adjustments, but with some hospitals having a 100% variable cost factor for some or all of their volume.

Massachusetts

The system in Massachusetts is in a state of flux, but the rate setting system being proposed is basically a continuation of the system that was in place for several years. This system sets a Maximum Allowable Cost (MAC) based on a base year. This amount is adjusted each year for inflation, technology, some passthroughs, and volume change. The major payors pay on the basis of an allocated share of the MAC for the hospital. The system includes an allowance for bad debts and charity care, but does not allow the hospitals to shift costs from Medicare to the private sector.

The legislation currently being proposed would require the state to contribute \$50,000,000 in 1988 to offset the Medicare shortfall, and would require the private sector to contribute an additional \$20,000,000 in 1989, 1990 and 1991. Apart from these explicit payments no cost shift of the shortfall to the private sector is permitted.

New Jersey

New Jersey was the first state to use the DRGs to set hospital prices. The state sets a rate for each DRG in each hospital. This rate is a blend of a hospital specific cost and a statewide average cost for the case, with the percentage of the statewide average dependent on how homogeneous the costs are within the given DRG. The more consistent the costs within the DRG the more standard cost component is built into the rate.

All payors (including Medicare and Medicaid) are charged using these DRG prices, with some payors receiving discounts. An appeal mechanism was set up for self pay patients who considered that they had been overcharged, but this appeal method has been abandoned in favor of a new formulistic system where patients with a short length of stay are charged a high per diem, patients with a long length of stay are charged a lower per diem, and patients between the two thresholds are charged the DRG price.

The rates are adjusted each year for inflation, change in payor mix, change in volume, and other appeals. This system is more formulistic than the Maryland system, but less than the Medicare system. The hospitals suffer from huge rate fluctuations during the year due to large retroactive adjustments to the rates.

The New Jersey system includes a hidden cost shift from Medicare and Medicaid to the private sector. The same DRG price is set for all payors, but Medicare, and to a lesser extent Medicaid, patients have higher resource use than the private patients, and so should actually be subject to a higher price.

New York

New York State is starting a DRG based system effective January 1, 1988. This system is a blend of DRG pricing and DRG revenue limits. For each hospital a rate is set for each DRG. The rate for 1988 is 90% hospital specific and 10% of a group standard. In subsequent years there will be a higher percentage of the standard rate. The base year for the rates is 1981, with various adjustments for the intervening period. The rates will be increased by an inflation factor each year, and capital, malpractice, and some other costs are paid at actually incurred levels. New York State has some pools to pay for charity care and bad debts, and also a pool for distressed hospitals. There is no adjustment to the rate for volume change.

The major payors all pay a DRG price. Insurance companies pay a rate which is 113% of the Blue Cross rate. Self pay patients are billed the detailed charges for the services they receive, with a cap on their billing at 120% of the rate that a insurance company would pay for the DRG. Thus if Blue Cross would pay \$2,000 for a case, then an insurance company would pay \$2,260 for the same case, and a self pay patient would pay the charges , but not more than \$2,712.

The rates do not include any recognition of the Medicare payment shortfalls.

Finger Lakes Area

The Finger Lakes Area has had a total regional revenue system for all payors for the period 1981 through 1987. The base year for the system was 1979. The total costs of the hospitals in that year were accumulated, and then adjusted forwards to 1981 to account for inflation, new projects, plus 2%. This gave the total allowable net revenue for the year. This was allocated among the hospitals, and then apportioned to the major payors using standard Medicare apportionment techniques. Each year the total revenue is increased for inflation, capital projects, and some appeals, with the increases over inflation limited to 1%. The net revenues from other payors are constrained so that the total net revenue received by each hospital shall not exceed its approved net revenue.

This system gives the most comprehensive incentives to the hospitals to operate efficiently, since the total revenue of the region is independent of the volume of service provided.

Medicare

The Medicare Prospective Payment System has now been in place for almost 5 years. It has provided Congress and Medicare with incredible flexibility to adjust payment rates to deal with

budget problems. Medicare sets rates per case, by DRG, based on a national standard cost, with adjustments for regional wage rates, whether the hospital is urban or rural², the amount of teaching the hospital does, and whether the hospital serves a disproportionate share of poor patients. Additional payments are made if the patient has a length of stay which exceeds a threshold (DRG specific), or a cost of treatment of over \$12,000. The payment rate is now entirely based on the standard (except for capital and direct medical education which are paid based on actually incurred costs). Theoretically each year the rate is adjusted upwards to account for inflation, but budgetary and other considerations have resulted in freezes or increases substantially less than inflation.

The system was phased in over several years, starting with each hospital having a rate which was 75% based on its own costs, and 25% on the average costs of the region to which it belonged, then moving to more of the standard rate, with the standard rate being based more on the national average and less on the regional average costs.

² The Medicare definition of urban is that the hospital is in a Metropolitan Statistical Area, so may not conform with one's intuitive idea of whether a hospital is actually urban or rural.

Nursing home payment systems

Introduction

There are two main payors for nursing home services, Medicaid and self pay, although insurance for nursing home care is starting to be more available. Medicaré pays for very little nursing home care. Medicaid normally pays for more than half the nursing home days in any state and in Maine the percentage is much higher. The issue of nursing home payments is thus mainly a Medicaid issue. There are two levels of nursing home which provide a substantial amount of nursing care - skilled nursing facilities and intermediate care facilities. The majority of states still pay for nursing home care either on the basis of costs, or on a flat per diem independent of the particular care requirements of the patient, but several states have moved to payment systems which do adjust the payment rate to correlate with the care requirements of the patient. New York and Maryland represent the two basic approaches, and so will be described below. One point which should be emphasized is that the payment systems described below are for Medicaid only. States have generally not set the rates charged to private pay patients for nursing home services.

New York State

New York State implemented their current nursing home payment system in 1986. This system uses a method of categorizing patients, Resource Utilization Groups (RUGS), according to their level of debility in activities of daily living, psychobehavioral problems, and whether they are comatose. The relative costs of caring for patients in the various categories were determined by a study. The payment rates to the nursing homes are based on the homes base cost, with limits, and the payment rates are adjusted using the mix of patients by RUGS categories. There are 14 RUGs categories. The payment rates vary according to the amount of care expected to be required by the mix of patients in a given facility. Previously, with a flat per diem which did not vary with the care requirements of the patients, the homes had an incentive to take the patients who required the least amount of care and were least disruptive to the operation of the facility. That faulty incentive has now been eliminated.

Maryland

The nursing home payment system in Maryland was designed to provide rewards for low cost, and to provide incentives to take heavy care patients. Administrative, routine, food, laboratory, pharmacy, social service, physical therapy and activity costs are paid based on the actual cost, subject to a ceiling, and with an incentive payment of 50% of the amount the actual cost per day is below the ceiling. Capital costs are paid as the sum of interest payments, insurance, taxes, and a rental on the owners equity. Behavior management costs are paid at a flat rate per day.

For payment of nursing services the patients are classified into light care, intermediate care, heavy care and heavy special care. The average nursing cost of treating patients in each category has been determined, and this average is paid, together with an incentive payment of 2% for moderate care, 3% for heavy care and 4% for heavy special care. Additional payments are made for specific services according to a fee schedule. The specific services include I.V., decubitus ulcer care, ostomy care, injections. Memorandum

March 10, 1988

To: Blue Ribbon Commission members

From: Graham Atkinson

-GA.

Regarding: Data paper and Medicare information

Data paper

At the last meeting I promised to prepare a short paper on the subject of data collection and use. This paper is attached. It is a succinct discussion of the subject and I will expand on any issues of particular interest in the meeting.

Medicare information

Some questions were raised regarding overall use of health care services in different areas of the state. The attached Medicare information is of interest in this regard. While it is from 1982, and so is quite old, overall patterns of high or low use tend to be stable over time, so it may be a fair indication of the relative use rates even now. 1982 is a good year to use because it is prior to the Medicare PPS, so the Medicare payments are related to the actual costs and/or charges made by providers. In later years the hospital payments were influenced by the standard rates used by Medicare in the PPS payments, and so are not so directly related to the costs or charges for providing services to Medicare beneficiaries. THE COLLECTION AND USE OF HEALTH CARE DATA

March 10, 1988

Prepared for: The Blue Ribbon Commission on Health Care Expenditures

Graham Atkinson, D.Phil. 1449 44th. Street, NW Washington, DC 20007

(202) 338 6867

March 10, 1988

The Collection and Use of Health Care Data

Introduction

The first question that must be asked before starting to design a data collection system is: What is the data to be used for? There is no point in setting up an elaborate data collection effort if the data will not be used, or if the desired goals can be served by a one time analysis using existing data bases. A theme which will therefore pervade this paper is that the amount of data to be collected is determined by the uses to which the data is to be put, and so, by the design of the regulatory system the Commission will be recommending.

There are basically three types of data that are normally collected by hospital regulatory agencies - cost and utilization data, financial data, and medical record abstract and charge data. These three types of data will be discussed separately below.

Cost and utilization data

Aggregate cost and utilization data are routinely collected by Medicare in the Medicare Cost Report, and by state rate regulatory agencies. The data collected by state agencies is usually an expansion and/or variation of the data provided on the Medicare Cost Report. It consists of data on costs, volumes of service, and revenues, split by cost center and by natural expense category.

Detailed data, in excess of the data on the Medicare Cost Report, is required if the regulatory process involves a detailed review of hospital budgets. Other regulatory approaches require less data, but usually more than is contained on the Medicare cost Report. The submission of a copy of the Medicare Cost Report by the hospital requires no more work than copying the report, so is not a burden on the hospital. Cost reporting requirements substantially in excess of the Medicare Cost Report would be a burden on small (and sometimes even on not so small) hospitals.

Financial data

Financial data is required in order to assess the financial health of the hospitals. This is gathered by getting a copy of the audited financial statement of the hospital, and usually additional information on revenue by class of payor, bad debts and charity care and contractual allowances (approved discounts and shortfalls from governmental payors). This level of detail would be required for monitoring purposes in any regulatory system we are likely to propose, since it will be essential to monitor the financial health of the hospitals, to adjust for reasonable bad debts and charity care, and probably to make some allowance for contractual allowances.

The collection of this data does not impose an unreasonable burden on the hospitals.

Medical record abstract and charge data

The data being referred to under this heading is detailed data on individual patients. Many states collect a discharge abstract on each patient discharged from each acute general hospital. Some states also collect charge information on the individual patients. This information is required for any regulatory system which makes adjustment for the mix of cases treated by the hospitals, and particularly for any Diagnosis Related Group (DRG) payment system. Total charges are required in order to make comparisons among hospitals in their relative charges for treatment of patients. Some states also collect more detailed charge information and use that to analyze specific components of hospital and/or physician performance. There are two basic approaches to collecting detailed charge information - 1. augmenting the medical record abstract and 2. collecting billing data and then merging this with the medical record abstract data.

Maryland takes the approach of augmenting the medical record abstract data. At first only total charges were reported by the hospitals, as an additional field on the medical record abstract. This was later refined by requiring that the charges be broken into eight major categories (e.g. routine services, laboratory, diagnostic radiology), and a much more detailed breakdown of charges is now being required. A very detailed breakdown is not necessary for regulatory purposes - total charges are definitely required for most regulatory systems, since fairness requires that account be taken of the mix of cases being treated by the hospitals, but a level of detail beyond the major charge categories is unnecessary.

New York State takes another approach. All hospitals in the state are using a uniform billing form (UB-82). The hospitals separately submit medical record abstract data and detailed billing data (the UB-82 data), and the state then <u>attempts</u> to merge the two data bases. New York State has taken several years to achieve a success rate of about 80% on this merging process. While this approach provides the most detailed charge data, that level of detail is generally not used, and the technical problems involved in the merging process are quite troublesome.

Both New York State and Maryland are in the process of expanding

their data collection to include ambulatory surgery data. No states to my knowledge have attempted to set up statewide outpatient information systems. This is because of the lack of good classification systems for outpatient services, and the high volumes and low per visit costs associated with outpatient services.

New York State collects information on nursing home residents (age, physical condition, level of functioning, etc.), and uses that information in its Medicaid payment system for nursing homes. Again, the need or lack of need for such a data base depends upon the type of payment system that is to be used for nursing home services. No such data is needed for a payment system which simply sets a flat per diem rate independent of the requirements of the patient, but a more refined payment system which adjusts for patient needs would require a data base.

Other data sources

There are numerous other data sources for analysis of health care costs. The Medicaid program maintains records of its payments for Medicaid services. The Medicare program has extensive data bases on payments and charges for both inpatient, outpatient, and physician services, and Blue Cross has detailed charge data on inpatient and outpatient hospital and physician services. These data bases may be able to be used for studies which do not require the total population, and inferences could be drawn on the missing populations.

Potential uses of the data

Potential uses of the data include:

Administration of a bad debt and charity care pool

Quantifying adjustments for shortfalls in governmental payments

Monitoring the financial health of the hospitals

Comparisons of hospital performance

Comparisons of physician performance

Utilization rate analysis

Length of stay analysis

Analysis of ancillary services use

Building standard payments into the regulatory system

Planning and market analysis

Establishing approved payment rates or revenue levels

Recommendation

The data collection should be based on what the data is to be used for. To be specific, the level of detail of the data collection from hospitals should be determined by the type of regulatory system which the Commission proposes. Likewise, the level of data collection from nursing homes should be determined by the type of payment system proposed. The minimum data collection from the hospitals should consist of the following:

- 1 Medicare Cost Report
- 2 Audited financial statements
- 3 Bad debt, charity care, Medicare and Medicaid shortfalls
- 4 Medical record abstract information plus total charges for the case for inpatient and ambulatory surgery cases

Additional information requirements should be added as required by the regulatory system, or as desired by the hospitals to make the data bases more valuable for management purposes.

The level of detail specified above should not place too much of a burden on any hospital, and the hospitals require the medical record abstract and charge data for internal management under the Medicare Prospective Payment System.

Ambulatory surgery data should be collected from ambulatory surgery centers. I will get copies of the data collection instrument used by New York State. This data would be used, among other things, for analysis of variation in regional use rates for specific procedures.

I would not recommend attempting to collect data from physicians for services provided in their offices. This would be strongly opposed by the physicians, the quality of the reporting would be suspect, and it would be difficult to validate the data. To my knowledge no states are attempting to collect this type of data.

The collection of the data will require a state mandate. If there is no legislation requiring the submission of the data then some providers will refuse to supply it, and there is a risk of anti-trust action. Table 8 ENROLLMENT AND REIMBURSEMENT FOR HOSPITAL AND MEDICAL INSURANCE BY STATE AND COUNTY OF RESIDENCE: PERSONS AGED 65 AND OVER--Con.

