THE COMBINED IMPACT ON HOSPITALS OF REDUCED SPENDING FOR MEDICARE, MEDICAID AND EMPLOYER SPONSORED INSURANCE

by

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I. OBJECTIVES

Proposed changes in the Medicare and Medicaid programs, along with recent trends in employment based health insurance, will have enormous repercussions on the American health care system. At the time of this publication there are proposed reductions in the projected growth of Medicare spending of $270 billion and in Medicaid of $182 billion which will take effect in the period 1996 to 2002. During the same time, continued declines in employment based health insurance and increased price competition from managed care organizations will place additional fiscal pressure on health care providers. Although many researchers have examined these changes individually, none have assessed their combined impact on the health care delivery system.

These changes have the potential to rein in the growth of public programs which many feel have been growing at unsustainable levels. They also may encourage consolidation and improved efficiency, which could increase the long term affordability of health care for all Americans. However, the combined magnitude of these changes may be so large as to threaten the financial viability of many providers, particularly those that serve the elderly and the poor, and could seriously reduce access to the populations they serve.

The hospital industry will be particularly affected by these changes. The AHA estimates that $76 billion (28%) of the $270 billion in Medicare reductions would come from hospitals.[1] In addition, with inpatient and outpatient payments to hospitals constituting over 35% of Medicaid spending,[2] these institutions will likely absorb substantial amounts of the reduced Medicaid spending. The combination of potential reductions in Medicaid eligibility and continued declines in employment based insurance will also impact hospitals in the form of increased uncompensated care.

The objective of this study is to estimate the combined effects on the hospital delivery system of reductions in Medicare, Medicaid, and employment based health benefits. We seek to answer the following questions:

1. What is the expected impact on hospital revenues of proposed Medicare and Medicaid reforms and projected declines in employment based insurance?

2. What (reduced) rate of cost growth will hospitals have to achieve in order to maintain fiscal stability in the face of these changes?

We will seek answers to these questions by examining the projected revenues of hospitals by sources of payment (e.g., Medicare, Medicaid, private sector payments, and uncompensated care). These will be disaggregated by hospital type and cover the years 1995-2002. We will

present baseline projections through the year 2002 for each source of payment assuming no system changes, and then project various scenarios for the impact of changes in public and private payments. We will then project various growth rates in total hospital costs and match them with revenues to determine hospital margins under differing assumptions. The results of the study should help policy makers assess how the hospital delivery system may adjust to the combined effects of legislative and market changes now taking place.

II. HISTORICAL PERSPECTIVE

Since the Second World War, the United States has experienced enormous growth in the health care sector. Much of this growth was originally financed by the private sector, spurred by the advent of private health insurance. Private health insurance served as a social protection system, insulating families from suffering the catastrophic financial consequences of an expensive illness. It also insured payment for a growing hospital industry. With few publicly funded federal programs, private sources of payment accounted for more than 75% of national health spending in 1965.[3]

By the 1960s, the expanded use of complex medical procedures and the greater availability of expensive technologies generated an increasingly more expensive healthcare delivery system. It became apparent that many elderly and lower-income citizens could not afford the cost of private health insurance, and that hospitals could not raise sufficient resources to fund the demand for charitable care. In response to this need, the Medicare and Medicaid programs were enacted in 1966 and the source of health spending began to shift to the public sector. By 1991, public dollars accounted for 44% of total health spending.[4]

Coincident with the growth of Medicare and Medicaid, the federal government also expanded its support of bio-medical research and the training of health professionals. The influx of this rapid growth in public funds combined with the continued growth of private insurance fueled a rapid expansion in hospital capacity and in physician services. The hospital sector, whose growth had been encouraged by federal programs since the 1940s, grew to consume 41% of health spending by 1983.[5] National health spending, which was 5% of the GDP in 1960 grew to 10.8% by 1983 and is now in excess of 14%.[6] Public expenditures for health started to become a serious drain on both federal and state budgets.

