ANALYSIS OF DRG'S AND COST CONTAINMENT ON HOSPITALS

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ABSTRACT

The change to a prospective payment system for Medicare patients has forced hospitals to adopt new management strategies. This paper examines those strategies and proposes that hospital administration costs have increased as a result of the prospective payment system. Data is gathered through a review of those areas most effected by this change: Admitting, Medical Records, Discharge Planning, Nursing and Physician Relationships.

INTRODUCTION

National health expenditures rose sharply throughout the period 1950-1987. In 1950 the nation spent $12.7 billion on the health sector; by 1987 national health spending had increased to $497 billion. In other words, in 1950 the nation spent a billion dollars on health every month; by 1987 it spent well over a billion dollars a day. Translated into personal terms, the nation spent $80 per person in 1950; by 1987 that figure was $1,973. (Anderson and Erickson, 1987).

Health care in the United States is financed by a mix of public and private funds. Federal, state and local governments pay for about 40 percent of health expenditures, private health insurance pays for about 31 percent and the remainder comes directly from patients, philanthropy and other private sources. Medicare and Medicaid make up the largest share of the public financing and together represent the source of 29 percent of all the health care dollars. (Office of the Actuary, 1987)

Appendix B indicates trends over time in sources of financing personal health care services (which exclude research, construction and administration). Over the period 1950-1987 the private health insurance industry grew from a $1 billion industry to a $154.7 billion

industry (Office of the Actuary, 1987). In 1950 private health insurance financed 9.1 percent of personal health care expenditures. This number grew steadily between 1950 and the early 1980's, peaking at 31.9 percent in 1982 and dropping slightly to 31 percent in 1987.

Federal government health expenditures rose from 10.4 percent of the health care bill in 1950 to 29.3 percent in 1987. The federal share took a major shift upward with passage of Medicare and Medicaid in 1965, rising again in 1972 with the expansion of Medicare coverage to the disabled. State and local government spending on health care as a share of all health expenditures has been relatively stable over the 1950-1987 period, averaging between 9 percent and 13 percent. The share paid by state and local government hit a high of 12.7 percent in 1975 and declined gradually to 9.3 percent in 1987.

Cutbacks in Medicare, Medicaid and private health insurance plans appear to be shifting more of the cost of health care directly onto patients. The share of personal health expenditures paid directly by patients out-of-pocket declined from 65.5 percent in 1950 to 27.1 percent in 1982 and crept up slightly to 29.1 percent of all expenditures in 1987. With the rapid rise in health expenditures, even a small increase in share can have a

substantial dollar impact. In 1980 Americans paid $268 per person directly for personal health care services; in 1987 this had increased to $508 (Office of the Actuary, 1987).

Table 1 illustrates the way in which the present health care system impacts the average individual. Four of the five categories listed receive all or a portion of their funding through the federal tax base. This shows that the user of the health care dollar is often not the payer and that public funding plays a major role in the present health care system.

Hospital care was the largest and one of the fastest growing services over the 1950-1987 period. Spending for hospital care as a percentage of all personal health care spending increased from 35.8 percent in 1950 to 44 percent in 1987 (Office of the Actuary, 1987).

In the 1980's it had become a national concern to halt this spiralling rise in hospital costs. The issue was not whether costs for hospital care were too high but whether the hospital industry could voluntarily bring costs down without federal regulation. Congress elected to try the voluntary approach. The assurance of cost restraint by the industry in 1979 and the industry's subsequent failure helped lay the groundwork for the changes in hospital payment enacted in 1982 (Admendments

Table #1

Pressure's on the Health Care System

Who Receives Care?	Who Pays?	How is money received?
1. poor, and medically indigent	states	through the federal tax base directed back to the states
2. active military	CHAMPUS insurance - paid for through the federal government	through the federal tax base
3. veterans of the military	federal government	through the federal tax base
4. affluent people	people who receive care through very private health insurance policies written for them personally	self-pay, out-of-pocket funding
5. regular or middle income citizens	employers, or those that can afford their own insurance, and Medicare for people over the age of 65 and those people disabled who meet specific requirements	employers or out-of-pocket and the federal tax base

to the Social Security Acts, 1982). This prospective payment system and its so-called Diagnostic Related Groups (DRG's) limits the amount the government will pay for each hospital stay of a Medicare or Medicaid patient. It seems deceptively simple; the hospital receives one per capita payment for each patient admitted. If it uses less resources treating a patient than the government is willing to pay, it is rewarded as being cost-efficient by being allowed to pocket the savings. This is the federal government's plan to force hospitals to accomplish two objectives: to lower their operating costs (which brings their increases in line with the general inflation rate) and to place hospital administrators in the role of controlling the physicians who are the purchasers of the expensive hospital resources (for their patients) (Schulz & Alton, 1990).

This paper examines how hospitals have responded to DRG's by looking at the administrative strategies they have adopted. Personnel costs were examined to see if hospitals have had to increase personnel to administer the DRG program.

This paper was a case study of a mid-sized hospital. It targets non-revenue generating areas that are most likely to be affected by the DRG system, such as Admitting, Medical Records, and Discharge Planning.

PERSONAL INTERVIEWS WERE CONDUCTED WITH THE MANAGERS OF EACH OF THE AREAS TO DETERMINE WHAT MANAGEMENT STRATEGIES HAVE BEEN INSTITUTED SINCE DRG'S HAVE BEEN IMPLEMENTED, AND THE IMPACT ON STAFFING THAT HAS OCCURRED.

BACKGROUND

THE PROSPECTIVE PAYMENT SYSTEM

Prospective payment may be the most revolutionary development in the health care field since the introduction of Medicare itself in the 1960's. Critics of the Medicare system have observed that the retrospective cost reimbursement policy contained a very positive incentive for excessive spending. Since its inception in 1965, Medicare has rapidly grown into a major government expense. Requirements for greater efficiency and cost effectiveness in Medicare raise an issue whose solutions have been long overdue. Prospective payment is the government's solution. The purpose and intent of DRG's and the prospective payment system is to provide more incentive for hospitals to be cost conscious and less incentive to provide unnecessary services.

For the past three decades, the financial incentives built into the hospital reimbursement system had rewarded increases in access, ie., increases in the number of facilities, beds and services. Also rewarded were increases and improvements in quality such as the newest technology and more highly trained personnel. The post-World War II construction era, fueled by Hill-Burton

GRANTS AND THE GROWTH OF SERVICES UNDER THE MEDICARE PROGRAM SHOW HOW HOSPITALS HAVE RESPONDED TO THE FINANCIAL INCENTIVES OF THIS PERIOD (DAVIS, ET AL, 1990). NOW UNDER THE MEDICARE PROSPECTIVE PRICING LAW, THE FINANCIAL INCENTIVES HAVE CHANGED. THE GOVERNMENT HAS CLEARLY EMPHASIZED COST CONTAINMENT. THE GOVERNMENT IS TRYING TO STEM THE RISING EXPENDITURES FOR MEDICARE BY PROVIDING MORE EFFICIENT AND COST-EFFECTIVE HEALTH CARE FOR MEDICARE PATIENTS.

THE CONGRESSIONAL AIMS UNDER THE PROSPECTIVE PAYMENT SYSTEM WERE TO:

1. ESTABLISH MEDICARE AS A PRUDENT BUYER OF SERVICES IN THE HOSPITAL MARKET.
2. REDUCE THE RATE OF INCREASE IN FEDERAL MEDICARE EXPENDITURES.
3. ENSURE PREDICTABILITY IN MEDICARE PAYMENTS.
4. IMPLEMENT A PAYMENT SYSTEM THAT WOULD BE LESS BURDENSOME THAN COST-BASED REIMBURSEMENT.
5. ENCOURAGE HOSPITALS TO OPERATE MORE EFFICIENTLY.

(SCHWEIKER 1982)

THE FEDERAL GOVERNMENT MANDATED THAT LIMITS ON COSTS PER DISCHARGE BE SET USING A CASE MIX MEASURE DEVELOPED AT YALE UNIVERSITY KNOWN AS DIAGNOSIS-RELATED GROUPS (DRG'S). THIS SYSTEM CLASSIFIES HOSPITAL INPATIENTS INTO PATIENT CARE CATEGORIES ACCORDING TO THE PATIENT'S

PRIMARY AND SECONDARY DIAGNOSIS, PROCEDURES PERFORMED, AGE, DISCHARGE STATUS AND WHETHER THE PATIENT HAD CERTAIN COMPLICATIONS. USING THIS SYSTEM, DIAGNOSES ARE FIRST GROUPED INTO TWENTY-THREE MAJOR ORGAN SYSTEMS AND THEN SUBDIVIDED FURTHER SO THAT PATIENTS WITHIN EACH GROUP REQUIRE SIMILAR LEVELS OF RESOURCES. A MAJOR ASSUMPTION OF THE DRG SYSTEM IS THAT PATIENTS WITHIN EACH DRG ARE HOMOGENEOUS WITH RESPECT TO THEIR CONSUMPTION OF HOSPITAL RESOURCES. (DAVIS ET AL, 1990). THE NUMBER OF DRG GROUPS CURRENTLY IS 467. THIS PROSPECTIVE PAYMENT SYSTEM (PPS) APPLIES EXCLUSIVELY TO HOSPITAL CARE RECEIVED BY MEDICARE BENEFICIARIES, OR ABOUT 35 PERCENT OF HOSPITAL TOTAL PATIENT REVENUES, WHICH BEGAN ON OCTOBER 1, 1983. HOSPITALS STARTED UNDER THE SYSTEM WITH THE BEGINNING OF THEIR ACCOUNTING YEAR.

THE DRG-BASED PPS WAS DESIGNED TO PROVIDE PHYSICIANS AND HOSPITALS WITH INCENTIVES TO IMPROVE THE EFFICIENCY AND COST-EFFECTIVENESS OF HEALTH CARE SERVICES PROVIDED TO HOSPITALIZED MEDICARE BENEFICIARIES. SAVINGS DERIVED FROM CARING FOR PATIENTS AT A COST THAT IS LESS THAN THE DRG PAYMENT RATE BECOME A "PROFIT" FOR HOSPITALS, AND COST OVERRUNS DERIVED FROM CARING FOR PATIENTS AT A COST THAT IS GREATER THAN THE DRG PAYMENT RATE BECOME A "LOSS".

