

IMPACT OF NEW COST CONTROL MEASURES ON HOSPITALS
WITH SPECIAL REFERENCE TO MONTANA

by
Steven Ray Spravzoff

A professional paper submitted in partial fulfillment
of the requirements for the degree
of
Master
of
Public Administration

MONTANA STATE UNIVERSITY
Bozeman, Montana

December 1986

P378
Sp 765
Cop. 2

ii

APPROVAL

of a professional paper submitted by

Steven Ray Spravzoff

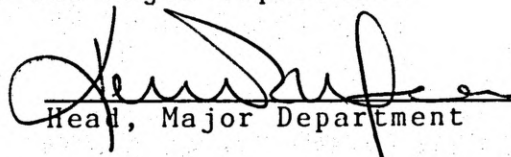
This professional paper has been read by each member of the professional paper committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

12-30-86
Date


Chairperson, Graduate Committee

Approved for the Major Department

12-30-86
Date


Head, Major Department

Approved for the College of Graduate Studies

2-10-87
Date

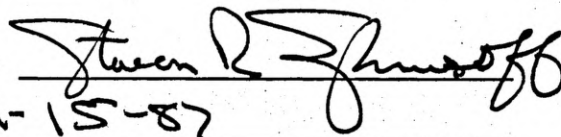

Graduate Dean

STATEMENT OF PERMISSION TO USE

In presenting this professional paper in partial fulfillment of the requirements for a master's degree at Montana State University, I agree that the Library shall make it available to borrowers under rules of the Library. Brief quotations from this professional paper are allowable without special permission, provided that accurate acknowledgment of source is made.

Permission for extensive quotation from or reproduction of this professional paper may be granted by major professor, or in his absence, by the Director of Libraries when, in the opinion of either, the proposed use of the material is for scholarly purposes. Any copying or use of the material in this professional paper for financial gain shall not be allowed without my written permission.

Signature



Date

1-15-87

TABLE OF CONTENTS

	<u>Page</u>
ABSTRACT	vii
1. INTRODUCTION	1
2. REVIEW OF THE LITERATURE	9
Cost Shift/Cost Reimbursement	13
Diagnosis Related Group (DRG)	15
3. MANAGEMENT PRACTICES	21
4. IMPACT ON EXPENDITURES	33
5. QUALITY OF CARE ISSUES	44
6. EXPERIENCE IN OTHER STATES	56
7. CONCLUSION	68
BIBLIOGRAPHY	71
APPENDIX 1	76
APPENDIX 2	83
APPENDIX 3 - Survey Letter	88
APPENDIX 4 - Survey Questionnaire	90

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1 - Major Hospital Payers	77
2 - Montana Hospital Administrator Survey Total Results All Hospitals Reporting Combined	78
3 - Hospitals with Bed Size Range Less Than 25	79
4 - Hospitals with Bed Size Range 25-100	80
5 - Hospitals with Bed Size Range 100 and Greater	81
6 - Occupancy Demographic Data	82

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1 - Patient Days/Admission	84
2 - Annual Operating Expense Percentage Increase	85
3 - Gross Charges and Net Patient Income	86
4 - Administrative/General Category	87

ABSTRACT

Major revisions have occurred and are developing in hospital cost reimbursement. Significant changes have already occurred resulting from the 1983 Social Security Amendments. Beginning in 1982 with TEFRA and following in 1983 with the Prospective Payment System, the federal government has moved away from a retrospective cost-based reimbursement system for Medicare patients to a prospective fixed-price reimbursement system.

Short term cost savings will be achieved through the implementation of the new health care price constraints and the advocacy of more competition. It is also an incentive to develop alternate care delivery subsystems as well as new management styles. However, research based upon a literature survey, data gathered by the author (in May, 1986), along with an examination of the experience in many states indicates there is a price to pay in other areas: 1) higher aggregate national health care expenditures and 2) a decline in the quality of care. This suggests that there may be a reason to closely scrutinize the present policy implications.

CHAPTER 1

INTRODUCTION

The advent of Medicare in 1966 opened the purse strings of the federal government, creating a seemingly endless source of funds for health care. Physicians were able to practice in a medical environment that knew few limits in number and kinds of tests, laboratory work and other services on their resulting fees. Encouraged by the pressures of population growth and demand for their services, hospitals expanded, upgraded and otherwise utilized this new source of income. The burden of payment shifted from the private sector to the government and there was little incentive to economize. With someone else paying the bills, it became more convenient for patients to be hospitalized for a few days than to be treated for the illness or injury in the physician's office or at home. Few, if any, of the hospital costs were out-of-pocket for the Medicare patient.

This provides the setting for the newly introduced prospective payment legislation. Faced with spiraling budgets, angry insurance companies and disgruntled taxpayers, the federal government was forced into

implementing a plan to slow the rate at which health care costs were rising.

This new means of reimbursing hospitals for in-patient care is based on a prospective payment per case, using diagnosis related groups (DRGs) to classify and label the various hospital products. The government feels that the new payment system will provide the impetus to deliver more economical health care.

Following the example that the federal government has set in its attempt to restrain health care costs, coalitions involving the medical insurance industry and private businesses have been formed. The union of insurance and business has heavily promoted the increased use of pre-admission testing, same day surgery centers, second opinions, and other new health care approaches.

New competition from non-traditional sources is another problem for hospitals compounding the issues arising from the new regulatory pressures. Phenomenal growth has occurred in the alternative care delivery systems, including Health Maintenance Organizations (HMOs), Preferred Provider Organizations (PPOs), urgent care centers, home health care providers, ambulatory surgery centers, and out-patient hospital care providers.

Consumers have also become more involved in health care cost containment and are now taking an active role in selecting medical care. Increases in medical insurance

deductibles and co-payments, along with a rising awareness of increasing health care costs, are causing consumers to carefully weigh each decision concerning their medical needs.

The underlying purpose of the new competitive and regulatory measures is to slow down the spiraling cost of health care. Early experience with Prospective Payment System (PPS) indicates cost savings are being realized. However, it is possible that the new reimbursement mechanism may give rise to some other outcomes in the United States health care delivery system.

The primary purpose of this paper is to discuss the potential effects these recent changes may have on the United States health care delivery system. Issues that will be addressed in this paper will include the impact of the new reimbursement system on management practices in the hospital, effect on health care expenditures, and quality of care trends. Particular reference will be made to the state of Montana through a survey administered by the author. Due to the nature of their size and the population base of rural communities, the operation of small rural hospitals is different than that of large metropolitan hospitals. Many rural hospitals rely on Medicare payments for a large proportion of their operating capital (Appendix 1, Major Hospital Payers). The perceptions of Montana hospital administrators gauged in the survey will be of particular

importance to administrators of hospitals in many other rural states. Due to Montana's rural nature, an indication of the impact of PPS on United States rural hospitals in general might be formulated.

Presently, PPS maintains the support of the federal government, the public, of private insurance groups, and of private industry in general. The likelihood that PPS will be abandoned in favor of a more lenient Medicare reimbursement system is remote. Therefore, it is important to study certain aspects of the impact of PPS on hospital systems in the United States.

Previously, Medicare payment plans paid for clearly definable procedures such as surgery, CT scans, lab tests, drugs and the hospital stay. The new change in public policy has shifted the emphasis away from payment based on charges toward reimbursement based on end products, primarily, diagnosis categories. The resource pool and operations of health care providers will be scrutinized much more creatively and comprehensively as a result of the changes.

The new regulatory and competitive pressures give rise to several questions. 1) Will a shift from current non-profit health care management practices to more aggressive and entrepreneurial practices occur? 2) What will the net affect of PPS be on hospital cost inflation? 3) What will PPS do to the present quality of hospital care?

Accessibility to necessary health care is an important component in regard to the quality of health care. This issue of accessibility will be addressed in association with quality of care issues.

Since the DRG-PPS system as it is being implemented nationwide is relatively new, research is rather limited. This paper will primarily rely on a relevant literature review from 1979-1986. The scope of study will be limited to factors which are directly attributable to the prospective payment system which has been designed as a control measure to limit health care expenditures in hospitals. Therefore, mainly hospital related issues will be discussed. For example, we will not address issues such as determining the impact of preventative health care or immunization programs on the mortality rate of United States citizens.

To gauge the perceptions of Montana hospital administrators regarding the new cost constraints, a survey questionnaire was developed and administered. Issues related to hospital management practice, cost impact and the quality of care delivered in rural hospitals will be the primary issues to be addressed by the survey. The survey was pre-tested by a group of persons employed in health care related professions.

Hospital administrators were chosen as a relevant group for the survey because of their extreme influence on decision making and resource allocation in the hospital

environment. Hospital administrators must also keep abreast of legal/environmental issues affecting the hospital environment.

Fifty-nine surveys were sent, with forty-two being returned, which resulted in a response rate of 71%. Surveys were not sent to hospitals exempt from the new regulations such as psychiatric hospitals. Twenty-one of the surveys which were returned came from hospitals with bed size less than 25. Thirteen of the surveys which were returned came from hospitals with bed size ranging from 25-100. The remaining eight surveys came from hospitals with bed size greater than 100. The bed sizes of reporting hospitals ranged from 6 to 288. The occupancy rate of reporting hospitals ranges from 8.4% to 67%, with an average reported occupancy of 47.5%. This compares to a national average occupancy of 60%-70%.¹ The importance of hospital occupancy as an indicator of hospital activity has diminished. This is due to the belief that a much higher proportion of a hospitals' business is now done on an out-patient basis.

Future surveys could focus on other sample groups such as policymakers (i.e., legislators and heads of federal agencies), third party payors (i.e., insurance companies), or practitioners. All of these groups would perceive similar issues on hospital reimbursement from a different viewpoint.

Pertinent information which has been extracted from the survey will be included at the end of each chapter in relationship to the topic under discussion. This paper is organized as follows: Chapter 2 is a literature review. Chapter 3 will address the issue of how management styles and approaches in hospitals will change as a result of the prospective payment system. An overview of expense implications and the cost impact of the prospective payment system will be discussed in Chapter 4. Chapter 5 will consist of a review of how the present quality of care in the United States may change as a result of the prospective payment system. Chapter 6 will cite experience from states other than Montana. Particular emphasis is placed on New Jersey, as its hospitals have been reimbursed under a prospective payment plan for several years. Many hospitals in the United States have responded to aggressive outside competition and a shrinking resource pool through the implementation of non-conventional management practices. Examples of hospital experience from these states will be included in Chapter 6. Conclusions and recommendations will be presented in Chapter 7.

NOTES

1. American Hospital Association, "The Changing American Hospital," Chicago, Illinois, 1985.

CHAPTER 2

REVIEW OF THE LITERATURE

Major government intervention in social programs began in the late 1940s and culminated with the "Great Society" years of the 1960s. Prevailing philosophy was that while the health care system was not socialized, it was a public utility.¹ In addition, it was believed that health care benefits were a right, regardless of social or economic class.²

The late 1950s through the early 1960s was a period of building and expansion in the health care industry, particularly for acute care hospitals. National health care policies guaranteed access and financial support through the federal government's enactment of the Hill-Burton Act (1946) which provided monies for the expansion of community hospitals. One condition of the funds was to insure that a specified percentage of indigent patients were treated free. This development alone dramatically increased the amount of care provided in hospitals.³

With the inception of Medicare in 1965, access to health care continued to expand. This trust fund would eventually provide hospital care, nursing home care, and home health services for over 30 million elderly Americans.⁴

Hospitals are reimbursed for the services they provide through an extensive third party system. In 1981, approximately 92 percent of all hospital bills were paid for by third party payers (Appendix 1, Major Hospital Payers). Each hospital has a unique mix of payers and the payers use different formulas and adjustments to determine the reimbursement for each hospital. Payers may contract with a fiscal intermediary to act as an agent and do the actual processing, monitoring, and paying of patient bills.

Medicare is a federally funded program for persons who are disabled or over age 65. It is not a welfare program. Under Medicare, eligible persons receive two basic types of health insurance coverage. Part A, hospital insurance benefits, which is the primary focus of this paper, covers in-patient hospital services and post-hospital care in skilled nursing facilities and patients' homes. Part B, supplemental medical insurance benefits, an optional program, covers physicians' services and out-patient hospital care. Enrollees in part B coverage pay a monthly premium and are required to pay for deductibles for services rendered.

Funding for Medicare is provided from taxes collected by the Social Security Administration. The Medicare programs, however, are administered by the Health Care Financing Administration (HCFA), a division of the Department of Health and Human Services (HHS). The

methodology used to reimburse hospitals has changed dramatically in the past three years.