	Hospital and/or medical insurance		Hospital insurance		Supplementary medical insurance	
Area of residence	Number of persons enrolled	Amount reimbursed	Number of persons enrolled	Amount reimbursed	Number of persons enrolled	Amount reimbursed
_						
Louisiana-Con.	1.507	** ***	4 500	65 007 (00	4.405	
St. Mary	4,567	12,475,360	4,522	9,562,269	8.037	2,913,091
Tangipahoa	8,507	11,649,744	8,406	8,940,306	7,754	2,709,438
Tensas	1,288	1,033,932	1,264	772,968	1,158 (260,964
1 errebonne	0,152	0,933,377	0,009	5,156,041	5,902	1,775,336
Union	3,052	3,085,067	2,988	2,395,239	2,882	689,828
Vermilion	5,592	7,553,403	5,527	5,920,628	5,469 2864	1,632,775
Washington	5,285	7,936,097	5,246	6,293,674	5,032	1,642,423
Webster	6,465	7,877,841	6,390	6,304,040	6,127	1,573,801
West Batan Bauga	.1 491	1 576 566	1 463	1 162 141	1 385	A14 425
West Carroll	1,847	1,540,720	1,805	1,152,356	1,739	388,364
West Feliciana	716	748,358	711	574,762	636	173,596
Wine	2,097	3,186,882	2,058	2,566,121	1,985	620,761
1						
Maine	. 146,807	211,172,017	145,149	155,399,706	144,470	55,772,311
Androscoggin	13,196	18.307.515	13.074	12,972,508	13.042	5.335.007
Aroostook	10,218	16,345,385	10,107	12,260,448	10,068	4,084,937
Cumberland	29,212	44,294,932	28,926	32,365,181	28,754	11,929,751
Hancock	6,760	9,727,889	6,689	7.282.099	6.658	2,445,790
Kennebec	13,499	18,836,009	13,241	14,022,892	13,263	4,813,117
Lincoln	4,475	5.328.544	4,427	3,934,964	4,408	1,393,580
Oxford	6,730	10,216,873	6,667	7,457,732	6,655	2,759,141
Penobscot	15,410	23,079,797	15,188	17,172,945	15,199	5,906,852
Piscataguis	2,654	2,839,515	2,626	2,015,855	2,614	823,660
Sagadahoc	3,117	3,772,632	3,089	2,681,150	3,070	1,091,482
Somerset	5,799	8,473,541	5,734	6,443,627 3,823,176	5,/33	2,029,914
Washington	5,353	7.516.228	5,281	5,802,639	5,224	1,713,589
York	18,046	26,509,812	17,887	19,385,037	17,672	7,124,775
	-					
Maryland	402,509	734,505,213	394,351	524,186,563	387,824	210,318,650
Allogany	12 042	21 402 565	12 799	16 387 154	12 748	5 105 411
Anne Arundel	27,015	46,542,417	26,680	32,644,000	25,823	13,898,417
Baltimore	69,279	129,254,109	68,598	95,040,983	67,748	34,213,126
Baltimore city	102,690	217,128,498	100,817	163,590,555	99,387	53,537,943
Carton	0,001	0,200,000	2,000			
Caroline	3,515	4,168,500	3,480	3,001,631	3,448	1,166,869
Cecil	5,263	8,736,806	5.204	6.569.078	4,902	2,167,728
Charles	4,095	8,044,909	3,958	5,545,942	3,856	2,498,967
Dorchester	4,648	6,780,068	4,566	4,766,258	4,560	2,013,810
Frederick	10,380	11,195,906	10,096	7,719,557	9,983	3,476,349
Garrett	2,971	3,590,862	2,915	2,769,005	2,900	821,857
Harlord	9,558	10,738,498	9,402	7 422 205	5,473	2.962.918
Kent	2,938	4,314,760	2,926	3,161,932	2,880	1,152,828
Mantanana	60.029	90 522 456	40 767	54 477 414	809.04	35 055 042
Prince Georges	34,976	80,133,235	33.618	53,844,216	32,782	26,289,019
Queen Annes	2,752	4,113,023	2,728	3,010,571	2,677	1,102,452
St. Marys	4,033	6,629,264	3,922	4,845,156	3,/59	1,784,108
Source set	0,100	4,440,001	0,000	0,201,701	0,010	
Talbot	4,777	5,655,394	4,746	3,974,323	4,664	1,681,071
Wiscomico	7,788	9.628.221	7,727	6,484,700	7.638	3,143,521
Worcester	4,635	5,385,460	4,592	3,721,781	4,499	1,663,679
}						
Massachusetts	733,595	1,383,941,351	723,711	979,177,900	716,491	404,763,451
	0,000	10 500 150	01715	21 222 212	24 212	15 245 116
Barhstable	21 232	49,526,430 34 618 842	21.067	24 967 320	21.015	9.651.522
Bristol	63,331	92,133,516	62,324	63,532,440	61,555	28,601,076
Dukes	1,677	4,423,478	1,670	3,410,392	1,646 (1,013,085
ESSØX	85,051	100,200,745	04,215	113,073,233	03,020	40,002,482
Franklin	8,788	12,986,299	8,699	9,133,065	8,697	3,853,234
Hampden	59,359	89,493,106	58,615	59,919,238	58,220	29,573,868
Middlesex	159,436	328.667.200	157.411	234,597,735	155,710	94,069,465
Nantucket	868	1,390,637	862	1,023,072	845	367,565
Norfolk	75 682	154 567 555	74 880	109.095.288	73,863	45.472.267
Plymouth	42,419	73,972,724	41,955	51,953,596	41,225	22,019,128
Suffolk	80,575	206,408,091	78,107 84 555	147,965,928 110 580 822	77,624 84 317	58,442,163 43,856,809

「「「「「「「「「」」」」

Ş

ړ.

1982 MEDICARE

137

Table 9 ENROLLMENT AND REIMBURSEMENT FOR HOSPITAL AND MEDICAL INSURANCE BY STATE AND COUNTY OF RESIDENCE: DISABILITY BENEFICIARIES---Con.

語言に

3

	Hospital and/or medical insurance		Hospital insurance		Supplementary medical insurance	
Area of residence	Number of persons enrolled	Amount reimbursed	Number of persons enrolled	Amount reimbursed	Number of persons enrolled	Amount reimbursed
Louisiana-Con.	707		707		700	
St. Mary	1.657	\$1,228,514 3,188,461	/3/ 1.657	\$780,679	703 1.551	\$447,835 1,099,335
Tangipahoa	1,813	2,774,960	1,813	1,901,847	1,649	873,113
Tensas	99	131,833	99	83,346	97 1 331	48,487
Terrebotine	1,410	2,217,420	1,410	1,034,200	1,001	000,102
Union	374	316,519	374	159,465	333	157,054
Vermilion	477	783.698	477	619.861	426	163,837
Washington	1,277	2,212,208	1,277	1,494,644	1,197	717,564
Webster	963	1,115,379	963	801,994	901	313,385
West Baton Rouge	259	336,967	259	152,370	. 242	184,597
West Carroll	227	216,239	227	121,120	205	95,119
Winn	316	450,640	316	336,760	292	113,880
Maine	15,922	28,809,843	15,922	19,727,962	14,921	9,081,881
Androscognin	1,704	2 968 143	1.704	2 041 272	1.618	926 871
Aroostook	1,563	3,099,180	1,563	2,265,263	1,473	833,917
Cumberland	2,620	5,257,524	2,620	3,405,216	2,460	1,852,308
Hancock	413	863,688	413	626,882	381	236,806
	1.070	0.004.444	1.070	0.400.004		007.040
Kennebec	473	634,701	473	2,190,934	1,758	219,684
Lincoln	292	609,905	292	415,705	270	194,200
Oxtord	1,880	1,275,171	800 1.880	8/6,0/3 2 443 551	764	399,098
		0,010,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	21110,001	.,	1,121,000
Piscataquis	267	297,733	267	206,675	250	91,058
Somerset	826	1,481,095	826	1,077,897	780	403,198
Waldo	418	652,009	418	471,751	381	180,258
York	1,582	2,849,057	1,582	1,831,174	1,444	1,017,883
Maryland	42,577	121,978,067	42,577	76,598,924	39,115	45,379,143
Allegany	1,405	2,711,163	1,405	1.872.207	1.315	838.956
Anne Arundel	3,285	9,762,748	3,285	5,857,436	2,975	3,905,312
Baltimore	6,266	16,290,260	6,266	10,987,073	5,736	5,303,187
Calvert	361	1,085,757	361	686,984	337	398,773
Caroline	351	556,153	351	363.601	330	192.552
Carroll	952	2,342,852	952	1,541,934	872	800,918
Charles	562	1,500,430	653 562	1.083.883	738	850 979
Dorchester	482	1,327,057	482	881,285	457	445,772
Frederick	933	1,583,098	933	1,035,469	834	547,629
Garrett	379.3	519,688	379	384,826	359	134,862
Harlord	1,344	2,981,163	1,344	2,001,253	1,144 474	558 865
Kent	246	573,324	246	443,292	233	130,032
Montoomery	3.117	10.341.314	3,117	5.678.197	2.849	4.663.117
Prince Georges	4,538	18,689,687	4,538	11,040,566	4,115	7,649,121
Queen Annes	253	537,506	253	320,077 705 301	229	217,429
Somerset	346	556,343	346	326,694	319	229,649
Talbot	290	603.961	290	323 704	278	280 257
Washington	1,306	2,531,267	1,306	1,671,864	1,176	859,403
Wicomico Worcester	928 - 427 -	1,869,124	928 427	1,046,983	880 392	822,141 338 369
Massachusetts	63,572	150,897,459	63,571	100,892,025	58,065	50,005,434
Barnstable	1,710	4 022 202	1.710	2 901 810	1,569	1 120 392
Berkshire	1,702	3,616,296	1,702	2,406,620	1,530	1,209,676
Bristol Dukes	6,586 75	12,503,658	6,585 75	8,065,421	6,044 73	4,438,237
Essex	7.233	17,587,519	7,233	12,357,672	6,597	5,229,847
Franklin	695	1 540 985	AR5	948 244	003	502 741
Hampden	5,432	11,611,622	5,432	6,587,398	5,087	5,024,224
Hampshire	1,287	2,632,689	1,287	1,522,888	1,190	1,109,801
Nantucket	29	46,379	29	39,472	26	5,753,974 6,907
Nodolk	5 221	19 717 774	5 2 2 1	\$ 740 021	4.802	3 677 449
Plymouth	4.205	8,417,554	4,205	5,825,121	3,748	2,592,433
Sutfolk	8,674 7,738	24,638,499	8,674	16,556,417 12,609,903	8,019	8,082,082 6 710 408
		10102010111		12100010001	.,500 1	01. 10,400

1982 MEDICARE

179

ł .

March 30, 1988

1.12

Suggested Evaluation Criteria

1. Will the proposal ensure that health care remains affordable?

2. What impact will the proposal have on accessibility?

3. What impact will the proposal have on quality?

4. Is the proposal administratively simple?

5. Are the implementation costs worth the benefits?

6. Does the proposal provide appropriate incentives to the providers?

7. Does the proposal provide appropriate incentives to users of services?

OPTIONS FOR REGULATION OF HEALTH CARE IN MAINE

.....

March 30, 1988

Prepared for: The Blue Ribbon Commission on Health Care Expenditures

1

Graham Atkinson, D.Phil. 1449 44th. Street, NW Washington, DC 20007

(202) 338 6867

÷

March 30, 1988

DRAFT

Options for the Hospital Regulatory System

Introduction

The purpose of this paper is to present a range of options for the hospital regulatory system for Maine, and discuss the advantages and disadvantages of each of the options. Some of the options to be discussed can be pursued independently of the decisions made on other options, while others are dependent on other decisions. To the extent possible I will indicate which of the options can be discussed independently.

The options for the hospital regulatory system can be categorized into three broad categories: 1) Eliminate any controls over hospital costs and revenues, 2) make changes to the system within the existing framework to deal with problems, but without any radical change in the mode of regulation, or 3) redesign the system drastically. Based on prior discussions it was determined that 1) was not a viable alternative, so it will be skipped over quickly. In regard to 2), we need to know what problems exist with the current system, and can then proceed to make adjustments to the system to correct these problems. 3) leaves open the greatest range of possibilities so will occupy the greatest part of this paper.

Before going to a discussion of the options for the mechanics of the regulatory system, I will discuss some of the independent issues, such as what agency should administer the program, and what elements could or should be paid from pools, and how the pools could be funded and administered.

Administration of the regulatory program and pools

The pools and regulatory system could be administered by the Maine Health Care Finance Commission, with a change to its responsibilities, or they could be administered by a different body, which could be another commission, or a section within the Department of Human Services. It usually works better to have the programs administered by an independent commission, since such a body has more flexibility in hiring and contracting than a section within the normal state government. It provides a forum for representation by various interested parties and it also provides some independence from the budget concerns of the state Medicaid program, which can result in a conflict of interest if the same agency is determining the payment rates of the hospitals, and then paying the rates for services provided to Medicaid beneficiaries.

Have the MHCFC administer the system:

Advantages

1. The MHCFC is an already existing organization, with a staff trained and experienced in regulation, and with a good knowledge of the Maine hospital system.

2. The MHCFC commissioners are representative of the range of interests in the system, and are acquainted with the issues involved.

3. The MHCFC already has much or all of the data that would be needed to administer a new regulatory system.

Disadvantages

1. There is some animosity between the some of the hospitals and the MHCFC, which could carry over in spite of a change in the system.

2. The staff and commissioners may find it uncomfortable administering a different system with altered incentives and regulatory principles.

Establish a new commission

Advantages

1. The new commission would provide a clean break between the existing regulatory system and the new system.

2. The new commission could take some staff over from the MHCFC.

Disadvantages

1. The learning curve for the commission and staff would have to start over again.

2. Setting up the new commission and hiring staff would take time.

3. There is no assurance that the same relationship with the hospitals would not develop.

Use an existing state agency other than the MHCFC

Advantages

1. The organizational structure and some staff would already be in place.

Disadvantages

1. Lack of independence from the Medicaid budget concerns.

2. Lack of representation from interested parties.

This decision can be made relatively independently of the decision on the precise form of the regulatory system, or the structure of the pools. It is not necessary that the same body administer the regulatory system and the pools, although it would be more natural for this to be done.

Pools for bad debt, uncompensated care, governmental shortfalls, etc.

Some states have set up pools to spread the load of bad debts and charity care. The normal funding source for these pools is a tax on the hospitals. New York State has a distressed hospital pool to deal with hospitals in severe financial distress. This can be used to help hospitals which suffer greatly as a result of shortfalls in governmental payments. Pools for other purposes have been proposed, e.g. to pay for medical education costs, and even to spread capital costs. I would not propose pooling of medical education or capital costs because of the complications and legal issues involved.

Four issues have to be addressed: Are pools necessary, how the pools are funded, how the pools are administered, and how payments from the pools are determined.

Are pools necessary?

Bad debt and charity care pools are desirable where there are major differences in the bad debt and charity care loads of hospitals, and the resulting differential mark-ups from costs to charges place the hospitals with high bad debt and charity care loads at a disadvantage, for example, in contracting with HMOs or PPOs. In addressing the need for pooling of bad debts and charity care we must weigh the fairness resulting from pooling with the administrative complexity and the change in the incentives to provide free care which result from the pooling mechanism. In order to do this data on the bad debt and charity care loads of the Maine hospitals is attached as Appendix A. Advantages of a bad debt and charity pool

1. Spreads the load of bad debts and charity care more evenly, either across hospitals, or to a broader population base.

2. Hospitals with a high bad debt and charity load are not placed at a competitive disadvantage when contracting with HMOs and PPOs. This is probably not an issue in most parts of Maine. Disadvantages of a bad debt and charity pool

1. The pool requires some administration, with associated costs.

2. The disparities among hospitals in bad debt and charity care may not be sufficiently great to warrant the complexity.

3. Unless great care is taken the incentives to the hospitals to collect effectively are reduced.

There are substantial disparities among hospitals in the amounts of the Medicare and Medicaid payment shortfalls. These could also be pooled. This particular pool may be more necessary than the bad debt and charity care pool, because of the large amounts of money that are involved.

Funding sources:

Possible funding sources for the pools are:

- 1. Contributions from hospitals.
- 2. General tax revenues.
- 3. Special taxes.

It should be mentioned in this context that not all the costs of bad debts, charity care, and governmental shortfalls need be paid from the pools. I would suggest that "reasonable"¹ bad debts and charity care should be funded from the pool (if the decision above is that such a pool is desirable), since we would not want to provide an incentive to the hospitals to not serve the poor, particularly those in need of charity care. However, it may not be appropriate to pass all shortfalls from the Medicare program automatically onto the private sector. This topic will be discussed more fully in the context of the regulatory system.

The states which have established bad debt and charity care pools have done so by a tax on the hospitals. The effect of the pools is thus to redistribute these costs uniformly across the hospitals, and so the private payors. However, it is still a case where the paying sick are being taxed to pay for the costs associated with treatment of the non-paying sick. It would be fairer to obtain a broader base of payment for these costs. The reason for choosing the hospital tax option is that this is the option which has been most politically palatable, since it does not result in any new taxes, and is a redistribution which is difficult to argue against on social policy grounds.

A general tax, either an addition to the income tax or to the sales tax would spread the load more evenly. A payroll tax might be considered, or a tax on tobacco, alcohol or motor vehicles.

Tax the hospitals for the pools

Advantages

Disadvantages

1. These costs are currently built into the rates of the hospitals, so the source of the revenue is not changing, merely the distribution among the hospitals.

2. It may be difficult to obtain other tax revenues for this purpose.

General or special tax revenues

Advantages

Disadvantages

1. The costs are appropriately spread over a wider population base.

1. It may be difficult to get new revenues appropriated for this purpose.

1. The bad debts, charity

shortfalls would be paid by the sick and their insurers,

where is would be good social

policy to spread these costs over a wider population base.

care, and/or governmental

Administration of the pools

Some body must make the decision on how much each hospital should get from the pool. The agency establishing the hospital rates or revenues would be the most natural body to serve this function. Alternatives could be a body set up specifically for this purpose, a body set up by the hospitals if the issue is purely redistributive, or some other regulatory agency already in existence, such as the Department of Insurance or the Medicaid agency.