In response, government policy shifted from expanding capacity to controlling cost. In the 1970s, federal and state governments tried various forms of regulation including Medicare and Medicaid reimbursement reforms, regulation of supply through certificate of need, utilization review, and encouragement of the use of HMOs. Such efforts achieved limited success and, spurred by advancements in medical technology and expansions in eligibility for public programs, health costs continued to grow more quickly than the general economy.

Beginning in the mid 1980s, however, it appeared that spending limits for public programs had finally begun to work. With the introduction of the Medicare Prospective Payment system in

1983 and the physician payment control system in 1989, annual growth in Medicare spending fell from 9.7% from 1980-1983 to 5.0% from 1983-1987.[7] In comparison to spending growth in the private sector, limits on Medicare spending appeared to be much more effective. At the same time, the Medicaid program, employing tight price regulation impacted hospital margins by low rates of reimbursement. Although volume continued to grow and many services were shifted to less regulated outpatient settings, many hospitals began to experience negative margins from Medicare and Medicaid. In 1992, hospitals lost nearly $11 billion providing serves to Medicare patients, $3 billion to Medicaid and $10 billion to uncompensated care.[8] However, they were able to more than offset these losses by raising prices to the privately insured.

In the 1990s, as hospitals confronted shrinking margins from the public sector, the private sector became a more effective payer in controlling cost. Employing more aggressive use of managed care techniques and tougher bargaining with major health providers, private payers were successful in demanding lower rates of growth in health care prices. This success was greatly facilitated by the growing availability of excess hospital capacity and the increasing numbers of specialists. Hospitals also had to contend with advancements in technology that permitted many procedures to be performed more quickly and in less intensive settings. As a result, hospital occupancy rates fell from 75.9% in 1980 to 61.4% in 1993 and hospital's share of total health expenditures fell below 37%.[9]

Despite all these difficulties, hospitals have been successful in preserving operating margins. They have greatly expanded out-patient services, increased revenues in higher margin areas such as home health care and imaging, cut operating expenses (particularly labor costs), shifted costs to private payers, and consolidated through mergers, acquisitions, and joint ventures. The question that will be confronted in this paper is whether hospitals can absorb the changes now being considered and continue to maintain their financial health.

Some analysts maintain that hospitals can still garner further efficiencies. They argue that there is expensive excess capacity in the system and that the number of hospitals can consolidate by as much as 1/3, greatly reducing fixed expenses. Indeed, many other industries in the United States have downsized over recent years in order to become more efficient and more competitive. These analysts contend that hospitals can re-engineer the structure of hospital care thereby changing the production function and reducing the cost of delivering care. Indeed, evidence in recent years suggests that this is possible. Beginning in the last quarter of 1993, the average cost per hospital admission fell below the rate of inflation for the first time and has remained there since the first quarter of 1994.[10]

Other analysts contend that hospitals face increasing fiscal pressures from the problems that we have detailed above. They argue that although some efficiency gains can be garnered through consolidation, the system will be overwhelmed by the magnitude of combined reductions in public spending and private insurance. Furthermore, they maintain that the moderation in cost growth recently achieved by hospitals is a brief departure from a long term trend, and that the chief drivers of medical inflation, increased technological intensity and the aging of the population, will

re-assert themselves and cause hospital costs to return to historical levels. When this happens, they argue, the collective impact of changes discussed herein will push the hospital industry into financial distress. Although they acknowledge that growth in public programs has to be scaled back to more sustainable levels, they contend that the magnitude of changes discussed herein is not necessary and is too large for the hospital sector to absorb.

Given the emergence of competition, the restructuring of hospital markets, and the numerous challenges faced by the hospital industry, there is wide range of opinion concerning the future ability of hospitals to adjust to the changes discussed herein. By projecting the impact on hospital margins of spending reductions in public programs and private insurance, we hope to provide insights to policy makers and industry analysts on these issues.

III. METHODS AND DATA

Overview

In this analysis, we attempt to combine the potential impacts on hospital margins of proposed reforms of Medicare and Medicaid and different possible scenarios regarding the number of uninsured. We examine hospital revenues by source of payment (i.e., Medicare, Medicaid, private insurance, and uncompensated care). We first look at baseline estimates made by the CBO (also using data from ProPAC, AHA, and HCFA) that do not include Medicare or Medicaid reforms. We then project changes in each of these revenue flows according to proposed legislative reforms and different assumptions regarding Medicaid payment/cost ratios, the number of uninsured, and the amount of uncompensated care.