NOT ALL CHANGES INDUCED BY PPS WILL ENHANCE THE QUALITY OR COST-EFFECTIVENESS OF CARE. THE SAME INCENTIVE

THAT OPERATES TO INDUCE HOSPITALS TO PROVIDE CARE EFFICIENTLY, HOWEVER, MAY ALSO INDUCE THEM TO SKIMP ON THE SERVICES THEY PROVIDE. UNDER PPS, HOSPITALS HAVE LITTLE INCENTIVE TO ACQUIRE NEW TECHNOLOGIES THAT IMPROVE THE QUALITY OF CARE AT INCREASED COST. FOR EXAMPLE, WERE AN ARTIFICIAL HIP TO BECOME AVAILABLE THAT WAS MORE COSTLY BUT LONGER-LASTING THAN EXISTING ALTERNATIVES, HOSPITALS WOULD HAVE LITTLE INCENTIVE TO UTILIZE THIS TECHNOLOGICAL IMPROVEMENT UNDER PPS. MOREOVER, GIVEN THE INCENTIVE UNDER PPS TO DISCHARGE PATIENTS AS EARLY AS POSSIBLE, SOME PATIENTS WILL LIKELY BE DISCHARGED PREMATURELY LEADING TO EITHER POOR OUTCOMES OR INCREASED HOSPITAL READMISSION RATES.

ONE CAN EXPECT BOTH BENEFICIAL AND ADVERSE RESULTS TO OCCUR. IN SOME INSTANCES, WHETHER OR NOT THE NET EFFECT OF CHANGES IN PRACTICE INDUCED BY PPS IS BENEFICIAL OR INJURIOUS TO PATIENTS WILL DEPEND ON THE ACCESSIBILITY OF OUT-OF-HOSPITAL SERVICES THAT ARE SUBSTITUTED FOR IN-HOSPITAL CARE AND THE AVAILABILITY OF THIRD-PARTY INSURANCE TO COVER THEIR USE. CONSIDER, FOR EXAMPLE, A PATIENT WITH ENDOCARDITIS (AN INFECTION OF A HEART VALVE). TRADITIONALLY, PHYSICIANS HAVE TREATED ENDOCARDITIS WITH FOUR TO SIX WEEKS OF IN-HOSPITAL INTRAVENOUS ANTIBIOTICS. DURING THE LAST FOUR TO FIVE WEEKS OF THIS TREATMENT MANY PATIENTS ARE QUITE STABLE

AND HAVE IN THE PAST BEEN HOSPITALIZED PRIMARILY IN ORDER TO RECEIVE ANTIBIOTICS INTRAVENOUSLY RATHER THAN BECAUSE OF A NEED FOR CONSTANT PHYSICIAN OVERSIGHT.

GIVEN ADVANCES IN THE EQUIPMENT USED TO ADMINISTER MEDICATIONS INTRAVENOUSLY, MANY PATIENTS CAN NOW COMPLETE THEIR COURSE OF INTRAVENOUS ANTIBIOTIC TREATMENT AT HOME WHICH WOULD GREATLY REDUCE THE COST OF THE TREATMENT. PPS PROVIDES AN INCENTIVE TO USE THIS TYPE OF COST SAVINGS TREATMENT BUT DOES NOT PAY FOR THE NECESSARY EQUIPMENT, MEDICATION AND PHYSICIAN OUTPATIENT VISIT COSTS TO MAKE THIS A REASONABLE ALTERNATIVE. NOT ALL PATIENTS ARE CANDIDATES FOR THIS TYPE OF TREATMENT. HIGH-QUALITY CARE CAN ONLY BE MAINTAINED AT DECREASED COSTS FOR THOSE PATIENTS WHO ARE KNOWLEDGEABLE AND MOTIVATED ENOUGH TO UNDERSTAND HOW TO TAKE MEDICATIONS AND OPERATE EQUIPMENT. WHILE PPS HAS THE ABILITY TO INDUCE CHANGES IN PRACTICE THAT MAINTAIN OR ENHANCE QUALITY OF CARE, IT ALSO PROVIDES INCENTIVES THAT COULD RESULT IN EROSIONS OF THE QUALITY OF CARE THROUGH EFFORTS TO CONTAIN COSTS.

HOSPITAL ANALYSTS, (DAVIS, ANDERSON, AND STEINBERG 1984; LAVE 1984; VLADECK 1984), PREDICTED THAT THE NEW PROSPECTIVE PAYMENT SYSTEM (PPS) WOULD LEAD TO SUBSTANTIAL CHANGES IN HOSPITAL BEHAVIOR AND PERFORMANCE. TWO SEPARATE LISTINGS ARE FOUND IN THE APPENDIX OF ANTICIPATED CHANGES THAT WOULD OCCUR. APPENDIX C GIVES THE

Prospective Payment Commission's hypothetical impact on hospitals (1982), and Appendix D gives the 1984 anticipated hospital changes by several hospital analysts. Some of those major changes were as follows:

1. Shorter hospital stays.
2. Reduction in hospital staffing levels.
3. Shifting some care, such as preadmission diagnostic testing, to an outpatient basis.
4. DRG creep, or an increasing tendency of hospitals to classify patients in DRG categories with higher payment rates.
5. Increased interaction between hospital administrators and organized medical staffs, including acceleration of trends toward salaried service chiefs in community hospitals and greater external scrutiny of physicians' activities.

A number of these predictions have proven to be accurate, but the results are ambiguous. The main effect of the Medicare PPS appears to have been shorter hospital stays for the elderly but it is unlikely that the length of hospital stays will continue to decline in the future (Davis, et al, 1990). For example, most reasonable types of care, i.e., hernia repairs and cataract

surgeries have already been transferred to the outpatient setting. Some analysts of nursing functions have revealed that less expensive labor can be substituted for more expensive labor (Smith & Fottler, 1985). RN, LPN and nurses' aide ratios may be adjusted to achieve a more appropriate and cost-effective mix of personnel. In contrast, other studies have shown that staffing with more RNs can actually reduce costs because the time needed per patient is decreased. The issue of nurse staffing is a complicated one for which all the data are not yet available. Shifting of diagnostic testing to outpatient settings has occurred. Outpatient visits to hospitals, for example, increased from 229 million in 1983 to 279 million in 1987 (HCFA 1988). Hospitals do seem to have upgraded the classification of patient diagnosis, leading to higher DRG payment (HCFA 1986b).

Many hospitals have integrated physician services in a variety of ways. Physicians and hospitals can be integrated by process means such as appointing physicians to hospital governing boards, appointing physicians to hospital management committees and/or appointing a medical director and salaried chiefs of services. Physicians and hospitals can be integrated through a number of structural means such as divisional, independent-corporate and team organizational arrangements. Physicians and

HOSPITALS CAN ALSO BE INTEGRATED BY PHYSICIAN GROUP PRACTICES TAKING OVER HOSPITAL OWNERSHIP, OR HOSPITALS PURCHASING PHYSICIAN PRACTICES (SCHUTZ & ALTON, 1990).

THE ISSUE NOT ADDRESSED

IN THIS LIST OF PROPOSED CHANGES IT APPEARS THAT ADDITIONAL ADMINISTRATIVE COSTS AS A RESULT OF DRG'S WERE NOT ANTICIPATED. IN A NUMBER OF MAJOR STUDIES (SEE BELOW) THE ADDED EXPENSE TO IMPLEMENT THE PROSPECTIVE PAYMENT SYSTEM HAS NOT BEEN ADDRESSED:

1. AN ANALYSIS OF 729 SHORT-TERM ACUTE CARE HOSPITALS, FROM 1980-1984, SOUGHT TO DETERMINE IF PATIENTS FOR WHOM THE EPISODE OF CARE WAS NOT COMPLETE WERE BEING DISCHARGED FROM THE HOSPITAL. (LONG ET AL, 1987). THEY ALSO LOOKED AT PRODUCTIVITY, OR THE RESOURCES USED TO ACHIEVE OUTPUTS (PATIENTS DISCHARGED FROM THE ACUTE CARE SETTING). THE PURPOSE OF THE RESEARCH WAS TWOFOLD, (1) TO IDENTIFY AND EVALUATE WHETHER OR NOT THE INTRODUCTION OF PPS RESULTED IN CHANGES IN ANY OR ALL OF THE PRODUCTS THAT REPRESENT DIFFERENT LEVELS OF COMPLETENESS OF EPISODE. IE. DISCHARGED TO HOME/SELF-CARE, SHORT-TERM HOSPITAL, SKILLED NURSING FACILITY, HOME HEALTH SERVICE OR DISCHARGED DEAD AND (2) TO DETERMINE

WHETHER OR NOT THE INTRODUCTION OF PPS RESULTED IN CHANGES IN THE NUMBER AND TYPE OF INPUTS THAT RELATE TO PRODUCE EACH OF THE PRODUCTS DESCRIBED ABOVE.

THE RESULTS OF THIS RESEARCH STRONGLY SUGGEST THAT THERE WAS A CHANGE IN THE HOSPITAL PRODUCT AS THE RESULT OF PPS. MORE PRECISELY, THERE WAS A REDUCTION IN THE NUMBER OF PATIENTS DISCHARGED FOR WHOM THE HOSPITAL CONSIDERED THE ENTIRE EPISODE OF CARE TO BE COMPLETE (DISCHARGED TO HOME/SELF CARE). CONVERSELY, THERE WAS AN INCREASE IN THE NUMBER OF PATIENTS DISCHARGED FOR WHOM THE HOSPITAL CONSIDERED THAT FURTHER CARE WAS REQUIRED. HOWEVER, THE ANALYSTS, (LONG ET. AL.), DID NOT ADDRESS THE ADDITIONAL COSTS REQUIRED TO MANAGE CHANGES IN HOSPITAL PRODUCTS WHICH RESULTED FROM THE IMPLEMENTATION OF PPS.

2. ANOTHER STUDY CONDUCTED AN ANALYSIS OF THE IMPLEMENTATION OF THE PPS (GUTERMAN, ET. AL., 1988), TAKEN FROM THE MEDICARE STATISTICAL SYSTEM AND DATA PROVIDED BY THE HEALTH CARE FINANCING ADMINISTRATION (HCFA).

A SUMMARY OF THE FINDINGS OF RESEARCH ON THE IMPACT OF PPS ON THESE MAJOR GROUPS OF ACTORS IN THE HEALTH CARE SYSTEM HIGHLIGHTED THE FOLLOWING. FIRST,

THE NEW SYSTEM HAS BEEN IMPLEMENTED FAIRLY SMOOTHLY. ESSENTIALLY, ALL OF THE HOSPITALS THAT WERE INTENDED TO BE COVERED BY PROSPECTIVE PAYMENT ARE INCLUDED IN THE SYSTEM. SECOND, THE IMPLEMENTATION OF PPS DOES APPEAR TO BE AFFECTING THE WAY THAT HOSPITALS OPERATE. THE LENGTH OF STAY IS DOWN, THE RATE OF INCREASE IN MEDICARE COSTS IS DOWN AND PRACTICE PATTERNS APPEAR TO BE CHANGING. THIRD, HOSPITALS IN GENERAL APPEAR TO HAVE REAPED THE BENEFITS OF THEIR COST-CUTTING BEHAVIOR IN THE FORM OF LARGE OPERATING MARGINS ALTHOUGH MORE RECENT DATA SHOW THAT THESE MARGINS HAVE DECREASED SOMEWHAT AND SOME HOSPITALS HAVE NOT DONE AS WELL AS OTHERS.