Administration by the hospital rate setting body (if there is one)

Advantages

1. No duplication of staff, or data collection.

2. This body would have the data and expertise to make the required decisions, and a knowledge of the hospital financing system.

Disadvantages

1. This redistribution would provide another potential source of acrimony between the regulator and the hospitals, and might distract attention from the regulatory process.

Administration by a separate government body

Advantages

Disadvantages

1. Separates the regulatory from the redistributive issues.

1. Requires a separate body, with staff and funding, so would be more expensive.

Administration by a hospital nominated body

This option is appropriate if the funding of the pools is from hospital revenues and so is purely redistributive.

Advantages	Disadvantages
1. Separates the regulatory from the redistributive issues.	1. The amount of the tax would have to be set by a governmental body, so the
2. The hospitals have the expertise required and interest in seeing this allocation done properly.	system would not be as flexible and responsive in this regard as if it was administered by a governmental agency

Determination of payments

This discussion will be split into two portions; the bad debts and charity care, and then the governmental shortfalls. The payments from the bad debt and charity care pool can be based on the actually incurred losses from bad debts and charity care, but this would eliminate the incentive for the hospitals to do an effective job of collection. The administrative agency could determine whether the actual losses are reasonable, and then pay the reasonable losses, or it could determine a reasonable allowance by some formula and distribute the funds on that basis. Options include:

Actual bad debts and charity care

Paying actual provides a poor incentive to the hospitals for collections. It rewards hospitals which have done a poor job on collections. It has the benefit, however, that the hospitals do not have any reason to discourage or limit charity cases.

A formula determined predicted amount

A payment based purely on a formula would reward hospitals which did not serve the poor, and would give an incentive to hospitals to limit charity care. It would provide a good incentive to maximize collections. The formula could take into account the income level and unemployment level of the catchment area, the number of Medicaid patients served by the hospital, the amount of outpatient care provided, and other factors.

Actual, but subject to a review

This is the most administratively burdensome method, but if the review is done properly could balance the need for an incentive to collect efficiently with the desire to provide no disincentive to serve the poor.

Lesser of actual and predicted amounts

This would penalize hospitals which had above standard bad debts and charity care, so encourage them to improve collections (or cut charity care), and would not provide any inappropriate payment to hospitals which were providing less free care than predicted.

Lesser of actual and predicted, but with appeals

This method blends administrative ease with fairness. It has the features described immediately above, but provides a mechanism whereby a hospital which has above standard free care costs can justify and receive payment for these costs.

I would recommend the last option, i.e., using a formula to determine a standard for each hospital, and then pay that standard or the actual, whichever is less, but with an appeal mechanism whereby a hospital with an actual level above its standard could justify that its actual level was justified and be paid above the standard.

The fund could also be used to provide or subsidize health

insurance for the indigent, and thereby reduce bad debts and charity care indirectly.

One complication is that you would want different incentives in regard to bad debts as compared with the incentives for charity care. To be specific, the hospitals should be provided with incentives to collect as effectively as possible, so the incentive should be to minimize bad debts. We would, however, not want to discourage hospitals from providing charity care. The problem is that it is very difficult to separate bad debts from charity care in a consistent manner given existing data.

Governmental shortfalls

Once the reasonable payment levels for the governmental payors are established, the calculation of the shortfalls is relatively straightforward. The question then arises how much of these shortfalls should be paid. The Medicare program is placing cost containment pressures on the hospitals. It does not appear appropriate for the state to relieve these pressures in their entirety. Options include:

- 1 Paying the total amount of any shortfall
- 2 Paying none of the shortfall
- 3 Paying some portion of the shortfall, either some percentage or the amount above some threshold expressed as a percentage of hospital revenue.
- 4 Paying the amount of the shortfall in some recent year, but only paying for additional shortfall in exceptional circumstances.

Hospital regulatory system

1. No revenue or cost regulation

Most states do not regulate the costs of the hospitals or the revenues from private payors. This is sometimes referred to as the "competitive approach", but for many services and in many areas of the country there is no real competition, since the hospitals are virtual monopolies. The rates of increase in hospital costs and charges in the states without regulation are generally higher than the corresponding rates of increase in the states with regulation, so it is clear that this option is not a viable alternative if the desire is to control the rate of increase in costs and charges and keep health care affordable.

In addition, the legislature expects a recommendation on a system of regulating hospitals, and so a recommendation to simply drop all regulation of revenues is not likely to meet with favor.

2. Modification of the current system

The current system was developed in a very different hospital payment environment from that which currently exists. Medicare was then paying on the basis of costs, so the shortfall in Medicare payments was relatively stable, and not a major problem. Also, Medicare was not applying any effective cost containment pressures on the hospitals. Admissions had been steadily increasing, while for the last four year they have been steadily, and quite dramatically at times, decreasing. One goal of the system was to provide reasonable stability in the revenues to the hospitals, and to that end a volume adjustment mechanism was built in using an assumed variable cost factor of 50%. With the volume changes that have occurred hospitals with large drops in volume have been protected from some of the financial consequences of these drops, and hospitals with volume increases may have been allowed an inadequate increase in revenue to compensate for the increases.

Possible problem areas within the current system include:

1) The treatment of the Medicare and Medicaid cost shift.

Options for dealing with this cost shift include:

Continuing to build it into individual hospital rates

A statewide pool, funded by hospital, general or other taxes

Some or total absorption by the hospitals

Increased payments by the state for Medicaid

2) The treatment of bad debts and charity care.

Options for dealing with bad debts and charity care include:

Continuing to build it into individual hospital rates

A statewide pool, funded by hospital, general or other taxes

Increased eligibility for Medicaid

3) The method of constraining new project costs.

The CoN development account is a major issue. It is currently being discussed by the legislature. Options include:

Retain the limit, but change the calculation of draws

Revise the limit

Eliminate any limit

Retain in its current form

Retain in its current form, but exempt certain projects

Depending on how the revenue regulatory system is designed we may not have to address this issue directly. Detailed discussion of this should therefore be delayed until some decisions have been made on the revenue regulation system.

4) Volume adjustment method not adjusting revenue sufficiently as volume changes.

The volume adjustment method currently applied uses a 50% variable cost factor. This means that if a hospital increases its volume by 1 case, it is allowed to keep 50% of the average revenue per case to compensate for its increased variable costs. Conversely, if the volume drops by 1 case the hospital is allowed to keep 50% of the revenue that would have been generated by that case to cover its fixed costs. The result is that as volumes drop the charges to the remaining cases increase to cover the fixed costs of the hospital. For substantial changes in volume the variable costs of a hospital are almost certainly higher than 50%. The relatively low variable cost factor was probably chosen deliberately in order to provide an incentive to decrease admissions. My observation is that the forces working on hospitals to cause them to want to retain volume, and the

countervailing forces causing volume declines, are much stronger than the financial incentive provided by the volume adjustment, so it is better to increase the variable cost factor to better track long term costs, except in cases where we want to preserve a hospital with declining volume.

5) Lack of a reward for good cost performance or penalty for poor cost performance.

The current system does not include any reward for good cost performance, or any penalty for poor cost performance. Thus hospitals with a low cost base are kept low cost and hospitals with a high cost base are allowed to remain relatively inefficient. The regulatory agency could develop standards for efficiency, and provide rewards or penalties based on these standards.

Options include:

A small percentage reward or penalty based on the amount the hospital is below or above the standard cost.

Establish a payment rate which is partly based on the hospital's own costs and partly on a standard cost.

The first point we should discuss is whether to approach our task from the viewpoint of adjusting the current system, or whether to go to a redesign as discussed below. If the decision is to discuss adjusting the current system, then we should consider any other points which should be added to this list.

Changes to the current system could include:

Inpatient system:

Use a per case revenue constraint instead of a total revenue constraint.

Advantages

Disadvantages

1. The revenue would track the 1 volume, so smaller year end readjustments would be required.

1. As volumes decline so do revenues.

Use a higher variable cost factor to adjust for volume changes.

Advantages

Disadvantages

1. Revenues will track volumes better.

2. Hospitals experiencing significant volume increases will receive a revenue adjustment more in keeping with their marginal cost increases. 1. Hospitals with volume declines will experience greater revenue reductions as a result.

Incorporate an element of a standard into the approved rate.

Advantages

Disadvantages

1. Hospitals with a currently low cost base would be rewarded for their low cost, and hospitals with a high cost base would be penalized for their high costs. 1. It is technically difficult to develop the standard costs.

Outpatient system:

Any areas in which there is competition could be deregulated.

Advantages

Disadvantages

1. This removes a major technically difficult area from regulation.

1. A determination would have to be made as to where sufficient competition exists and where it does not.

2. It allows more competition in the system.

Change the method of regulation to control the charge per unit of service instead of the total revenue.

Advantages

Disadvantages

1. The revenues would vary in step with changes in outpatient volume.

2. The regulation would allow for meaningful comparisons between hospitals.

1. Data would have to be collected on units of service. Initially there will be inconsistencies between hospitals in the units recorded and the way they are reported.

Do not control the actual charges, just limit the ratio of
charges to costs.

Advantages

Disadvantages

1. The revenues would vary in step with volumes.

2. Volume adjustments would be automatically accounted for.

3. The data collection requirements are simple.

1. There is no explicit assurance that the costs are reasonable.

Recommendation:

For those areas in which there is some competition, deregulate outpatient services. For those areas where the hospitals have a monopoly the charge to cost ratio should be controlled to limit excessive profits from the monopoly services. This combines simplicity with some protection from monopoly pricing.

3. Develop new system

If the changes in the environment are so major that they cannot easily be dealt with by making modifications to the existing system then the alternative is to redesign the regulatory system from scratch.

I will describe a system for controlling the revenues of hospitals which has a number of different branches. The hospitals could have a choice as to which of the branches they could enter. The first branch is a less regulatory system. The second branch is more regulatory than the first branch, but possibly less regulatory than the current system. This second branch could split into two sub-branches, for different types of hospitals. While I will describe the system as a whole, it would be possible to implement certain parts of it and not others.

The basic idea underlying this proposal is that it would provide a choice of regulatory systems. The less regulatory approach would substantially reduce the regulatory burden on the hospitals, it would allow hospitals choosing that approach to negotiate with major payors on payment rates and methods, but at the same time would provide protection for the payors who are unable to negotiate with hospitals, and it would protect against monopoly pricing by hospitals.

For hospitals which wanted the protection that regulation provides, a more regulatory system would be available. This system would provide some guarantees to the participating hospitals, but at the cost of a more stringent review of their expenditures and revenues. There could be two versions of this system, one based on a DRG rate, and the other based on a total revenue budget. The total budget system would be for isolated hospitals which are needed for access.

Since we have not determined the administrative agency which will administer the system I will refer to it as the Rate Setting Body (RSB).

Less regulated system:

This system is intended for hospitals which do not want the burden of regulation, or the protection which regulation provides. The RSB would establish an upper limit on the average amount the hospital was permitted to charge per discharge with a DRG^{1} weight of 1, or alternatively, the RSB could set a limit to

¹ Diagnosis Related Group. This is the method of grouping inpatient cases used by Medicare for payments. It assigns every inpatient case to a DRG. The DRGs have different weights the charge to cost ratio of the hospital. The purpose of this limit is to protect self pay patients and insurers who do not have the ability or market share to negotiate rates with the hospital. There would be no volume adjustments to the DRG charge limit in the year such a change occurred, but rates could be adjusted in future years if there was a significant volume change. The hospitals in this category would have a high CoN threshold. Hospitals and payors would be permitted to negotiate discounts, but the charge per case limit or charge to cost ratio limit would not be adjusted as a result of such discounts (they could be adjusted for certain approved discounts or unavoidable discounts). Each year the charge per case limit would be adjusted upwards to account for inflation, plus a fixed factor of x% (1 to 2%) to account for new technology, new projects, etc.

Hospitals in this system would participate in any pools.

For outpatient services the options are as previously discussed -1) no regulation, or 2) no limit for those services for which there is a competitive market, and a limit on charge per unit or charge to cost ratio for monopoly services.

The charge limit or charge to cost ratio limit could be adjusted to account for governmental shortfalls, and any mandated discounts.

If a hospital in this system decided that it wanted to enter the regulatory system it could do so, but subject to a stringent review by the RSB, who would have the authority to mandate major changes in management, licensure and organizational structure.

Regulatory system:

 i_{s}

This system would not permit contracting between hospitals and payors on payment rates, since there would be some solvency guarantees for needed, efficient institutions. Projects requiring additional revenues would all be subject to review. Volume adjustments would be made using some reasonable variable cost factor. The revenue limit could be on a DRG unit basis, or total inpatient revenue.

Outpatient services could be deregulated, or deregulated where there is some competition, the revenue per unit of service could be controlled, or the ratio of charges to costs could be limited, i.e. all the options previously described.

depending upon the resources needed to care for the typical patient in the DRG. Thus a case in a DRG with a weight of 2 would be expected to be twice as costly to treat as a case in a DRG with a weight of 1. The system could be simplified by having automatic adjustments to the rates/revenues from year to year. Hospitals would only be subject to a detailed review if they wanted an increase in excess of the automatic adjustment. Compliance monitoring would be required.

1

1

If a hospital had solvency problems then the RSB would have authority to require management changes, organizational changes, licensing changes, or mergers.

Options for Recommendations on Physicians

() Ф

> The Medicaid program substantially underpays physicians, and particularly primary care physicians. As a result there is an access problem for Medicaid beneficiaries. The Commission could recommend that the payment rates for primary care physicians, and possibly also for specialists, should be increased in order to improve access.

> There appear to be shortages of physicians, particularly specialists, in some areas of the state. Maine already has a loan forgiveness program for physicians who practice in underserved areas. The National Health Service Corps Program has provided some physicians to practice in underserved areas, but this program is being phased out now that there is a physician surplus in most areas of the country. This may aggravate the problem in Maine.

One approach might be to provide start-up grants to physicians willing to establish practices in the underserved areas. Also, the increase in the Medicaid payment rates discussed above might have the effect of making it more attractive for physicians to set up practices in some of the currently underserved areas.

The Medicare program is planning to change the way in which it pays physicians. The first changes are likely to occur in 1989 or 1990, and will affect anesthesiologists, pathologists and radiologists. Other changes are likely to follow. These changes should be watched to ensure that they do not adversely impact on physician availability in the state. If they are likely to have an adverse impact the state should submit testimony opposing the changes or suggesting alternatives. If the changes are made in spite of such intervention then it may be necessary to take some action to counteract their adverse consequences. At this time the changes are not sufficiently well specified to predict their likely impact.

Options for Nursing Home changes

There is a shortage of nursing homes in the state, as in most states. One result is that patients stay in hospitals awaiting placement in nursing homes. There are currently plans to build more nursing home beds, and approvals by the state are expected by the summer. There are currently 9000 nursing home beds in the state, and an additional 450 are likely to be approved. However there are a number of competing applications, and not all will be approved, so litigation can be expected. This will slow down the whole process. However there are apparently beds that are not available because of staffing shortages, and the new staffing regulations recently promulgated for nursing homes are likely to exacerbate this problem.

Some states are implementing payment systems for Medicaid nursing home patients which vary the payment according to the care requirements of the patients. Such a system would make it somewhat easier to place the more severely disabled patients in nursing homes.

The Medicaid program is currently planning for a patient related payment system for nursing homes in Maine. The Commission could recommend that the Medicaid program expedite implementing such a system.

1. "Reasonable" in this context would be determined by the body administering the pool.

PROJECTIONS FOR THE FINANCING SYSTEMS FOR THE 1990s

May 5, 1988

Prepared for: The Blue Ribbon Commission on Health Care Expenditures

.

Graham Atkinson, D.Phil. 1449 44th. Street, NW Washington, DC 20007

4

(202) 338 6867

٠

. (#

May 5, 1988

Predictions on the Financing Systems for the 1990s

Introduction

There is always a risk in attempting to predict the future, but in this paper I will attempt to do that. To be specific, I will give my best guesses as to how the health care system will be financed, and how the pie will be split, in the early 1990s. One of the major indeterminate factors is the ideological persuasion of the administration which will be in place from 1989 on. This will have a major impact on the future of health care financing, and could range from pushing hard on fostering competitive bidding for Medicare services to implementing rate regulation for all payors. In any event we can expect to see considerable change, as the private sector wakens up to the impact of the cost shifts from the governmental sector, and realizes that health care costs are continuing to increase at a much faster rate than general inflation in the economy. However, with any administration budget concerns will dominate the discussion, the only difference will be the way in which these concerns will be responded to.