We next examine hospital costs. We first present baseline estimates made by HCFA for total hospital costs from 1995 through 2002. These estimates are comprised of changes in the cost of treating each patient (cost per case), the volume of patients receiving treatment, and differences in case-mix and intensity of service. We then project cost growth at a "best case scenario" in which we assume that costs increase at baseline during 1995 and in the period 1996-2002 they increase by an average rate about 35% below the baseline or 4.4%.[11]

Next, we compare the flows of revenues and costs (using different scenarios) to ascertain the impact on hospital margins. Finally, we calculate the break even rate of cost growth that hospitals will have to achieve under the various scenarios.

Throughout the analysis, we disaggregate our projections by type of hospital (urban vs. rural, and major teaching vs. other teaching vs.non-teaching), so that we can also examine the impact of these changes by hospital type. We start with an estimate of the distribution of revenues and costs by hospital type for 1995 derived largely from the AHA. We include approximately 85% of all expenses and revenues traced to community hospitals. Excluded from the study are Maryland and other hospitals unable to provide full data on both Medicare and total margins. As a result, our base of expenses in 1993 is $222 billion whereas the AHA reports $266 billion in expenses for all

community hospitals. These data were trended to 1995 by ProPAC using an estimated growth in hospital marketbasket. Revenues across hospital types and payers are derived using payment to cost ratios calculated by ProPAC. Costs are distributed across hospital types and payers using data from the AHA provided by ProPAC. We turn first to the revenue projections and begin with Medicare.

Medicare

The current Medicare reform proposal seeks to reduce Medicare spending by $270 billion between 1996 and 2002. In the House bill, these savings include $57 billion of reductions in hospital payments for both inpatient and outpatient services. Under current reimbursement policy, total hospital revenues are expected to rise at approximately 5.4% per year. However, this rate of increase is not uniform across different payers. Spending under the Medicare Prospective Payment System is projected at a 4.3% annual rate (ProPAC). Table 1 compares baseline and reform revenues in 1995 and 2002 (projected revenues are from ProPAC).[12]

Table 1 - Comparison of Baseline and Reform Hospital Medicare Revenues ($ billions)

	1995	2002
Baseline Medicare Revenues	80.6	116.3
Reform Medicare Revenues	80.6	101.9

These reductions do not account for the "fail-safe" provision which provides that Medicare payments will be cut back even further to meet the targeted budget ceilings. As shown in table 1, total Medicare spending for hospital services would fall by $14.4 billion or 12.4% from the baseline by the year 2002.

Medicaid

The current Medicaid reform proposals seek to reduce federal Medicaid payments by $182 billion. Under current policy, the CBO estimates that baseline revenues for Medicaid will rise from $89.2 billion in the fiscal year 1995 to $177.8 Billion in fiscal 2002, an average growth rate of 10.4%. Under reform, if states maintain the current level of reimbursement relative to provider costs, revenues for Medicaid will rise from $89.2 billion in fiscal 1995 to $125.8 billion in fiscal 2002, an average annual growth rate of 5% (4.7% between 1996-2002).

However, the assumption that current payment/cost ratios will be maintained may be unrealistic. These ratios were under 80% before disproportionate share payments were raised substantially beginning around 1988. They have risen to 93% today as a result of disproportionate share payments and the Boren amendment.[13] Under Medicaid block grants and repeal of the Boren amendment, it is likely that these ratios will decline at least down to 1988 levels. Hence, we have presented our estimates with both the current Medicaid payment/cost ratios and with a

payment/cost ratio of 80%.

We took the year-to-year total Medicaid growth rates from the Congressional proposals and grew Medicaid hospital revenues at this rate of growth, adjusting, as appropriate, for the 80% payment/cost scenario. Table 2 compares the revenue streams under current policy and under reform for both payment/cost scenarios.

