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**Diagnosis Related Groups (DRGs)
and the Prospective Payment
System: Forecasting Social
Implications**

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On October 1, 1983, Medicare's new Prospective Payment System (PPS) became effective for 1500 of the nation's hospitals. By September 1984, 3700 additional hospitals will be subject to the legislation. According to this payment scheme, intended to control Medicare expenditures which have risen an average of 19% annually since 1979 to \$32.9 billion for inpatient hospital care in 1982, hospitals will be paid a fixed amount per patient discharge. The rate of reimbursement will be based on Diagnosis Related Groups, a classification of 467 illness categories identified in the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM). Each of the distinct groupings is considered to be "medically meaningful," that is, all patients in the same DRG are expected to display a set of clinical responses which will, on statistical average, result in equal use of hospital resources. The Prospective Payment System replaces the fee-for-service plan in which the payment is cost-based and retrospectively determined following treatment.

All hospitals participating in Medicare will be covered except psychiatric and rehabilitation hospitals, children's hospitals, long term care facilities, alcohol and drug treatment units, and hospitals in states with an approved prospective payment system in effect

The SCOPE NOTE SERIES is intended to present a current overview of issues and viewpoints related to a specific topic in biomedical ethics. It is not designed as a comprehensive review, but rather it offers immediate reference to facts, opinion, and legal precedents (if applicable) for scholars, journalists, medical and legal practitioners, students, and interested laypersons.

The payment system is being phased in over a three year period. During the first year, payments are based 75% on a hospital's own specific rate and only 25% on regional averages. By the end of the third year, payments will be based 100% on national DRG rates.

The use of Diagnosis Related Groups as a case-classification system was developed in 1975 under the leadership of John D. Thompson, head of the Yale School of Medicine's Division of Health Services Administration.

LEGISLATION AND REGULATIONS

The scarcity of response to the new legislation by social commentators, economists, policy makers, and ethicists is likely due to the swift development and passage of the law as well as the regulations which implement it. The Tax Equity and Fiscal Responsibility Act (TEFRA), signed into law September 3, 1982, mandated the development of a prospective payment methodology for Medicare reimbursement to hospitals. Health and Human Services Secretary, Richard Schweiker, submitted a plan in December 1982 based on administration proposals. Draft legislation was quickly appended to the fast-moving and, highly publicized Social Security Amendments of 1983. Few legislators became actively involved, some commentators feel, because attempts to limit funding rarely become popular issues. As a result, provisions of the legislation were largely designed behind the scenes by legislative aides. The Ways and Means Subcommittee on Health finalized and wrote up the bill in one day, February 24. In April, only four months after initial appearance of a PPS plan, the Social Security Amendments Act of 1983

(Public Law 98-21) was signed into law, with Title VI containing the new Medicare payment system.

An Interim Final Rule, consisting of the regulations to execute the legislation, was published in the Federal Register on 1 September 1983. The Final Rule, containing some alterations in response to public comment, appeared on 3 January 1984. (Details of these regulations appear in the body of this Scope Note.) It should be noted that the drive to implement the PPS legislation was so rushed that many hospitals were forced to accept it less than a month after preliminary regulations were published and several months before the appearance of the Final Rule.

ADMINISTRATION AND OVERSIGHT

The Health Care Financing Administration oversees the new Medicare payment system. A Prospective Payment Assessment Commission, appointed by the Office of Technology Assessment, will serve as an advisory body to assess new and existing medical procedures and services, and to provide recommendations on the annual inflation factor and DRG recalibration. The Commission is composed of fifteen members with expertise and experience in the provision of health care, including physicians, nurses, employers, economists, third-party payers, and biomedical researchers. Dr. Stuart Altman, Dean of the Florence Heller School for Advanced Studies in Social Welfare at Brandeis University, has been appointed chairperson.

At the local level, quality of care, the validity of diagnostic information and appropriateness of admissions and discharges are reviewed by Peer Review Organizations. PROs will replace present Professional Standards Review Organizations (PSROs). All PROs are composed of licensed doctors of medicine and osteopathy engaged in practice in the appropriate geographic area.

ADJUSTMENTS FOR FACILITIES AND ATYPICAL CASES

Adjustments which increase the dollar rate for DRG reimbursement are available for sole community hospitals, cancer hospitals, referral centers such as the Mayo Clinic, and teaching hospitals. Medical education costs and cancer treatment will be reimbursed on a "reasonable cost" basis. Sole community hospitals will continue indefinitely to receive payment on a 75% hospital specific and 25% DRG rate.

Additional payment is authorized for "outlier" cases, defined as cases involving an unusually long length of stay or resulting in costs substantially above the DRG rate. Excess costs must be 1.5 times the DRG rate. Length of stay must exceed the mean length of stay for the DRG generally by 20 days. The hospital receives no extra payment until the qualifications are met, thus, for example, no compensation is provided for the first 20 atypical stay days.