I will start with a discussion of the inflation and utilization trends that are occurring, and that are likely to continue into the foreseeable future. I will then discuss the changes that can be expected in inpatient hospital payments systems, outpatient hospital payments, physician payments, and nursing home payments.

Inflation trends and costs projections

Cost Projections:

Figure 1 shows the annual percentage change in real personal health care expenditures for the period 1966 through 1986. This is the amount by which inflation in health care costs has exceeded inflation in the general economy. It can be seen that for the last decade health care costs have increased at a rate 3 to 5% faster than the inflation in the economy. There is no reason to assume any change in this phenomenon, and in fact the difference appears to be increasing again. The low figures in 1983 and 1984 are probably due to declines in inpatient hospital utilization, which now appear to be at least bottoming out if not returning to the previous trend line (See figures 2 and 3). We can thus expect the growth in health care expenditures to continue at, conservatively, 3% a year above general inflation. The Office of the HCFA Actuary has made similar assumptions, and projected the change in health care expenditures against the change in the Gross National Product (GNP), and health care

expenditures as a percentage of the GNP. These projections are displayed in figure 4 through the year 2000. It can be seen that projecting the current trends forwards, by the year 200 15% of the GNP will be devoted to health care.

Figure 5 shows the relative contribution of various components to the inflation in health care expenditures. 11% is due to population growth, 32% to economy wide inflation, 22% to medical price inflation in excess of general inflation (i.e, the prices that hospitals are paying for goods and services is increasing faster than general inflation), and 35% is due to "all other factors".

The number of surgical operations (including outpatient operations) performed in community hospitals has steadily increased (see figure 3) and can be expected to continue to increase. The number of outpatient visits to community hospitals has also been steadily increasing (see figure 3).

Sources of hospital payments:

In 1986 the government paid for 53.3% of hospital care expenditures. This declined in 1987 to 50.8%, mainly due to a decline in the percentage paid by Medicare, but is projected to increase back up to 52.5% by 1990, and to stay at that level for the next decade. Within that constant level, however, there are some interesting shifts. The Medicare share will increase, and the Medicaid share decrease. The percentage of direct payments is projected to increase over the next decade. This will result in more bad debt problems for hospitals.

Figure 6 shows the breakdown of the hospital care expenditure pie by source of payment in 1986 and the projected breakdown in 2000 (the data is from the Office of the HCFA Actuary).

Hospital Inpatient:

When the Reagan administration implemented the Prospective Payment System for Medicare (PPS) it was intended to be a temporary regulatory system which would set the scene for a more competitive system. In the longer run competition was intended to prevail and capitation payments and a voucher system were intended to take over a large share of the Medicare market. However there were substantial political problems with implementing competitive approaches. The Health Care Financing Administration has been trying for three years to start a competitive bidding demonstration for purchase of outpatient laboratory services and for durable medical equipment, two of the easier areas in which to try competitive bidding. Both areas which are well suited to such an approach. Lobbying from the industry has prompted Congress to postpone and postpone implementation of even demonstrations in these areas. The mechanics of the demonstrations have been worked out, but the demonstrations have never been able to be started. The research staff at HCFA are now working on the mechanics of competitive bidding for hospital inpatient and ambulatory surgery services but there are many technical and political problems to be overcome before implementation would be possible. Technical problems with voucher systems, particularly how to deal with adverse selection, have delayed any activity on that front.

There are still problems with the PPS - the DRGs do not adjust adequately for severity, the indirect teaching adjustment is rather arbitrary, and location is improperly accounted for. These problems result in a maldistribution of revenues among hospitals. This maldistribution was not a major problem when PPS was generous so the effect of the maldistribution was large profits¹ for some hospitals and small profits for others (or possibly a small loss), but it is now becoming very troublesome. When rural hospitals make small profits or losses, and suburban teaching hospitals make big profits, there are no major political problems; but when rural hospitals go bankrupt while some other hospitals are making profits, there are problems.

PPS problems will intensify over next few years - pressures to change will become overwhelming in the mid-1990s, if not earlier. In the next two years we will see refinements of the DRG grouping system to take better account of severity, changes in the treatment of rural hospitals, reduction to the allowance for indirect teaching costs, and continuing small adjustments for inflation. However the PPS will last for several more years because it has been too successful as a budget control mechanism to abandon it yet.

Competitive bidding approaches will probably start with high tech services - Open Heart Surgery and transplants. There are a few key centers doing these services which want to provide them to Medicare at a discount in return for increased volume. With the centers involved there will be no argument that quality will be adversely impacted by the selective contracting. This will get the proverbial foot in the door, and HCFA will try to expand from these services into less exotic inpatient services.

In the interim, PPS will continue to squeeze down and cause budget problems for hospitals. Rural hospitals will continue to be hit hard short term, but may do relatively well if the distinction between urban and rural hospitals is eliminated for payment purposes.

¹ The term profits is used loosely here. It is used in this context to mean the amount above what Medicare would have paid under cost based reimbursement.

While the demand for acute inpatient services has been dropping, this is likely to turn around within a couple of years. Demand and supply of rehabilitation, substance abuse, and psychiatric services are growing fast - these will become major cost problems in the 1990s as mandatory benefits make them more affordable to the patients. The problem will be compounded because it is difficult to control utilization as criteria for need are more subjective than with most acute services.

Health Insurance:

Pressure growing for some form of national health insurance, but a nationalized health service along the lines of Britain or Canada would not be feasible or desirable in the United States. The US already has partial national health insurance and the task of expanding it is being tackled in a piecemeal and ad hoc fashion. The elderly and disabled are covered by Medicare, and the extremely poor by Medicaid. Employees of large businesses and also some medium and small businesses are covered through employer purchased health plans. The major gaps remaining are the unemployed and employees of small businesses.

The Kennedy bill currently being considered by Congress would mandate employer purchased coverage of catastrophic health insurance for all employed persons. A bill recently past in Massachusetts would essentially mandate insurance coverage by all employers.

Basically a decision is being made that national health insurance is desired, but governments are not willing to foot the bill by increasing taxes, so are attempting to mandate a hidden tax on businesses. This would fill in part of the gap, but still leaves the unemployed to be dealt with through some other mechanism.

Long term care health insurance is being marketed, but is very expensive and unlikely to be a major force in the market in the next decade. If I am wrong in this prediction and it becomes a major force then we are likely to see a problem with cost increases in long term care.

Outpatient Hospital services:

At present regulators cannot adequately control outpatient costs or revenues, because no good output measures exist to quantify and compare performance. A considerable amount of work is being done on the development of systems for classifying outpatient services which are analogous to the DRGs for inpatient hospital services. Yale University is working on the development of Ambulatory Visit Groups. New York State is already starting demonstrations on the use of another grouping system, Products of Ambulatory Care (PAC), for outpatient payments for hospital

4

clinic services.

Medicare currently pays on the basis of costs for outpatient services, and most other payors pay charges or discounted charges. We can expect to see Medicare use a DRG type system for outpatient payments in the early 1990s. States will adopt such systems also.

As discussed above, outpatient hospital services are growing fast - there is a shift from inpatient to outpatient treatment settings, new diagnostic techniques which can be used outpatient, new surgical techniques which allow procedures to be done on an outpatient basis, and lack of controls on utilization. In a few years this outpatient cost growth will be perceived to be a major problem and attacks will be focussed on that front.

Capital:

Capital costs comprise about 7% of total costs, but capital expenditures drive operating cost expenditures. Medicare is still paying for capital on the basis of actual costs - but 12% under actual cost for 1988, then 15% under cost in 1989. There is a desire to build capital into the DRG rate, and each year new proposals for doing this are floated, but they sink because of the revenue redistribution effects they would cause. The difficulty is how to deal with the long cycle of building and fixed equipment capital costs. Hospitals which recently built are disadvantaged by a DRG capital payment, and old hospitals with low capital costs are advantaged. There is also a fear of disruption of the capital markets.

Can expect some movement to a DRG payment for capital, phased in over, say 10 years, within 2 to 3 years. This will cause some disturbance to the hospital capital markets.

Long Term Care:

In the next decade we will see more emphasis on home care. Short term this will increase expenditures but improve quality of life, as a large reservoir of demand exists, and home care does not just substitute for institutional care, but adds to it. There are also economies of scale in providing services in an institutional setting, which mean that only patients with relatively low care requirements can be cost effectively treated in a home setting.

There will be a move to case-mix payment systems for nursing homes (as in Maryland and New York).

If long-term care insurance takes off (contrary to my prediction) then we will see a cost problem on that front and pressure for regulation. Otherwise nursing home costs will remain principally a Medicaid problem and Medicaid will continue to attempt to control it by controlling expansion of the nursing home bed supply.

Staffing:

Hospitals have been a employing a reducing share of the total number of people employed in the health industry. Between 1983 and 1986 total full time equivalents in hospitals dropped by 133,376. At the same time nurse staffing has been increasing. There are many misconceptions about nurse staffing, so it will be useful to present some data here²:

Between 1977 and 1984 employed RNs increased by 55% while the population increased by 8%.

80% of RNs are actively employed.

From 1983 to 1986 hospital FTEs dropped by 133,376, but FTE nurses in hospitals increased by 37,500.

In 1972 there were 50 nurses per 100 patients, in 1986 there were 91 nurses per 100 patients.

These figures all suggest that there is not currently a real nursing shortage. The following numbers suggest that there will be a very real nursing shortage in the future:

Graduating nurses in 1985: 82,700. Estimated number of nurses graduating in 1995: 68,700.

When combined with an aging population these figures suggest that some innovative changes in staffing are going to be required. The above discussion is not meant to suggest that there is not a problem with nursing salaries. There clearly is rapid inflation in the wages being paid to nursing personnel.

Physician:

Physician payments are increasing faster than payments to hospitals. The main method used to determine physician fees, the Usual, Customary, and Reasonable fee schedule (UCR), is highly inflationary and demands to be changed. Medicare is working on developing fee schedules for payment and has discussed combining hospital and physician payments. However the combination of the payments is not likely to be politically saleable.

² The statistics presented here are from: Aiken and Mullinix, " The Nurse Shortage: Myth or Reality ", New England Journal of Medicine, September 3, 1987. Changes to the Medicare payment system for physicians will start with anesthesiologists in 1989 or 1990, then expand to pathologists and radiologists, then out from there.

There has been a substantial shift in the distribution of physician charges by place of service. In 1982 60.8% of physician charges were for services provided to hospital inpatients. By 1985 this had dropped to 49.7%. The major growth was in the outpatient hospital setting (from 4.7% to 12.1%, but with some growth in the percentage of services provided in an office setting (29.7% to 32.1%)³. This shift from the inpatient hospital setting can be expected to continue for several years.

³ Data from the Health Care Financing Review, Summer 1987.



Although much less than in the decade of the 1970's, growth of personal health expenditures (after removing the effects of price inflation) was returning to the longrun average in 1986, after a deceleration that began in 1978 and ran through 1984 (with one exception).



. .



community hospitals. In fact, the same period in which the use of inpatient days declined witnessed an upswing in the trend of outpatient visits. The number of surgical operations accelerated after 1984. Figure shows trends with seasonal, daily, and irregular variations removed. 「日田になる」というないです。





SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Division of National Cost Estimates.

Price inflation has always accounted for a substantial part of the increase in personal health care expenditures. From 1985 to 1986, 32 percent of the \$33 billion increase in that spending was attributable to economy-wide price inflation, and another 22 percent to medical care price inflation in excess of the general rate of price inflation. Population growth accounted for 11 percent of the change, and the remainder was attributed to other factors—changes in consumption per capita and in "intensity" as a result of rising income levels, aging of the population, and so on.

Hospital care expenditures Source of payment in 1986 and 2000

9

2



Date from HDFA. office of the estury



۴.,

Although tending to move up and down with prices in general (with a lag of 6 months to 2 years), medical prices have risen more rapidly than other prices. This relatively rapid price inflation has contributed to the increasing share of the gross national product that is devoted to health expenditures.

.



The second second second

Components of health care inflation 1986



Data from HCFA, office of the actuary

DISCUSSION PAPER ON POOLING

JUNE 7, 1988

Prepared for: The Blue Ribbon Commission on Health Care Expenditures

Graham Atkinson, D.Phil. 1449 44th. Street, NW Washington, DC 20007

(202) 338 6867

м м м

JUNE 7, 1988

Pools for bad debt, uncompensated care, governmental shortfalls, etc.

Some states have set up pools to spread the load of bad debts and charity care. The normal funding source for these pools is a tax on the hospitals. New York State has a distressed hospital pool to deal with hospitals in severe financial distress. This can be used to help hospitals which suffer greatly as a result of shortfalls in governmental payments. Pools for other purposes have been proposed, e.g. to pay for health insurance for the poor, for medical education costs, and even to spread capital costs. I would not propose pooling of medical education or capital costs because of the complications and legal issues involved.

Four issues have to be addressed: Are pools necessary, how the pools are funded, how the pools are administered, and how payments from the pools are determined.

Are pools necessary?

Bad debt and charity care pools are desirable where there are major differences in the bad debt and charity care loads of hospitals, and the resulting differential mark-ups from costs to charges place the hospitals with high bad debt and charity care loads at a disadvantage, for example, in contracting with HMOs or PPOs. In addressing the need for pooling of bad debts and charity care we must weigh the fairness resulting from pooling with the administrative complexity and the change in the incentives to provide free care which result from the pooling mechanism.

In Maine the differences in bad debt and charity care loads among hospitals are not sufficient to justify the establishment of a pool just for the purpose of spreading this more evenly across hospitals. Indeed, this spreading would have the effect of transferring money from less affluent rural areas to more affluent urban areas, which does not seem a very socially desirable result. Including the governmental shortfalls results in a reallocation which makes more sense from a social policy viewpoint. Advantages of a bad debt and charity pool

1. Spreads the load of bad debts, charity care, and shortfalls more evenly, either across hospitals, or to a broader population base.

2. Hospitals with a high shortfall, and bad debt and charity load are not placed at a competitive disadvantage when contracting with HMOs and PPOs. This is probably not an issue in most parts of Maine. Disadvantages of a bad debt and charity pool

1. The pool requires some administration, with associated costs.

2. The disparities among hospitals in bad debt and charity care may not be sufficiently great to warrant the complexity.

3. Unless great care is taken the incentives to the hospitals to collect effectively are reduced.

Funding sources:

Possible funding sources for the pools are:

- 1. Contributions from hospitals.
- 2. General tax revenues.
- 3. Special taxes.

It should be mentioned in this context that not all the costs of bad debts, charity care, and governmental shortfalls need be paid from the pools. I would suggest that "reasonable"¹ bad debts and charity care should be funded from the pool (if the decision above is that such a pool is desirable), since we would not want to provide an incentive to the hospitals to not serve the poor, particularly those in need of charity care. However, it may not be appropriate to pass all shortfalls from the Medicare program automatically onto the private sector.

The states which have established bad debt and charity care pools have done so by a tax on the hospitals. The effect of the pools is thus to redistribute these costs uniformly across the hospitals, and so the private payors. However, it is still a case where the paying sick are being taxed to pay for the costs associated with treatment of the non-paying sick. It would be fairer to obtain a broader base of payment for these costs. The reason for choosing the hospital tax option is that this is the option which has been most politically palatable, since it does not result in any new taxes, and is a redistribution which is difficult to argue against on social policy grounds.

A general tax, either an addition to the income tax or to the

sales tax would spread the load more evenly. A payroll tax might be considered, or a tax on tobacco, alcohol or motor vehicles.

Tax the hospitals for the pools

Advantages

Disadvantages

1. The bad debts, charity

shortfalls would be paid by

the sick and their insurers,

where is would be good social policy to spread these costs

over a wider population base.

care, and/or governmental

1. These costs are currently built into the rates of the hospitals, so the source of the revenue is not changing, merely the distribution among the hospitals.

2. It may be difficult to obtain other tax revenues for this purpose.

General or special tax revenues

Advantages

Disadvantages

1. The costs are appropriately spread over a wider population base.

1. It may be difficult to get new revenues appropriated for this purpose.

Administration of the pools

Some body must make the decision on how much each hospital should get from the pool. The agency establishing the hospital rates or revenues would be the most natural body to serve this function. Alternatives could be a body set up specifically for this purpose, a body set up by the hospitals if the issue is purely redistributive, or some other regulatory agency already in existence, such as the Department of Insurance or the Medicaid agency.