Table 2 - Comparison of Baseline and Reform Hospital Medicaid Revenues ($ Billions)

	1995	2002
Baseline Medicaid Revenues	29.8	56.5
Reform Medicaid @ current payment/Cost	29.8	41.7
Reform Medicaid @ 80% Payment/Cost	29.8	34.1

Based on these projections, hospital revenues from Medicaid in 2002 would be 26% less than the projected baseline if payment/cost ratios are maintained at current levels, and 40% less if they fall to 80%.

Uncompensated Care

Under current policy, the AHA Annual Survey estimates the amount of hospital uncompensated care at $15.9 billion in 1993 or about 7% of total hospital costs. In our accompanying paper[14] we explain how we derive future estimates of uncompensated care from our projections of the number of uninsured. Under reform, we assume that enrollment in Medicaid is likely to be frozen or possibly even reduced. In such a case, Medicaid enrollment would not be available for those individuals losing private insurance. Hence, as a result of Medicaid reform the amount of uncompensated care would increase. We project uncompensated care under two different scenarios: In Scenario 1, Medicaid enrollment is frozen at current levels and the number of individuals with employer sponsored insurance (ESI) declines according to CBO estimates. In Scenario 2, Medicaid enrollment is frozen and the trend in ESI continues at the same rate as in 1989-1993.

For the calculations needed in this study we include baseline AHA estimates of revenues from private payers made to hospitals in partial satisfaction of uncompensated care. We trend these amounts to changes in total hospital uncompensated care calculated under our two scenarios. Table 3 presents the baseline and reform estimates of the amount of uncompensated care and corresponding revenues from partial payments by private payers..

Table 3 - Uncompensated Care and Revenues on Account of
Uncompensated Care Received From Private Payers ($ Billions)

	1995	2002
Baseline Uncompensated Care	17.7	29.3
Baseline Private Payer Revenues	3.9	6.5
Scenario 1 - Uncompensated Care	18.3	33.4
Scenario 1 - Private Payer Revenues	3.9	7.4
Scenario 2 - Uncompensated Care	18.3	43.2
Scenario 2 - Private Payer Revenues	3.9	8.8

Based on these projections, the amount of uncompensated care increases modestly under the low uninsured scenario, but increases nearly over 47% if ESI continues to decline at recent trend rates. Revenues received by private payers show a corresponding increase, but the ordinal difference is small, rising from $6.5 to $8.8 billion. Our estimates of uncompensated care may be understated by about 5% because we use cost data from PPS hospitals that exclude Maryland and some other hospitals (see endnote for explanation).[15]

Private Insurance

Under current policy, the CBO estimates that the baseline growth in hospital revenues from private payers will increase at an annual rate of 5.6%. This estimate employs the more moderate CBO projections for employment sponsored insurance (ESI). We also project revenues from private insurance under our Scenario 2 in which the trend in ESI continues at the same rate as in 1989-1993. In each case, we take the baseline private health insurance payments and calculate a per capita amount (from the baseline number of privately insured individuals). We then multiply the per capita amount times the number of privately insured under each scenario. Table 4 presents the baseline and reform estimates of hospital revenues from private payers.

Table 4 - Hospital Revenues From Private Payers ($ Billions)
Comparison of CBO Trends and 1989-1993 Trends in Employment Sponsored Insurance

	1995	1996	1997	1998	1999	2000	2001	2002
Baseline Private (same as scenario 1)	111.6	118.9	126.6	134.1	141.1	148.9	156.9	165.0
Scenario 2	111.6	115.7	120.1	124.5	129.1	133.9	138.9	144.1

Based on our assumptions, hospital revenues from private payers in the year 2002 would decline by nearly $21 billion dollars below baseline estimates if the decline in ESI continues along the 1989-1993 trend. These estimates do not assume any further reductions in payment/cost ratios of private payers beyond those in the CBO baseline.

Other

Hospitals receive revenue from a variety of other patient care (state, local, and federal sources) as well as from non-patient care sources. We assume these revenues grow under each scenario at the CBO baseline projection.