The mid-1970s were a period in which the federal government attempted to address the cost and quality issues of health programs. The Carter administration spoke at length of its national health plan and promised that appropriate legislation would be submitted to Congress.⁵ It never was, because as revealed in the memoirs of former Department of Health and Human Services (DHHS) Secretary Joseph Califano, the Administration believed they could not competently control the cost aspects of a national health plan.⁶

The largest single item of the federal 1984 budget (FY84) was that of the Department of Health and Human Services (HHS), totaling \$289 billion. Of that total, 96% can be accounted for by entitlement spending--notably Medicare, Medicaid, and Social Security.⁷ Furthermore, the largest single health care expenditure is for hospital care. The United States is now spending over 10 percent of its gross national product on medical care (in comparison with 4.5% in 1950), causing great concern on the part of the government, industry, and the consumer.⁸

TEFRA is an acronym for the Tax Equalization and Fiscal Responsibility Act of 1982, PL 97-248. The law went into effect on October 1, 1982, but not all hospitals entered into the system on that date. Individual hospitals entered

the TEFRA system with their first cost reporting period beginning after October 1, 1982. For example, if a hospital's fiscal year began on February 1, 1983, that hospital entered the TEFRA system on February 1, 1983. All eligible hospitals were on the TEFRA reimbursement system by September 30, 1983, but they were covered by this reimbursement system for only one year. After that year the hospitals began receiving reimbursement for Medicare patients under the Prospective Payment System (PPS) using Diagnosis Related Groups--DRGs (see DRG and PPS sections).

The TEFRA system applies only to reimbursement for Medicare patients. Shifting of non-reimbursed costs to commercial insurers and self-pay patients will continue (see Cost Shift/ Cost Reimbursement section). Under TEFRA, capital-related expenses and out-patient service costs are reimbursed on the basis of costs incurred. In effect, these costs "pass through" to reimbursement and are not limited with the expected result that hospitals will continue aggressive building programs and purchases of capital equipment and hospitals may shift selected in-patient activities to an out-patient setting.

Under TEFRA, hospitals are reimbursed on a retrospective basis. They are paid for their actual costs incurred in delivering care, but there are prospectively set targets, with rewards and penalties for cost performance

against these targets. There are absolute upper ceiling and lower (floor) limits on what a hospital will receive.

Both the actual costs and the target and limit costs are considered on an adjusted cost per Medicare case. This is different from the pre-TEFRA reimbursement formula, which dealt with daily and departmental costs. Cost limits were based on a per diem room charge only. However, there were no limits on the per case costs coming from ancillary service departments (such as pharmacy, laboratory, and radiology), which were included in the cost per case and were subject to the targets and limits. It is possible that hospitals may attempt to curtail ancillary department usage for Medicare patients unless such usage can be shown to be cost-effective.

Use of a nationwide average Medicare cost per case would fail to consider the variation in complexity of care that any one hospital may provide. The case mix index is a hospital-specific number that measures this overall complexity of care delivered and is used to determine the adjusted cost per Medicare case for each hospital.

Cost Shift/Cost Reimbursement

From 1965 until passage of TEFRA in 1982, Medicare has paid hospitals on the basis of "reasonable and necessary" costs of providing care to their beneficiaries. In the last few years, these payers have increasingly restricted what they accept as reasonable costs. The cost restrictions have

left hospitals unable to meet their normal operating expenses, generate the operating margin necessary for the purchase of new technology and services, and to cover the costs incurred from bad debts and charity care. Hospitals have responded to these cost limits by shifting the Medicare non-reimbursed portion of their hospital costs to commercial insurers and self-pay patients. To do this, hospitals develop charge levels (prices) reflective of the shifted costs. Insurers and self-pay patients typically pay the bill on the basis of charges as they appear on a patient's bill.

There are other problems unique to the retrospective cost-based reimbursement system. Under such a system, hospitals are paid for whatever they spend. They have no real incentives to cut costs, because if a hospital cuts costs, it cuts reimbursements. Hospitals are better off maximizing costs, and thus reimbursements from cost-based payers, and shifting all non-reimbursed costs to charge-based payers. Another problem with the traditional cost-based reimbursement system is that it can lead to widely different payments to hospitals for similar services, because each hospital is paid for what it can legitimately claim as its costs. This results in the much publicized example of an operation which may cost \$4,000 to treat in one hospital and \$1,000 in another.⁹

Starting in 1982 with TEFRA and in 1983 with PPS, the federal government has begun to move away from the retrospective cost-based reimbursement system for Medicare patients to a prospective, fixed-price reimbursement system.

Diagnosis Related Group (DRG)

Diagnosis Related Groups (DRGs) are a patient classification scheme. The patient is classified into one of 467 different DRGs at the time of discharge. The classification scheme is based on the following hierarchy:

Major Organ System

Operating Room Procedure(s)

Primary Diagnosis

Age

Complications and/or Co-morbidities

A final step in the classification is the evaluation of the length of stay. For each DRG, there is an average length of stay that is used in developing the cost profile for that DRG. Reimbursement under a DRG system is the product of the number of discharges for any one DRG and the rate for that DRG. If the length of stay for a particular patient exceeds that average length of stay by a certain number of days, the patient will be classified as an "Outlier." Outliers are reimbursed at a rate that is different than the DRG rate. The Medicare prospective payment system will limit the dollar amount of

reimbursements a hospital may claim as Outlier payments.

The DRG system was developed at Yale University in the late 1960s for use in utilization review and is seen as having the following advantages:

- the number of DRGs is manageable;
- patients within a DRG have similar medical problems and;
- the resources used (or costs) for treating patients in a DRG are similar.¹⁰

The following are cited as disadvantages of the DRG patient classification system:

- the severity or stage of illness is not considered;
- the costs of standby staff and equipment for emergency/disaster response are not recognized;
- data used in developing costs were not accurate and do not reflect current state-of-art technology and medical practice.¹¹

This DRG classification system was utilized as a cornerstone for the development of the federal prospective payment system.

On April 20, 1983, President Reagan signed into law the Social Security Amendments of 1983, incorporating into those amendments the Prospective Payment System (PPS) which had been proposed earlier in the year.¹² Prospective reimbursement is defined as a method of reimbursing hospitals or other health care facilities on the basis of a

rate established in advance of the delivery of services and not affected by the amount of actual cost incurred.¹³ The present proposals seem to run counter to the reimbursement practices of the past 50 years.¹⁴

A prospective payment system is a reimbursement plan that (1) establishes a flat rate for a unit of hospital output (DRG), (2) establishes that rate in advance of the care being provided to the patient, and (3) considers that rate as payment in full to the hospital for providing that particular output.

The United States government's PPS plan establishes fixed rates for 467 categories (DRGs) of hospital treatment. The system applies only to Medicare patients. In order to allow hospitals time to adjust to the new system, the government is phasing in a national rate over a three-year period. In the first year, payment to a hospital will be equal to 75% of the hospital-specific cost-per-case amount plus 25% of a regional average DRG rate. In the second year, payment will be equal to 50% of the hospital-specific cost-per-case amount plus 37.5% of a regional DRG rate and 12.5% of a national DRG rate. In the third year, payment will be equal to 25% of the hospital-specific cost-per-case amount plus 37.5% of a regional average DRG rate and 37.5% of the national DRG rate. In the fourth and subsequent years, the payment will be based solely on the national DRG rate. All payments will be broken down into urban and rural

rates. Rates will be further adjusted to account for 300 regional wage divisions.

A hospital that can treat a patient for less than the DRG payment can keep the surplus. However, a hospital that incurs costs in excess of the DRG payment will have to absorb the loss. It can be expected that hospitals will continue to shift non-reimbursed costs to other payers. In addition, hospitals will seek to selectively decrease the length of stay and to increase productivity of the hospital's human and other resources. Diversifying into out-patient services and reducing the size of a hospital's staff are examples of means to accomplish these objectives.

The base-year DRG rates are being set on the basis of previous Medicare charge data that have been updated to reflect the impact of inflation and changes in medical technology. In 1984 and 1985, DRG rates were adjusted for by the amount of increase in the the market-basket index of hospital costs plus one percent. Prices will be adjusted in 1986 and beyond on the advice of the HHS secretary and the Prospective Payment Assessment Commission (PROPAC). DRG base rates will be recalibrated every four years.

The PPS system will apply to hospitals with their first cost reporting period beginning after October 1, 1983. Thus, after spending one year under the TEFRA system, hospitals enter the PPS system. Hospitals currently exempt

from PPS include psychiatric, pediatric, rehabilitative, and long-term-care facilities.

At this time, the PPS system does not apply to capital costs and out-patient costs. The PPS legislation instructs the HHS Secretary to study ways to incorporate capital costs into the system. The HHS secretary is also mandated to report to Congress on the feasibility of including physician fees in the DRG rates.

States such as New Jersey, that had previously implemented state cost-control programs will continue to be granted waivers if the programs meet specific criteria.

Since the setting under which hospitals are now reimbursed has been established, the following chapter will deal with how PPS has influenced hospital management practices.

NOTES

1. Sharon Murphy Enright, "Effect of Reaganomics on the U.S. Health Care System." Am. J. Hosp. Pharm., 39, (1982), pp. 1169-75.
2. Ibid.
3. Roxanne B. Spitzer, "Legislation and New Regulations," Nursing Management, 14, No. 2, (1983), p. 14.
4. United States Department of Health and Human Services, Health Care Financing Administration, HCFA Statistics, September 1984, p. 1.
5. Enright, "Effects of Reaganomics," p. 1170.
6. Ibid., p. 1170.
7. T. Bray, "Budget Realism is in the Eye of the Beholder," Wall Street Journal, 1 February 1983, p. 32.
8. Eric Munoz, "The New Challenge of Critical Care: Grappling With the Dollar Impact of our Actions," Critical Care Monitor, 3, No. 6, (1983), p. 1.
9. David B. Swoap, "Medicare Crisis is Only a Symptom," Wall Street Journal, 3 January 1984 p.
10. Franklin A. Schaffer, (ed.), "DRGs: Changes and Challenges," Pub. No. 20-1959, (New York: National League for Nursing, 1984), p. 17.
11. Ibid.
12. S. M. Enright, "DRGs: Implications for Hospital Pharmacy Practice," Topics in Hospital Pharmacy Management, 3, No. 4, (1984), pp. 10-18.
13. Bernard Mehl, "Reimbursement Constraints and Pharmacy Practice: The New York State Experience," Topics in Hospital Pharmacy Management, 3, No. 4, (1984), pp. 73-88.
14. Leah Curtin, "Social Justice and the Interim Regs," Nursing Management, 4, No. 11, (1983), pp. 7, 8.

CHAPTER 3

MANAGEMENT PRACTICES

With PPS came new financial incentives for hospital managers to restrain costs. PPS reimburses the provider a flat rate for each DRG regardless of how long the patient stays in the hospital or how many of the hospital's resources the patient uses. It is now in the hospital's best interest to control in-patient costs and make the best use of alternatives to expensive in-patient care. Reducing patient Length-of-Stay (LOS) and substituting a more economical means of providing hospital care are being given a greater emphasis. Therapies that yield the lowest monetary return might be reduced or eliminated, regardless of their perceived need.

Every successful enterprise combines four assets to produce its contribution to the public economy: (1) Material Resources (technology, buildings, grounds, equipment, supplies); (2) Capital (money, bonds, investments, credit); (3) Labor (nurses, physicians, technicians, support personnel); and (4) Entrepreneurship (the skill needed to blend the other three in the right quantity, at the right time and in the right place to produce the right product.¹ Modern hospitals must follow

the same rules for success, in other words, sound management techniques.

Douglas McGregor is known in management circles for his Theory X and Theory Y views of worker motivation.² Theory X implies that the typical worker has an inherent dislike of work and will avoid it if possible. A management style based on Theory X relies on coercion, direction and control of the worker to promote productivity. Theory Y, on the other hand, assumes that the typical worker enjoys work, is creative, and will assume responsibility toward the achievement of organizational goals with very little supervision. McGregor's theories, at first glance, seem to imply that managers are either authoritarian or democratic. In reality, however, the manager must combine the elements of both management styles to create one that is workable in a particular organization.³

The Japanese theory of management described in William Ouchi's Theory Z, has also been carefully studied and practiced by many American managers.⁴ Theory Z suggests that when an important decision concerning the organization is to be made, everyone who will be impacted by the decision should be involved in making it. Ouchi further claims that the success of the Japanese management style lies in its emphasis on participatory management. The Japanese manager solicits and values the opinions and ideas of workers and listens when suggestions are offered. Quality circles, or

meetings of small groups of workers to work on ways to improve the work environment, evolved from the Japanese style of management. The following strategies, which have been already proved to be beneficial by Japanese managers could well be used by American hospital managers to encourage greater worker involvement and increased productivity.⁵

- An open environment is fostered and two-way communication is encouraged.
- Workers are evaluated on performance rather than on personalities.
- Policies are developed that place priority on the solving of "people problems."
- Workers are encouraged to seek a balance between personal and organizational needs.
- Educational programs are initiated to encourage human resources development.
- Decentralized management is favored and responsibility for decision making is placed at the lowest level possible.