THE AUTHORS SEEMED TO FEEL THAT THE CHANGE IN HOSPITAL BEHAVIOR IS HAVING AN EFFECT NOW AND WILL PROBABLY HAVE AN INCREASING EFFECT ON THE OTHER ACTORS IN THE HEALTH CARE SYSTEM--MEDICARE BENEFICIARIES, OTHER PAYERS FOR INPATIENT HOSPITAL SERVICES AND OTHER HEALTH CARE PROVIDERS.

THE STUDY ADDRESSED THE IMPACT ON BENEFICIARIES AND PAYERS BUT DID NOT CONSIDER THE ADMINISTRATIVE COST TO IMPLEMENT THE PROSPECTIVE PAYMENT SYSTEM.

3. SCHEINGOLD (1989), ANALYZED THE PATTERN OF ANNUAL CHANGES IN MEDICARE COSTS AND THE IMPACT OF PPS

PROFITS ON COST INCREASES. IT WAS EXPECTED THAT HOSPITALS WOULD CONTROL COSTS BASED ON WHAT THEY FELT THEIR PROFITS WOULD BE. IT WAS FOUND GENERALLY THAT HOSPITALS WITH SURPLUS (PROFITS) WOULD USE THEM TO REACH HIGHER GOALS WHEREAS HOSPITALS HURT UNDER PPS WOULD CUT COSTS IN ORDER TO MAINTAIN A DESIRED PROFIT MARGIN.

THE AUTHOR SUGGESTED THAT WHATEVER THE REGULATORY SYSTEM IS, HOSPITALS WILL CONTROL COSTS TO AVOID DEFICITS BUT WHEN THEY HAVE SURPLUS THEIR COSTS WILL BE ALLOWED TO RISE TO USE UP THE SURPLUS TO MEET SHORT TERM GOALS. AGAIN THIS ARTICLE DID NOT ADDRESS EXPLICITLY THE ADDITIONAL ADMINISTRATIVE COSTS HOSPITALS HAVE HAD TO INCUR AS A RESULT OF PPS.

4. A COMPREHENSIVE STUDY BY DAVIS, ET. AL. (1990), EVALUATED FEDERAL AND PRIVATE SECTOR EFFORTS OVER THE PAST FIFTEEN YEARS TO LIMIT RISING HEALTH CARE COSTS. EXAMINING THE "MARKET-CENTERED" APPROACH OF ALTERING INCENTIVES FOR PROVIDERS OF HEALTH CARE, THE AUTHORS FOUND THAT REGULATION HAS BEEN MORE EFFICIENT THAN MARKET FORCES IN LIMITING COSTS. THE BLAME IS PLACED ON A FRAGMENTED FINANCING SYSTEM IN WHICH MEDICARE, MEDICAID AND PRIVATE HEALTH INSURANCE COMPANIES ALL PURSUE COST-CONTAINMENT

POLICIES WITH THEIR OWN INTERESTS IN MIND. THIS STUDY DEALT WITH MANY IMPACTS OF PPS BUT DID NOT CONSIDER THE ADMINISTRATIVE COST OF IMPLEMENTING PPS.

REALITIES OF ADMINISTRATIVE COSTS

THE HEALTH CARE INDUSTRY TODAY IS A SYSTEM IN TRANSITION. NEW PROSPECTIVE PAYMENT GUIDELINES HAVE BEEN DEVELOPED TO CONTROL HOSPITAL COSTS, AND THE EFFICIENCY OF A HOSPITAL'S LABOR OPERATIONS WILL BE A KEY DETERMINANT OF THE SUCCESS OR FAILURE OF ITS COST CONTAINMENT EFFORTS.

THE FOLLOWING TABLE COMPARES THE SALARY AND BENEFIT EXPENDITURES AS A PROPORTION OF ALL COSTS OF COMMUNITY HOSPITALS IN 1977 AND 1990.

	1977	1990
PAYROLL EXPENSES (WAGES AND SALARIES)	51.69%	60.55%
EMPLOYEE BENEFITS	7.22%	11.68%
TOTAL % OF HOSPITAL EXPENSES	58.01%	72.23%

(SOURCE: FREELAND, ET. AL. 1977)

THE PROPORTION OF COSTS ATTRIBUTED TO SALARY AND BENEFITS INCREASED MORE THAN 14 PERCENT. IT WOULD APPEAR THAT THIS SIGNIFICANT INCREASE IN SALARIES AND BENEFITS IS PARTIALLY DUE TO A SUBSTANTIAL INCREASE IN ADMINISTRATIVE COSTS AS A RESULT OF THE DIAGNOSIS-RELATED GROUP (DRG) SYSTEM.

The adoption of a prospective payment system was expected to encourage hospitals to operate more efficiently. This system creates a powerful incentive to treat patients in the least costly manner possible. The Medicare's PPS is a dramatic departure from years of cost-based reimbursement that provided no incentive for hospitals to economize or improve productivity. It would appear that this new set of economic incentives has had a major impact on the hospital sector. Hospital management is quite sensitive to decisions concerning costs. Hospitals seemingly have had to add additional administrative staff to administer DRG's. The question is, how significant are these additional administrative costs?

The Medicare prospective payment initiative has been in operation only a relatively short period of time and its immediate impact may not be sustained over the longer term. During the first full year that it was in effect, total hospital costs and hospital costs per admission experienced a dramatic slowdown, increasing in real terms by 1.5 percent and 3.0 percent, respectively, (Davis, et. al. 1990). Increases in hospital costs per patient day, on the other hand, continued to increase at historically high rates. The main effect of the Medicare PPS appears to have been shorter hospital stays for the elderly but it is unlikely that the length of hospital stays will

continue to decline in the future. With hospital costs returning to historical rates of increase once utilization savings have been realized, the success of the Medicare PPS may well be short-term. On balance, it seems clear that the hospital cost problem has not been solved and that other measures may be needed in the future (Davis et al., 1990).

For example, Davis et. al. (1990), predicted that cutbacks in nursing staff would be a way to contain costs. Some analysts predicted that DRG's would force hospitals to cut back on nursing staff, one of the largest components of routine-care costs. But New Jersey hospitals did not reduce nursing staff or shift to less expensive nurses. Nursing hours per patient day in New Jersey increased by 15 percent over the period of 1979 to 1984, which was roughly comparable to regional and national trends. In addition, registered nurses who earn considerably higher salaries than licensed practical nurses now comprise a larger share of nursing staff than in 1979, also reflecting national trends (New Jersey State Department of Health, 1979 & 1984).

If the health sector were not booming, it might be argued that there would be less real growth in the economy, unemployment would be higher, and the standard of living of the population would be lower. Prior to the

IMPLEMENTATION OF DRG'S HOSPITALS, GOVERNMENT AND THE PRIVATE SECTOR WERE DOING NOTHING TO CONTAIN HEALTH CARE COSTS. THE HEALTH SECTOR HAS EXHIBITED A STRONG AND PERSISTENT TENDENCY TO OUTSTRIP THE REST OF THE ECONOMY IN EXPENDITURE INCREASES, EXCEPT DURING PERIODS OF DIRECT GOVERMENTAL INTERVENTION TO CONTAIN COST INCREASES. RISING HEALTH CARE EXPENDITURES ARE UNIVERSALLY BELIEVED TO REPRESENT A NEGATIVE ECONOMIC DEVELOPMENT. THIS IS QUITE UNLIKE THE CASE IN OTHER SECTORS OF THE ECONOMY WHERE GREATER SALES ARE UNIVERSALLY BELIEVED TO BE POSITIVE.

HOSPITAL EMPLOYMENT AND LABOR COSTS

HOSPITALS MEASURE EMPLOYEE WORK HOURS BY FULL-TIME EQUIVALENTS (FTE'S). A PERSON WORKING 40 HOURS PER WEEK IS EQUAL TO 1.0 FULL-TIME EQUIVALENT. TWO OR MORE PEOPLE CAN SHARE 1.0 FULL-TIME EQUIVALENT BY EACH WORKING A PORTION OF THE HOURS TOTALING 40 HOURS PER WEEK.

TOTAL HOSPITAL EMPLOYMENT INCREASED STEADILY FROM 0.5 MILLION FTE'S IN 1950 TO A PEAK OF 3.1 MILLION IN 1982, AN ANNUALIZED RATE OF GROWTH OF 5.9 PERCENT. DURING THE PERIOD 1983-86, HOWEVER, HOSPITAL FTE'S DID NOT CONTINUE TO INCREASE BUT REMAINED FAIRLY CONSTANT AT ABOUT 3 MILLION. THE NUMBER OF FULL-TIME EMPLOYEES PER PATIENT CENSUS INCREASED FROM 1.8 IN 1950 TO 3.9 IN 1986. THE NUMBER OF EMPLOYEES REQUIRED TO CARE FOR ONE PATIENT HAS

MORE THAN DOUBLED FROM 1950 TO 1986, THUS INCREASING HOSPITAL LABOR COSTS. (DAVIS, ET AL. 1990)

PHYSICIAN/HOSPITAL RELATIONSHIPS ARE CHANGING AND HOSPITALS MAY BE ADDING ADDITIONAL FTE'S AS PHYSICIANS BECOME EMPLOYED BY HOSPITALS. AS EXTERNAL PRESSURES CONTINUE THERE WILL LIKELY BE MORE HOSPITAL/PHYSICIAN MERGERS AND JOINT VENTURES, SUCH AS WHEN HOSPITALS PURCHASE MEDICAL PRACTICES, PHYSICIAN ORGANIZATIONS TAKE CONTROL OF HOSPITALS OR WHEN BOTH MERGE. FOR EXAMPLE, IN 1987, MORE THAN 23% OF HOSPITALS REPORTED THAT THEY HAD PURCHASED PHYSICIAN PRACTICES. ALTHOUGH EMPLOYED PHYSICIANS REPORT EARNINGS TO BE $38,000 A YEAR LESS THAN SELF-EMPLOYED PHYSICIANS, THEY WORK FEWER HOURS. CONSEQUENTLY HOURLY PAY IS NOT THAT MUCH LESS (SCHULZ 1990). THERE IS A VARIETY OF WAYS TO INTEGRATE PHYSICIAN SERVICES. ALTHOUGH PHYSICIAN MEMBERSHIP ON HOSPITAL GOVERNING BOARDS WAS A CONTROVERSIAL ISSUE JUST A FEW YEARS AGO, IT IS NOW A MORE ACCEPTED PRACTICE. MANAGEMENT ORIENTED MEDICAL STAFF COMMITTEES, SUCH AS FOR PLANNING OR COST CONTAINMENT, ARE ANOTHER WAY TO FORMALLY INVOLVE PHYSICIANS IN HOSPITAL DECISIONS.