Administration by the hospital rate setting body (if there is one) $% \left({\left[{{{\left[{{{\left[{{{c_{{\rm{m}}}}} \right]}} \right]_{\rm{max}}}} \right]_{\rm{max}}} \right]_{\rm{max}}} \right)$

Advantages

1. No duplication of staff, or data collection.

2. This body would have the data and expertise to make the required decisions, and a knowledge of the hospital financing system. Disadvantages

1. This redistribution would provide another potential source of acrimony between the regulator and the hospitals, and might distract attention from the regulatory process.

Administration by a separate government body

Advantages

. .

Disadvantages

1.	Separ	rates	the	regula	atory	1.	Re	quire	es a	separate	body,
from	the	redis	trib	outive	issues.	with	S	taff	and	funding,	SO
						woul	.d	be mo	ore e	expensive.	•

Administration by a hospital nominated body

This option is appropriate if the funding of the pools is from hospital revenues and so is purely redistributive.

Advantages	Disadvantages
1. Separates the regulatory from the redistributive issues.	1. The amount of the tax would have to be set by a governmental body, so the
2. The hospitals have the expertise required and interest in seeing this allocation done properly.	system would not be as flexible and responsive in this regard as if it was administered by a governmental agency

Determination of payments

The main factor determining payments will be the amount of money in the pool. If the pool is funded from general taxes then this will be determined by the legislature on an annual basis. If the pool is funded by a tax on the hospitals then the amount should be determined by the administering agency on an annual basis, or by the legislature.

This discussion will be split into two portions; the bad debts and charity care, and then the governmental shortfalls. The payments from the bad debt and charity care pool can be based on the actually incurred losses from bad debts and charity care, but this would eliminate the incentive for the hospitals to do an effective job of collection.

You want different incentives in regard to bad debts as compared with the incentives for charity care. To be specific, the hospitals should be provided with incentives to collect as effectively as possible, so the incentive should be to minimize bad debts. We would, however, not want to discourage hospitals from providing charity care.

The MHCFC is starting to collect data for bad debts and charity care with these two categories separated. Given this it makes sense to have different methods for determining the allowance for each. Charity care provided under approved guidelines could be a pass-through cost, in order not to discourage the provision of charity care. Bad debts could be paid at some pre-approved level.

Options for bad debt payments include:

Actual bad debts

Paying actual bad debts provides a poor incentive to the hospitals for collections. It rewards hospitals which have done a poor job on collections.

A formula determined predicted amount for bad debts

A payment based purely on a formula would provide a good incentive to maximize collections. The formula could take into account the income level and unemployment level of the catchment area, the number of Medicaid patients served by the hospital, the amount of outpatient care provided, and other factors.

Actual bad debts, but subject to a review

This is the most administratively burdensome method, but if the review is done properly could balance the need for an incentive to collect efficiently with the desire adjust for unusual situations of hospitals.

Lesser of actual and predicted bad debts

This would penalize hospitals which had above standard bad debts, so encourage them to improve collections, and would not provide any inappropriate payment to hospitals which had lower bad debts than predicted.

Lesser of actual and predicted, but with appeals

This method blends administrative ease with fairness. It has the features described immediately above, but provides a mechanism whereby a hospital which has above standard bad debt costs can justify and receive payment for these costs.

I would recommend the second option, i.e., using a formula to determine a standard for each hospital, and then pay that standard.

The fund could also be used to provide or subsidize health insurance for the indigent, and thereby reduce bad debts and charity care indirectly, or to subsidize clinic services in certain areas.

Governmental shortfalls

Once the reasonable payment levels for the governmental payors are established, the calculation of the shortfalls is relatively straightforward. The question then arises how much of these shortfalls should be paid. The Medicare program is placing cost containment pressures on the hospitals. It does not appear appropriate for the state to relieve these pressures in their entirety. Options include:

- 1 Paying the total amount of any shortfall
- 2 Paying none of the shortfall
- 3 Paying some portion of the shortfall, either some percentage or the amount above some threshold expressed as a percentage of hospital revenue.
- 4 Paying the amount of the shortfall in some recent year, but only paying for additional shortfall in exceptional circumstances.
- 5 Paying the entire amount of the shortfall for those hospitals opting for the more regulatory system, and only a portion for the other hospitals.

This topic is discussed in the briefing paper for the second retreat.

DISCUSSION PAPER FOR SECOND RETREAT

JUNE 7, 1988

Prepared for: The Blue Ribbon Commission on Health Care Expenditures

.

1

Graham Atkinson, D.Phil. 1449 44th. Street, NW Washington, DC 20007

(202) 338 6867

June 6, 1988

al al c

Discussion Paper for Second Retreat

Introduction

The purpose of this paper is to provide some background, discussion, and examples to aid the discussion at the second retreat of the Blue Ribbon Commission. The topics included are those that were raised at the first retreat and required further elaboration.

Criteria for judging a proposal

The criteria discussed at the previous retreat for evaluation of any proposed system are:

1. Does it reduce the level of regulation and simplify the system.

- 2. Does the proposal provide more flexibility.
- 3. Is access maintained?

4. Does the system constrain the increases in costs and revenues?

5. Does the system provide equity among payors?

6. Does the system maintain quality?

Funding mechanisms for primary care clinics

Clinics are an important source of primary care in many areas. Currently many of the clinics are subsidized from inpatient services. We must discuss whether continuation of the crosssubsidies at approximately the current level is sufficient to ensure continuation of the clinics or whether some other mechanism is required in order to provide adequate funding for the clinics. If this is not sufficient then there are incremental steps which can be taken to improve the funding of the clinics.

A first conceptually easy step could be to ensure that the Medicaid program is making adequate payments for clinic services. If Medicaid is underpaying clinics, then an increase in the Medicaid payment rate could alleviate many of the problems.

The pool discussed below provides a mechanism for paying for bad

debts, charity care and governmental shortfalls. The first two factors are important problems in the provision of clinic services. Ensuring that the bad debts and charity care associated with clinic services were paid from the pool, together with the ideas discussed above, is likely to deal with the problems associated with funding clinic services.

If problems still exist with the funding for some small number of clinics then direct subsidies could be allowed from the pool to provide adequate funding.

Pools for bad debts, charity care and governmental shortfalls

This issue is discussed in a separate paper.

Demonstration options

ng trig trig trig

> The current statutory language allows the MHCFC to waive its regulations, and even the provisions of the statute, for demonstration payment systems. To date this flexibility has not be used. Similar language should be included in any replacement statute. The purpose of a demonstration could be to allow for the particular situation of a hospital or hospitals, to allow a group of hospitals to take regional control within overall revenue constraints, or simply to test out some innovative ideas for the regulation of the hospital(s) concerned.

The system which is being applied in the Finger Lakes Area of upstate New York could be applicable for a demonstration in Maine. A brochure summarizing that system is attached. The basic idea is that the net revenue base of the hospitals in the demonstration area would be set using the standard system, then this total net revenue would be allowed to increase at a market basket inflation factor plus 2%. Within this constraint the local hospitals would have flexibility on how to distribute and spend the money, and would cooperate on planning and payment issues. A major part of the total net revenue would be allocated directly to the hospitals, and the balance would go into a regional pool, which would be used to pay for new projects, including Certificate of Need projects, volume adjustments, and any other projects determined by the group of hospitals to be valuable for the area. Such a system would foster cooperation among the hospitals, and would require that planning for new services be done cooperatively.

Specialty hospitals

There are a number of specialty hospitals in Maine which will require separate consideration. These are psychiatric hospitals and rehabilitation hospitals. The Diagnosis Related Groups are not satisfactory for setting the rates for these hospitals, or for reviewing their efficiency level.

31

The simplest system to control the rates of the specialty hospitals would be a total revenue system with adjustments for change in volume of service. An alternative, which in practice is very similar, would be a per diem system. This is the way that the MHCFC currently sets the rates for these institutions.

If the specialty hospitals are experiencing a change in their case mix, then they may want to suggest a method of measuring that change, and a set of output measures which would accurately reflect changes in their volume of service.

Hospital regulatory systems

Outpatient regulatory systems

The current system for regulating the rates of outpatient services is unsatisfactory. The reason is that the measure of outpatient volume is very imprecise. The volume measure is equivalent admissions. The number of units of volume is the total outpatient gross revenue divided by the inpatient revenue per admission. The outpatient volume is thus affected by the relative charges for inpatient and outpatient services, and by changes in the average charge per inpatient admission.

Outpatient services fall into two major categories - 1) clinics and emergency rooms, for which the hospitals generally charge less than the full cost of the service, and 2) diagnostic testing, and ambulatory surgery, for which hospitals usually charge considerably more than cost.

The options for regulation of the outpatient services are:

- 1. No regulation of charges
- 2. Control the charge to cost ratio
- 3. Set an approved rate per unit of service
- 4. Approval of the charge master

Before describing each how each of these options would work, it will be worthwhile to discuss some of the policy implications and assumptions underlying each of the options.

1. No regulation of outpatient charges

The assumption is that either there is sufficient competition that regulation of the charges is unnecessary, which is not a valid conclusion for most of the markets for outpatient hospital services in Maine, or that the regulation is too administratively complex for the advantages that it provides.

A large portion of hospital bad debts and charity care are generated on outpatient services. If pools are established, and these pools are funded from non-hospital revenues, then the legislature will want some assurance that the costs that are being paid from the pools are reasonable. This would require some review of the reasonableness of the charge levels, either for the calculation of the draw from the pool, or for setting the rates the hospital was permitted to charge.

2. Control of the charge to cost ratio

Controlling the cost to charge ratio does nothing to control costs of outpatient services. It does prevent hospitals from extracting monopoly profits from outpatient services. Thus whether this is a satisfactory control depends upon what the regulation is intended to accomplish. If it is to prevent monopoly profits then a charge to cost ratio limit would be a satisfactory control. On the other hand, if it is to control the rate of increase in outpatient costs then the charge to cost ratio will not be satisfactory.

The mechanics of applying a charge to cost ratio limit are discussed below under the inpatient regulatory system so will not be repeated here.

3. Set an approved rate per unit of service

Setting an approved rate per unit of service would be the most regulatory approach. A unit of service would have to be defined for each outpatient department. The units would not have to be the same for all hospitals. In fact, it is unlikely that all hospitals currently collect the same measures of volume in all their departments. The Rate Setting Body (RSB) would have to specify that all hospitals supply outpatient cost and volume data using some valid volume measure. They would then use this data to establish a rate per unit of service which would be adjusted for changes in the volume of service provided, inflation, and other factors. Since different hospitals will have been collecting different units of measure it would not be possible at the outset to compare the rates of different hospitals and apply efficiency rewards and penalties. Over time the RSB could require the hospitals to collect consistent statistics, and then use these consistent statistics to set the rates, with some adjustments for relative efficiency.

This approach controls both the rate of increase in the costs of outpatient services and the mark-up from costs to charges. It is, however, more difficult to administer.

4. Approval of the charge master

An alternative approach would be to require the hospitals to report the number of tests classified as on the charge master for hospital outpatient services. The RSB could then approve the charge master for outpatient services, ensuring that the overall charges are increasing at a reasonable rate.

The disadvantage of this system is that the charge master is quite extensive, and calculating an overall rate of increase from one charge master to the next requires volume data on each of the procedures or tests listed on the charge master.
Inpatient regulatory systems

1. Total revenue system

Under a total revenue system the RSB would set the total revenue the hospital was allowed to charge for inpatient and outpatient services. This would be set based upon the actual costs of the hospital in some recent year or the MHCFC cost base. The total revenue would be allowed to increase each year by a market basket factor plus, say, 2% for intensity and population change, with an adjustment for change in bad debts, charity care, and governmental shortfalls. The approved governmental shortfalls would be paid in full.

This system is intended for hospitals with well defined catchment areas, and with a stable population. This system is similar to the system currently used by the MHCFC to regulate hospitals with under 55 beds. Most of the detailed issues discussed below are relevant for this system.

2. Charge per case (DRG) system

Under this system the RSB would set the average charge the hospital was permitted to make for a case with a DRG weight of 1. After the end of the year the RSB would compare the amount the hospital had actually charged for inpatient services with the amount that was approved. If an overcharge had been made then the amount of the overcharge would be reduced from the rates for the subsequent year.

Within this option there are a multitude of different decisions that must be made - all the issues discussed below under the heading "Components of the system design" have to be addressed.

3. Limit the charge to cost ratio

Under this approach the RSB would set a limit on the charge to cost ratio. The hospital would be required to keep its charge to cost ratio below this limit. If the limit was exceeded the limit for the subsequent year would be correspondingly reduced. There would be no explicit limit on the costs of the hospital. As the costs increased, for example for new projects or as volume increased, then the charges could go up pro rata with the costs. Hospitals' cost budgets would not be subject to any review.

This system of control ensures that hospitals cannot obtain monopoly profits from their services. The only cost containment pressures are those that result from the spill-over effect from the Medicare and Medicaid payment systems. If the Medicare and Medicaid shortfalls are automatically paid in full, either by the other payors or from a pool, then this system provides no cost containment pressures. The amount that would be paid for the governmental shortfalls would be set in advance of the payment year, and either built into the charge to cost ratio (if no pool is available to cover it) or paid from the pool.

The charge to cost ratio would be calculated using the approved bad debts and charity care of the hospital and the governmental shortfalls, if these were not paid from a pool, and any profit margin approved. The role of the regulatory agency would be to determine the charge to cost ratio and also the amount to be paid for charity care, bad debts and governmental shortfalls.

Components of the system design

Cost base

The choices for the cost base for deriving the rates or revenues are: 1) The current MHCFC cost base, or 2) the actual costs incurred in some recent year, as reported in the Medicare Cost Report, and augmented by the additional cost categories used by the MHCFC.

One of the complaints that is often heard from hospitals against the current system is that hospitals which had the misfortune to be low cost in the base year used by the MHCFC have been kept low cost, and hospitals which had relatively high costs in their base year have continued to be paid relatively generously. This is a problem with any system which picks one year and then pays the hospitals on the basis of their own costs in that year with adjustments for inflation, volume, and such factors. Thus moving to a more recent base year would not correct the problem, just change the winners and losers somewhat. Building in a standard component to the rates, as discussed below, does deal with this problem, but at the cost of considerable extra complexity in the system.

Standard component or screens

As mentioned above, if the payment rates for several years are based upon the actual costs of the hospital in a single year then hospitals which are low cost in that year will be required to stay low cost and hospitals which were inefficient in that year will be permitted to stay inefficient, or will be overly rewarded as their efficiency improves. To adjust for this problem it is possible to base the rates of the hospitals partly on hospital specific costs and partly upon a standard. An alternative, which deals with the problem of the inefficient hospitals but not the low cost hospitals, is to set upper limits on the charges. The appeal mechanism would be left to deal with problems experienced by hospitals which were low cost in their base year. The standard rate could be based on a state (or peer group) average rate, or could be calculated from the Medicare rate, with some adjustments for the inequities of the Medicare payment system. The advantage of basing it on the Medicare rate is that this is already known, while developing a state standard would turn into a complicated exercise as it became necessary to adjust for all the various factors which would be raised and which account for justifiable differences in the cost levels of the hospitals, e.g. direct and indirect medical education costs,

Capital costs

The MHCFC defines capital costs in a different way from the Medicare program. The major question is whether hospitals should be paid depreciation for buildings and fixed equipment, or the principal payments that they are required to make. Depreciation payments are higher are the start of a facility's life cycle, while principal payments are higher towards the end of the life cycle. Many economic arguments can be provided against the use of depreciation for payment purposes, and changing now to using depreciation in place of principal would increase the payments to the Maine hospitals, so would result in an increase in charges.

The two major options for capital payments are: 1) the formula used by the MHCFC, or 2) the Medicare definition of capital costs.

This issue causes a great deal of controversy because use of a basis of payment other than depreciation results in paper losses in the financial statements of hospitals. Given this controversy it is probably better to just use the Medicare definition of capital costs. However, hospitals should be required to either use their accumulated depreciation to pay for new projects, or alternatively, to offset interest income against income expense.

Adjustments for new projects

When new Certificate of Need projects are implemented some adjustments may be necessary to the rates of the hospital implementing the project. The use of the word "may" in this context is quite deliberate. If a project can be expected to result in savings in operating costs then these savings may offset the cost of the project and so no rate adjustment is in order. If the payment system involves a per case payment rate, and the project results in additional volume of cases, or additional outpatient volume, then all or part of the project cost will be recovered through the increased volume. If the payment constraint chosen is the charge to cost ratio system then there is no problem in building in the costs of new projects. The costs will change when the project is implemented, and so the allowed charges will automatically change.