The PPS legislation has been a powerful catalyst in the making of hospital operations more "business-like." Some of the innovative strategies which are being attempted by hospitals include employee involvement programs, participative management, and product-line management.

Hospitals must re-examine their management styles under PPS in order to determine the most effective approach.

The track record of participative management programs in hospitals has generated "enough hard evidence to suggest that employee involvement programs such as quality circles, can be effective in improving hospital performance."⁶

A review of the record of employee involvement programs in hospitals concludes that factors that predict success of participative management programs in other large organizations apply to hospitals as well. Genuine long-term support from top management is essential for the success of employee involvement programs. A supportive organizational culture is also necessary. Quality circle programs have been proven successful at hospitals such as Henry Ford hospital in Detroit, Michigan and Mount Sinai Hospital in Miami, Florida. These are hospitals which have demonstrated a long tradition of support for innovative human resources management. Working environment is another important factor in determining successful employee participation programs. Hospital employee participation programs which have involved clerical and support departments have been more successful than those involving patient care units. Those involved directly with patient care, such as nursing units, have been among the least effective to date.⁷

Since hospital units are functionally interdependent, efforts must be made to identify all of the employees who will be affected by the employee involvement activities. For example, changes by lab in a blood banking procedure will ultimately affect every nursing unit.

Finally, in order for employee involvement programs to succeed, employees must be assured of job security since strong incentives currently exist to promote massive layoffs.⁸ While participative management has enjoyed considerable success in the management of many modern hospitals, there are additional new approaches worth discussing. One such example of product-line management follows.

DRGs have stimulated an interest among many hospitals in product-line management. While product-line management is a new concept to many hospitals, it has been used at Johns Hopkins hospital successfully for more than ten years. Since the DRGs are readily identifiable as a unit of hospital output, the approach in product-line management is to identify mutually exclusive product-lines, determine who will manage and be accountable for each product-line, and define the corresponding reporting relationships.⁹ Johns Hopkins has eight "business units" corresponding to clinical services such as medicine, pediatrics and surgery. Each unit at John Hopkin's has a nursing director and an

administrator that manage the units and report to a physician director. All units report to the president.¹⁰

Hospitals have a product line that is in theory as extensive as the number of patients it serves. However, while each patient is unique, (s)he has certain diagnostic and therapeutic attributes in common with other patients that determine the type and level of services he receives. One method which can be used for identifying products is to determine which factors are important in predicting the amount and type of goods and services to be provided to patients. The different combinations of the levels of these important factors (e.g., age, diagnosis, surgical procedures), describe the classes of patients with similar products. Different products may then be analyzed in regard to their profitability. This would provide rationalization to the financial planning process of the hospital. Many other management approaches have been used in a response to PPS.

Small rural hospitals are most likely to flourish under scaled-down, non-bureaucratic management, according to an officer of a rural-hospital management company.¹¹ Charles J. Hall is the Vice President of Operations for Morris Management Inc., a privately held company started in 1979, that manages hospitals with 25 to 100 beds. It is one of several management firms that deals only with small rural hospitals. Hall feels the company is good at managing small

hospitals because they can identify with people. The company prefers to avoid mass layoffs and tries to reassure employees within the first month of the contract by giving small incentive pay increases.¹²

Another management strategy which has been used successfully is to utilize a greater proportion of part-time employees. It is recognized that a critical component under nursing management's control is the use of part-time nurses to solve scheduling, cost, and quality of care problems.¹³ The survey administered by the author provides additional documentation in regard to how management practices and approaches are changing.

Over three-fourths of the Montana hospital administrators believed that management styles had changed significantly because of prospective payment (Appendix 2, Summary of Survey Results, All Hospitals Reporting). The focus in Montana hospital care is clearly moving from building and expansion toward cost-control and down-sizing. In order to survive, businesses must anticipate changing conditions and respond. From the survey, it is apparent that Montana hospital administrators are trying to do just that.

Eighty percent of all Montana hospitals surveyed have implemented improved financial monitoring systems in a response to DRG reimbursement (Appendix 2). It is evident that hospitals in Montana are now monitoring costs much more

closely than when they were being reimbursed based upon charges. Due to their numerical nature, the 467 categories of DRGs lend themselves very well to computerized monitoring. The trend of declining computer hardware and software costs may be another reason that rural hospitals have improved their financial monitoring systems, since systems are now available at an affordable price.

Over one-half of Montana hospitals surveyed have reduced their labor force between 1984 and 1986 (Appendix 2). This is representative of the downsizing trend which has been occurring in the hospital industry on a nationwide basis. For example, in 1984, the nation's hospitals closed 1,000 beds and decreased FTE positions by 73,000.¹⁴

About 60% of the Montana hospital administrators felt that the delivery of patient care had not diversified significantly since the beginning of prospective payment (Appendix 2). This may indicate diversification is more of a long term process. It may also indicate that the focus of Montana hospital administrators is still primarily on providing effective and efficient hospital care, rather than on getting into new markets. Many of the services which have been traditionally provided on an in-patient only basis are now available on an out-patient basis. Providing services on an out-patient basis may not have been perceived by administrators as diversification, but only as doing the same thing under a different setting.

Among Montana hospital administrators diversification, marketing and planning, better management, and cost containment were all rated highly in regard to what they perceived would keep Montana's hospitals viable (see Appendix 2). Hospital productivity, adjusting to DRGs and consolidating/merging were rated less important in this regard.

This information correlates very well with the results of a previous survey done by the National Research Corporation.¹⁵ In this survey, 450 administrators of rural hospitals were contacted by telephone in September of 1985. Diversification, cost containment, marketing/planning and better management were highly rated in this survey in regard to what would keep rural hospitals viable. Productivity, adjusting to DRGs, consolidating/merging were rated lower in regard to maintaining viability.

In summary, it is apparent that a divergence of new management styles and approaches has occurred in American hospitals since the implementation of PPS. Employee involvement programs, participative management, product-line management and the utilization of different staffing patterns are among the approaches that have been proven successful in some hospitals. Montana hospital administrators also believed that PPS had influenced a significant change in management styles. An example of this, is that 80% of the administrators interviewed had

recently implemented improved financial monitoring systems in a response to PPS (Appendix 2). The percent change in the ration of in-patient to out-patient services could be addressed in any future studies which may be done assessing the impact of PPS on Montana hospitals.

NOTES

1. L. L. Curtin, "Who Says Lean Must Be Mean?" Nursing Management, 17, No. 1, (Jan., 1986), pp. 7-8.
2. Douglas McGregor, The Human Side of Enterprise, (New York: McGraw-Hill, 1960).
3. T. J. Peters, and R. H. Waterman, In Search of Excellence, (New York: Warner Books, Inc., 1982), p. 96.
4. W. G. Ouchi, Theory Z, Reading Massachusetts, Addison-Wesley, (1981).
5. R. Boissoneau, "The Democratically Orientated Manager," Topics in Hospital Pharmacy Management, 4, (1984), pp. 44-51.
6. Martin D. Hanlon, "Reducing Hospital Costs Through Employee Involvement Strategies." National Productivity Review, Executive Enterprises, Inc., 5, No. 1, (1985-1986), pp. 22-31.
7. Ibid.
8. Ibid.
9. John G. Nackel and Irwin W. Kues, "Product-Line Management: Systems and Strategies," Hospital and Health Services Administration, Foundation of the American College of Healthcare Executives, 31, No. 2, (1986), pp. 109-123.
10. Ibid.
11. Catherine A. Siegner, "Outside Management Firm Puts Ailing Hospital on the Right Track," Modern Healthcare, (December 6, 1985), pp. 88-89.
12. Ibid. p. 88.
13. D. S. Wakefield, and S. Mathis, "Formulating a Managerial Strategy for Part-Time Nurses," Journal of Nursing Administration, 1, (15 Jan., 1985), pp. 35-39.
14. American Hospital Association, "The Changing American Hospital," (estimate), (Chicago, Illinois, 1984).

15. J. Jensen, "42% of Rural Residents Are Traveling to Urban Areas for Medical Treatment," Modern Healthcare.

CHAPTER 4

IMPACT ON EXPENDITURES

The need to control runaway health care costs and provide affordable health care service is clearly recognized. National health expenditures per person increased from \$254 in 1967 to \$1,365 in 1982, an increase of 437%.¹ Federal health expenditures increased 682% between 1967 (\$12 billion) and 1982 (\$93 billion).² Yet, an overwhelming emphasis on "cost reduction at any cost" constitutes a simplistic solution that may only serve to aggravate the overall quality of patient care. Changes in the infrastructure of the United States health care delivery system will make sense only when the patients are the beneficiaries and not the victims of such a system.³ In addition, the question remains unanswered as to whether payment based on diagnosis related groups will control hospital costs. Since labor costs represent a considerable portion of hospital costs, the issue of productivity merits examination.

Has hospital labor productivity declined over the past twenty years? Hospitals now employ more personnel per patient day than in the past. But productivity is difficult to measure in the complex hospital care field. In 1960, it took 2.27 full time equivalent employees to produce one day

of patient care. By 1983, this figure had risen to 4.12--an 83% increase!⁴ Wage costs have similarly increased. Measured in constant 1967 dollars, hospitals spent \$31 in labor costs per patient day in 1960. By 1983, \$96 per patient day was spent on labor.⁵ These increases in the number of employees and cost per patient day have no simple explanations. For example, a 1960 patient day may have been much different from a 1983 patient day. It cannot be concluded that labor productivity has either increased or decreased during the period in question.⁶ Regardless of the potential impact on productivity, the additional employees and higher wages have contributed to the overall increases in hospital costs.

What about the issue of cost effectiveness? Almost anything can be demonstrated to be cost effective depending on what alternatives are compared. In order to get a true picture of the cost effectiveness of hospital care in the United States all alternatives must be identified for achieving a desired goal. It is the author's opinion that the cost effectiveness of hospitals may not be determined until the policymakers reach a consensus on what the goal of health care delivery is?

Peter Drucker, known for his Management by Objective (MBO) technique, questions what the objectives of a hospital are. "Health care sounds plausible, but most hospitals have nothing to do with health care. Hospitals are concerned

with the treatment and care of the sick. Clearly, the most intelligent and effective way to produce health care is the prevention of sickness, rather than its treatment and cure. Hospitals, in effect, are the result of the failure of health care."7 Until agreement is made on what the overall purpose of the American health care delivery system should be, health care policymakers will continue to try to make the current system more economical.

Cost effective, but to whom is another question that may be raised. The program may be cost effective to the federal government but what will its impact be on the beneficiaries? State and local governments will stand to become the big losers in the end. It will be necessary for indigent care costs and uncompensated care to be paid for at the local level. Just how many costs are within a hospital's control is yet another point of discussion.

In regard to the control of hospital costs it is interesting to note that physicians make the major decisions affecting resource consumption by a given patient. This puts the hospital at risk, since there is little a hospital can do to influence those decisions. At the present time, the physician-patient relationship appears to be more important than the control of cost issues, since there are no incentives for the physician to control costs. Cost control by hospitals is done primarily by reacting to the physician after the decision has been made. In the future,

computerization may aid the process where decisions are made to allocate hospital resources. It is possible that all of the resources necessary (to treat a given patient) will be compiled on an up-to-the-minute basis, so that a physician can quickly find out just how much of which institutional resources have been used for any specific patient.

PPS has imposed an economic limitation on the total cost of hospital in-patient care, thus encouraging the shortest length of hospital stay. Clearly the largest controlling factor related to costs in hospitals today is the length of stay (LOS). Prospective payment dictates that a higher turnover of patients with a minimum length-of-stay (LOS) is optimal for most hospitals. Optimal product mix (i.e., attracting patients with profitable DRGs-assuming the hospital has the tools available to determine profitability) is the subject of discussion among many hospital administrators.

Wennberg et al. studied per capita discharge rates for all non-obstetrical and surgical conditions classified according to DRGs in thirty Maine hospital market areas. The study was based on data from a two-year period before implementation of the DRG system, which avoided any influence of DRG reimbursement concerns on admission policies. Hospitalization rates varied more than five-fold for most of the 445 DRGs studied; more than 47% of the patients were in DRG categories for which admissions varied

by a factor of 8.5 times or more. The authors concluded that differences in admission rates are likely related to variations in individual physicians' practice styles and that physicians may be able to alter their admission policies within clinically acceptable limits in order to increase hospital revenues. From this, one could postulate possible abuses of PPS could occur.