THE PROBLEM/HYPOTHESES

The primary reason for instituting the Prospective Payment System was to curb rising health care costs. Salaries and benefits are the largest expense a hospital has to incur, thus, if hospitals can reduce the number of people required to carry out the day-to-day business, over-all hospital expenses would be reduced. It was not anticipated that the implementation of DRG's would require more people to administer this system and that hospitals would actually add additional staff. The proposed hypotheses for this study are listed below:

H1: Hospitals reacted to the government's prospective payment system by adding staff in non-revenue generating areas of the hospital.

H2: Hospitals reacted to the government's prospective payment system by changing the mix of RN's, LPN's and nurse aides in order to reduce inpatient labor force expenditures.

H3: Hospitals reacted to the government's prospective payment system by putting a greater emphasis on discharge planning to further reduce patient lengths of stay.

H4: Hospitals reacted to the governments prospective payment system by fostering much closer relationships with the medical staff as a cost-effective measure.

METHODOLOGY

The purpose of this research was to analyze the impact that the prospective payment system has had on one hospital. The method of analysis chosen for this study was not only to examine the pressures put on hospitals by the prospective payment system in the literature, but also to study more specifically the impact of these forces on one hospital. This study was limited to a case study of a mid-size urban midwestern hospital. There were limited statistical measures that can be applied to a sample of one. Research methods used for this analysis consisted of a review of secondary data sources and interviews with directors and managers who are involved in the decision making and management of the study hospital.

Key informant interviews were conducted with directors and managers directly affected by the prospective payment system. Those individuals involved in the interview process included St. Luke's Hospital President, Director of Admitting, Director of Medical Records, Controller, DRG Coordinator, Discharge Planning Coordinator, Financial Analysis and Human Resource Manager. Additional information was acquired from the following organizational documents: staffing reports, department manuals, financial reports, DRG listings and job descriptions.

Each interviewee was asked a series of open ended questions:

1. What impact has the prospective payment system had on your department?

2. What advantage or disadvantage has the prospective payment system had for patients?

3. How do you feel St. Luke's has responded to the prospective payment system?

4. What has been the impact of the government's role since the implementation of the prospective payment system?
   A. Did this government program achieve the impact that was intended?
   B. Did government intervention improve the health care system or create additional burdens?

Because this study was restricted to a single hospital, it would be hard to generalize information from this hospital to hospitals in general. All the variables that go into staffing decision making in an institution

CANNOT BE IDENTIFIED THEREFORE, GENERALIZED PATTERNS MAY BE IMPLIED IN THE RESULTS BUT THEY WOULD BE ENTIRELY OUT OF THE SCOPE OF THIS STUDY. (SISSORS, 1984)

STUDY SITE

ST. LUKE'S HEALTHCARE ASSOCIATION IS A REGIONAL MULTI-FACILITY NONPROFIT HOLDING COMPANY COMPRISED OF HOSPITAL, CLINICAL AND SUPPORT SERVICES. THE ASSOCIATION IS GOVERNED BY A BOARD OF DIRECTORS SELECTED FROM AREA LUTHERAN CHURCHES AND THE COMMUNITY AT LARGE.

IN ADDITION TO THE HOSPITAL ITSELF, ASSOCIATION SUBSIDIARIES INCLUDE THE SAGINAW MEDICAL CENTER CLINICAL LABORATORY, MIDWEST MEDFLIGHT HELICOPTER SERVICE, SAGINAW MERCY AMBULANCE SERVICE, SAGINAW COOPERATIVE HOSPITALS RESIDENCY PROGRAM, COMFORT CARE OF SAGINAW, MAGNETIC RESONANCE IMAGING CENTER, SPORTS AND PHYSICAL THERAPY CENTERS, PHYSICIAN'S OFFICE BUILDING, ST. LUKE'S AMBULATORY CARE CENTER, MEDEXPRESS OF FRANKENMUTH, MEDEXPRESS WEST OF SAGINAW, AS WELL AS A NUMBER OF PHYSICIANS EMPLOYED BY, AND PHYSICIAN PRACTICES MANAGED BY, THE ASSOCIATION.

ST. LUKE'S HOSPITAL IS A 300 BED ACUTE CARE HOSPITAL LOCATED IN AN URBAN AREA WHICH SERVICES A NINE COUNTY AREA. ON SEPTEMBER 1, 1992, ST. LUKE'S IS SCHEDULED TO OPEN AN

OPEN HEART SURGERY PROGRAM AND WILL THEN BE A FULL SERVICE FACILITY. THIS HOSPITAL IS REPRESENTATIVE OF MANY HOSPITALS THROUGHOUT THE COUNTRY AND THE SIGNIFICANT ADMINISTRATIVE COSTS INCURRED BY ST. LUKE'S MAY BE DUPLICATED BY NEARLY EVERY OTHER FACILITY IN THE COUNTRY.

THERE ARE TWO ADDITIONAL ACUTE CARE HOSPITALS IN SAGINAW WHICH COMPETE WITH ST. LUKE'S, AS WELL AS TWO OTHER ACUTE CARE HOSPITALS WITHIN A THIRTY MILE RADIUS OF SAGINAW. TOTAL FULL-TIME EQUIVALENTS (FTE'S) FOR THE THREE HOSPITALS IN SAGINAW ARE AS FOLLOWS:

SAGINAW GENERAL HOSPITAL.....1,084 FTE'S
ST. LUKE'S HOSPITAL.....1,161 FTE'S
ST. MARY'S HOSPITAL.....1,416 FTE'S

THE AVERAGE NUMBER OF FTE'S FOR MEDIUM SIZE HOSPITALS IN MICHIGAN (200-399 BEDS) IS ABOUT 917 FTE'S (AMERICAN HOSPITAL ASSOCIATION, 1990).

RESULTS

Efforts to contain health care costs under the Prospective Payment System (PPS) have changed the way hospitals do business. Hospitals that are financially stable and have learned to work within the diagnosis-related group (DRG) system have had to add staff in several areas of the hospital to administer the system. Medicare was the first to institute this type system but now insurance companies are instituting similar type systems.

The major areas that have been impacted at St. Luke's have been non-revenue generating areas such as Admitting, Discharge Planning and Medical Records. Each of these departments has shown significant increases in number of full-time equivalents (FTE's) since the institution of DRG's.

The interviewees all felt that a key element in effectively being able to work within the DRG system is to have a strong pre-screening program in a hospital admitting department. Hospitals have to screen patients based on the type of diagnosis and procedure that the physician is prescribing. Medicare reimbursement payment under the DRG system has determined which types of procedures and diagnoses require inpatient treatment, thus determining the amount of reimbursement that will be paid to the hospital. Hospitals have to monitor closely which patients are being admitted

AND WHETHER OR NOT THEY WILL RECEIVE PAYMENT. PHYSICIANS HAVE TO BE EDUCATED AS TO WHICH TYPES OF PATIENTS CAN BE ADMITTED AND ALTERNATE TYPES OF SERVICE HAVE TO BE OFFERED FOR THE PATIENTS TO RECEIVE APPROPRIATE CARE. (ALLEN AND ROUSSEAU, 1992, MARCH)

PROSPECTIVE PAYMENT OFFERS ONLY TWO ALTERNATIVES: 1) TO OPERATE AT COSTS EQUAL TO OR BELOW THOSE DETERMINED BY DRG RATES OR 2) TO ALLOW OVERALL COSTS TO RISE ABOVE THOSE DETERMINED BY DRG RATES, INCUR A LOSS AND THREATEN THE INSTITUTION WITH BANKRUPTCY. THE MOST IMPORTANT ELEMENT IN THE IMPLEMENTATION OF CHANGES IS TO ENCOURAGE INTERDEPARTMENTAL AND MULTIDISCIPLINARY COMMUNICATION IN ORDER TO IDENTIFY POTENTIAL AREAS FOR COST SAVINGS AND INCREASED EFFICIENCY. THIS REQUIRES THE CREATION OF AN INTERNAL MANAGERIAL CLIMATE AND STRUCTURE THAT FOSTERS EFFICIENCY. (DAVIS ET AL, 1990)