Costs

The baseline rate of hospital cost growth is derived from projections provided by the Office of the Actuary, Health Care Financing Association (HCFA). These estimates show total expenses for inpatient and outpatient hospital services including the cost per treating each patient (cost per case), the volume of patients treated, as well as changes in case mix and intensity of services. The HCFA baseline estimates have an average annual growth rate of 7.5%. We rely on the HCFA baseline total costs estimates, to derive our "best case" cost estimate in which we assume that costs increase at baseline during 1995, and in the period 1996-2002 they increase by an average rate of 4.4%. These estimates are performed separately for inpatient and outpatient services, and then are weighted to totals using relative cost shares. In Table 5 we compare the baseline stream and "best case" projections of total hospital costs.

TABLE 5 - Comparison of Baseline and "Best Case" Total Hospital Costs
1995 - 2002 ($ Billions)

	1995	1996	1997	1998	1999	2000	2001	2002
Baseline Total Cost	233.8	250.6	268.9	289.4	311.6	335.3	360.8	387.9
"Best Case" T. Cost	233.8	250.6	260.2	271.0	283.1	295.7	309.7	324.3

IV. RESULTS

We present a summary of our findings in the five tables that follow. All of these projections are for the year 2002.

Table 6 Hospital margins (by hospital type) with costs growth at CBO baseline.

Table 7 Hospital margins (by hospital type) assuming the low uninsured scenario with costs at "best case" (4.4% in 1996-2002). We project two different sets of margins according to our assumptions about Medicaid payment/cost ratios.

Table 8	Break-even rates of cost growth (by hospital type) assuming the low uninsured scenario. We present two different break-even rates according to our assumptions about Medicaid payment/cost ratios.
Table 9	Same as table 7 assuming the high uninsured scenario
Table 10	Same as table 8 assuming the high uninsured scenario

Table 6, below, projects hospital margins in the year 2002 if hospital costs increase at the HCFA baseline rate. The average of the HCFA baseline rate of hospital cost growth for the years 1995-2002 is 7.5%. Clearly, hospitals cannot operate at the baseline rates of cost growth and maintain their financial viability. This is true across all hospital types.

Table 6 - Hospital Margins in the year 2002
Assuming Baseline Cost Growth

HOSPITAL TYPE	MARGIN
Urban	-16.7%
Rural	-15.0%
Major Teaching	-16.4%
Other Teaching	-16.5%
Non-Teaching	-15.0
Total	-15.8%

Table 7 presents a "best case" scenario for hospitals. We project hospital margins in the year 2002 assuming cost growth at HCFA baseline for 1995 and at 4.4% for 1996-2002 (4.8% overall). Currently, the HCFA baseline hospital cost growth is 7.5%, so hospitals would have to reduce their cost growth by approximately 36% under the baseline amount by the year 2002 to conform to these projections. We assume the more moderate CBO estimates of declines in ESI (the low uninsured scenario) with Medicaid enrollment frozen. We examine margins with present Medicaid payment/cost ratios and with payment/cost ratios adjusted to 80%. Under these "best case" assumptions, hospitals would maintain margins of 3.1% overall if states continue to reimburse hospitals at the current payment/cost ratio. Margins are clearly higher for rural versus urban hospitals and for non-teaching versus teaching. If states revert to a payment/cost ratio of 80%, overall margins fall to just under 1%. This would have a critical impact on major teaching hospitals as their margins would fall from 2.6% to -3.0%.

Table 7 - Hospital Margins in the year 2002
Low Uninsured Scenario
Cost Growth at "Best Case"

HOSPITAL TYPE	Margin at Block Grant Rate	Margin at 80% Payment/Cost
Urban	2.3%	0%
Rural	3.8%	1.9%
Major Teaching	2.6%	-3.0%
Other Teaching	2.5%	0.8%
Non-Teaching	3.8%	2.7%
Total	3.1%	0.9%

Table 8 has the same assumptions as table 7, but instead of specifying a rate of cost growth, we calculate the break even cost growth for each type of hospital. If states maintain the current Medicaid payment/cost ratios, hospitals overall will break-even at a rate of cost growth of 5.2%. Currently, the overall baseline rate of cost growth is 7.5%, so that by 2002 hospitals would have to reduce their rate of cost growth by over 30%. Given our assumption that reduced revenues from reform or private insurance do not alter the volume of patients treated (some go from Medicaid or private insurance to uncompensated care) this analysis requires that hospitals reduce their cost per adjusted admission by this same 30%.