SOCIAL IMPLICATIONS

Social concerns voiced in the early stages of the new system relate to issues of economics, justice, control and quality of patient care. Since rural hospitals and facilities in less costly geographic areas are likely to be able to perform more procedures and provide care at or below the DRG rate, policy makers and economic researchers predict a massive movement of funds away from urban areas and the Northeast. An outcry from legislators carefully watchful of funding for home districts is expected. A significant loss of Medicare expenditures could contribute to an imbalance of economic stability in some areas, especially inner cities.

Changing economic characteristics naturally translate into problems of justice involving access to health care. Urban hospitals assume a large proportion of the costs of caring for patients from whom no compensation can be received. Since the DRG system makes no allowance for such care, these hospitals will be at high risk to absorb the costs. Many hospitals could be forced to close, thus leaving extensive populations without local

care. Hospitals may also choose to specialize only in those DRGs for which they can break even or make a profit. Such specialization, already somewhat evident in New Jersey, obviously reduces access to health services. In the worst case, facilities may refuse admission to indigent and even Medicare patients when dollar loss is a certainty.

Several commentators warn of the rapid development of a "two-tier" health system in which standards and access to care differ for Medicare recipients and for those patients able to pay privately or covered by Blue Cross or corporate insurance. An allied problem is "cost shifting" from Medicare to private payers. Hospitals unable to provide treatment at a DRG rate may simply transfer excess costs to the bills of non-Medicare patients. In an attempt to correct these situations, attention is being given to proposals which would extend DRG payment measures to physicians and incorporate private insurance carriers into the system. Senator Edward Kennedy and Congressman Richard Gephardt have introduced relevant legislation (American Medical News, p. 2, 17 Feb. 1984.)

Physicians and medical associations are voicing concerns about the loss of control over patient care decisions and quality of care. The sophisticated, computerized information systems which hospitals are developing in order to deal with the DRG system enable administrators to oversee the cost effectiveness of staff members. Doctors and other personnel may be confronted if their method of care is too costly or if they do not perform enough profitable procedures. As a result, practitioners are being forced to play a larger role in hospital administration often utilizing time that is taken from patient care. Physicians are specially concerned that quality of care will suffer from excessive monitoring of type and number of diagnostic tests performed on specific patients and from a potentially dangerous shortening of length of stay. They also see regression in care resulting from the lack of provision in the payment system for development and implementation of new

technologies.

The Health Research and Educational Trust of New Jersey, an Independent health policy research firm headed by J. Joel May and based in Princeton, is conducting the most extensive evaluation to date of the DRG payment system. Dealing primarily with New Jersey's experience, published reports provide much needed factual data and impact analysis of a system in effect for four years. Several reports from this group are listed at the end of this Scope Note.

Those interested in the social effects of the Prospective Payment System and DRG5 are encouraged to contact the Center for Bioethics Library or their affiliated medical library. At present, the HEALTH PLANNING AND ADMINISTRATION computer database, part of the National Library of Medicine's MEDLARS system, provides the most comprehensive literature coverage of this Issue. Computer searchers utilizing the MEDLIARS system may choose the following subject terms:

CASE MIX

(as of 6/84, the term "Diagnosis Related Groups" maps automatically to CASE MIX)

REIMBURSEMENT, PROSPECTIVE

HEALTH INSURANCE FOR AGED AND DISABLED, TITLE 18, legislation and jurisprudence

The Center for Bioethics Library can provide research assistance and computer searches of its database, BIOETHICSLINE (also available in the MEDLARS system).

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GUIDEBOOK

American Medical Association. Group on Health Service Policy. **DRGS AND THE PROSPECTIVE PAYMENT SYSTEM: A GUIDE FOR PHYSICIANS.** Chicago: American Medical Association, 1983. 70 p. \$2.50.

The handbook effectively informs physicians of the basic requirements and objectives of the Prospective Payment System for medicare inpatient hospital services. The requirements of the legislation are carefully detailed including services covered, types of hospitals exempted, clear explanation of payment formulas, and adjustments for special facilities and outlier cases. The role of Peer Review Organizations in maintaining quality of care and the duties of the Prospective Payment Assessment Commission are detailed. A brief discussion of implications for physicians and hospitals cites economic risk, the tendency for hospitals to limit services to those procedures in which it can be most efficient and retain a profit, a hesitancy to acquire the latest technologically advanced equipment, and "cost-shifting" of charges from medicare to private payers. A list of the 467 Diagnosis Related Groups, with payment weighting factors, is appended, as is a useful glossary of terms and a bibliography.

FEDERAL REGULATIONS

U.S. Department of Health and Human Services. Health Care Financing Administration. **"Medicare Program; Prospective Payment for Medicare Inpatient Hospital Services. Final Rule."** *FEDERAL REGISTER* 49(1): 234-334, 3 January 1984.