Under a per case payment system based on the hospital's own historical cost, with or without a standard element, some adjustments will be required for major new projects. The net increased cost not covered by volume adjustments would have to be calculated and used to adjust the approved payment rate. However, many projects could be covered within an allowance for new technology and changes in medical practice. The cost per discharge could be allowed to increase at 1% over the market basket factor, and this 1% allowance would be intended to cover changes in technology, new projects, and changes in medical practice. Only major projects which could not be covered within this allowance would result in a rate change. The advantage of this approach is that the majority of CoN and other projects would not require explicit rate adjustments, and the problem of quantifying cost offsets and net incremental costs is sidestepped. This simplifies the system, and provides an incentive to the hospitals to plan their projects cost effectively.

Differentials and discounts

The current system allows for some approved discounts. Blue Cross currently receives such a discount, and the rates of other payors are increased to adjust for the discount provided to Blue Cross. The discount to Blue Cross was quantified through a study which demonstrated the magnitude of the discount that was economically justified. Such discounts could continue.

The major question which must be addressed is whether the hospitals and payors should be permitted to negotiate discounts which are not economically justified, and not reviewed by the RSB. Certainly hospitals should not be provided solvency guarantees if they provide unapproved discounts, and they should not be permitted to increase their charges to other payors to recoup the shortfalls resulting from voluntarily negotiated discounts which are not economically justified or approved.

Hospitals in the more regulatory system should not be permitted to provide unapproved discounts, since they will be provided with some solvency assurances if they are needed and are efficiently and effectively operated. Hospitals in the less regulatory system should be permitted to negotiate unapproved discounts, provided that the charges to other payors do not increase as a result.

Inflation and other adjustments

Various agencies produce estimates of the impact of inflation on the prices of goods and services purchased by hospitals. Medicare does this for the PPS (although the PPS rate increases end up being driven by budget considerations rather than the

(

market basket inflation), the American Hospital Association publishes a market basket, and the various state rate setting agencies have similar indices. These indices are generally quite similar in their construction and magnitude. The rate of inflation in the prices that hospitals pay for goods and services is generally a little higher than the inflation experienced in the Consumer Price Index. This year it is likely to be considerably higher because of the higher wage and salary increases being provided to nurses and other health professionals. Any of the standard indices is satisfactory for the purpose of adjusting for the reasonable impact of inflation on hospital costs.

Medical technology and changes in medical practice has consistently resulted in hospital inpatient cost per discharge increasing at a substantially higher rate than the market basket inflation factors discussed above. Historically the rate of increase in hospital cost per discharge has increased at 3 to 4% per year faster than the market basket¹. How much of an allowance should be provided within a per case payment system to account for changes in medical technology, new projects, change in medical practice, new drugs, etc.? The Prospective Payment Advisory Commission has recommended that the increased costs due to these factors should be offset by improvements in productivity. Maryland provides an allowance of 1% per year for these factors, but requires hospitals to absorb the costs of most new projects within this allowance. New York State has provided some enhancements to the cost bases of the hospitals, which probably amount to about 1% for 1988, but thereafter is apparently intending to permit no specific allowance for these factors. New York State will adjust the rates for the "incremental non-volume related operating costs" of CoN projects.

Options:

- 1. Provide an allowance of 1%.
- 2. Provide a higher allowance.
- 3. Provide no allowance and deal with this issue on an exception basis through appeals.

Volume adjustments

Within the total revenue system there would be no automatic volume adjustments. There could be some volume adjustments, say using a 50% variable cost factor, for volume changes exceeding

¹ For specific figures for recent years see the projections paper recently distributed.

some corridor, say of 5%.

at is a second

Within the per case DRG payment system there are a multitude of options. The major options are:

1 Make no volume adjustments to the operating cost rate

This simplifies the system, and reduces the magnitude of adjustments, but provides an incentive to increase volume and a penalty for decreasing volume.

2 Volume adjustments at some variable cost factor

This ensures that the rates will be decreased as volume increases, and that the rates of hospitals with declining volumes will be increased to compensate for the volume decline. For any substantial changes in volume a variable cost factor of 70 to 85% would be appropriate. To reduce the complexities of the system a corridor can be established, and no volume adjustments made while the volume stays within that corridor. A corridor of 2% would be suitable for this purpose.

If the volume changes during a year should the approved rate for that year be changed retroactively, or should the changes only be made prospectively? Should the prospective changes be for the past difference between budgeted and actual volume, or only for the new budgeted volume?

Appeal mechanism

The systems being discussed are largely formula driven, but no formula driven system can anticipate every eventuality. Some mechanism must be built into the system so that a hospital can appeal for changes which are unexpected and not automatically adjusted for. At the same time, the appeals must be limited or they will defeat the purpose of the regulatory system to control costs and charges.

The appeal mechanism should be limited to major items, say items having an impact on costs or revenues of at least 2% of the total costs of the hospital, and which are not taken account of in the formula used to develop the rates. The RSB should have the option of recommending that charges be cut if a hospital has filed an appeal and the RSB determines that the hospital's charges are too high.

Governmental shortfalls

The Medicare program is paying most hospitals much less than their charges and some less than their costs. Similarly the Medicaid program is underpaying hospitals. The current system ensures that the charges to the other payors can be increased to fully cover any shortfalls between the payments from Medicare and Medicaid and the financial requirements that the MHCFC allocates to Medicare and Medicaid. Two decisions have to be made in regard to the governmental shortfalls in the new system: 1) How much of the shortfalls should the hospitals be paid for, either by payments from pools or through increased charges to other payors, and 2) how is that payment to be made.

The Medicare program is making a conscious decision that certain increases in costs will not be funded by the Medicare program. It does not seem sensible for a relatively poor state like Maine to then make the decision that they will subsidize the costs that Medicare is unwilling to pay. The problem is in deciding where the rational policy decisions end and where budget driven cuts start, and the extent to which the State of Maine should pay for the costs which Medicare is unwilling to pay.

For the hospitals which opt for the more regulatory system, and which are nerved for access to care, the costs and charges of the hospital will be subject to scrutiny by the RSB, which will be determining that the costs are reasonable. The governmental shortfalls relative to these reasonable costs should be paid in full.

For the other hospitals a decision must be made how much of the shortfall will be paid from other sources. Medicare has decided that it will not make any additional payment for TPA for heart attack victims (at \$2,000 per treatment), and that streptokinase (at \$200 per treatment) is as effective in most instances. If a physician uses TPA instead of streptokinase because of some personal preference the other residents of Maine should not be required to make up the difference. Likewise, if Medicare does not pay for a service because it was not medically appropriate, should the other residents of Maine have to pay for the service? The ProPAC recommendations are that the increased cost of new technology is offset by productivity improvements that should be expected from hospitals. Given this should the hospitals be recompensed for increased costs of new technology that Medicare has made a conscious decision it should not pay for? Medicare is also making additional reductions to its inflation increases to meet budgetary goals, and without any other justification. Is it reasonable to expect the hospitals to absorb these cuts.

These decisions go beyond just technical considerations. If the decision is made that the governmental shortfalls should be paid from a pool funded from general taxes, then that places the decision on the amount of funding to provide for governmental shortfall in an appropriate forum, namely the legislature. If the decision is that the shortfalls are to be paid through hospital revenues, as at present, then some other mechanism must be developed for specifying the amount of the shortfall to be



included in the hospital charges. This could be done by the legislature on an annual basis, or it could be done by the RSB with some guidelines established in statute.

Connecticut has made the decision to freeze the shortfalls at the 1986 level. New York State allows hospitals to mark-up their charges to private insurers 13% over the costs and makes no other provision. Options available include:

- 1 Include the entire amount of the shortfall
- 2 Freeze the shortfall at the 1987 level
- 3 Decide each year how much of the shortfall to fund
- 4 Include half the additional shortfall over 1987

Cross-subsidization

Emergency rooms and clinics are generally priced at substantially below cost. The charges for other services are increased to make up for the shortfall. There is some question as to whether the profits made on other outpatient services are sufficient to cover the shortfall on emergency rooms and clinics, or whether there is also some subsidy from inpatient care.

One option would be to provide direct subsidies from a pool to cover shortfalls in emergency room and clinic revenues, but this could remove any incentive to maximize collections for these services.

The hospitals in the more regulated system should continue to have cross subsidization permitted, as at present. For those in the less regulated setting a policy decision must be made. If the rates charged for outpatient services are deregulated, then it is difficult to justify charging the inpatients for services provided in an unregulated setting. It would be possible to include some set level of subsidy as long as the services were continued at the existing level.

Options for the level of cross-subsidy of emergency rooms and clinics (less regulated setting):

- 1 Eliminate all subsidies
- 2 Specify a set level to be provided
- 3 Have the level of subsidy set each year

Profit margins

Currently the MHCFC does not include any specific component for a profit margin. This is consistent with the rate setting mechanisms used in the other rate setting states in the north east. Hospitals do however require some profit margin in order to grow. The rationale that has been used for not including a profit margin is that the cost bases on which the rates have been set include some percentage of inefficiency, and so the hospitals should be able to generate profits by improving their efficiency.

A point which should be made clear is that this discussion of profit margins is not intended to limit the profits which could be generated by a hospital as a result of improvements in the efficiency of its operation, or response to incentives in the payment system. The question is whether an explicit element for profit should be built into the cost base. Such an additional element would result in increased payments by the payors since it is not included in the current cost base.

A mechanism whereby a profit margin could be included without increasing the charges to the payors would be to include a profit margin, but to limit the maximum charge per case so that the most expensive hospitals had to reduce their charges, with the profit margin and charge per case limit being set so that the net effect on revenues was zero. The profit margin could be increased and corresponding maximum charge decreased over time. Examples of the impact of various changes on revenue under the charge to cost ratio control system.

The purpose of the following examples is to show how the charge to cost ratio system allows the costs and charges to vary, and how the bottom line of the hospital is affected by various changes in costs and volume. The cost containment incentives that are provided by this system result from the fact that the Medicare payments vary in direct proportion to the volume of service and do not vary with the costs. If all Medicare shortfalls are automatically past on to the private sector, or are paid from a pool, then this system would provide no cost containment pressure. The approved amount of the Medicare shortfall would have to be established prior to the start of the year, and not changed as costs changed.

The purpose of the examples is to show how the revenues and bottom line vary as various changes occur in costs and volumes. For simplicity bad debts and charity care have been ignored. This will not change the general conclusions. The PROJECTED column of each example shows what the hospital was expecting at the start of the year, and the ACTUAL column shows what actually happened during the year. For all the examples the PROJECTED data is the same, and assumes that the hospital was expecting 50% of its utilization to be Medicare patients, and 50% charge paying patients. The approved charge to cost ratio for all the examples is 1.25.

General discussion:

The RSB would set the charge to cost ratio. On the assumption that there is no pool for bad debts, charity care, and governmental shortfalls, the RSB would calculate the mark-up from costs to charges taking into account the reasonable bad debts, charity care, governmental shortfalls, and mark-up for profit margin, if any. The RSB would not concern itself with the cost level of the hospitals, except in so far as that affected the amount of governmental shortfall to be approved. If a hospital had a project which increased costs, this would automatically result in an increase in the allowed charges. As volume increased or decreased, costs would change and the approved charges would track the costs automatically.

Example 1:

This example shows what happens when the costs increase with no increase in volume.

	PROJECTED	ACTUAL
Cost	\$10,000,000	11,000,000
Approved charges	\$12,500,000	13,750,000
Medicare payments	\$5,000,000	5,000,000
Private charges	\$6,250,000	6,875,000
MC payments + private	\$11,250,000	11,875,000
Balance over costs	\$1,250,000	875,000

When the costs increase, the approved charges automatically increase, since they are 1.25 times the costs. The Medicare payments did not change because the number of Medicare discharges was as projected. While the total charges increased, and the charges to private payors increased, the bottom line of the hospital dropped as a result of this change.

The increase in costs could be due to any cause - increased salaries, new projects, decreased efficiency.

Example 2:

This example shows what happens when the costs increase with a pro-rata increase in Medicare volume.

	PROJECTED	ACTUAL
Cost	\$10,000,000	11,000,000
Approved charges	\$12,500,000	13,750,000
Medicare payments	\$5,000,000	5,500,000
Private charges	\$6,250,000	6,875,000
MC payments + private	\$11,250,000	12,375,000
Balance over costs	\$1,250,000	1,375,000

When the costs increase, the approved charges automatically increase, since they are 1.25 times the costs. The Medicare payments increased because the number of Medicare discharges was above the projected number. The total charges increased, and the charges to private payors increased, and the bottom line of the hospital increased slightly as a result of this change.

Example 3:

This example shows what happens when the costs decrease with no decrease in volume.

	PROJECTED	ACTUAL
Cost	\$10,000,000	9,000,000
Approved charges	\$12,500,000	11,250,000
Medicare payments	\$5,000,000	5,000,000
Private charges	\$6,250,000	5,625,000
MC payments + private	\$11,250,000	10,675,000
Balance over costs	\$1,250,000	1,625,000

When the costs decrease, the approved charges automatically decrease, since they are 1.25 times the costs. The Medicare payments did not change because the number of Medicare discharges was as projected. While the total charges decreased, and the charges to private payors decreased, the bottom line of the hospital increased as a result of this change, rewarding the hospital for its improved performance.

Example 4:

This example shows what happens when the costs decrease with a pro-rata decrease in Medicare volume.

	PROJECTED	ACTUAL
Cost	\$10,000,000	9,000,000
Approved charges	\$12,500,000	11,250,000
Medicare payments	\$5,000,000	4,500,000
Private charges	\$6,250,000	5,625,000
MC payments + private	\$11,250,000	10,125,000
Balance over costs	\$1,250,000	1,125,000

When the costs decrease, the approved charges automatically decrease, since they are 1.25 times the costs. The Medicare payments decreased because the number of Medicare discharges was below projected. The total charges decreased, and the charges to private payors decreased, and the bottom line of the hospital decreased as a result of this decline in volume.

Example 5:

This example shows what happens when the costs increase with a increase in the number of non-Medicare cases, and with Medicare cases staying constant.

	PROJECTED	ACTUAL
Cost	\$10,000,000	11,000,000
Approved charges	\$12,500,000	13,750,000
Medicare payments	\$5,000,000	5,000,000
Private charges	\$6,250,000	7,500,000
MC payments + private	\$11,250,000	12,500,000
Balance over costs	\$1,250,000	1,500,000

When the costs increase, the approved charges automatically increase, since they are 1.25 times the costs. The Medicare payments did not change because the number of Medicare discharges was as projected. Total charges increased, and the charges to private payors increased the same amount. The bottom line of the hospital increased as a result of this change, rewarding the hospital for its increased non-Medicare volume.

Example 6:

This example shows what happens when the costs increase with no increase in non-Medicare volume, and an increase in Medicare volume.

	PROJECTED	ACTUAL
Cost	\$10,000,000	11,000,000
Approved charges	\$12,500,000	13,750,000
Medicare payments	\$5,000,000	6,000,000
Private charges	\$6,250,000	6,250,000
MC payments + private	\$11,250,000	12,250,000
Balance over costs	\$1,250,000	1,250,000

When the costs increase, the approved charges automatically increase, since they are 1.25 times the costs. The Medicare payments increased since the number of Medicare discharges was above projected. The total charges increased, but the charges to private payors stayed the same because their volume stayed the same, and the bottom line of the hospital stayed the same.

Evaluation of the proposals relative to the criteria.

I will discuss in this section how well each of the proposals meets the evaluation criteria which were agreed to at the last retreat, and which are listed at the beginning of this paper. I will start with the three proposals for outpatient services, and then go on to the inpatient proposals.

Outpatient - deregulate rates

1. Does it reduce the level of regulation and simplify the system?

This proposal certainly simplifies the outpatient regulatory system. It could not be any simpler.

2. Does the proposal provide more flexibility.

This proposal provides the maximum flexibility to the hospitals.

3. Is access maintained?

The maintenance of access depends upon some solvency assurances, and some cross-subsidization of clinics and emergency rooms from other services. Since the rates for the outpatient services would be deregulated it would be impossible to assure that the costs or charges were reasonable, and subsidies from other sources would have to be limited in some way. Access may not be maintained.

4. Does the system constrain the increases in costs and revenues?

No.

5. Does the system provide equity among payors?

Only if there is an assurance that all parties pay the same, or that any discounts provided are cost justified.

6. Does the system maintain quality?

There should be no effect on quality.

Outpatient - constrain charge to cost ratio

1. Does it reduce the level of regulation and simplify the system.

Yes. This does simplify the system.

2. Does the proposal provide more flexibility.

Yes. There would be no review of the outpatient costs, only the charge to cost ratio.