J. E. Wennberg et al. concluded that the Medicare prospective pricing system may increase rather than decrease per capita costs for hospital care if hospital admission rates are not effectively controlled.⁸ An important factor in controlling hospital costs will be the peer-review organizations (PROs) now being set up in each state.

Important in controlling abuses of the DRG system will be Peer Review Organizations (PRO) which will replace existing Professional Standards Review Organizations (PSROs). PRO will be responsible for determining whether health care services funded by Medicare are "reasonable, medically necessary, are furnished in the appropriate setting, and are of the quality which meets professionally recognized standards."⁹ It is recognizable that, because of the nature of medical practice, some "gaming" of the system may occur in spite of the PRO review. This could be accomplished through changing physicians' admitting practices. It could also be accomplished through practices within the DRG system itself, such as "DRG Creep."

DRG "creep" is a process whereby hospitals classify patients under those DRGs with the highest reimbursement levels. It is an inevitable result of the implementation of a fixed rate reimbursement system. To what magnitude this currently occurs is really unknown.

Under PPS the inherent financial incentives are to provide less service. This does not promote efforts to keep patients out of the hospital (more admissions are desirable), to promote healthy lifestyles, and/or to encourage enrollees to engage in self-care and seek preventive health-care services. Any of the aforementioned factors has the potential to increase total health care costs in a society. (The impact of decreasing expenditures on the quality of care will be covered in the next chapter.)

The survey administered by the author offers some insight into how hospital expenditures are perceived in a rural state. Overall, Montana hospital administrators did not feel that the hospital industry was any less efficient when compared to the efficiency of other industries. Hospitals will now have products (DRGs) which lend themselves to measurement. Previously, a valid comparison of efficiency between hospitals was difficult to obtain because patient days was used as the primary indicator. Comparisons between hospitals should be easier to achieve

than in the past, since cost accounting by DRG allows for easily quantifiable comparisons among hospitals.

It appears that most hospitals in Montana adjusted rapidly to the changes which have occurred in Medicare reimbursement. Most administrators felt that the transition to prospective payment would not control hospital costs in Montana (Appendix 2). This is probably true because most hospitals had already adapted to PPS by the time this survey was distributed. Montana administrators expressed that the aging population, the cost of high technology and declining patient days could be some of the more important issues in regard to controlling hospital costs in the future (Appendix 2).

It is apparent that the aging population is a primary factor in driving Montana hospital costs up (Appendix 2). Administrators in Montana agree that the aging population will keep the cost of hospitalization increasing. The population will go from 11% elderly today to 20% elderly by 2020.¹⁰

A majority of the administrators in Montana also agree that high technology is a major contributor to rising hospital costs in Montana (see Appendix 2). While new diagnostic techniques may be effective, they are also expensive. As the federal government looks for other means to decrease the costs of health care, capital costs will be included in the DRG payment in the future. This will make

the acquisition of new sophisticated high technology equipment much more difficult. Limiting capital acquisitions could stabilize the impact of the rising cost of high technology on hospitalization. It is also likely that a limit on capital acquisition may make private philanthropy a more important source of these purchases.

According to Edward C. Bessey, President and Chief Executive Officer of the Pfizer Hospital Products group there are three reasons why DRGs will slow innovation¹¹ 1) Hospitals are attempting to control all of their costs, including technology. Bessey notes, however, that cost pressures may be forcing hospitals to avoid some higher-priced technologies that may prove to be more cost effective for society in the long run. 2) New technologies are factored into the DRG rates only when the rates are periodically revised. This creates a time lag between the introduction of new technology and its reimbursement. 3) Until a technology is reimbursed it may not be widely adopted. However, if it is not widely adopted, it is not likely to be adequately reimbursed. The underlying implication throughout these assumptions is that the rate of technological innovation will slow down from its present rate of growth. Because of these problems, Pfizer has shifted its R and D effort to focus on products that offer short-term savings and on cost-effective products that are used in large DRG categories. Bessey recommends that DRG

prices be recalibrated every year, rather than the current recalibration of every four years and that Medicare reimbursement decisions coincide with FDA approval of a new device.

Most Montana administrators feel that the national physician glut will not increase hospital costs in Montana (Appendix 2). The number of non-federal physicians who are active in patient care has increased from 255,027 in 1970 to 373,644 in 1981.¹² Their feeling could be due to the fact that many of Montana's administrators of rural hospitals stated that they had experienced difficulties in attracting a sufficient number of physicians to their communities. Although nationally there are a greater number of physicians overall, apparently they are not distributed evenly. Additional physicians and increased specialization may drive hospital costs upward in the larger, more populated cities of Montana. However, due to the shortage of physicians in many of the rural communities, it would be hard to project the overall impact of the national physician glut on Montana hospital costs.

In conclusion, many factors can be identified in regard to contributing to rising hospital costs. They include the aging population, high technology, capital equipment costs, increased physician specialization, higher labor costs and other miscellaneous operating cost increases. Some of these expense categories are not within the control of the

hospital's daily management activities. Reimbursement for hospitals is also becoming more restricted which will have the net effect of reducing their incomes. The challenge for hospital survival will be to reduce controllable expenses while maintaining an acceptable quality of service.

NOTES

1. United States Department of Health and Human Services, Health Care Financing Administration, HCFA Statistics, U.S. Government publication No. 3, (September 1984), p. 3.
2. Ibid. p. 2.
3. Devin P. O'Donnell, Hospital Based Home Health Care: Gaining Competitive Advantage Where Everyone Benefits, Am J. Hosp. Pharm., 41, (1984), pp. 147-148.
4. Ibid.
5. Ibid.
6. Joel J. May, "Productivity, the Human Dimension," Health Matrix, Rynd JCommunications and Cole Western Reserve University, 3, No. 4, (Winter 1985-86), pp. 24-30.
7. P. F. Drucker, Management: Tasks; Responsibilites; Practices, (New York: Harper and Row, 1974).
8. J. E. Wennberg, K. McPherson and P. Caper, "Will Payment Based on Diagnosis Related Groups Control Costs?" New England Journal of Medicine, 311, (1984), pp. 295-300.
9. U.S. Department of Health and Human Services, "Medicare and Medicaid Programs; Utilization and Quality Control Peer-Review Organization (PRO); Assumption of Reponsibilities and Medicare Review Functions and Coordination of Medicaid with Peer-Review Organization," Federal Register, 49, (1984), pp. 29026-29033.
10. Gail Wilensky, Ph.D., "Rethinking the Rules of Health Care Finance," (Interview), Hospitals, (1985), pp. 63-64.
11. "Cost Containment Policies Expected to Delay Technological Innovation," Federation of American Health System Review, Federation of American Health Systems, 19, No. 4, (July/August 1986), pp. 28-30.
12. HCFA Statistics, p. 13.

CHAPTER 5

QUALITY OF CARE ISSUES

As a consequence of the new reimbursement mechanisms, all physicians and patients may have to live with and within a system that limits expenditures. An example of our possible future under restricted health care funding is the British National Health Service (NHS). Britain spends half the amount per capita than does the United States. The British have had a long history of medical rationing and the people are accustomed to it. It is common for patients in Britain to wait over a year for elective or non-emergency surgery or treatment.¹ Whether or not PPS will ultimately cause rationing in American hospitals is a point worth considering.

All societies ration health care; the presence of rationing is, therefore, something of a false issue. The lesson of NHS in Britain is that public and provider acceptance appears to depend upon how rationing is accomplished. In the United States, implicit allocation based largely on the patient's ability to pay is a tradition, albeit an uncomfortable one. "In Britain, rationing to the point of letting patients die is also an uncomfortable tradition."²

A book by Henry Aaron and William Schwartz titled The Painful Prescription, contains a very thorough, careful, and objective evaluation of the system of medical care in the United Kingdom as compared with that in the United States.³ Their data indicate quite clearly that if the standards for treatment in the United Kingdom applied to the people of the United States, there would be no fewer than 37,000 excess deaths a year from renal disease, 48,000 from cancer, and 40,000 from coronary disease. An additional 138,000 people would be denied the extension of a useful, productive and comfortable life. Physicians in the United Kingdom gradually have refined the standards of care so that they can escape the constant recognition that financial limits compel them to do less than their best. They persuade themselves that their patients will lose nothing of medical significance when budget limitations force the provision of alternate forms of care, forms that are less than optimal.

In the United States, after 20 years of searching for a means to assure access and availability of high-quality medical care and hospital services to every person in the country, and after eight years of agonizing over how we can reduce the escalation in the cost of care and promote economy and efficiency in the provision of health care services, we have progressed to the question of how best to limit access, decrease demand, and ration care.⁴

Another consequence of fewer resources available for hospital care, may be the emergence of a two-tier system of health care. Under that scenario, some hospitals would turn away all Medicare patients while maintaining their state-of-the-art facilities for those patients whose costs are fully reimbursed. Other hospitals would become exclusive Medicare hospitals with services and facilities pegged at the imposed dollar level of reimbursement.⁵ The net effect of this would be to lower the standard of care for Medicare patients.

A survey by the National Research Corporation, Lincoln, Nebraska conducted in June 1985, with 450 hospitals participating showed that 29% of the hospitals felt PPS had lowered the quality of care.⁶ Only five percent of the hospitals surveyed had experienced an improvement in the quality of care under PPS.

Accountability should be considered a primary issue in determining whether or not care is being delivered within clinically acceptable limits under PPS. Hospitals must account for relationships among the care required (patient classification), the care available (staffing etc.), and the care received (documentation, outcomes). Review by PROs is not sufficient. The responsibility to maintain high standards of hospital care in the United States must include hospital administrators and the boards of trustees, consumers, physicians, and other third party payers. The

aforementioned groups need to define acceptable standards of care that are consequently measurable. These standards must then be monitored to determine if there is a persistent disparity between the care needed and the care received.

Peer Review Organizations (PROs) like Professional Standards Review Organizations (PSROs) before them, are more likely to be seen as agents of cost containment than of quality assurance.⁷ Both their credibility and their effectiveness might be enhanced if an expert panel of clinicians and health services researchers were established to help them set and achieve reasonable objectives for quality of care.⁸ As more attention is focused on the quality of care issue, PROs are expected to begin issuing more sanctions against health care providers. If a hospital makes a serious mistake, a PRO can recommend a sanction to ban the provider from the Medicare program. Although a provider with minimal Medicare business may think that there is little to lose if a sanction is imposed, the resulting publicity and malpractice suits could seriously harm the provider's reputation.⁹

The United States population will go from having 11% elderly today to 17.5% or 20% by the year 2020, which will likely have very substantial implications for our whole tax-transfer system. It will force us to think very hard about how much of our resources we are willing to transfer from the currently employed population to the currently retired population, and it will also require us to think hard about whether we want to change the incentives for the elderly with regard to labor force participation. It will require some deep serious reconsideration of what many people have

regarded as a social contract with the elderly (i.e., Medicare)."10

Accessibilty to necessary health care is an important component in regard to the quality of health care. Medicare has been, and still is, a social contract between the federal government and the disabled and elderly. Recent changes in reimbursement laws, coupled with the aging population of the United States, will make access to necessary health care by these individuals increasingly difficult. For example, one change in the reimbursement scheme will require increased co-payments by this fixed income group. Will PPS discourage these individuals from seeking out necessary medical attention while their ailments are still in early, easily-treatable stages?

The concerns expressed by the chairman of the House Ways and Means Committee Health Subcommittee Representative Fortney Stark (D-CA), are valid. Interviewed by the American Hospital Association's Washington office, regarding the developments in the Medicare system, he commented: "I'm concerned about people who, for whatever reasons, aren't getting medical care. I have the strong impression that some people are being tossed overboard in the effort to make the system more efficient. I want to document and reverse that trend."

In regard to cost, Rep. Stark stated, "The DRG isn't as simple as it looks at first. It seems that the basic question is whether the government wants to pay hospitals

for acceptable costs or whether it simply wants to buy quality health care at the lowest available price. I don't think we're clear on that question."

When questioned on the likelihood of rationing of health care in the United States, Rep. Stark felt that it needed to be acknowledged that rationing had already been occurring the United States for a number of years. "As long as there is a limited number of beds in an intensive care unit, there will be rationing. Rationing is a pejorative word. But call it allocation, or what you will, there are going to have to be some priorities." Stark thinks that there will be rationing because there won't be enough money and Congress just won't give the medical delivery system a blank check.¹¹ The impressions of Montana hospital administrators on the quality of care topic will now be discussed.

Montana administrators overwhelmingly felt that illness severity does differ (within the same diagnosis) among hospitals in Montana (Appendix 2). This reinforces the belief that payment according to DRG does not always guarantee the purchase of a similar product. Presently, if a hospital can't treat a patient within the amount of the DRG payment, it must absorb the loss, even though these medical costs may be deemed necessary and efficient. For example, if the average population of an individual community was older than another, the anticipated recovery

time could also be expected to be longer. A system based on averages does not account for this.