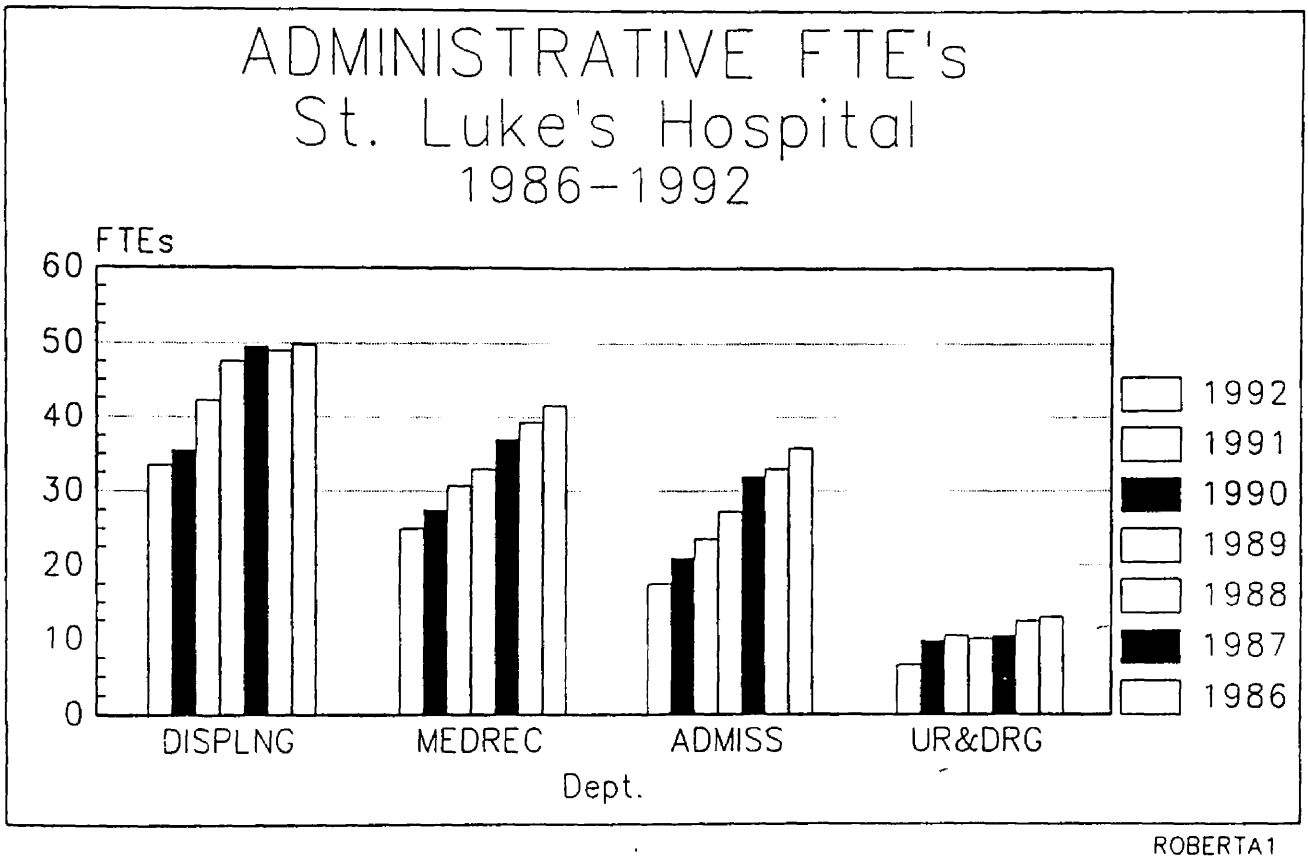
CHANGES IN STAFFING LEVELS

FOUR ADMINISTRATIVE DEPARTMENTS ARE ILLUSTRATED IN FIGURE 1: PATIENT ACCOUNTING WHICH INCLUDES DISCHARGE PLANNING, MEDICAL RECORDS, ADMITTING, DRG COORDINATOR AND UTILIZATION REVIEW. EACH DEPARTMENT'S TOTAL FTE'S ARE REPRESENTED IN THE GRAPH. ONLY A PORTION OF THE FTE'S ARE RELATED DIRECTLY TO THE ADMINISTRATION OF THE PROSPECTIVE PAYMENT SYSTEM. EACH AREA REPRESENTED HAS HAD A YEARLY INCREASE IN THE NUMBER OF FTE'S NEEDED.

Outpatients as well as inpatients are processed through the departments shown. Patient Accounting which includes the Discharge Planning Nurses has had a 26 percent increase in staffing, Medical Records has had a 39 percent increase in staffing, Admissions has had a 53 percent increase and DRG Coordinator and Utilization Review has had a 52 percent increase in staffing during the 1986 to 1992 time period.

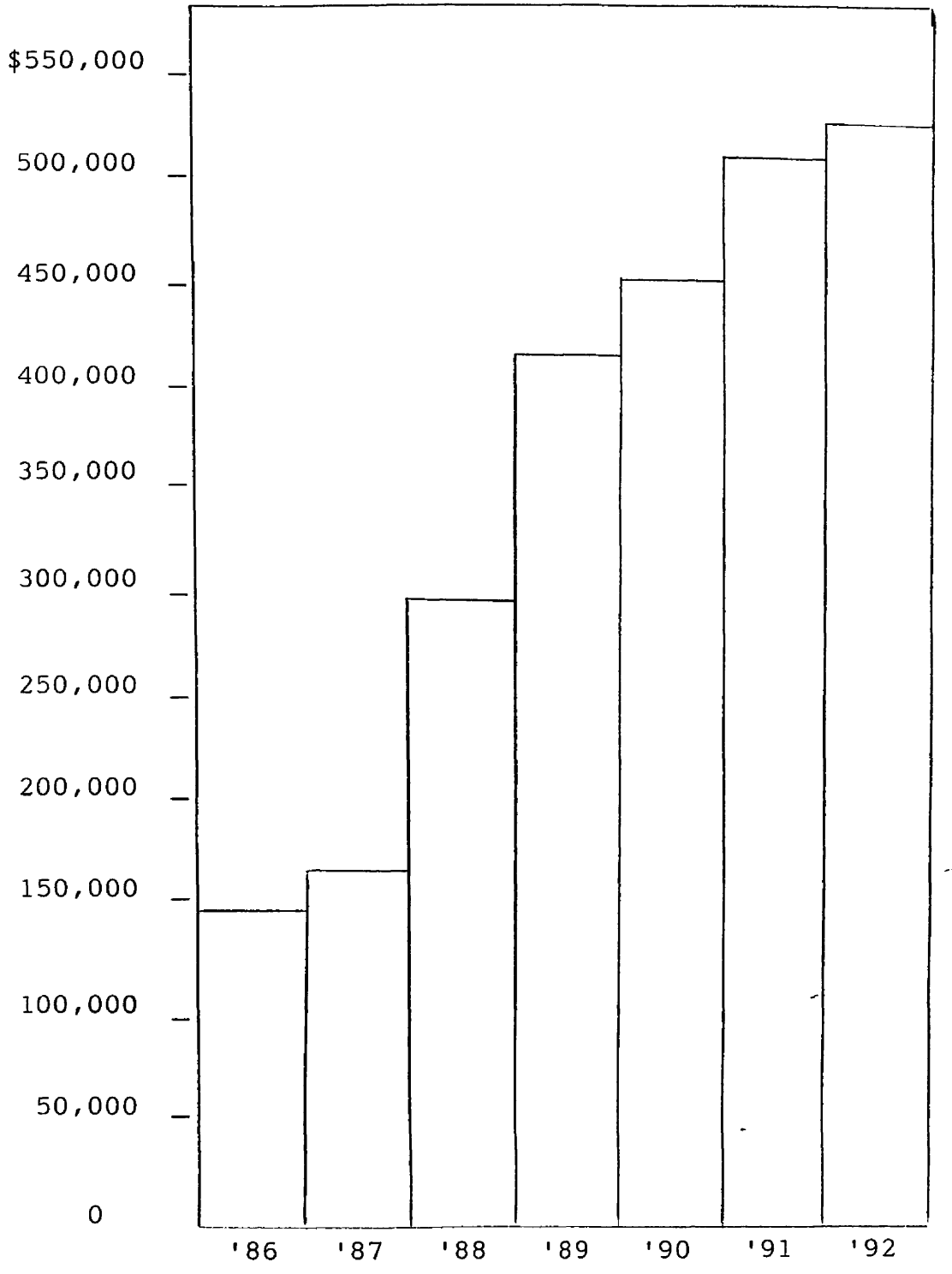
Figures 2 and 3 show the total annual salary and benefit costs for St. Luke's Hospital Medical Record Analysts and Discharge Planning Nurses. The Discharge Planning Nurses work only with the inpatients to help reduce the length of stay in the hospital. During the 1988-1989 period, they experienced approximately a 76 percent increase in salaries and benefits, but these have risen only slightly from 1989 through 1992 (Figure 2). The Medical Record Analysts are the people who code the charts for payment under the DRG system. This group has experienced over a 150 percent increase in salaries and benefits from 1987 through 1989 (Figure 3). During this period medical record analysts people began taking over ALL the coding in the hospital. Prior to that some outpatient areas were coding their own charts. This change contributed to the significant increase in salary and benefits costs as well as to the additional coding responsibilities created by the prospective payment system.

Figure 1



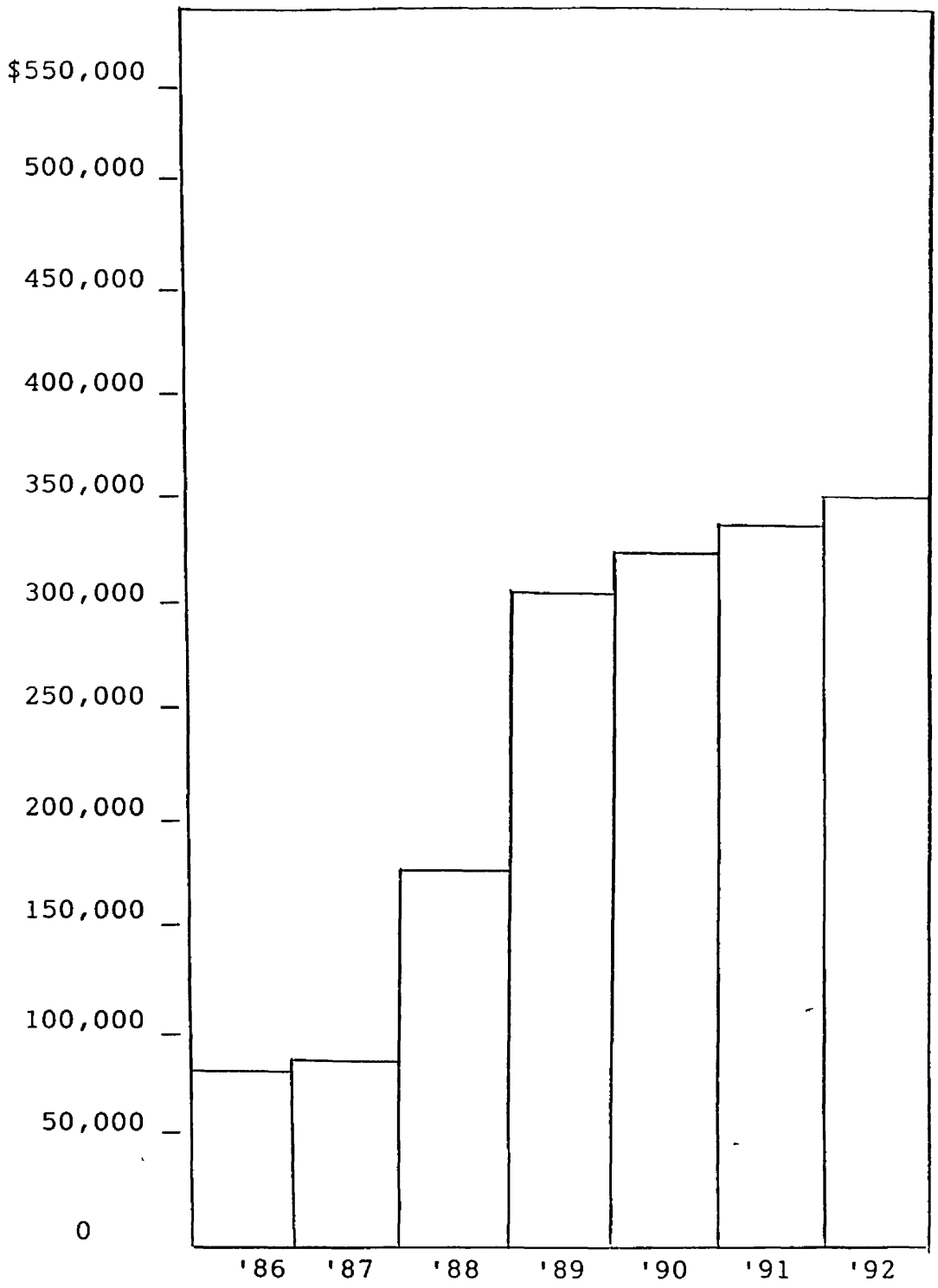
*Notes:

1. Discharge Planning
2. Medical Records
3. Admissions
4. Utilization Review and Discharge Coordinator



Medical Records Analysts
Salary and Benefits Costs, 1986-1992
St. Luke's Hospital

Figure 2



DISCHARGE PLANNING NURSES

SALARY AND BENEFIT COSTS, 1986-1992

ST. LUKE'S HOSPITAL

FIGURE 3

Many insurance policies besides Medicare require pre-authorization before a patient is admitted. Payment may be denied if pre-authorization is not obtained. The hospital must check with the patient's insurance companies before admission to find out what the requirements are and if they are met. Physician offices and patients must be informed as to what is required. Compliance to the requirements must then be monitored before admission. If this is not done patients may have to pay for services that were provided that are not covered because of non-compliance. The admission director, R. Allen, felt that pre-authorization was a public relation mechanism for the hospital as well as a cost effective program (Allen, 1992, March).