3. Is access maintained?

The maintenance of access depends upon some solvency assurances, and some cross-subsidization of clinics and emergency rooms from other services. Since the costs of the outpatient services would not be reviewed it would be impossible to assure that the costs were reasonable, and subsidies from other sources would have to be limited in some way. Access may not be maintained.

4. Does the system constrain the increases in costs and revenues?

The system would provide no constraint on costs, but would limit the profits the hospital could make on outpatient services.

5. Does the system provide equity among payors?

Only if there is some constraint on discounting, or a provision that discounts cannot result in higher charges to other patients.

6. Does the system maintain quality?

No effect on quality.

Outpatient - Set rate per unit of service

1. Does it reduce the level of regulation and simplify the system.

This system is more regulatory and more complicated than the current system.

2. Does the proposal provide more flexibility.

The pricing flexibility of the hospitals would be more limited, but revenues would track volumes much better than at present.

3. Is access maintained?

This depends upon the decisions made on cross-subsidization, and the availability of funds from other sources (e.g., pools) to pay for services which are not self-sufficient.

4. Does the system constrain the increases in costs and revenues?

This is the system which has the best potential to constrain the increases in costs and revenues.

5. Does the system provide equity among payors?

Yes. Provided the appropriate constraints on discounting are included.

6. Does the system maintain quality?

This has no effect on quality.

Inpatient - Total revenue system

1. Does it reduce the level of regulation and simplify the system.

This is similar to the current system for small hospitals. The automatic formula adjustments may make the system simpler.

2. Does the proposal provide more flexibility.

It will provide a similar degree of flexibility as the current system for small hospitals.

3. Is access maintained?

Yes. The hospitals opting for this system would have a predictable revenue stream, and so should be in a good position to maintain access.

4. Does the system constrain the increases in costs and revenues?

Yes. Provided there are not too many exceptions granted.

5. Does the system provide equity among payors?

Yes. Provided the appropriate constraints on discounting are included.

6. Does the system maintain quality?

Yes. The hospitals would have a predictable revenue stream, which should aid in planning, and allow the management to devote more time to quality considerations.

Inpatient - Constrain charge to cost ratio

1. Does it reduce the level of regulation and simplify the system.

Yes. This system would eliminate review of the costs of the

hospitals, which is one of the main complications of the current system.

2. Does the proposal provide more flexibility.

Yes. Hospitals would be free to engage in new projects, subject to planning review. Gross revenues would increase in direct proportion to cost increases.

3. Is access maintained?

The hospitals may have a slight incentive to underserve the governmental payors, or to provide less chari'y care, but this would depend upon how the charge to cost ratio was calculated. The desire to maintain volume, and the fact that the Medicare payments exceed marginal costs, should counteract this effect.

4. Does the system constrain the increases in costs and revenues?

The only constraint on cost increases would be some spill-over cost containment pressures from the Medicare payment system. The level of constraint on the charges depends upon how the charge to cost ratio is calculated.

5. Does the system provide equity among payors?

This depends upon what constraints are placed upon discounting. It will provide equity as long as the charges to other payors cannot be increased to compensate for non-approved discounts given to a payor.

6. Does the system maintain quality?

There should be little effect on quality.

Inpatient - Set charge per DRG unit

1. Does it reduce the level of regulation and simplify the system.

This is in many ways like the current system. If standards are introduced this will complicate the system considerably. If an automatic formula adjustment is provided, with limited appeals, then the system could be simplified.

2. Does the proposal provide more flexibility.

With an increased variable cost factor for volume changes the system would provide the hospitals with more flexibility to increase volume without financial hardship. The formula allowance for new technology, and reduced CoN requirements, would provide more flexibility.

3. Is access maintained?

As volume declined revenues would decline and this could result in solvency problems. It is assumed that this system would not be applied to hospitals with declining volumes which were

4. Does the system constrain the increases in costs and revenues?

Yes. This would be an effective cost and revenue control mechanism - provided that appeals are limited.

5. Does the system provide equity among payors?

Yes. Provided that non-approved discounts to one payor do not result in increased charges to other payors.

6. Does the system maintain quality?

The system should have no effect on quality.

Example on using the Medicare rate to construct a standard component.

One of the problems in setting a DRG rate is that it either:

1) is based solely on the historical cost of the individual hospital, in which case the criticism will be made that low cost hospitals are being penalized for their historical low cost, and high cost hospitals are being rewarded for their high cost with higher rates.

or,

2) the rate includes some component of a standard cost. This removes the complaint discussed above, but substantially complicates the system. The idea here is that the rate for a hospital would be a blend of its own historical cost rate and a rate calculated from some average.

Most of the state regulatory systems which involve setting a DRG price or average charge include some component of a standard, or set some upper limits. One approach would be to base the standard component or upper limit on the basis of an average of hospitals in Maine. The approach to be discussed here is to base the standard on the Medicare rate. This has the advantage of simplicity, since the Medicare rate is already calculated and published for each hospital, and takes account of most of the factors which have to be adjusted for in order to make fair comparisons among hospitals.

The standard component would be calculated are follows:

1.	Medicare payment per DRG unit	\$3,300
2.	Non-Medicare to Medicare cost per DRG unit	0.60
3.	Non-Medicare cost per DRG unit	\$1,980
4.	Mark-up, for charity, bad debts, approved differentials, approved shortfalls, additions	1.25
5.	Standard rate per DRG unit	\$2,475

The approved rate for the hospital per DRG unit would be a blend of the rate developed from the historical cost base, and this derived rate, say 90% historical rate and 10% derived rate for the first year. Memorandum

July 14, 1988

To: Blue Ribbon Commissioners

From: Graham Atkinson If a.

Regarding: Additional information for the August 1 meeting.

The purpose of this memo is to provide information on two topics in preparation for the Commission meeting on August 1. One topic is the capital payment system, where I may not have made clear the exact scope of my recommendation, and the other is the adjustments that should be included in addition to the market basket factor in the per case payment system.

Capital payments

1

My recommendation that capital payments be based on depreciation and interest rather than on a capital facilities allowance was intended to apply only to the payments for buildings and fixed equipment, and was not intended to apply to movable equipment. For movable equipment I would recommend continuation of paying on the basis of replacement cost depreciation. This provides appropriate incentives in regard to borrowing or paying cash for equipment.

Flexibility should be included to allow for other payment methods, at least for movable equipment, as Medicare changes its payment methods for capital. It makes sense to treat movable equipment costs in the same way as operating costs, because this then allows for trade-offs between equipment and operating costs. This is more feasible for movable equipment because of the relatively short life cycle for most such equipment compared with buildings and fixed equipment.

Adjustments for technology, new projects, etcetera.

There are a variety of ways in which the rate adjustments from one year to the next can be determined. In the draft report I recommended providing the market basket factor plus 1%, and then only making additional adjustments for major cost items. I would like to expand upon this topic; first discussing the issue conceptually, and then the magnitude and uncertainty of the numbers involved. I will also describe how the issue is handled in two states which have adopted opposite extremes on the conceptual issue.

1

1) Provide the market basket adjustment and then require an appeal for any other additions.

Under this option a hospital's rates would be increased by the market basket adjustment each year, unless the hospital appealed for an additional increase. Additional increases would be allowed for the non-volume related incremental inpatient costs of new projects. Since revenues will automatically track volumes, the volume related component of any project will be automatically included in the revenues of the hospital. The following simplified example (ignoring the mark-up) illustrates this:

Example:

Suppose a hospital has a rate of \$2,000 per case. If it engages in a new project which increases costs by \$100,000 and cases by 50, then the revenue will increase by \$100,000 simply because of the increase in cases, so the increase in revenue will cover the increase in costs. If a separate adjustment were to be made to the rates for the \$100,000 in cost then the hospital would be overpaid.

If a project is partly for outpatient services, then part of the additional costs will be recovered by the additional outpatient volume. Thus only the inpatient portion of the project costs should be adjusted for in the per case rate.

If the project involves services which substitute for other services, then the incremental cost per case will not be the full cost of the project. For example, a CT scanner may substitute for some other radiological procedures, so the incremental cost of a CT scanner may not be the full budgeted cost. The quantification of offsetting costs like this is extremely difficult.

New York State basically handles the issue in this way. In the New York State per case payment system rates are to be increased each year by the market basket factor, and adjustments will be made for the incremental non-volume related inpatient operating costs of CoN projects. Some other adjustments may be made. Projects which do not require a CoN will not be adjusted for.

2) Provide an automatic allowance for new technology and projects, and only adjust for major projects.

An allowance of x% per year would be provided for new technology and projects, and no further adjustments would be made for small or medium sized projects. The non-volume related incremental inpatient costs of major projects could be adjusted for, but even some of these might be offset by the allowance provided. Some multi-hospital problems could be adjusted for by special purpose adjustments.

The advantage of this option is that it eliminates the argument about the reasonable increment in rates for most projects. Each hospital knows how much revenue it has available and has the flexibility to spend that as it thinks appropriate.

Maryland handles the increments for new technology and projects in basically this way. Almost all projects are required to be absorbed within a 1% allowance (not just the non-volume related costs). For a large project, say having an impact on revenues of 5%, there might be an increase in revenues of 2%, and the hospital would be required to absorb the other 3% by using its 1% allowance for each of three years.

Separate adjustments are made for specific technological changes judged to be sufficiently significant to warrant such adjustment, e.g., the new hemophiliac factor was the subject of such an adjustment.

3) Intermediate positions

There are some intermediate positions between the two options discussed above. A smaller automatic adjustment could be provided, and the threshold for making specific adjustments could be reduced.

It should be noted that the adjustment for new projects should only be made to the hospital specific portion of the rate and not to the standard component. In other words, if the rate per case for the hospital is 50% based on its own cost base and 50% based on a standard, then it is only the hospital specific portion that would be adjusted, so only half the incremental non-volume related inpatient operating cost of the project would be built into the rates of the hospital. This is analogous to the way in which Medicare handles the operating costs of new projects, namely, it does nothing to the operating cost rate to adjust for new projects because the rate is now entirely based on a standard cost.

Medicare establishes an operating cost rate which it pays independently of the actual operating costs of the hospital. The theory is that this is the reasonable price to pay for the case, and it is up to the hospital to decide how to provide the services required.

It is worth mentioning at this point that ProPAC recommends that the incremental costs of new projects and new technology should be offset by improvements in productivity, and also recommends reductions in the rate to account for increases in the apparent intensity of cases treated due to improved coding by hospitals and not to real increases in patient intensity. The options discussed above, being considerably more generous than the allowance being provided by Medicare (which is invariably less than the ProPAC recommendation), will guarantee that the Medicare cost shift will increase over time.

Quantification of the adjustment

If the decision is to make no automatic adjustment, and to adjust for new project costs and costs of new technologies as and when projects occur or new technologies are implemented, then this issue becomes moot.

The quantification of the adjustment, if the decision is other than that just described, is one of the most important technical issues in the system design. An informed decision would require knowledge of the increase in case mix complexity in Maine hospitals, estimation of the likely increase in cost per case due to new projects and technology that would occur in the absence of controls, and a judgement as to what is affordable.

Nationally the rate of increase in cost per case has been about 3% above the market basket increase, but this has varied widely from year to year. Part of this has been due to increase in case mix intensity as measured by the DRGs, and partly to new technology, changes in medical practice, etc.

While no good national data is available on the total population, there is good case mix data for the Medicare population. The case mix intensity increases from 1984 to 1985, and from 1985 to 1986 for all hospitals in the U.S. and for New England are provided in the table below¹:

	Percent 1984-85	change 1985-86
U.S.	3.1%	2.0%
New England	1.9%	2.9%

I would suggest that we should try to get data on case mix increases in Maine in recent years for the total patient population.

¹ The source of this data is "Medicare Prospective Payment and the American Health Care System: Report to Congress", June 1988, Prospective Payment Assessment Commission.

DISCUSSION PAPER ON CROSS-SUBSIDIZATION

August 8, 1988

Prepared for: The Blue Ribbon Commission on Health Care Expenditures

Graham Atkinson, D.Phil. 1449 44th. Street, NW Washington, DC 20007

(202) 338 6867

August 8, 1988

. . . *****

Issue Paper on Cross Subsidization

Introduction

The term cross-subsidization means the underpricing of some services, and the overpricing of other services to make up for the losses incurred on the underpriced services. Almost all hospitals engage in some degree of deliberate cross-subsidization of this sort. The services that are normally underpriced are: obstetrics, labor and delivery, emergency room, clinic, and, sometimes, pediatrics. The ancillary services, particularly laboratory and radiology, are the services that are normally overpriced to make up for the losses.

The issue being discussed in this paper is whether the inpatient rates of hospitals should be increased to provide a subsidy of outpatient services. If a hospital wishes to underprice its outpatient services without such an allowance, say by using profits generated on inpatient services, then the regulator should not interfere with this.

The next section of this paper consists of a discussion of the arguments for and against allowing cross-subsidization in the major departments in which it is normally found. The way in which cross-subsidization is handled in several regulated states is the topic for the subsequent section, and this section also contains a discussion of the particular situation prevailing in Maine. The paper finishes with a suggestion on how to handle cross-subsidization within the systems being proposed.

Section I: Arguments For and Against Cross-subsidization.

Arguments against cross-subsidization.

1) Fairness.

An equity consideration is whether it is reasonable to tax the sick to pay for the care of the less sick, because this is precisely the effect of most of the cross-subsidization that takes place. There is also the public policy question whether these taxing decisions should be made unilaterally by the hospitals or by some other more public and disinterested body.

The departments that are normally underpriced relative to their costs are clinics, emergency rooms, obstetrics, labor and delivery, and, sometimes, pediatrics. The reasons for the underpricing in these departments are that:

- a) these services have historically been relatively less well insured than most of the other services provided by hospitals; and/or,
- b). the services are often underutilized so the actual cost is high due to the spreading of the fixed costs over a small number of units of service.

However, these are also the services in which the bills are more predictable, and substantially smaller than the average hospital bill.

The services that are normally overpriced by the hospitals are those that are predominantly used by inpatients requiring medical or surgical care, i.e., those patients who have variable bills which can be quite large. This is the reason for using the terminology that the more sick are being effectively taxed to pay for the care of the less sick.

2) Costs are concealed.

ι.)

Cross-subsidization has an impact on the ability of health planning agencies to operate effectively because in conceals the true cost of services. Health planning agencies attempting to force the closure of an underutilized service often find community support for the retention of the service by the hospital. One of the reasons for this support is that the community does not know, and does not have to pay, the true costs of maintaining the service. If cross-subsidization were eliminated and thereby the true costs of the service were made apparent, then the community support for retaining the underutilized service might be considerably diminished. Also, health planners would have the true costs of the service readily at their disposal when evaluating such situations.

3) Unfair advantage.

The cross-subsidization of clinics and emergency rooms provides them with a competitive advantage over physicians in office practice who have to cover their total costs from the fees they charge. This can make it more difficult for a physician to move into an area and establish a practice. The provision of primary care in hospital outpatient departments may lead to greater use of inpatient hospital services. Given the shortages of physicians in rural areas of Maine this argument should be given little weight in Maine.

Arguments for cross-subsidization.

1) Bad debt is averted.

The departments in which prices are reduced are the departments

2

in which there is a higher proportion of self-pay patients. Increasing the charges to these patients is likely to increase the amount of bad debts incurred by the hospital because the patients will be less likely to pay the higher bills. This, however, is likely to be a very marginal effect.

S 2) Underutilized services may be necessary to provide adequate R access to care.

It may be necessary, in order to maintain adequate access to patient care, to maintain a service even if it is underutilized. For example, in an isolated rural area it may be necessary to retain an underutilized obstetrics unit, or to keep open a primary care clinic because there are insufficient physicians in the area. The cross-subsidization of such underutilized services allows them to be retained, with reasonable charges, in spite of the high per unit cost for the services provided. For the situation in Maine this is one of the most compelling arguments.

Section II: Cross subsidization in some regulated states.

Maryland: The Maryland Health Services Cost Review Commission initially permitted some cross-subsidization, but after a few years of operation decided that there was little justification for the subsidies, and has eliminated almost all cross-subsidies from the rates of the hospitals.

New York: New York does not build any subsidies into the inpatient rates. Outpatient services as a whole are therefore expected to be self-supporting.

Connecticut: The system in Connecticut froze the cross-subsidies of outpatient services by legislation. On analysis it was discovered that in aggregate the subsidies were of the inpatient services by the outpatient services, opposite to what was expected. The reason for this was that the outpatient ancillary services were sufficiently overpriced relative to their costs that they more than compensated for the underpricing of the emergency rooms and clinics.