Administrators in Montana were equally divided on the issue of whether or not hospital patients in Montana were now being discharged quicker and sicker (Appendix 2). Many administrators wrote comments stating that they felt there was no doubt that the patients were definitely being discharged quicker. Since a patient's clinical status upon discharge would be somewhat difficult for the administrators to gauge, they may have been somewhat reluctant to make any kind of judgement as to whether the patients are now actually being discharged sicker than prior to when the hospital received reimbursement by DRG. Undoubtedly there now exist incentives to discharge patients as early as possible. However, the final dismissal decision still ultimately rests with the patient's attending physician. At the current time, there aren't any incentives for the physician to dismiss a patient any earlier, so this probably prevents the practice of quick discharges from occurring. It is also recognized that there are incentives to utilize the step-down process to a long-term care facility to a much greater extent. So while it is realistic to assume Montana hospital patients are being discharged quicker than before, this does not mean they are being denied access to institutional care.

Administrators were divided as to whether services which were not providing a good profit margin would be dropped (Appendix 2). There are other factors such as community need and support which obviously play a role in determining the availability of a given service in any Montana community. The isolated nature of many Montana communities and the severity of Montana's wintertime weather make it necessary for some hospitals to provide services whether they are profitable or not. In the future, if the federal government does not reimburse hospitals for these services at an acceptable level, decisions will have to be made at the local level to support those services or they will be dropped.

Ninety percent of the Montana hospital administrators who were surveyed felt that the new reimbursement mechanisms will force society to confront the issue as to who will bear the burden of indigent care costs (Appendix 2). It is becoming increasingly difficult to obtain payment for indigent care through cost-shifting and charge based reimbursement. Previously, under charge based reimbursement, hospitals were able to increase their rates to account for this lost revenue. Since PPS pays the provider a set dollar amount per case, the practice of increasing the charges will have no impact on the amount a provider will be paid. Now, it is highly likely that state and local governments will be faced with this issue as the burden of indigent care is

transferred from the federal level to the local level. In order to survive hospitals will have to become less philanthropic and more business-like. It has been stated that the Medicare payment system could falter because of its failure to account for hospitals indigent care costs.¹²

"By the mid-1990s, the current system for the care of the uninsured poor will be breaking down. Fewer funds will come from federal and state governments and charities, and hospitals will be providing less "free" (uncompensated) care. The federal government will have four choices in responding to the needs of the 35 to 40 million Americans who are likely to be uninsured: 1) Do nothing; 2) Enact a comprehensive form of national health insurance; 3) Provide grants to designated hospitals and clinics for the care of the uninsured; and 4) Expand existing public and private health insurance programs to cover the uninsured portion.¹²

In summary, the ability of the consumer to pay for the service is becoming a primary consideration in determining whether or not the provider will make that service available. Although documentation would be difficult, the quality of care in United States hospitals has probably declined since the implementation of PPS, in spite the activity of PROs. Some maintain that the United States is moving away from the concept of the best care available at any price to good care at the best price.

Currently, the budget process holds the health issues captive, especially quality. Because 1988 will be a presidential election year, PPS may become a major domestic issue, on the premise that DRGs have been successful from a federal standpoint but have led to unacceptable levels of

care for the elderly and therefore may offer some alternatives to the PPS plan.

A select few experiences of how individual hospitals have responded to the pressures of PPS will be presented in the following chapter.

NOTES

1. W. B. Schwartz and H. J. Aaron, "Rationing Health Care: Lessons from Britain.," The New England Journal of Medicine, 310, No. 1, (1984), pp. 52-56.
2. Emily Friedman, "Health Care Policy Lessons from Britain," Hospitals, (September 1985), pp. 78-83.
3. H. J. Aaron and W. B. Schwartz, The Painful Prescription: Rationing Hospital Care, Brookings Studies in Social Economic Series, (Washington D.C.: The Brookings Institution, 1984).
4. J. F. Boyle, "Should We Learn to Say No?," The Journal of The American Medical Association, 252, No. 6, (August 10, 1984), p. 782.
5. Richard L. Johnson, "Shooting Oneself in the Foot: Congress May Recreate Two-Tier Care," Hospital Progress, 64, No. 12, (1983), pp. 32-39.
6. H. J. Anderson, "Majority of Hospitals are Better Off Under Prospective Pricing-Surveys," Modern Healthcare, (September 13, 1985), pp. 72-73.
7. P. E. Dans, J. P. Weiner and S. E. Otter, "Peer Review Organizations. Promises and Potential Pitfalls," New England Journal of Medicine, 313, No. 18, (October 31, 1985), pp. 1131-1137.
8. Report, "Sanctions Now Present Serious Threat to Hospitals, Physicians," Hospital Peer Review, American Health Care Consultants, Inc., 11, No. 7, (July 1986), pp. 81-83.
9. Gail Wilensky, Ph.D., "Rethinking the Rules of Health Care Finance," (Interview), Hospitals, (1985), pp. 63-64.
10. "A Congressman's View of Medicare's Woes," (Interview), Hospitals, (September 1985), pp. 76-77.

11. "Indigent Care Problem Draws Attention," (Report), Hospitals, (April 16, 1984), p. 31.
12. R. J. Blendon, "Health Policy Choices for the 1990s," Issues in Science and Technology, National Academy of Sciences, 2, No. 4, (Summer 1986), pp. 65-73.

CHAPTER 6

EXPERIENCE IN OTHER STATES

Before any conclusions are drawn, it is worthwhile to see how the pressures of PPS are handled in a select few states. The state of New Jersey has long upheld a tradition of legislation geared to the regulation of hospital costs in the best interest of the public.¹ New Jersey's plan in requiring fixed ceilings on reimbursements for all payers, set the stage for the Health Care Finance Administration's prospective pricing model.² The following example is one New Jersey hospital's experience of operating within those fixed reimbursement limits: Monmouth Medical Center is a 510-bed community teaching hospital that participates as a member of the Mid-Atlantic Health group, a holding company that also controls a forty-nine bed chemical dependency treatment center, a fund-raising foundation, and a for-profit corporation. This hospital is in an area defined as an urban metropolitan area and has in its ninety-seven year history been the principal provider of indigent care in the county. In its modern history, the hospital has prided itself on the introduction of new technology or new health service skills to the eastern central portion of New Jersey. It has developed referral programs to enhance its medical education and services commitments.

The financial implication of such commitment, as in so many similar institutions in this country, was that of rapidly escalating costs for staff and equipment upgrading. Appendix 6 reflects the history of annual expense increases for New Jersey hospitals, for the United States hospitals, and for Monmouth Medical Center from 1970-1983. Two outstanding patterns appear: 1) The hospital industry in New Jersey which had been an innovator in attempting to control costs in the 1960s through self-imposed rate review mechanisms began to see a slowing trend in expense increases among its hospitals in the early 1970s. This contrasted with the national pattern. Since 1974, the New Jersey state government's involvement in rate setting has further reduced the rate of expense increase compared to the national experience. 2) Monmouth Medical Center had experienced continual increases in its expenses above the norm which would place it in a relatively high cost situation compared to other hospitals in the state by the end of the decade. Because the DRG system would force institutions to a median level of expense and Monmouth's history suggested a relatively high cost position, it was apparent that change in behavior would be required to maintain fiscal integrity.

There are several lessons which have been learned from Monmouth's experience, the most important of which is that the management of the institution's expenses becomes

critical. As a result of living within these constraints, Monmouth's management can now approximate the number of admissions to the organization and the case mix that they may expect to see and project a revenue level with which they will have to operate.

Another lesson is that management must respond promptly by reducing expenses in a department if they exceed the revenues, or face not only continuance of the problem, but a growth in the impact of that problem since the inflationary effect year after year continues to eat away other operating resources. It is also important to attack the problem area directly where it exists, before it endangers other operating units of the organization. Appendix 9 demonstrates the focus on the Administrative/General category of expenses. This enables management to target specific areas for reductions in expenses.

Despite beginning 1982 with a \$2.5 million potential loss, which was augmented by over \$1 million after the beginning of the year, active control of expense increases allowed Monmouth to finish the year with an operating loss of just \$100,000. This was viewed internally as an enormous accomplishment. Having stabilized in 1982, Monmouth was expected to clear a seven figure profit in 1983.³ New Jersey hospitals have accumulated a great deal of experience under PPS but there is much to be learned from the examples of other hospitals throughout the country that follow.

The factory community of Worcester, Massachusetts was selected as an example for this paper because it spends more per resident on hospital care than do most other U.S. cities and this account of its experiences has much to offer.⁴

A coalition involving the businesses of Worcester and the insurance companies has been formed in an effort to reduce the amount of money which is currently being spent on hospital care. "It's not that the hospitals cost more here or that people stay in the hospital longer," says William Densmore, retired senior vice president of Norton Co., the biggest company in town. "It's that Worcester doctors send patients to the hospital more often than doctors elsewhere."

For instance, an average group of 1,000 Massachusetts children under 15 years old spent a total of 281 days in the hospital in 1982. In Worcester, a similar group spent 401 days in the hospital. Given this, and backed by his former employer and other local businesses, Densmore is heading a two-year-old coalition whose purpose is to change the way health care is utilized in Worcester. They want to reduce hospital use, get rid of 30% of the hospital beds by 1988 and, by 1989, cut hospital costs per resident by a third. There are other examples within this context: more than 125 state and local business-led coalitions have been formed in the U.S. in the past few years to try to restrain health-care costs. Approaches vary: in Nebraska businesses are

promoting "wellness," or healthy diets and exercise; in Pittsburgh they are creating a fund to assist hospitals that are shrinking in capacity; in Detroit they are encouraging out-patient surgery; some other groups advocate more regulation.

The Worcester Area Systems for Affordable Health Care is among those that believe competition is the way to curb hospital costs. It wants to change how hospital care is delivered and financed by encouraging health plans that have economic incentives to keep people out of the hospital. The group is supported by top executives of the town's biggest employers who have given it time, money and perhaps most importantly, influence. Hospital costs per resident in the Worcester area were \$393 compared with a national median of \$253 in 1979, the coalition says. Updated comparisons aren't available, but there isn't any reason to believe Worcester's position has improved.

A typical small business in Worcester pays about \$400 a month for a standard Blue Cross-Blue Shield family policy, says the Worcester-based Small Business Service Bureau. In comparison, in Rochester, N.Y., where health costs are below average, a company policy costs \$165 a month. The reason the Worcester area spends so much on hospital care, the coalition says, is that it has too many hospital beds for its 280,000 people--6.5 per 1,000 residents compared to the nation's average of 4.3. "Excess beds create Parkinson's

Law of hospitals, which says that patient days rise to fill the number of beds available," says Donald R. Melville, Norton's president.

Until recently, there was not any great incentive to control health care costs. For years, Norton, a Fortune 500 company that makes sandpaper, oil-drill bits and other products, had insurance premiums that ran around 1 million dollars per year. Around 1975, the company's insurance premium doubled in eighteen months. Norton currently spends \$9 million dollars a year on health care, one-eighth of its pre-tax profits in 1983.

The business-led group is encouraging development of what it calls competitive health plans. These include health maintenance organizations, which cover all health care for a fixed fee--an obvious incentive to avoid unnecessary hospital use. Other plans include insurance programs that, except in emergencies, require a doctor to get the insurer's permission before admitting a patient to the hospital. The coalition is trying to foster competition among plans by writing a buyer's guide. But it says it's restraining unhealthy competition by hiring a panel of doctors to monitor the quality of care. The coalition's approach was shaped by the advice of Walter McClure, a Minneapolis consultant. "The problem with medical inflation isn't a problem of providers," he recalls telling Worcester

executives in 1982. "It's a problem of purchasers. Purchasers don't buy right."

About 19% of Worcester area residents were enrolled in one plan or another when the most recent tally was taken last April. The coalition's goal is to convince 50% of the population, from corporate executives to welfare recipients, to join one by 1988. This will cut demand for hospital beds and force some hospitals to convert wards into needed nursing home-type units or even to close their doors altogether.⁵

Although it is much too early to predict the overall impact of the coalition of hospital costs, it is apparent it will be a positive one. Competition for the business's health care dollar, along with smarter purchases by the health care consumers in Worcester will keep long-term hospital costs from rising. Other hospitals have made significant changes in the services they provide in order to survive under PPS. Another interesting example follows.