Admitting

Admitting Department services have required additional staff since the institution of the Prospective Payment System requiring pre-authorization for hospital services. Both secretarial and R.N. staff have been added because of these requirements. A total of nearly 10 full-time equivalents (FTE's) have been added since 1984, 4.5 R.N. FTE's and 5.5 secretarial staff FTE's. The cost of this additional staffing has been offset by savings generated by directing patients to the Patient Observation Program

(24 HOUR STAY) OR TREATING PATIENTS AMBULATORY INSTEAD OF ADMITTING. THE COST SAVINGS ARE MONITORED ON A MONTHLY BASIS WITH YEARLY TOTALS AS FOLLOWS:

1986	$ 74,900.00	
1987	100,000.00	
1988	100,000.00	
1989	100,000.00	
1990	85,000.00	
1991	53,214.00	
1992	83,860.00	JULY '91 THRU FEB. '92

(ALLEN, 1992, MARCH)

MEDICAL RECORDS

MEDICAL RECORDS IS ANOTHER DEPARTMENT WHICH HAS BEEN IMPACTED BECAUSE OF THE DRG SYSTEM. PRIOR TO THE INCEPTION OF DRG'S, THIS DEPARTMENT FUNCTIONED AS A PAPER SHUFFLING AND STORAGE DEPARTMENT. NOW THE DEPARTMENT HAS BEEN GIVEN RECOGNITION AS CONTRIBUTING GREATLY TO THE FINANCIAL WELL BEING OF THE HOSPITAL. (ROUSSEAU, 1992, MARCH). CODING THE CHARTS PLAYS A VITAL ROLE IN HOW MUCH PAYMENT THE HOSPITAL RECEIVES. EACH DIAGNOSIS OR PROCEDURE THAT IS DOCUMENTED REQUIRES A SPECIAL CODE. REIMBURSEMENT IS LINKED DIRECTLY TO THE SOPHISTICATION AND ACCURACY OF HOW THE CHART IS COMPLETED. THE KEY ISSUES INVOLVED IN DETERMINING WHETHER THE CHART IS ACCURATE WHEN IT ARRIVES

IN THE MEDICAL RECORD DEPARTMENT AT ST. LUKE'S ARE:

1. ACQUIRING ANY MISSING DATA
2. CLARIFYING ANY UNUSUAL INFORMATION THAT MAY ADVERSELY AFFECT THE ASSIGNMENT TO A DRG
3. VALIDATING DATA WHEN THERE IS ROOM FOR INTERPRETATION AND POSSIBLE UPGRADING OF A DIAGNOSIS
4. ENSURING THAT ALL DIAGNOSES AND PROCEDURES ARE CHARTED
5. COORDINATING WITH PHYSICIANS TO CONFIRM THE ACCURACY OF DIAGNOSIS
6. ASSIGNING THE PATIENT TO A DRG ON THE BASIS OF SURGERY, PRINCIPAL DIAGNOSIS AND SECONDARY DIAGNOSIS

(ROUSSEAU, 1992, MARCH)

ST. LUKE'S PURCHASED A COMPUTER PROGRAM TO HELP WITH DETERMINING THE MOST PROFITABLE DRG CODE FOR ANY GIVEN PATIENT. THIS IS CALLED A "DRG GROUPER PROGRAM" WHICH ALLOWS THE HOSPITAL TO PRIORITIZE EACH DIAGNOSIS. AN ATTESTATION STATEMENT IS FORMULATED WHICH GIVES THE DIAGNOSIS AND DRG CODE ASSIGNED. THE PHYSICIAN MUST SIGN THAT THIS STATEMENT REFLECTS THE CORRECT DIAGNOSIS FOR THAT PATIENT BEFORE THE BILLING CAN BE DONE (ROUSSEAU, 1992, MARCH).

Discharge Planning

This is a sub department which works within the Patient Accounting Department. Discharge Planning was not in existence before the onset of DRG's. One of the greatest impacts of DRG's has been to reduce the length of stay in the hospital. In order to accomplish this, discharge planning, is intended to ensure continuity of care that begins in the admission phase and is developed throughout hospitalization. Discharge planning provides continuity of care to patients and their families through coordination of various programs. These programs and services focus on the physical, emotional and social needs of the patient. This holistic approach ensures that the total needs of the patients are met. Discharge planning services at St. Luke's Hospital include:

1. Home Health Referrals
2. Nursing Home and Foster Care placement
3. Crisis Intervention dealing with substance abuse and mental disorders
4. Financial Assistance
5. Adult and Child Abuse cases
6. Ordering Durable Medical Equipment

Community services are available for use in a variety of ways; Discharge Planning nurses work with various community agencies to provide patients with needed services following discharge from the hospital (Mehalski, 1992, March).

In order for St. Luke's to provide discharge planning services, 6.6 FTE's have been dedicated to this function since 1984. Within two working days of admission, 90-96% of all patients admitted are seen. Assessment is vital to determining what the patient may require on discharge, therefore, this is an all R.N. staff.

It is difficult to determine what the costs savings are to the hospital by getting patients discharged early but St. Luke's does a monthly tracking of patients who are ready to be discharged and yet stay because of a variety of reasons ie., no available nursing home beds, required insurance approval, speech therapist needed, problem with Department of Social Services approval or family unable to make decision. These overstay days and the costs incurred by St. Luke's are shown below.

Number of overstay days April 1991 through February 1992 178 days x $700.00/day = $124,600.00 for the 11 month period.

(Mehalski, 1992, March)

Patients are being discharged more quickly now and their acuity level is higher upon discharge. As a result of

THIS, MORE PATIENTS ARE REQUIRING HOME HEALTH CARE SERVICES. THERE ARE APPROXIMATELY 70 REFERRALS PER MONTH TO SUCH SERVICES WITH SOME PATIENTS REQUIRING AS MANY AS FOUR TYPES OF REFERRAL. THIS HAS CAUSED A SHIFT IN WHERE NATIONAL HEALTH CARE DOLLARS ARE BEING SPENT. HOSPITALS ARE ESTABLISHING SUB ACUTE HOSPITAL UNITS OR REHABILITATION UNITS WHERE PATIENTS CAN BE DISCHARGED FROM THE ACUTE CARE SETTING INTO ONE OF THESE TYPE UNITS WHERE A DIFFERENT PAYMENT SYSTEM IS INSTITUTED. PATIENTS REQUIRE A "PROTECTED ENVIRONMENT" TYPE SETTING FOR CONTINUED CARE THUS ALLOWING EARLIER DISCHARGE THAN WAS PREVIOUSLY POSSIBLE, (MEHALSKI, 1992, MARCH).

NURSING SERVICE

THE NURSING SERVICE IS THE LARGEST DEPARTMENT WITHIN ST. LUKE'S AND CONSUMES THE LARGEST PORTION OF THE HOSPITAL'S BUDGET. CONSEQUENTLY, THE NURSING SERVICE HAS COME UNDER PARTICULAR PRESSURE IN COST CONTAINMENT POLICIES. AS DRG'S HAVE EMERGED, THOSE WHO MANAGE NURSING SERVICE DEPARTMENTS HAVE BEEN CALLED UPON TO OPERATE MORE EFFICIENTLY WHILE PROVIDING QUALITY PATIENT CARE.

IN RESPONSE TO THE PRESSURES TO OPERATE MORE EFFICIENTLY, A NUMBER OF UNITS HAVE MOVED TO ALL RN STAFFING AT ST. LUKE'S. PRIOR TO THE PROSPECTIVE PAYMENT SYSTEM ST. LUKE'S HAD A LARGE NUMBER OF LPN'S AND NURSE

aides. Around 1985 the number of LPN's and aides were greatly reduced particularly in the critical care areas shown in Table 2.

Table 2 illustrates that all-RN or nearly all-RN, staffs are utilized in the intensive care units. The one exception to this trend is found in the Operating Rooms where some LPN's have been specially trained to function as Surgical Technologists. Registered nurses who earn considerably higher salaries than licensed practical nurses now comprise a large share of the nursing staff which reflects a national trend (New Jersey State Department of Health, 1984).

Physician Relationships

St. Luke's relationship with physicians has changed since the implementation of DRG's. The emergency room is staffed with a number of physicians who are employed by St. Luke's. A physician has been hired as a Vice President of Physician Relations and several service chiefs such as Pediatrics, Obstetrics, Radiology and Anesthesia are employed by the hospital. There are twenty-five physician practices that are owned or managed by St. Luke's in the surrounding community. It is generally believed that intergration of physician and hospital services can help to achieve efficiencies within the hospital and make physicians more accountable for hospital costs. (Davis, et al., 1990)

TABLE 2

RATIO, LPNS TO RNS

ST. LUKE'S HOSPITAL, 1992

RECOVERY ROOM	ALL RN STAFF
CORONARY CARE UNIT	ALL RN STAFF
PEDIATRIC INTENSIVE CARE	ALL RN STAFF
OBSTETRICS	ALL RN STAFF
SURGICAL INTENSIVE CARE	1::10.4
PEDIATRICS 4 MAIN	1::1.9
ORTHOPEDICS	1::1.9
OUTPATIENT (IN HOSPITAL)	1::1.6
INTENSIVE CARE STEP-DOWN	1::1.5
SURGICAL 6 NORTH	1::1.3
MEDICAL 3 MAIN	1::1.2
MEDICAL 5 MAIN	1::1.1
MEDICAL 4 NORTH	1::1.1
OPERATING ROOM (LPN/SURG. TECH.)	1::0.8

DISCUSSION

It appears that the study hospital did add additional staff that clearly were in non-revenue generating areas of the hospital. This supports H1 which shows that the study hospital did react to the government's prospective payment system by adding staff in non-revenue generating areas; Admitting, Medical Records and Discharge Planning experienced the greatest staffing increases.