Table 8 - Hospital Break-Even Growth Rates in the year 2002
Low Uninsured Scenario

HOSPITAL TYPE	Break-Even Rate of Cost Growth at Current Payment/Cost	Break-Even Rate of Cost Growth at 80% Payment/Cost
Urban	5.1%	4.8%
Rural	5.3%	5.0%
Major Teaching	5.2%	4.3%
Other Teaching	5.1%	4.9%
Non-Teaching	5.3%	5.2%
Total	5.2%	4.9%

Table 8 reveals little difference across hospital types. If Medicaid payment/cost ratios were reduced to 80%, the break even level of cost growth decreases by an overall average of .3%, but by nearly one full percent at major teaching hospitals. Note that the above reductions in the rate of hospital cost growth are required simply to break even. Substantially larger reductions would be necessary to maintain hospital margins at current levels (4.3% in 1993).

In Table 9, we analyze what happens to hospital margins in the year 2002 if we assume that Employment Sponsored Insurance continues to decline at the same rate as it did from 1989-1993 (the high uninsured scenario). Again, we assume that Medicaid enrollment is frozen and that costs are held to "best case" (4.4% in 1996-2002). Our results indicate that if Medicaid payment/cost ratios are maintained at current levels, margins overall would be -2.9%. All hospitals would experience negative margins under the high uninsured scenario, but rural hospitals and major teaching hospitals would be less impacted by the decline in privately insured payers. If Medicaid payment/cost ratios fall to 80%, margins become quite negative, falling to an overall average of -5.4%. As expected, the impact of lower Medicaid reimbursements has a relatively larger impact on safety net hospitals than the impact of higher uncompensated care caused by declines in ESI, and major teaching hospitals experience the worse margins at -7.2%.

Table 9 - Hospital Margins in the year 2002
High Uninsured Scenario
Cost Growth at "Best Case"

HOSPITAL TYPE	Margin at Block Grant Rate	Margin at 80% Payment/Cost
Urban	-3.7%	-6.3%
Rural	-2.6%	-4.9%
Major Teaching	-1.4%	-7.2%
Other Teaching	-4.3%	-6.3%
Non-Teaching	-2.7%	-4.0%
Total	-2.9%	-5.4%

Lastly, we calculate the break-even rate of cost growth in 2002 under the same assumptions as above (the high uninsured scenario). We find that if states maintain the current Medicaid payment/cost ratio, the overall break-even rate of cost growth is 4.3%. In the year 2002 this would be more than a 40% reduction under the current HCFA estimates of hospital cost growth. Under our assumptions, hospitals would have to reduce their cost per adjusted case by this same amount as previously discussed. The impact across hospitals would not vary widely. If states

reduce the payment/cost ratio to 80%, the overall break-even level of cost growth falls to 4.0%. This would require nearly a 47% reduction in the rate of cost growth by the year 2002 compared to CBO baseline cost growth estimates. The break-even rate of cost growth for safety net hospitals would be under 4% and would require nearly a 50% reduction in costs from baseline projections simply to maintain a zero margin.

Table 10 - Hospital Break-Even Growth Rates in the year 2002
High Uninsured Scenario

HOSPITAL TYPE	Break-Even Rate of Cost Growth at Current Payment/Cost	Break-Even Rate of Cost Growth at 80% Payment/Cost
Urban	4.2%	3.9%
Rural	4.4%	4.1%
Major Teaching	4.6%	3.7%
Other Teaching	4.1%	3.8%
Non-Teaching	4.4%	4.2%
Total	4.3%	4.0%

V. DISCUSSION

Our findings indicate that under all of our scenarios, hospitals will have to reduce their rates of cost growth well below CBO baseline estimates to achieve positive financial margins. We project negative margins of between 15%-17% if costs continue to rise at the CBO baseline estimates. Clearly, hospitals would not be able to sustain their financial viability at those rates of cost growth.