These examples are provided for completeness, but given the different geographic and service situation of the hospital system in Maine these should not necessarily be considered precedents.

Maine: In Maine the inpatient routine services are generally underpriced relative to their cost, emergency rooms and clinics are underpriced, and ancillary services are overpriced. Given that the same price is charged for an ancillary service whether it is provided on an inpatient or an outpatient basis, there is reason to believe that the outpatient ancillary services may be providing the subsidy of emergency rooms and clinics, as was discovered to be the case in Connecticut. In some hospitals the subsidized services are clearly needed to provide access to care, and the prices would obviously be higher without the subsidy.

The argument is often made that the standard Medicare cost allocation methods over-allocate overhead costs to the outpatient departments. I know of only one study which investigated this claim¹, and that study found that, when a detailed costing was done, the overhead costs were being under-allocated to outpatient services. The change in the Medicare payment system since the date of that study, and the resulting change in hospital cost allocation practices, may have changed that result.

Section III: Recommendations

For hospitals on the Total Revenue System cross-subsidization should continue to be permitted, as in the current system. For hospitals on the per case or other payment systems there should be no automatic cross-subsidies built into the inpatient rates. Hospitals should, however, have the opportunity to present a case to the Rate Setting Body to justify some such subsidy. The appeal would have to demonstrate that the service was needed for access to care (for example, four emergency rooms in a town are not all needed for access to care, but a single one probably is), and that a subsidy is required in order to allow the service to be viable. If the service already exists data should be presented showing that the hospital has subsidized this service in the past from the inpatient rates. The burden would then be on the hospital to provide the data, currently not available, to demonstrate that the subsidies are currently coming in part from inpatient services.

¹ This study was done by the Center for Health Policy Studies for the U.S. Department of Health and Human Services.

September 23, 1988

TOPICS STILL TO BE RESOLVED

In this note I will list topics which have been discussed in previous meetings of the Commission, but which have not yet been fully resolved. Where appropriate I will provide a recommendation on how to proceed. Very little discussion will be included here as the topics have all been previously.

Certificate of Need

.

The report would be incomplete without some recommendation on the subject of Certificate of Need. This should be an early topic for discussion. I will not provide any recommendation at this time on this subject since I was not present at the presentations on LD 2500.

.

<

Hospital inpatient regulation

In the first version of the draft report there was a list of technical issues which were omitted from the draft that was distributed for public comment. These included:

> The cost base The system for specialty hospitals The method for developing the standard component Payment for capital costs Inflation proxies Volume adjustments Profit margins Payment for new projects and services Adjustment factor over inflation

It is likely to be difficult to get agreement on some of these technical issues in the time remaining, and the Blue Ribbon Commission may not be the best forum for resolving the more detailed financial questions, many of which require additional information before an informed decision can be made.

The question of what adjustment should be made to the rates each year in addition to inflation is a particularly important and tricky one. It should be influenced by the amount that would be approved through individual appeals, the amount that would be approved for specific projects, and the situation of the hospital system at the time the adjustment is being made. Since the system being designed would not go into effect until 1991, and would be expected to be in place for several years thereafter, it may be overambitious to expect to be able to suggest a specific number now which would continue to be appropriate several years in the future. I would suggest that this question could be left to the Rate Setting Body, but with specific direction as to the intent of the legislature. For example, the direction might be that the increases in costs and revenues in Maine were expected to track the national average (but not necessarily each year), or to be some amount above or below the national average.

The other technical issues could be left to the RSB, again with clear policy direction, or could be assigned to a follow-up Commission together with some issues which will not be fully addressed in the report but which are noted as being worthy of further study.

Pools for governmental shortfalls, bad debts, charity care

No decision has yet been made on whether the current level of governmental shortfall should be pooled, or whether bad debts and charity care should be pooled.

ter and the second s

I would recommend against pooling just bad debts and charity care. I would recommend pooling the existing level of the governmental shortfall only if some source of revenue other than hospital charges was available to pay for it. The public comment seemed to be generally against providing additional general funds for inpatient hospital services.

Rate Setting Body

The issue of the structure of the RSB has been addressed to the extent that it should be an independent executive agency. The composition, appointment, duties, and methods of ensuring accountability have not yet been addressed.

<

2

The Commission may wish to leave the recommendation in the report at its current level of detail. Alternatively, you may wish to discuss how many member the RSB should have, how they should be appointed, etcetera, but without reference to whether the body ought to be the MHCFC (possibly with some modification) or a newly constituted body.

Hospital outpatient rate regulation

It has not yet been decided whether hospitals under the per case payment system for inpatient services should be subject to rate regulation on outpatient services. This issue is closely related to the issue of cross-subsidization of outpatient services. At present we do not know whether outpatient services are subsidized by inpatient services in Maine. This information is important to a decision to eliminate regulation of outpatient services. I have prepared a paper on the issue of cross-subsidization, which has recently been distributed.

One possible approach would be to suggest a study on the amount of cross-subsidization which currently takes place, and defer a decision until that information was available. This decision would clearly not be made by the current Blue Ribbon Commission.

Differentials and discounts

Should there be any change in the way in which approved discounts are quantified? In several states, including Maine, this has been done through expensive studies, which always arouse some controversy. I would suggest that the approved discounts for specific practices should be specified in the statute. In this way all the parties will know in advance what discounts are available, and for what purposes or practices.

Physician shortages and malpractice insurance

Recommend further study by a body having substantial physician representation.

Nurse and other professional shortages

The recommendation should await the report of the Commission studying this issue.

Data Collection

The recommendation should await the report of the Commission studying this issue

Mandated benefits

Mandated benefits should be mentioned as a topic worthy of further study. In the time available we could not do it justice.

Demonstration on lower level facilities

Suggest a task force to define the parameters of this demonstration, e.g., what types facilities would qualify, what would be the licensing requirements for the modified facility, etc.?

3

a second a s

1. S. S. M. S. M. S. S. S.

Utilization levels

e de la secolar

Maine has a good record of studying and acting on utilization patterns. Further such studies should be encouraged, with strong payor involvement.

(2) A start of the second start of the seco and a second and a s A second a s المراجع المراجع المكتب المراجع في المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المر المراجع المراجع المكتب المراجع في المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراج ne man a forthan at the second and a second a se a da anti-servici da anti-servici da anti-servici da anti-servici da anti-servici da anti-servici da anti-serv A servici da servici da anti-servici da anti-servici da anti-servici da anti-servici da anti-servici da anti-ser

and a second second a second of the and the second s

<

October 17, 1988

a d_ay 1

The Interaction of CoN and the Payment System

Graham Atkinson

Introduction

The need for the review of capital projects and new services is closely tied to the incentives embodied in the payment system for hospital services. If the payment system is such that the rates of payments are relatively independent of the direct impact of capital projects, then there is no cost reason for review of the new projects. The federal government realizes this and has acted accordingly. When Medicare was first introduced, and up until 1982. Medicare paid hospitals on the basis of their incurred costs. This cost reimbursement system provided no incentive to control costs, and so it was thought that some controls over new projects were required. With the Medicare Prospective Payment System (PPS) the incentives are quite different. Hospitals do not receive any additional payment for operating costs as a result of new projects, except in so far as the projects result in increased volume, and so they have a strong incentive to ensure that projects are cost effective. The PPS involves paying for capital costs on the basis of the actually incurred costs (actually some percentage of actual capital costs), so there is still an incentive to overspend on capital, particularly if this reduces operating costs. Given these changes the federal government is much less concerned that projects are subject to Certificate of Need review.

Proposed per case payment system for Maine

The principal payment system being proposed for Maine involves a revenue per case, with a standard component which will eventually reach 50% of the total payment. We have not yet decided whether this standard component should involve just the operating costs, or whether it should also include capital costs for movable equipment and buildings and fixed equipment. The decisions on these questions will influence the decision on the need for review of new projects.

Consider the situation where a hospital had a new project and required an adjustment to its approved inpatient per case rate to adjust for incremental operating costs. Note that this means that the project involves some additional costs which were not covered through additional volume of service (either additional admissions or additional outpatient services), and which were not covered by the automatic allowance. Then an adjustment would be made to the hospital specific component of the approved rate. The process can best be illustrated by means of an example:

1

Example:

Suppose the hospital has a hospital specific rate of \$2,000 per case, and a standard rate of \$2,500 per case. Suppose also that the hospital engages in a project which increases its inpatient costs by \$200 per case. Then its hospital specific rate would increase to \$2,200 per case.

Assume that the approved rate is 50% hospital specific and 50% standard. Without the project the hospital had a blended rate of

\$2,250 = (\$2,000 + \$2,500)/2.

With the project the hospital will have an approved blended rate of \$2,350 = (\$2,200 + \$2,500)/2.

The approved rate has thus increased by \$100 per case, while the costs increased by \$200 per case. In this situation the hospital has a clear incentive to restrain its operating cost increases as a result of new projects. Thus, in this situation there is no need for CoN review as a cost containment measure for operating costs per case.

Capital costs

The same basic arguments apply to capital costs. If the payment system involves the payment of the actual capital costs of each hospital, then there is no incentive in this system to cause the hospital to restrain its capital expenditures. However, if the payment includes the capital costs in the standard component of the rate, so that the payment for capital in the rate is 50% based on the hospital's own capital costs and 50% on the standard capital costs, then there is a clear incentive for the hospital to control capital costs.

Some examples of the interaction of CoN and the rate setting system:

1. If the rate setting system involves setting a rate based on the hospital's own costs, with additions for the costs associated with new projects, then there must clearly be some review of the costs of new projects.

2. If the rate setting system involves a rate which is based entirely on a standard operating and capital cost with no additions for new projects, then review of projects has no cost containment rationale. 3. If the rate setting system involves a rate which is based entirely on a standard operating cost with no operating cost additions for new projects, but pays for the actual capital costs incurred by the hospital, then review of projects has no cost containment rationale for operating costs, but may be required for capital costs.

One question which remains is: At what point is the percentage of a standard sufficient to provide meaningful incentives? This is a judgement call, but at 10% of a standard the incentives are too small to be significant, and at 75% they are clearly very significant. I would suggest that only when the standard component exceeds 25% is there sufficient financial incentive to cause hospitals to take it seriously into consideration in their decisions to expand.

Should capital costs be included in the standard?

The above discussion has shown that if capital costs are included in the standard, when the standard component becomes large a detailed review of project capital costs would not be required. Conversely, if capital costs are not included in the standard, and are paid on a hospital specific basis, then some review of these costs would continue to be required.

If capital costs are paid as hospital specific incurred cost, while operating costs are subject to a standard, then a hospital has an incentive to spend on capital rather than on operating costs. This will result in a misallocation of resources. By including both operating and capital costs in the standard the hospitals are provided with an incentive to make trade-offs between operating and capital costs.

The problem with including capital costs in the standard is that hospitals have vastly different capital costs depending on where the hospital stands in its replacement cycle of buildings and fixed equipment. Hospitals which are relatively new have high interest and depreciation costs, while hospitals which are old have low interest and depreciation costs. An extended phase-in of the standard component for capital could allow hospitals to adjust to this change. This problem does not apply for movable equipment, since movable equipment has a shorter life cycle than buildings and fixed equipment, and is continually being replaced.

My recommendation would be to include all capital costs in the standard. If this would cause too much disruption, then I would definitely recommend including movable equipment costs in the standard. This would should not cause any trauma to the industry, and would eliminate the need for review of most equipment purchases.

Questions:

118 1 1 1 1 1 1 1 1 1 1

1. At what percentage standard are the incentives strong enough to be significant?

2. Should movable equipment costs be included in the standard?

3. Should building and fixed equipment capital costs be included in the standard?

4. If the cost containment reasons for CoN review are eliminated, are there other reasons for retaining some review, e.g. of new services or new beds.
October 18, 1988

- * * ⁷⁵

Outpatient Rate Deregulation, Cross Subsidization and Pooling

Graham Atkinson

Introduction

The topics to be addressed in this paper are:

1) should any cross-subsidization of outpatient services would be permitted if these services are not subject to rate regulation; and,

2) should bad debts and charity care resulting from these services be eligible to draw on pools, and if so, what mechanisms could be used to assure that the draws are reasonable.

The setting for the discussion is the hospitals on the per case payment system. The issue of cross-subsidization has been discussed in some detail in a separate paper distributed last month.

Deregulation of some outpatient services

There are four main classes of outpatient services:

Emergency rooms Clinics Ambulatory surgery Ancillary services (ambulatory)

The first three are relatively easy to regulate, and the fourth is very troublesome to regulate. One suggestion that has been made is that only the outpatient ancillary services should be deregulated. There is a problem with that approach because the emergency rooms and clinics are almost invariably revenue losers, and the ancillary services revenue winners.

Currently hospitals in Maine are undercharging relative to their financial requirements in emergency rooms, clinics, and routine inpatient services, and overcharging in the ancillary services. If the outpatient ancillary services were to be deregulated then the overcharges would not be available to subsidize other services. The charges for the other services would have to be increased in order for them to be self-supporting, and at the same time the hospitals would be able to continue to overcharge relative to their financial requirements for the outpatient ancillary services. The following example illustrates this:

1

Example:

Suppose a hospital has financial requirements of \$4,000,000, of which \$1,000,000 are for outpatient ancillary services and \$3,000,000 for the other services. For ease of discussion assume charges = financial requirements. The hospital has charges of \$1,200,000 in the outpatient ancillary services and of \$2,800,000 for the other services, so it is charging the full \$4,000,000. If the outpatient ancillary services are deregulated then the hospital could continue charging the \$1,200,000, or even increase those charges. The Rate Setting Body would have to set the charges for the other services at \$3,000,000, so the total charges will increase to \$4,200,000 as a result of the deregulation of outpatient ancillaries, even without an increase in the amount charged for the outpatient ancillaries.

This example shows that it would not be fair to the payors to deregulate outpatient ancillary services, and require the remaining regulated services to be self supporting.

Is cross-subsidization needed?

The difficulty in determining whether there is currently crosssubsidization occurring between inpatient and outpatient services is because it has not been possible to split bad debts and charity care between inpatient and outpatient. The following example shows a situation in which no cross-subsidization would be required.

Example:

Suppose outpatient financial requirements are 20% of total financial requirements, and that outpatient ancillary are 10% of the total. Assume hospitals are charging 25% over the required charge to recoup financial requirements for outpatient ancillary services, and that bad debts and charity care are 15% on outpatient and 4% on inpatient, for an overall rate of 6.2%.

Then the hospital is making 2.5% of financial requirements from the higher charges for outpatient ancillary. This is sufficient to cover the amount by which the bad debts and charity care on outpatient services exceed the overall bad debt and charity care rate.

Protection of Access in the event of deregulation

For the majority of hospitals it would cause no hardship if all outpatient services were deregulated and any cross-subsidization which was required took place among the outpatient services. The

2

isolated hospitals can opt for the total revenue payment system in which outpatient would continue to be regulated, and crosssubsidization could continue to be permitted. If there are particular hospitals with a high volume of outpatient services provided to the indigent, then they might be eligible for special consideration - either a draw from a pool or some explicit subsidy built into the inpatient rate. In these instances the burden would be on the hospital to provide the evidence of the need, and to provide a quantification of the problem.

If it is felt that some additional subsidy of emergency rooms and clinics is required from a statewide pool then there are a number of options available:

1) Pay for charity care in the emergency rooms and clinics on the basis of the costs. The charity care would be easier to allocate to specific services than bad debts. The cost of the charity care could be calculated using an RCCAC method.

2) Have grants for specific services which are required for access. This makes more sense than funding underutilized emergency rooms which may or may not be required to provide adequate access to emergency care.

3) Reduce the bad debts and charity care by improving the availability of health insurance.

Another alternative which sidesteps the pool would be to attempt to freeze any cross-subsidization between inpatient and outpatient at the current level. The basis for establishing the inpatient rates could then be the inpatient charges made in the UB-82 data, with adjustment for reconciliations and compliance. This idea would need more study to work it out, and the quality of the charge data may not be sufficient to allow this approach to be used.

Recommendation

It is difficult to justify deregulating outpatient services and then allowing continued cross-subsidization from a regulated inpatient service, or access to a bad debt and charity care pool funded with general funds, except in exceptional cases where access to care is in danger. I would therefore recommend that the Commission decide either:

1) outpatient services should continue to be regulated; or,

2) outpatient services in hospitals in the per case payment system should not be subject to rate regulation, and crosssubsidization or access to the pool should only be permitted in exceptional cases where access is in danger.