St Joseph's Hospital, Ottumwa, Iowa is located in a poor, rural Iowa community where it competes with the 155-bed Ottumwa Regional Health Center. Because the town is small, the hospitals share the same medical staff and medical director. Faced with a steadily declining census the 85-bed St. Joseph's called in consultants to devise a survival strategy in 1985. The result was that St. Joseph's changed its name to St. Joseph Health and Rehabilitation

Center and has become a model for diversification. The hospital made several significant changes in the services it provides: 1) An eight -bed skilled nursing facility at the hospital for elderly patients was created. 2) A Family Recovery Center, offering treatment for chemical dependency on an out-patient and in-patient basis was added. The program also places counselors in three nearby towns and provides an employee/student assistance program for local businesses and school districts. 3) Horizons, a wellness program for the elderly, which uses facilities at the hospital and elsewhere, was instituted. 4) The hospital also will add an adult day-care center this fall and may add an out-patient rehabilitation facility to supplement services offered at the hospital. 5) The hospital has eliminated its pediatrics department. A community of 27,000 could not support two pediatric units. Economic considerations have been given primary emphasis in determining which services St. Joseph will provide.

In 1984, St. Joseph became affiliated with the Catholic Health Corp., an Omaha, Nebraska based system that supplies a chief executive officer to manage the hospital under contract. In recent years, the hospital downsized from 120 to 85 beds, as its census dropped about 50%.

In summary, diversification has allowed St. Joseph's to remain financially healthy and the hospital has ended recent years with surpluses. It was essential for the hospital to

take progressive measures to chart its own course in order to survive.⁶

Although the prospective pricing system game can be frustrating, hospitals of all sizes are playing to win. Here are several other examples:

The University of Alabama Hospital, Birmingham, Alabama is an 825-bed facility which has a DRG sheet printed out each night, according to Mary Kurtts, utilization review coordinator. The sheets go directly into patients' charts so a doctor making rounds the next morning knows what DRG the patient was admitted under; the average length-of-stay for that DRG; how many days the patient has left; the average amount of reimbursement; and the amount of financial resources the patient already has consumed.

"With this method, our doctors are keeping costs down themselves," Ms. Kurtts said. "We haven't had to really sit on them at all. They realize they have to work with us to survive."

Baptist Memorial Hospital, Memphis, Tennessee, a 1,805-bed facility, uses patient education in an effort to cope with DRGs. Lucy Walker, associate director of nursing, said the hospital has decreased length-of-stay by handling work-ups on an out-patient basis; by starting discharge planning efforts immediately upon the patient's admission; and by discharging the patient to a rehabilitation facility

as soon as he's ready to leave the more expensive acute care setting.

Henrico Doctor's Hospital, Richmond, Virginia, a 312-bed facility owned by Hospital Corporation of America, Nashville, Tennessee, was one of the pioneers in the use of prepackaged medical and surgical devices, said Stephen Lindsey, hospital administrator. "We started doing it when we realized that we could replace expensive nursing time with a factory worker's time," he said. "By using prepackaged materials, the hospital is saving about \$340,000 each year," he said.

Lee Memorial Hospital, Fort Myers, Florida, a 534-bed facility met several DRG challenges with the help of its utilization review committee. Lee Kirk, committee chairman, said the committee convinced an orthopedic surgeon, who was a top admitter, to limit the number of days between when he admits a patient and performs surgery to one, saving almost \$250,000 a year. The committee also convinced the orthopedic department to decrease the use of expensive antibiotics, saving almost \$50,000 a year. The committee has curbed unnecessary daily testing and has been instrumental in requiring automatic pre-hospitalization screening and post-hospitalization planning, Mr. Kirk said. "Basically, we've opened up the line of communication with our physicians."

Phillips County Hospital, Phillipsburgh, Kansas, a 62-bed member of the 31-hospital not-for-profit Phillipsburgh-based Great Plains Health Alliance Incorporated, has instituted the swing-bed concept as "the rural hospital answer to DRG problems." Administrator Joanne Johnson said the swing-bed program is expected to increase the current 58% occupancy level by allocating 29 beds for either acute or long-term care. When a patient is moved from acute to skilled care, the hospital is reimbursed for the swing-bed days.⁷

The information presented in this chapter documents the success of the strategies used by several hospitals in coping with PPS. In the future, it is likely that many other hospitals will incorporate similar innovative approaches examining the opportunities available to them during this cost containment era.

NOTES

1. Franklin A. Schaffer, (ed.), "DRGs: Changes and Challenges," Publication No. 20-1959, (New York: National League for Nursing, 1984), p. 17.
2. Ibid.
3. U.S. Department of Health and Human Resources, Proceedings, 1983 Conference, HCFA Pub. No. 03170 (Washington D.C.: U.S. Government Printing Office, 1984).
4. D. Wessel, "Worcester Mass., Tries to Rein in Hospital Costs With Competition," Wall Street Journal, 1 January 1985, p. 33. All of the following quotes in this text are from this same source unless otherwise specified.
5. Ibid.
6. H. J. Johnson, "St. Joseph a Model for Diversification," Modern Healthcare, 16, No. 16, (August 1, 1986), pp. 36-39.
7. K. Carter, "New Innovative Technologies Help Hospitals Fight DRG Squeeze," Modern Healthcare, (February 14, 1986), pp. 74-75.

CHAPTER 7

CONCLUSION

American hospitals are in the midst of a revolution. The revolution is one being driven by rising costs. Medicare is the largest buyer of hospital services. The Medicare system has undergone many changes from its inception in 1966. The most recent change, the prospective payment system (PPS), has fundamentally changed the economic incentives for hospital care providers. Payment to a hospital is no longer based on what it charges. PPS is a reimbursement plan that establishes a flat rate for a unit of hospital output (DRG), establishes that rate in advance of the care being provided to the patient, and considers that rate as payment in full to the hospital for providing that particular output.

Profit and not-for-profit hospitals alike are aggressively pursuing management strategies that will maximize efficiency. Participative management and product-line management are two examples of approaches that have been used successfully by hospitals in coping with PPS.

Individual hospitals are responding to the price-sensitive world of DRGs. Although the prospective pricing game can be frustrating, hospitals of all sizes are playing to win. One hospital has instituted the swing-bed concept

as an answer to its reimbursement problems. When a patient is moved from acute to skilled care, the hospital is reimbursed for the swing-bed days, otherwise the reimbursement would be lost. Likewise, many hospitals have converted acute care hospital beds to nursing home beds so that patients may be treated on a less-intensive and inexpensive basis. The next ten years will probably be a time for experimentation hospitals as they attempt to diversify into new services while using their traditional in-patient services as their base.

Currently, the budget process holds the health issues captive, especially quality. Because 1988 will be a Presidential election year, PPS may become a major domestic issue on the premise that DRGs have been successful from a federal standpoint but have led to unacceptable levels of care for the elderly and therefore may offer some alternatives to the PPS plan.

Many factors can be identified in regard to contributing to the rise in hospital costs. They include the aging population, high technology, capital equipment costs, a greater number of physicians, higher labor costs and other miscellaneous operating cost increases. Some of these expense categories are not within the control of the hospital's daily management activities. Reimbursement for hospitals is also becoming more restricted, which will have the net effect of reducing their incomes. The challenge for

hospital survival will be to reduce controllable expenses while maintaining an acceptable quality of service.

Access to necessary health care by fixed income groups will become more difficult in the future. The topic of uncompensated indigent care remains an unresolved issue at this time. With the possibility of rationing hospital care and the lack of reimbursement for technological innovation in the future, it is inevitable that the present quality of care will erode at many hospitals unless preventive measures are taken.

Medicare's prospective pricing system has contributed to the financial problems of rural hospitals. The effect of PPS on the total health care costs in the United States is unknown because a study of this would involve the examination of multiple parameters within the United States health-care delivery system over time. PPS has had an impact on the management styles and approaches used in hospitals and also appears to have influenced the quality of care which is delivered by hospitals. As with other major revisions in American health care policy, it will be necessary for the government and hospitals to respond to their experiences and make necessary policy adjustments as they become necessary.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Aaron, H. J. and Schwartz, W. B. The Painful Prescription: Rationing Hospital Care. Brookings Studies in Social Economic Series. Washington D.C.: The Brookings Institution, 1984.
- American Health Care Consultants, Inc. Report, "Sanctions Now Present Serious Threat to Hospitals, Physicians." Hospital Peer Review. 11, No. 7 (July 1986).
- American Hospital Association. "The Changing American Hospital." Chicago, Illinois, 1985.
- Anderson, H. J. "Majority of Hospitals are Better Off Under Prospective Pricing-Surveys." Modern Healthcare. (September 13, 1985), pp. 72-73.
- Blendon, R. J. "Health Policy Choices for the 1990s." Issues in Science and Technology. National Academy of Sciences. 2, No. 4 (Summer 1986), pp. 65-73.
- Boissoneau, R. "The Democratically Orientated Manager." Topics in Hospital Pharmacy Management. 4 (1984), pp. 44-51.
- Boyle, J. F. "Should We Learn to Say No?" The Journal of The American Medical Association. 252, No. 6 (August 10, 1984), p. 782.
- Bray, T. "Budget Realism is in the Eye of the Beholder." Wall Street Journal. 1 February 1983, p. 32.
- Carter, K. "New Innovative Technologies Help Hospitals Fight DRG Squeeze." Modern Healthcare. (February 14, 1986), pp. 74-75.
- Curtin, Leah. "Social Justice and the Interim Regs." Nursing Management. 4, No. 11 (1983), pp. 7, 8.
- Curtin, L. L. "Who Says Lean Must Be Mean?" Nursing Management. 17, No. 1 (Jan., 1986), pp. 7-8.
- Dans, P. E., J. P. Weiner and S. E. Otter, "Peer Review Organizations. Promises and Potential Pitfalls." New England Journal of Medicine. 313, No. 18 (October 31, 1985), pp. 1131-1137.

- Drucker, P. F. Management: Tasks; Responsibilities; Practices. New York: Harper and Row, 1974.
- Enright, Sharon Murphy. "Effect of Reaganomics on the U.S. Health Care System." Am. J. Hosp. Pharm. 39 (1982), pp. 1169-75.
- Enright, S. M. "DRGs: Implications for Hospital Pharmacy Practice." Topics in Hospital Pharmacy Management. 3, No. 4 (1984), pp. 10-18.
- Federation of American Health Systems. "Cost Containment Policies Expected to Delay Technological Innovation." Federation of American Health System Review. 19, No. 4 (July/August 1986), pp. 28-30.
- Friedman, Emily. "Health Care Policy Lessons from Britain." Hospitals. (September 1985), pp. 78-83.
- Hanlon, Martin D. "Reducing Hospital Costs Through Employee Involvement Strategies." National Productivity Review. Executive Enterprises, Inc., 5, No. 1 (1985-1986), pp. 22-31.
- Jensen, J. "42% of Rural Residents Are Traveling to Urban Areas for Medical Treatment." Modern Healthcare.
- Johnson, H. J. "St. Joseph a Model for Diversification." Modern Healthcare. 16, No. 16 (August 1, 1986), pp. 36-39.
- Johnson, Richard L. "Shooting Oneself in the Foot: Congress May Recreate Two-Tier Care." Hospital Progress. 64, No. 12 (1983), pp. 32-39.
- McGregor, Douglas. The Human Side of Enterprise. New York: McGraw-Hill, 1960.
- May, Joel J. "Productivity, the Human Dimension." Health Matrix. Rynd Communications and Cole Western Reserve University. 3, No. 4 (Winter 1985-86), pp. 24-30.
- Mehl, Bernard. "Reimbursement Constraints and Pharmacy Practice: The New York State Experience." Topics in Hospital Pharmacy Management. 3, No. 4 (1984), pp. 73-88.
- Munoz, Eric. "The New Challenge of Critical Care: Grappling With the Dollar Impact of our Actions." Critical Care Monitor. 3, No. 6 (1983), p. 1.

- Nackel John G. and Irwin W. Kues. "Product-Line Management: Systems and Strategies." Hospital and Health Services Administration. Foundation of the American College of Healthcare Executives. 31, No. 2 (1986), pp. 109-123.
- O'Donnell, Devin P. Hospital Based Home Health Care: Gaining Competitive Advantage Where Everyone Benefits. Am J. Hosp. Pharm. 41 (1984), pp. 147-148.
- Ouchi, W. G. Theory Z. Reading Massachusetts, Addison-Wesley. 1981.
- Peters, T. J. and R. H. Waterman. In Search of Excellence. New York: Warner Books, Inc., 1982, p. 96.
- Schaffer, Franklin A. (ed.). "DRGs: Changes and Challenges." Pub. No. 20-1959. New York: National League for Nursing. 1984, p. 17.
- Schwartz W. B. and H. J. Aaron. "Rationing Health Care: Lessons from Britain.." The New England Journal of Medicine. 310, No. 1 (1984), pp. 52-56.
- Siegner, Catherine A. "Outside Management Firm Puts Ailing Hospital on the Right Track." Modern Healthcare. 6 December 1985, pp. 88-89.
- Spitzer, Roxanne B. "Legislation and New Regulations." Nursing Management. 14, No. 2 (1983), p. 14.
- Swoap, David B. "Medicare Crisis is Only a Symptom." Wall Street Journal. 3 January 1984.
- U.S. Department of Health and Human Services. "Medicare and Medicaid Programs; Utilization and Quality Control Peer-Review Organization (PRO); Assumption of Responsibilities and Medicare Review Functions and Coordination of Medicaid with Peer-Review Organization." Federal Register. 49 (1984), pp. 29026-29033.
- U.S. Department of Health and Human Resources. Proceedings, 1983 Conference. HCFA Pub. No. 03170. Washington D.C.: U.S. Government Printing Office. 1984.
- United States Department of Health and Human Services. Health Care Financing Administration. HCFA Statistics. U.S. Government publication No. 3 (September 1984), p. 3.