We find that under the low uninsured scenario, hospitals would have to reduce their rate of cost growth to the 5% area to break even in the year 2002. This represents a 1/3 reduction from the CBO baseline rate of cost growth. Based on HCFA data, we estimate that the baseline projected rate of total hospital cost growth in the year 2002 of 7.5% is comprised of approximately 4.2% in cost per case and approximately 3.3% in increased volume, case mix and intensity of service. In accordance with that estimate, hospitals would have to reduce their growth in cost per case to the 1.7% area in 2002, well below the level of inflation. Although this is a rate of cost growth that hospitals have never achieved, the rate of 2.0% achieved in 1994 was quite close.

Similarly, in the high uninsured scenario, hospitals overall would have to reduce their rate of cost

growth to the 4% area to break-even in the year 2002. This represents a 47% reduction below the CBO estimated growth in hospital costs. Assuming the same breakdown of cost per case and volume stated above, this would require a growth rate in cost per case in the 0.7% area. That would represent a substantial reduction below any rates of growth previously reported.

Can hospitals achieve these reduced rates of cost growth? It is instructive to look at the historical growth rate of hospital costs. From 1990 through 1994 growth rates in total costs ranged from 4.6 to 11.6%. The 1994 rate of 4.6% was the only year hospitals achieved a rate of total cost growth under 7% (HCFA estimates 1995 at 6.9%).[16] In terms of cost per case, the 2.0% rate that hospitals reported in 1994 is the closest to the 1.7% required break-even area under Scenario 1 (the low uninsured scenario). Clearly, even under Scenario 1, hospitals would have to hold their annual increases in cost per case below the level of inflation. Indeed, if inflation rates return to their 1965-1993 average of 5.4%, growth in hospital costs per adjusted case would have to be substantially below the level of inflation.

These are rates of cost growth that hospitals would have to attain merely to break even. To maintain their current margins (4.3% in 1993), substantially larger reductions in cost would be necessary.

During 1993 and 1994 hospitals did manage to keep their costs per case under the rate of inflation. In the 4th quarter of 1993 hospital costs per adjusted admission declined below the rate of inflation for the first time, and by the first quarter of 1995 they were 1.7% below inflation. Hence, recent changes in the structure of financing and delivery of care could be indicative of a substantial cost saving potential that we have not experienced in the past. Savings from both consolidation and managed care may present many hospitals with previously unforeseen opportunities to increase efficiency. It is reasonable to speculate that some hospitals, particularly those that provide few services to Medicaid or indigent patients, may be able to overcome these challenges.

To the extent that some hospitals may be able to reduce costs sufficiently to maintain positive margins, the proposed legislation may accomplish some much needed reforms. The growth rate of Medicare and Medicaid, having far exceeded the growth rate of the economy in recent years, could be held to a sustainable level of growth. In so doing, the Medicare trust fund would remain solvent for perhaps another 10 years. Hospitals, which have been able to utilize the availability of public funds to resist necessary consolidation, may now have sufficient market incentive to consolidate to a more efficient and appropriate size relative to demand. These reductions in government programs and in demand for services may make the long term cost of health care more affordable and may enable resources to flow to other important areas of the economy such as education, housing, etc.

However, even given these opportunities to increase efficiency, it is likely that many hospitals will not be able to achieve savings well beyond any historical precedent. In these cases, hospitals will be faced with the following options: reduce quality and/or access, seek government relief, or be

forced to merge or close.

There is ample evidence in the literature of hospitals reducing access and/or quality when faced with stringent regulation, increased competition, or unattractive levels of reimbursement.[17] Although we cannot predict whether such a result may occur in the future, past evidence would certainly indicate the need for concern. If revenue reductions of this magnitude are enacted, we recommend that quality of care and restrictions in access be closely monitored, particularly at safety-net hospitals which are most at risk for financial difficulties.