It appears that in the study hospital that less expensive LPN's and nurse aides were not utilized in place of more expensive RN staffing. On the contrary, there are more RN's than LPN's in 70% of the nursing units at St. Luke's. The study hospital did not react to the government's prospective payment system by changing the mix of RN's, LPN's and nurse aides in order to reduce the inpatient labor force expenditures, as suggested in H2.

Discharge Planning has become a very important part of the hospital's need to facilitate shorter lengths of stay for patients. It appears that in the study hospital, discharge planning became important in that staffing increased 26 %, and that patients were discharged more quickly, which was an expected reaction to the

GOVERNMENT'S PROSPECTIVE PAYMENT SYSTEM (H3).

THE HYPOTHESIS, SUGGESTING THAT A REACTION TO THE GOVERNMENT'S PROSPECTIVE PAYMENT SYSTEM WOULD BE A MUCH CLOSER RELATIONSHIP WITH THE MEDICAL STAFF AS A COST-EFFECTIVE MEASURE, IS SUPPORTED. IN THE STUDY HOSPITAL THERE HAS BEEN A MUCH GREATER EMPHASIS ON THE KINDS OF RELATIONSHIPS IT ESTABLISHES WITH PHYSICIANS. MANY MORE PHYSICIANS ARE EMPLOYED BY THE HOSPITAL NOW THAN BEFORE THE ONSET OF PPS. THE STUDY HOSPITAL OWNS AND/OR MANAGES TWENTY-FIVE PHYSICIAN PRACTICES IN THE SURROUNDING GEOGRAPHIC AREA AS WELL AS HAVING A NUMBER OF PHYSICIANS WHO ARE EMPLOYED BY ST. LUKE'S. THE STUDY HOSPITAL IS A FAIRLY TYPICAL HOSPITAL WHICH HAS DIVERSIFIED ITSELF FROM AN ACUTE CARE HOSPITAL INTO MANY OTHER AREAS.

CONCLUSION

Hospitals have had to change the way they operate. The prospective payment system will survive and is already spreading to other third party payers. It is universally expected that the federal government and major insurers will extend a similar type system to other third party payers which will include outpatient procedures and physicians fees. In patient health care costs are still uncontrolled but the prospective payment system has demonstrated that costs can be slowed when controls are mandated through some form of payment system. Each time more controls are mandated additional administrative costs are experienced. What this study discovered was that:

1) additional staff was added in non-revenue generating areas of the hospital ie, admitting, medical records, and discharge planning.
2) less expensive LPN and nurse aides were not utilized in place of more expensive RN staffing.
3) discharge planning has become a very important part of the hospital in being able to facilitate shorter lengths of stay.
4) hospital and physician relationships have changed and more physicians are being employed by the hospital.

Even though the study looked at only one hospital the findings <u>could</u> be representative of many hospitals throughout this country. Like many hospitals, St. Luke's diversity is one of the main reasons the hospital's financial stability ranks in the top 5 percent in the state and the top 15 percent nationwide (Maidlow, 1991, March). Since the introduction of PPS hospitals that are financially stable have had to decrease their inpatient lengths of stay and look more acutely at costs per patient. This has been detrimental to some patients because more patients are being discharged in an unstable condition, 15 percent pre-DRG's vs. 18 percent post-DRG's (Wilensky, 1990). The impact on the community has been an increase of the need for support services to help supplement home care which is not always covered by insurance. This adds an extra financial burden for the patient and his or her family.

Outpatient services have come more into vogue as a result of the prospective payment system. More and more types of procedures are being done on an outpatient basis. Hospitals are setting up units within their facilities to house outpatient surgery departments. I personally have seen this service expand in the study hospital. In 1977 the first ambulatory patient beds were established at St. Lukes which consisted of four. By the early eighties this had increased to fifteen. In 1984 plans were being made to

BUILD AN AMBULATORY UNIT ACROSS THE STREET FROM THE MAIN CAMPUS. THIS WAS COMPLETED AND OPENED IN FEBRUARY, 1986. CURRENTLY 60 PERCENT OF THE IN-HOUSE OPERATING ROOM SCHEDULE IS AMBULATORY SURGERY PATIENTS. THERE ALSO ARE SIX ADDITIONAL OPERATING ROOMS IN THE OUTPATIENT FACILITY. I THINK THAT THIS INCREASED DEDICATION TO OUTPATIENT SURGERY IS RATHER TYPICAL OF MANY HOSPITALS THROUGHOUT THE COUNTRY.

THE FOLLOW-UP CARE THAT PATIENTS RECEIVED AFTER BEING DISCHARGED FROM THE HOSPITAL WAS NOT AS GOOD BEFORE THE PROSPECTIVE PAYMENT SYSTEM AS IT IS NOW. TWENTY-FIVE PERCENT OF PATIENTS RECEIVED POOR CARE FOLLOWING DISCHARGE PRIOR TO THE PPS COMPARED TO ONLY 12 PERCENT NOW (WILENSKY, 1990). I THINK THIS HAS IMPROVED BECAUSE OF THE DISCHARGE PLANNING THAT IS BEING DONE AS A RESULT OF HOSPITALS TRYING TO DECREASE LENGTHS OF STAY FOR PATIENTS. ALSO, THE JOINT COMMISSION ON ACCREDITION FOR HOSPITAL ORGANIZATIONS IS MONITORING HOSPITALS TO ASSURE THAT PATIENT NEEDS FOLLOWING DISCHARGE ARE BEING IDENTIFIED AND A PLAN OF CARE ESTABLISHED.

FUTURE IMPLICATIONS

WITH FEW EXCEPTIONS, EFFORTS TO CONTAIN HEALTH CARE COSTS HAVE BEEN FRAGMENTED AND THEIR EFFECTIVENESS HAS BEEN LIMITED. IN LARGE PART THIS REFLECTS THE STRUCTURE

OF THE U.S. HEALTH CARE FINANCING SYSTEM WITH MEDICARE, MEDICAID AND EMPLOYER-PROVIDED HEALTH INSURANCE EACH INDEPENDENTLY PURSUING COST CONTAINMENT POLICIES DEVELOPED WITH THEIR OWN INTERESTS IN MIND. THIS APPROACH TO COST CONTAINMENT HAS NOT SUCCEEDED IN CONTROLLING HEALTH CARE COSTS. IN ADDITION, THOSE SUFFERING THE BRUNT OF THIS UNCOORDINATED POLICY HAVE BEEN THE UNINSURED AND THE POOR WHO HAVE BEEN DISCRIMINATED AGAINST BY A MARKET-ORIENTED HEALTH SYSTEM.

COST CONTAINMENT BY INSURERS MUST BE INTEGRATED INTO A UNIFIED POLICY IN ORDER TO BE EFFECTIVE. IN ADDITION, COST CONTAINMENT INITIATIVES MUST BE CONSIDERED AS PART OF A BROADER ARRAY OF SOCIAL GOALS--GOALS RELATED TO IMPROVING AND MAINTAINING THE HEALTH OF THE PUBLIC, ACCESS TO CARE, QUALITY OF CARE AND COMMITMENT TO EXCELLENCE IN RESEARCH AND TECHNOLOGY.

MANUFACTURERS OF HOSPITAL SUPPLIES, DRUGS, PHYSICIANS AND MALPRACTICE FEES AND SETTLEMENTS WILL ALSO HAVE TO BE INVESTIGATED AND DEALT WITH THROUGH SOME FORM OF COST CONTAINMENT. THE DRG PROSPECTIVE PAYMENT SYSTEM IS A BEGINNING TO SOME LONG-RANGE POLICY CHANGES IN OUR HEALTH SYSTEM.

COST CONTAINMENT MUST BE LOOKED AT GLOBALLY AND NOT JUST A SHIFTING OF COSTS FROM ONE AREA OF HEALTH CARE TO

ANOTHER. ANY POLICY CHANGES THAT ARE MADE SHOULD TAKE INTO CONSIDERATION THE COSTS OF IMPLEMENTING SUCH POLICIES TO DETERMINE IF ADDITIONAL COSTS HAVE BEEN ADDED THROUGH IMPLEMENTATION.

SOCIETY WANTS LOWER COSTS, BUT WE WANT MEDICAL TREATMENT AVAILABLE TO EVERYONE. THE BURGEONING COSTS OF HEALTH CARE WILL UNDOUBTEDLY RESULT IN SOME CHANGES IN SOCIETAL VALUES, AS WELL AS SOME FORM OF RATIONING FOR MEDICAL SERVICES. AT PRESENT, HOWEVER, WE HAVE NO WAY TO MAKE SUCH JUDGMENTS. THE IMPACT OF OUR CHANGING PHILOSOPHIES AND ATTITUDES MAY WELL BE A PARADOXICAL COMBINATION OF MORE REGULATION AND MORE COMPETITION. WHILE THE TWO ARE GENERALLY CONSIDERED ALTERNATIVES, THEY MAY WELL BE COMPLEMENTARY APPROACHES TO COST CONTAINMENT.

REFERENCES

Allen, R. (1992, March). Interview with Rosemary Allen R.N., Director of Admitting, St. Luke's Hospital.

American Hospital Association (1990). American Hospital Association Guide to the Health Care Field, (pp 210-223), Chicago, Illinois: American Hospital Association.

Anderson, G.F. and Erickson, J.E. (1986). Data Watch: National Medical Care Spending. Health Affairs, (Fall), 96-104.

Berman, Howard J., Weeks, L. E., Kukla, S.F. (1990). The Financial Management of Hospitals, 7th. Ed. Health Administration Press.

Davis, K., Anderson, G.F., Rowland D., Steinberg, E.P. (1990). Health Care Cost Containment. The Johns Hopkins University Press.

Freeland, M., Anderson G.F., Schendler C., (1979). National Hospital Input Price Index. Health Care Financing Review no. 1:37-61.

Guterman, S., Eggers P., Riley, G., Greene T. and Terrell S. (1988). The first 3 years of Medicare prospective payment: An overview. Health Care Financing Review, 9 (3, Spring), (pp. 67-77)

Halloran, E. (1983, September). R.N. Staffing:More Care--Less Cost, Nursing Management 14 (pp. 18-20)

Lave, J.R.(1984). Hospital Reimbusement under Medicare. Milbank Memorial Fund Quarterly, Health and Society 62, no. 2:251-278.