Regulations which implement Title VI of the Social Security Amendments of 1983 (Public Law 98-21) change the method of payment for

inpatient hospital services from a cost-based, retrospective reimbursement system to a prospective payment system based on diagnosis. The text published herein reflects decisions on issues raised by commentators in response to the Interim Final Rule and Notice published in the Federal Register on 1 September 1983 (48 FR 39752-39890). The Final Rule catalogs number and types of public consents; lists hospitals excluded from the regulations; details the payment procedures under the Prospective Payment System and the methodology for determination of payment rates; lists additional payments for outlier cases, medical education costs, and certain types of hospitals; explains the components of the review system; and ends with an analysis of the impact of the legislation on hospitals, hospital employees, physicians, patients and the diffusion of technology. A significant number of the 2739 consents received centered on the DRGs for alcoholism and drug abuse treatment, the effects of rebundling on registered nurse anesthetists, the definition of non-physician services, and the definition of excluded rehabilitation and psychiatric facilities.

U.S. Department of Health and Human Services. Health Care Financing Administration. **"Medicare Program; Prospective Payments for Medicare Inpatient Hospital Services. Interim Final Rule."** *FEDERAL REGISTER* 48(171): 39752-39890, 1 September 1983.

Materials published in this Interim Rule are not repeated in the January 3 Final Rule, therefore both sets of regulations are needed by those investigating the new payment system. Additional technical information, formulas, and statistics printed herein include a more thorough explanation of the features of the Prospective Payment System; examples of discrepancies in charges among various hospitals for similar services; formulas for determining DRG payment

including hospital specific factors; principles of reimbursement for categories of costs including outpatient dialysis, depreciation, teaching activities, research, etc. Also appends tables presenting case mix indexes by provider number, wage indexes for urban and rural areas; and a complete listing of diagnosis related groups with weighting factors and mean length of stay.

ARTICLES

Henderson, Robert R. and May, J. Joel. **“The Business Community Looks at DRG-Based Hospital Reimbursement.”** *HEALTH AFFAIRS* 2(1): 38-49, Spring 1983.

A dialog between Henderson, of the New Jersey Business Group on Health, and J. Joel May, President of the Health Research and Educational Trust (an independent health policy research firm) considers the business community’s concerns about the establishment of the DRG payment system in New Jersey, where it has been in operation since 1980. May admits that data is not yet sufficient to confidently declare whether changes have occurred in quantity or quality of care, access, and costs. The most evident concern of the business community is whether cost shifting has resulted in inequitable charges to Blue Cross and corporation health plans. Company comparisons of DEC and itemized bills indicate that DEC charges are higher, and revenues of hospitals in the system increased at a greater rate than those not in the system during the first year. May explains that early DRG payments were made deliberately high to “sweeten the pot” and accelerate hospital cooperation. However, the existence of information on the profitability of procedures will stimulate sound business practices and “ratchet down” costs. The DEC system discourages new technologies since 1982 and 1983 rates are based on 1979 data with only inflation increases. Thus, innovation is eliminated from the payment equation. Henderson reports concerns among New Jersey physicians that the DEC process will decrease quality of care particularly by shortening length of hospital stay.

May explains that quantity of care has been reduced but he is unable to equate it to changes in quality of care. AHA Annual Survey Data reports an insignificant reduction of 0.1 day in length of stay in New Jersey community hospitals between 1979 and 1981.

Hornbrook, Mark C. **“Allocative Medicine: Efficiency, Disease Severity, and the Payment Mechanism.”** *ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE* 468: 12-29, July 1983.

Three types of payment mechanisms for health care are examined in an effort to provide information needed to select an appropriate payment policy to achieve a socially acceptable allocation of resources. The plans discussed are capitation (HMOs), fee-for-service, and fee-per-diagnosis. Implications of each plan regarding types of services provided, allocation of resources, and access equity are detailed. Regarding fee-per-diagnosis, or a prospective payment system, the author points out that once a fee has been set for a specific diagnosis, providers face an incentive to provide lower quality care in order to maximize operating profits. There is also an incentive to upgrade the reported diagnosis for purposes of reimbursement while care is given for a less costly diagnosis. Another serious problem is the lack of coverage for preventive care. Ethical consequences are seen in the concept of grouping patients into disease classes since the broader the class definition, the more likely that some patients will not receive the most appropriate treatment. Current policy proposals will result in a two-tier health care system where lower income groups will face capitation and fee-per-diagnosis schemes with severe budgetary constraints while higher income groups will still have access to unconstrained fee-for-service systems.

Iglehart, John K. **“Medicare Begins Pro-spective Payment of Hospitals.”** *NEW ENGLAND JOURNAL OF MEDICINE* 308(23): 1428-1432, 9 June 1983.