Many hospitals that cannot financially cope with these changes are likely to seek rate relief from local, state, and federal government. Given the structure and scope of the reform proposals, it is likely that some budget adjustments will be needed. For example, readjusting allocation among states or changing the budget limits across categories (i.e. hospitals, physicians, home health care, etc.) could solve some of the most pressing problems. They would, of course, meet with stiff political resistance. As an alternative, some additional revenues may be needed if hospitals are unable to adjust to the magnitude of revenue reductions. Given the scope and impact of these reforms, we recommend that procedures be formulated to monitor the financial impact on hospitals and to recommend adjustments if needed.

Finally, these changes will encourage mergers, acquisitions and closures in an industry that has been consolidating at an unprecedented pace. Many of these consolidations are likely to generate efficiencies, and should not be impeded. However, there are also potential problems that may arise from consolidation. The hospitals that close will not necessarily be the least efficient, but may be the ones that share the highest burden of providing care for Medicare and Medicaid patients and for the uninsured. Problems of reduced access may occur in places where specific services have been discontinued or where entire hospitals have closed. Such problems can negatively impact the health status of populations in those communities.[18] Additionally, too much consolidation in specific markets may result in an accumulation of market power which could eventually lead to higher prices. We recommend that hospital mergers and consolidations be closely monitored. Previous Council publications[19] have identified the need for increased capabilities in this area.

1. D. Shelton, "Charity's Bottom Line," *AHA News (*10/16/95): 11

2.Prospective Payment Assessment Commission, "Medicare and the American Health Care System: Report to the Congress," (June 1994): 80

3. IBID., 15

4. IBID., 15

5.IBID: 16

6. Employee Benefits Research Institute, "EBRI Databook on Employee Benefits," 3rd Edition (1995): 346

7. Prospective Payment Assessment Commission, Supra #2: 30

8. IBID: 30

9. Prospective Payment Assessment Commission, "Medicare and the American Health System: Report to the Congress," (June 1995): 19

10. American Hospital Association National Hospital Panel Survey

11. This figure represents marketbasket plus increases in adjusted days with other measures of volume such as case mix and intensity of service held constant.

12. ProPAC estimates under the House proposal for hospital non-long term care savings are $11 billion in the year 2002. CBO projects these same savings at $14.7 billion. We used the more conservative ProPAC estimates because their analysis distributed these savings across hospital types.

13. The Boren amendment provides a legal requirement that states reimburse hospitals at a realistic rate relative to costs.

14. K. Thorpe, A. Shields, H. Gold, S. Altman, D. Shactman, "Anticipating the Number of Uninsured Americans and the Demand for Uncompensated Care: The Combined Impact of Proposed Medicaid Reductions and Erosion of Employer-Sponsored Insurance," Paper Presented to the Council on the Economic Impact of Health System Change, (November 8, 1995)

15. Data we use from PPS hospitals slightly understate the financial impact on all hospitals concerning the growth in the number of uninsured. National uncompensated care is $16 Billion in 1993 (6% of $266 Billion) and in our hospitals $14 Billion (6% of $233 Billion). In 1995 this would total nationally nearly $18 Billion (6.1% of $300 Billion in costs). Since we are using a subset, the total is slightly less--around $16 Billion. However, we calculate a per capita using the total number of uninsured. This slightly understates per capita costs. Maryland has only about 0.6 million uninsured on a base of 39.7 million, so we understate uncompensated care across all

hospitals by about 5%.

16. Data from HCFA

17. See, for example, J. Mann (1995), J. Dailey (1992), S. Shortell (1988), A. Bindman (1990), D. Dunn (1994), K. Thorpe (1991), M. Fox (1992), D. Shelton (1995)

18. A. Bindman, D. Keane, N. Lurie, "A Public Hospital Closes: Impact on Patient's Access to Care and Health Status, *Journal of the American Medical Association* (June 12, 1990): 2899-2904

19. D. Shactman, S. Altman, "Mergers, Consolidation, and Antitrust: Charting an Appropriate Public Policy" *Health Affairs* (in press).