Litman, T.J., Robins L.S. (1991). Health Politics and Policy, 2nd. ed., Delmar Publishing Inc.

Long, M., Chesney J., Ament R., DesHarnais, S., Fleming S., Kobrinske, E. and Marshall, B., (1987, June). The Effect of PPS on Hospital Product and Productivity, Medical Care 25, no. 6: .

Maidlow, S. (1992, March). Interview with Spence Maidlow President, St. Luke's Hospital.

Mehalski, G. (1992, March). Interview with Gail Mehalski, R.N., Discharge Planning Coordinator, St. Luke's Hospital

New Jersey State Department of Health, Statistics, 1979, 1984

Rakich, J.S., Longest, B.B. and Darr, K., (1985). Managing Health Services Organizations, Philadelphia, PA.:W.B. Saunders Company.

Rousseau, J. (1992, March). Interview with Jan Rousseau, Assistant Director Medical Records, St. Luke's Hospital

Scheingold, S. (1989). The First Three Years Of PPS: Impact on Medical Costs. Health Affairs, 8 (3), Fall, 191-204

Schutz, R. and Alton J.C. (1990). Management of Hospitals and Health Services, St. Louis, MO.:The C.V. Mosby Company.

Schweiker, R.S. (1982). Report to Congress: Hospital Prospective Payment for Medicare. Washington, D.C.:U.S. Department of Health and Human Services.

Sissors, J.Z. (1984). Problems in Marketing Management (chap. 12). Englewood Cliffs, NJ.: Prentice-Hall.

Smith, H.L. and Fottler M.D. (1985). Prospective Payment, Rockville, Maryland, Aspen Systems Corporation.

U.S. Department of Health and Human Services (DHHS) (1990). Federal Register, Monthly Vital Statistics Report 37:1

U.S. Department of Health and Human Services (1986b). Report to Congress:Impact of the Medicare Hospital Prospective Payment System, 1984 Report, HCFA Pub. No. 03231. Washington, D.C.

U.S. Department of Health and Human Services (1987b). National Health Expenditures, 1986-2000. Health Care Financing Review 8, no. 4:1-36

U.S. Department of Health and Human Services (1988, June). Health Care Financing Administration (HCFA). Data Evaluation Report.

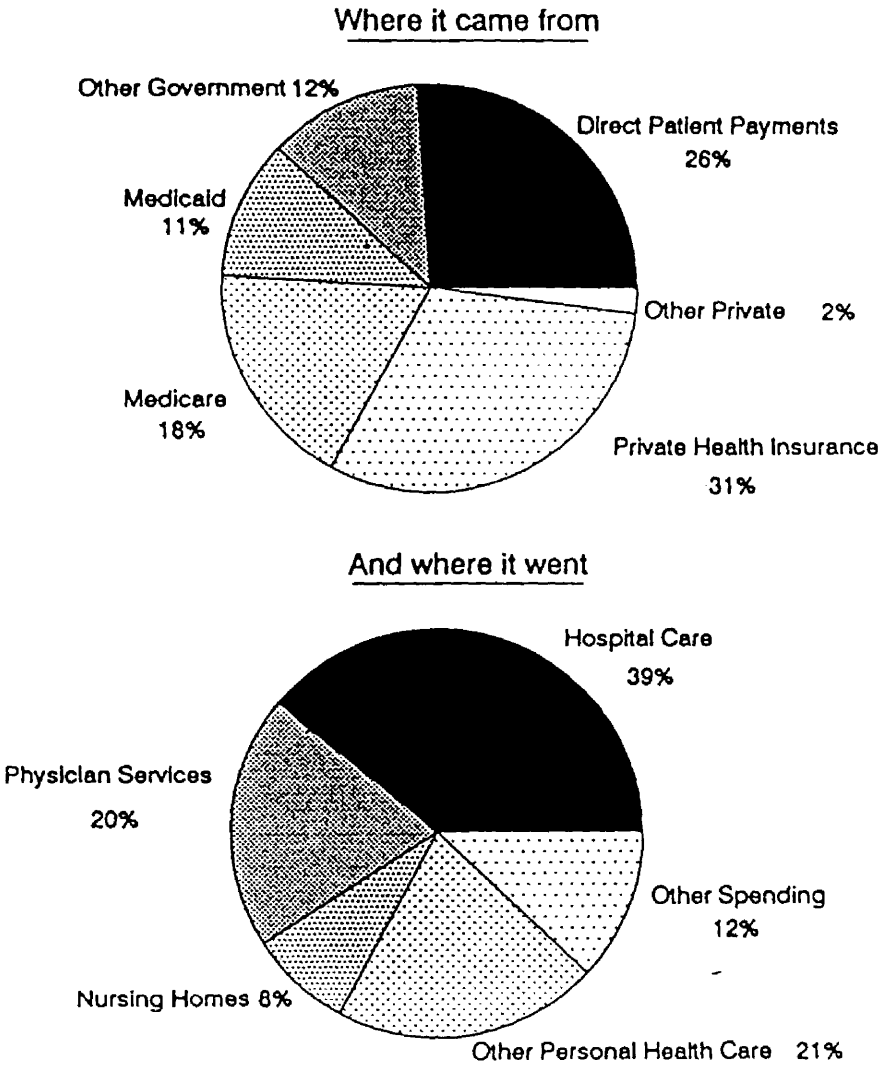
Valdeck, B. (1981). Equity, Access, and the Costs of Health Services. Medical Care 19, (12) 69-79.

Weiner, S.L., Maxwell J.H., Sapolsky, H.M., Dunn, D.L., and Hsiao, W.C. (1987). Economic Incentives and Organizational Realities: Managing Hospitals under DRG's . The Milbank Quarterly 65, No. 4, (pp 463-483)

Wilensky, G.R. (1990, October). Medicare at 25: better value and better care. The Journal of the American Medical Association (2) p1996

Appendix A

The Effectiveness of Cost Containment Efforts



The Nation's Health Care Dollar, 1987

Percentage Distribution of Personal Health Care Expenditures by Source of Funds, Selected Calendar Years, 1950–1987

Calendar Year	Total	Direct Patient Payments	Third Parties					
			Total Third Parties	Private Health Insurance	Other Private Funds	Government		
						Total Government	Federal	State and Local
1950	100.0	65.5	34.5	9.1	2.9	22.4	10.4	12.0
1955	100.0	58.1	41.9	16.1	2.8	23.0	10.5	12.5
1960	100.0	54.9	45.1	21.1	2.3	21.8	9.3	12.5
1965	100.0	51.6	48.4	24.2	2.2	22.0	10.1	11.9
1967	100.0	42.6	57.4	21.6	1.9	33.9	21.3	12.6
1970	100.0	40.5	59.5	23.4	1.7	34.3	22.2	12.1
1975	100.0	32.5	67.5	26.7	1.3	39.5	26.8	12.7
1980	100.0	28.7	71.3	30.7	1.2	39.4	28.4	10.9
1985	100.0	28.4	71.6	30.4	1.2	40.0	30.3	9.6
1986	100.0	28.7	71.3	30.4	1.2	39.6	30.2	9.4
1987	100.0	29.1	70.9	31.1	1.2	38.6	29.3	9.3

Sources: Levit et al. 1985; HCFA 1987b.

Appendix C

Prospective Payment System Study Issues: Hypothetical Impact on Hospitals - 1982

Economic Impact

Anticipated Benefits:

- Shorter inpatient stays.
- Fewer unnecessary tests and services.
- More specialization in efficiently provided services.
- Better coordination of outpatient, inpatient, and post-hospital care, through improved discharge planning.
- Reduction in excess capacity.
- Adoption of cost-reducing technology.
- Increased price competition among providers of supplies and equipment.
- Application of improved management practices.

Other Potential Consequences:

- Increases in unnecessary admissions, readmissions, and transfers.
- Increases in hospital case mis, due to changes in coding procedures ("DRG creep").
- Separate provision of services that were traditionally considered part of routine inpatient care ("unbundling").
- Increase in cases with exceptionally lengthy stays or high costs (outliers) due to additional outlier payments.
- Underpayment of hospitals that tend to treat cases that are more severely ill or that require more intensive care.
- Reductions in hospital staffing levels.
- Diminished hospital financial performance, particularly among certain groups of hospitals.

Impact on the Quality of Care

Anticipated Benefits:

- Reduction in the risk of nosocomial infection and other iatrogenic events, as lengths of inpatient stays decrease.
- Fewer unnecessary tests and services.
- Specialization in services most efficiently and effectively provided.
- More selective and effective use of new technology.

Other Potential Consequences:

- Increase in unnecessary admissions.
- Reductions in necessary tests and other ancillary services.
- Tendency toward premature discharges.
- Reluctance to adopt quality-enhancing (but expensive in the short run) technology.

Impact on Access to Care

Anticipated Benefits:

- Improved coordination of outpatient, inpatient, and post-hospital care.
- Shifting of services to more appropriate (and inexpensive) settings.

Other Potential Consequences:

- Reluctance of hospitals to accept patients who present greater risk of financial loss (skimming").
- Tendency to transfer patients who are associated with high costs or an inability to pay for their care to other hospitals ("dumping").

(Source: Prospective Payment Commission, 1982)

Appendix D

HCFA and hospital analysts predicted that the new DRG system would lead to substantial changes in hospital behavior and performance (Davis et al 1984) Anticipated effects included:

1. Shorter hospital stays.
2. Increased readmissions of Medicare beneficiaries.
3. Shifting of costs to privately insured patients.
4. Elimination of nonpaying or nonprofitable services, such as patient education services.
5. Shifting some care, such as preadmission diagnostic testing, to an outpatient basis.
6. Dumping or transferring to other institutions patients with higher than average severity of illness within a given DRG.
7. DRG creep, or an increasing tendency of hospitals to classify patients in DRG categories with higher payment rates.
8. Increased reluctance or refusal to care for uninsured patients because of reduced ability to cross-subsidize such care from other patient revenues.
9. Diminished quality of care as hospitals cut corners or physicians were pressured to forgo expensive diagnostic testing or treatment regimens.
10. Reduced acquisition, diffusion, and utilization of cost-increasing technology.
11. Increased diversification of hospital operation, including moving into long-term care services such as home health services or nursing homes to provide care in other settings following earlier hospital discharges.
12. Increased interaction between hospital administrators and organized medical staffs, including acceleration of trends toward salaried service chiefs in community hospitals and greater external scrutiny of physicians' activities.