- Wakefield, D. S. and S. Mathis. "Formulating a Managerial Strategy for Part-Time Nurses." Journal of Nursing Administration. 1 (15 Jan., 1985), pp. 35-39.
- Wennberg, J. E., K. McPherson and P. Caper. "Will Payment Based on Diagnosis Related Groups Control Costs?" New England Journal of Medicine. 311 (1984), pp. 295-300.
- Wessel, D. "Worcester Mass., Tries to Rein in Hospital Costs With Competition." Wall Street Journal. 1 January 1985, p. 33. All of the following quotes in this text are from this same source unless otherwise specified.
- Wilensky, Ph.D., Gail. "Rethinking the Rules of Health Care Finance." Interview. Hospitals. (1985), pp. 63-64.

APPENDIX 1

TABLE 1

MAJOR HOSPITAL PAYERS

<u>Payer</u>	<u>National Avg. % of Payments</u>	<u>Intermediary</u>	<u>Basis of Payment</u>
Medicare	30%	B.C. */Others	Cost
Medicaid	10%	B.C. */Others	Cost
Blue Cross	40%	B.C. *	Cost/Charge/ Negot. Rate
Commercial Insur.	15%	Insurer	Charge
Self-Pay	8%	None	Charge
Other	17%	Various	Various
Veterans			
Charity Care			
Workmen's Comp.			

*Blue Cross

TABLE 2

MONTANA HOSPITAL ADMINISTRATOR SURVEY

Summary of Results
 Total Results All Hospitals Reporting Combined

(Percentages reported in parenthesis)

**Response which was selected most often

	Agree	Disagree	Don't know
1.	10 (24)	30 (71)**	2 (5)
2.	19 (45)	21 (50)**	2 (5)
3.	34 (81)**	5 (12)	3 (7)
4.	31 (74)**	9 (21)	2 (5)
5.	35 (83)**	6 (14)	1 (3)
6.	10 (24)	27 (64)**	5 (12)
7.	17 (40)	24 (57)**	1 (3)
8.	33 (79)**	9 (21)	0
9.	13 (31)	19 (25)	10 (24)
10.	26 (62)**	16 (38)	0
11.	36 (86)**	6 (14)	0
12.	16 (38)	25 (59)**	1 (3)
13.	38 (90)**	1 (3)	3 (7)

#14. (Selected #1 in priority)

Marketing/Planning	8 (19)
Diversification	10 (24)**
Cost Containment	6 (14)
Hospital Productivity Issues	5 (12)
Better Management	8 (19)
Adjust to DRG's	2 (5)
Consolidate/Merge	3 (7)

TABLE 3

MONTANA HOSPITAL ADMINISTRATOR SURVEY

Summary of Results
Hospitals with Bed Size Range Less than 25

(Percentages reported in parenthesis)

	Agree	Disagree	Don't Know
1.	17 (81)	4 (19)	0
2.	7 (33)	13 (62)	1 (5)
3.	17 (81)	2 (9.5)	2 (9.5)
4.	15 (71)	5 (24)	1 (5)
5.	16 (76)	4 (19)	1 (5)
6.	3 (14)	16 (76)	2 (10)
7.	7 (33)	13 (62)	1 (5)
8.	16 (76)	5 (24)	0
9.	4 (19)	13 (62)	4 (19)
10.	12 (57)	9 (43)	0
11.	16 (76)	5 (24)	0
12.	5 (24)	16 (76)	0
13.	19 (90)	1 (5)	1 (5)
14. (Selected #1)			
Marketing/Planning		3 (14.2)	
Diversification		3 (14.2)	
Cost Containment		4 (19.0)	
Hospital Productivity Issues		0 (0)	
Better Management		6 (28.6)	
Adjust to DRG's		2 (9.5)	
Consolidate/Merge		3 (14.2)	

TABLE 4

MONTANA HOSPITAL ADMINISTRATOR SURVEY

Summary of Results
Hospitals with Bed Size Range 25-100

(Percentages Reported in parenthesis)

	Agree		Disagree		Don't know	
1.	3	(23)	9	(69)	1	(8)
2.	7	(54)	5	(38)	1	(8)
3.	11	(84)	1	(8)	1	(8)
4.	9	(69)	3	(23)	1	(8)
5.	11	(84)	2	(16)		
6.	5	(38.5)	5	(38.5)	3	(23)
7.	6	(46)	7	(54)	0	
8.	10	(77)	3	(23)	0	
9.	7	(54)	4	(31)	2	(15)
10.	8	(62)	5	(38)	0	
11.	12	(92)	1	(8)	0	
12.	10	(77)	3	(23)	0	
13.	11	(84)	0		2	(16)

#14. (Selected #1)

Marketing/Planning	3	(23)
Diversification	5	(38)
Cost Containment	0	
Hospital Productivity Issues	3	(23)
Better Management	2	(16)
Adjust to DRG's	0	
Consolidate/Merge	0	

TABLE 5

MONTANA HOSPITAL ADMINISTRATOR SURVEY

Summary of Results

Hospitals with Bed Size Range 100 and Greater

(Percentages reported in parenthesis)

	Agree	Disagree	Don't Know
1.	3 (37.5)	4 (50)	1 (12.5)
2.	5 (62.5)	3 (37.5)	0
3.	6 (75)	2 (25)	0
4.	7 (87.5)	1 (12.5)	0
5.	8 (100)	0	0
6.	2 (25)	6 (75)	0
7.	4 (50)	4 (50)	0
8.	7 (87.5)	1 (12.5)	0
9.	2 (25)	2 (25)	4 (50)
10.	6 (75)	2 (25)	0
11.	8 (100)	0	0
12.	1 (12.5)	6 (75)	1 (12.5)
13.	8 (100)	0	0

#14. (Selected #1 in priority)

Marketing/Planning	2 (25)
Diversification	2 (25)
Cost Containment	2 (25)
Hospital Productivity Issues	2 (25)
Better Management	0
Adjust to DRG's	0
Consolidate/Merge	0

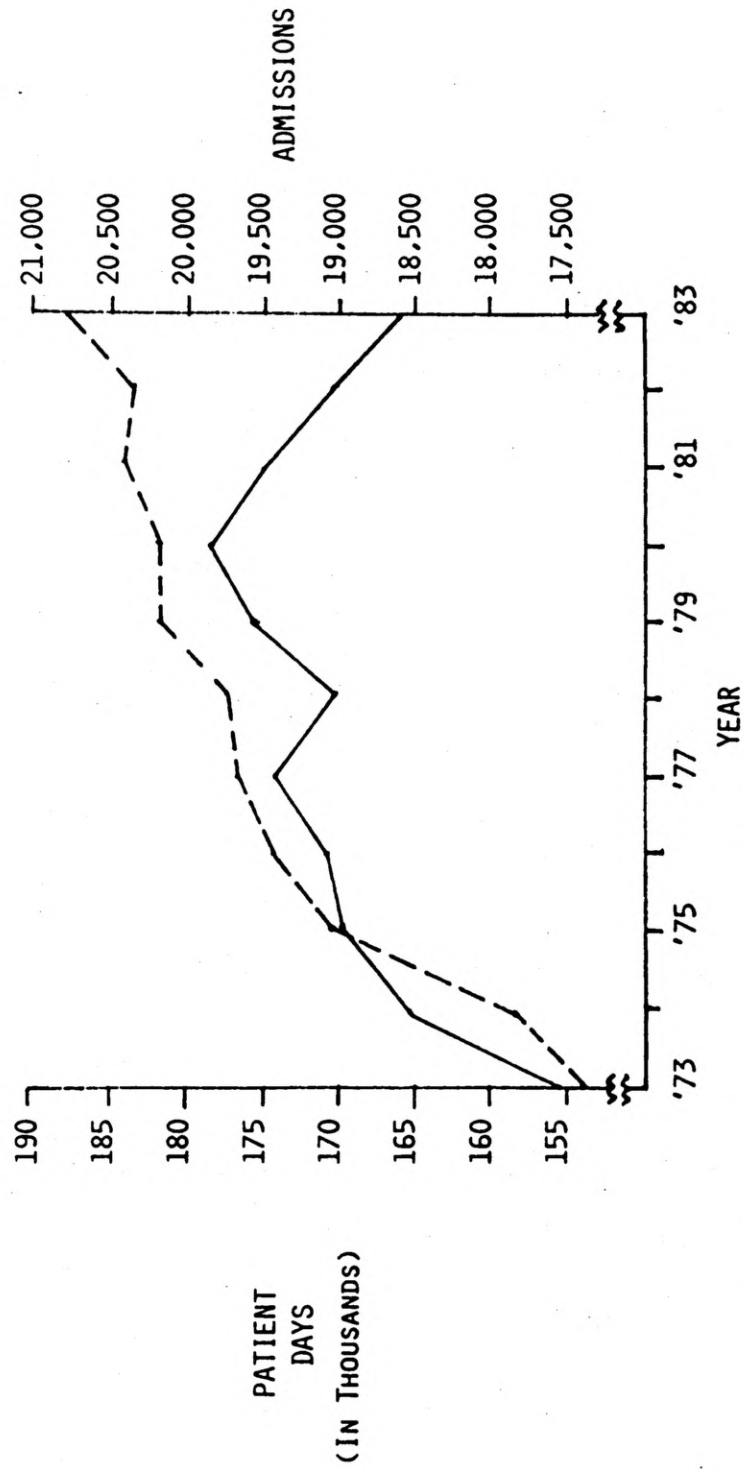
TABLE 6
OCCUPANCY DEMOGRAPHIC DATA

May 1986 Survey
Montana Hospitals

Occupancy	Occupancy Range (in percent)	Average (in percent)
1. Hospitals less than 25 beds	8.4 - 67	34.5
2. Hospitals from 25-100 beds	12 - 62.8	35.4
3. Hospitals greater than 100 beds	35.5 - 67	55
4. Combined all bed sizes	8.4 - 67	47.5

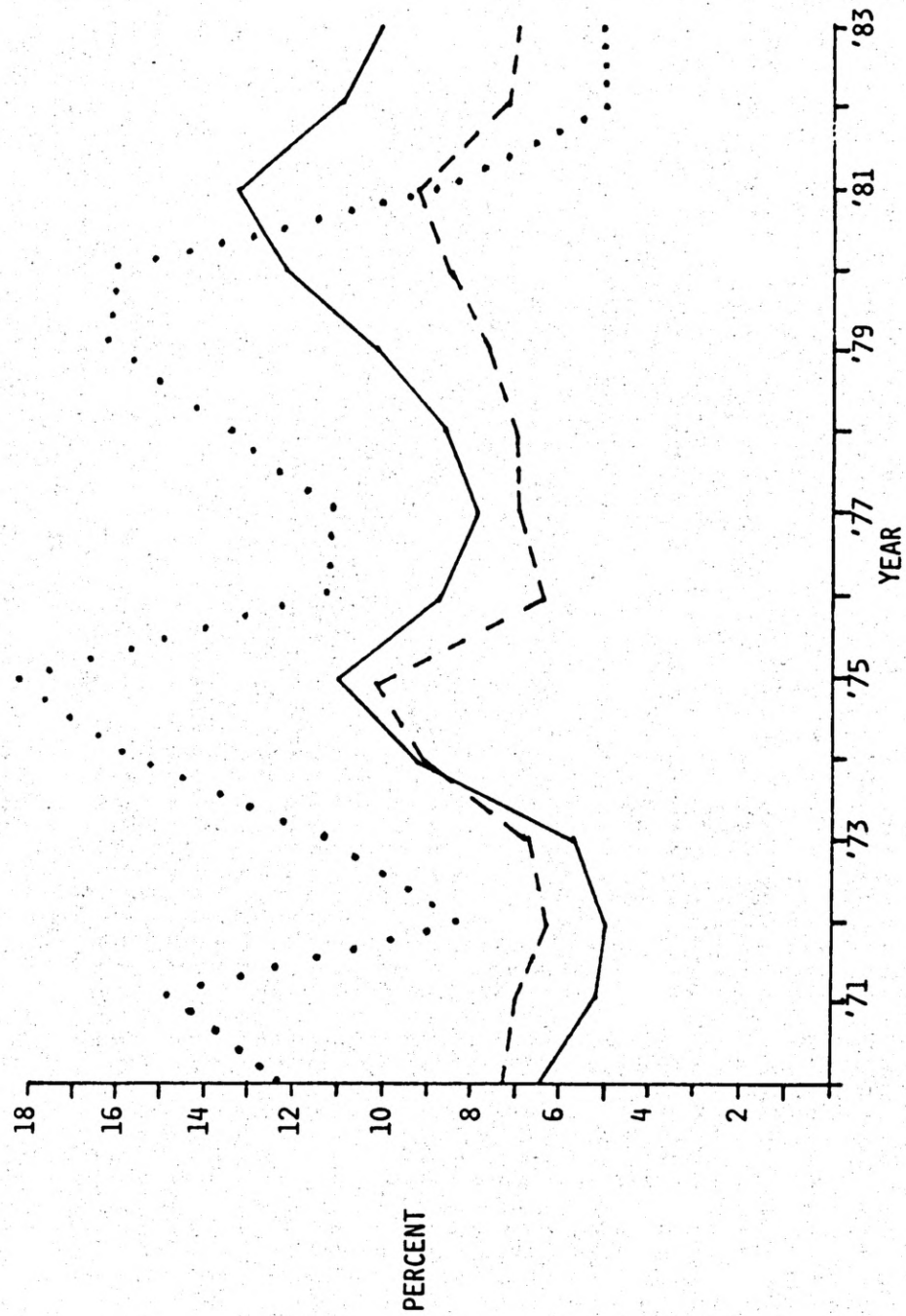
APPENDIX 2

FIGURE 1
PATIENT DAYS/ADMISSIONS



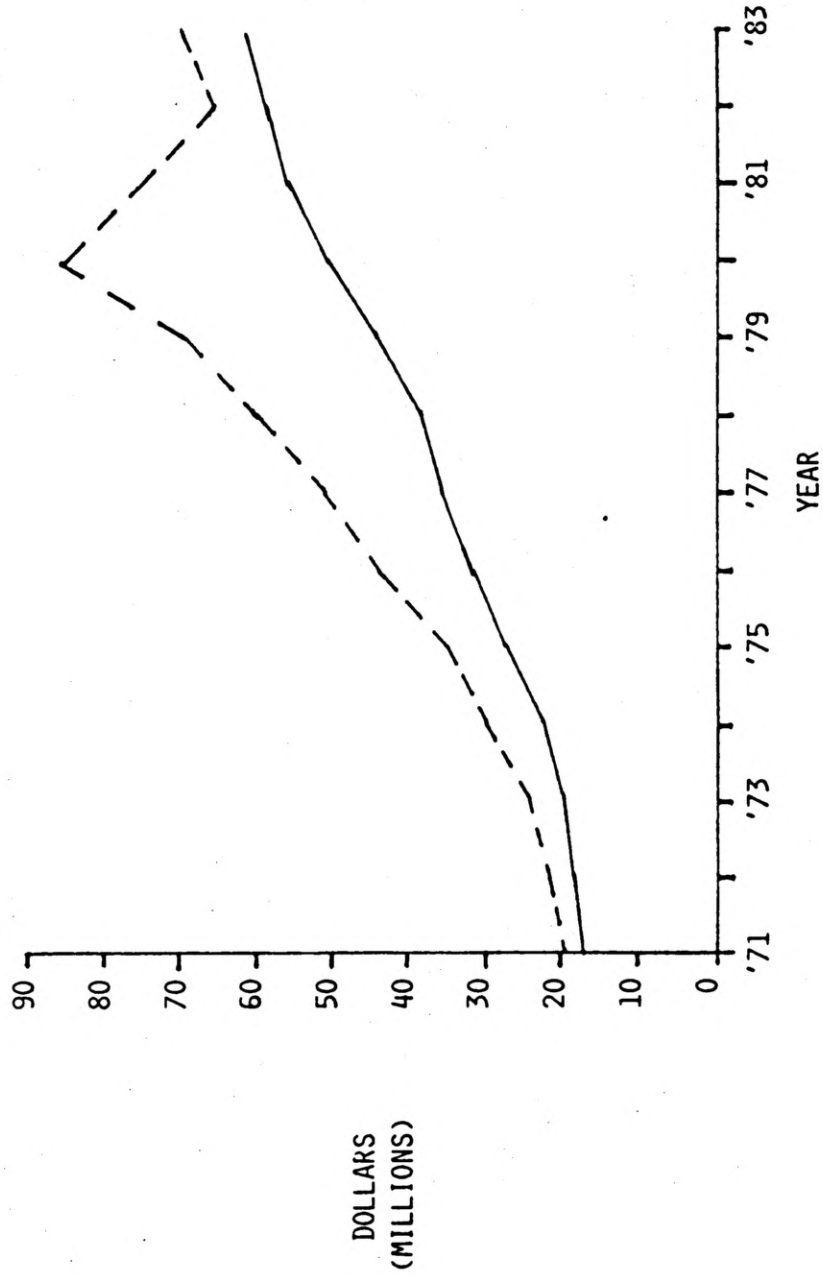
LEGEND: SOLID LINE = PATIENT DAYS
DOTTED LINE = ADMISSIONS

FIGURE 2
ANNUAL OPERATING EXPENSE PERCENTAGE INCREASE



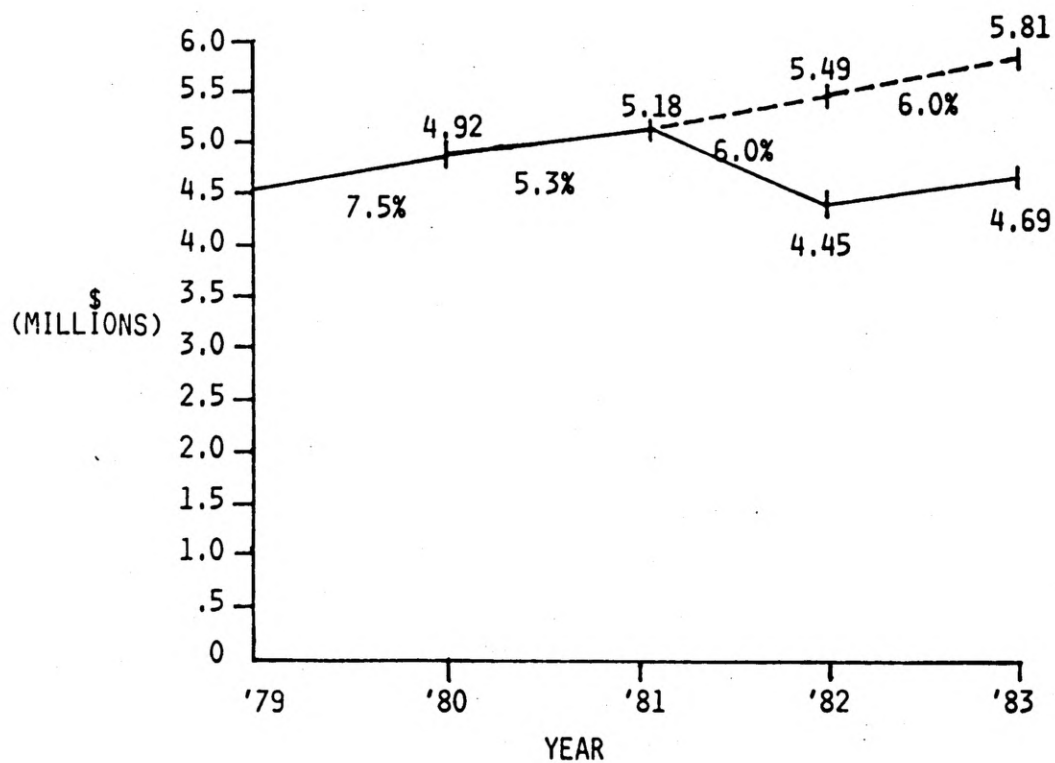
LEGEND: SOLID LINE = U.S. HOSPITALS (SOURCE: AHA)
 DASHED LINE = NEW JERSEY HOSPITALS (SOURCE: NJHA)
 DOTTED LINE = MONMOUTH MEDICAL CENTER

FIGURE 3
GROSS CHARGES AND NET PATIENT INCOME



LEGEND: SOLID LINE = NET PATIENT INCOME
DOTTED LINE = GROSS CHARGES

FIGURE 4
ADMINISTRATIVE/GENERAL CATEGORY
1979-1983 EXPENSES



LEGEND: SOLID LINE = ACTUAL EXPENSE

DOTTED LINE = PROJECTED GROWTH AT 6% PER ANNUM

APPENDIX 3

SURVEY LETTER

5-10-86

To _____:

I am a graduate student pursuing the Masters of Public Administration degree at Montana State University in Bozeman. As a part of my degree requirements I am preparing a professional paper, titled: "The Impact of New Cost Control Measures on the United States Health Care Delivery System, with Special Reference to the state of Montana."

As part of my research, I am administering a survey questionnaire among all Montana hospital administrators. The purpose of the survey will be to gauge your perceptions in regard to some of the current financial issues that your hospital is facing.

In order to make this a meaningful paper, your cooperation is of utmost importance. Please complete the survey and return to me by May 31. To facilitate the process, I have enclosed a self-addressed stamped envelope.

Individual survey results will be kept completely confidential. If you wish to receive a summary of the survey results please provide your address with your completed survey.

Sincerely,

Steve Spravzoff
406 N. 22 Ave.
Bozeman, Montana 59715

APPENDIX 4

SURVEY QUESTIONNAIRE

PLEASE CHECK THE ANSWER THAT YOU FEEL TO BE MOST APPROPRIATE. AS THE INTEREST IS ONLY IN YOUR PERCEPTIONS, THERE ARE NO RIGHT OR WRONG ANSWERS. INDIVIDUAL SURVEY RESULTS WILL BE KEPT COMPLETELY CONFIDENTIAL.

Hospital is : _____ #of beds _____ % Occupancy(past fiscal year)

1. When hospitals were reimbursed based upon charges, some said they were "intentionally inefficient". Overall, the hospital industry is less efficient when compared to the efficiency of other industries.

_____ AGREE _____ DISAGREE _____ DON'T KNOW

2. The transition to prospective payment will provide the impetus to control hospital costs in Montana.

_____ AGREE _____ DISAGREE _____ DON'T KNOW

3. Some studies show that illness severity differs (within the same diagnosis) among hospitals. This holds true in Montana.

_____ AGREE _____ DISAGREE _____ DON'T KNOW

4. The aging population keeps hospital costs rising in Montana.

_____ AGREE _____ DISAGREE _____ DON'T KNOW

5. High technology contributes significantly to rising hospital costs in Montana.

_____ AGREE _____ DISAGREE _____ DON'T KNOW

6. The national physician glut will increase hospital costs in the state of Montana. (Increased specialization may drive hospital costs upward)

_____ AGREE _____ DISAGREE _____ DON'T KNOW

7. Montana hospital patients are being discharged quicker and sicker (as compared to the discharges under the previous reimbursement plan).

_____ AGREE _____ DISAGREE _____ DON'T KNOW

8. Our hospital has implemented improved financial monitoring systems in a response to DRG's?

_____ AGREE _____ DISAGREE _____ DON'T KNOW

9. Services that do not provide a good profit margin may be dropped at our hospital in the future.

_____ AGREE _____ DISAGREE _____ DON'T KNOW

10. Our hospital has experienced a work force reduction in the past TWO years?

_____ AGREE _____ DISAGREE _____ DON'T KNOW

11. Hospital management styles have changed because of prospective payment.

_____ AGREE _____ DISAGREE _____ DON'T KNOW

12. The delivery of patient care has changed significantly (diversified) in your hospital since the beginning of prospective payment.

_____ AGREE _____ DISAGREE _____ DON'T KNOW

13. The new reimbursement mechanisms will force society to confront the issue of who will bear the financial burden of indigent care.

_____ AGREE _____ DISAGREE _____ DON'T KNOW

14. Please rate the following in the order of importance in regard to approaches that will keep Montana hospitals viable. (#1 highest to 7 lowest).

_____ Marketing/Planning
 _____ Diversification
 _____ Cost Containment
 _____ Hospital productivity issues.
 _____ Better Management
 _____ Adjust to DRG's
 _____ Consolidate/Merge

15. Any Further Comments:

_____ NAME
 (Only if you wish to receive a copy of the survey summary)