The swift passage of legislation enacting the Prospective Payment System for Medicare reimbursement to hospitals is reviewed. The author also explains specific aspects of the legislation which received strong administration and lobbying support. The Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982 paved the way for the development of a prospective payment proposal. In response, Secretary Richard Schweiker submitted a report in December 1982 containing the administration's plan. This proposal was quickly introduced as a bill. The administration's policy reveals a view of health care as an economic product rather than a social good. The bill was attached to the rapidly moving Social Security Amendments of 1983. Few legislators were ever involved with the bill and most work was done behind the scenes by legislative aides. The most bitterly fought-over issue regarded Medicare's long-standing policy of paying for-profit hospitals a return on equity, that is, compensation for investment risk. The administration, Senators Dole and Durenberger supported retention despite objection from six major health organizations. Most equity funding remains intact. Effects of the legislation will be the provision of an Incentive for hospitals to underserve patients and a significant redistribution of payments from high-cost to low-cost hospitals in different sections of the country.

Iglehart, John K. "**The New Era of Prospective Payment for Hospitals.**" *NEW ENGLAND JOURNAL OF MEDICINE* 307(20): 1288-1292, 11 November 1982.

The federal government's adoption of a prospective payment system for hospitals will place all factions of the health care system at greater financial risk for medical actions. The Diagnosis Related Groups system developed by John D. Thompson, head of the Yale School of Medicine's Division of Health Services Administration, has been modified by the Health Care Financing Administration to fit cases that typify elderly patients. Hospital organizations have aggressively lobbied to incorporate an

incentive payment provision in the new legislation which allows hospitals to retain a portion of funds if its costs are below the DRG target rate. Since new legislation affects only Medicare payments, it can be assumed that hospitals will shift costs to private-charge payers such as commercial Insurers and Blue Cross plans. Another major issue is a reduction in access to hospital care for Medicare beneficiaries. Seven states have already developed prospective payment systems; Massachusetts, Connecticut, Washington, Rhode Island, New York, New Jersey, and Maryland. In New York and Maryland [and now New Jersey], legislation has extended the payment system to all payers. As the primary patient advocates within a hospital, physicians must become more involved in planning for the "new era of limits."

Lewis, Stephen. "**Speculations on the Impact of Prospective Pricing and DRGs.**" *WESTERN JOURNAL OF MEDICINE* 140(4): 638-644, April 1984.

A thorough exploration of foreseeable effects of prospective payment and DRGs reports implications to the payer, the provider, and the patient. For the payer, the most important consequence is cost shifting. A hospital unable to break even on a prospective rate from one payer will attempt to recover costs from other payers, usually the private sector. This has already led to pressure for all-payer plans in states and even Congressional moves for a national all-payer system. Impacts on health care providers are extensive. Physicians and hospitals will have to cooperate closely to reduce utilization of services since hospitals will be at risk for costs over the DRG allotment. Computerized systems make it easy to pinpoint individual physicians who generate profits and losses. Hospitals may seek to maximize use of profitable services and avoid "loss leaders." Such specialization has begun to appear in New Jersey. A major effect, caused by imposition of urban and rural rates for each DRG, will be a radical shifting of funds from high-cost to low-cost hospitals. Two forms of "gaming," or manipulation, hospitals will assume in order to

maximize reimbursement are “DRG creep,” involving a shift from lower to higher cost categories and the “unbundling” or divestiture of functions such as laboratory and radiology facilities. Finally, the patient is likely to face reductions in length of stay, and readmission under differing diagnoses in order to allow the hospital to collect multiple DRG payments. Backup diagnostic procedures will be reduced and new therapies will be more slowly-adopted. Since inner-city and rural public hospitals carry the burden of underreimbursed care, they will be most threatened by the new system and may be forced to close causing a severe reduction in access to care. Lewis closes with the ominous statement that “for some patients. . .the more immediate issue will be whether any care is available at all, regardless of quality.”

Pellegrino, Edmund D. “**Competition: New Moral Dilemmas for Physicians, Hospitals.**” *HOSPITAL PROGRESS* 64(2): 8, 10, 22-25, February 1983.

Dr. Pellegrino reflects on the potential ethical and social issues which will arise from new payment plans for hospitals and the intrusion of the concept of profit into health care facilities, he feels that our government is “defecting on its responsibilities” to care for the poor, the chronically ill, and the aged. It will be morally necessary for church-related hospitals to assume the care of those patients who are not “profitable.” Competition is seen to displace the focus of hospitals from care to cost. Physicians should exercise responsibility by utilizing only treatments which are effective, but they must not become “agents of fiscal or social policy” by deciding who is more deserving of care. If we are forced to limit the availability of certain types of treatment, such decisions involving “life raft” ethics should be made in the realm of public policy, not by physicians on an individual basis. This distinguished physician and scholar unequivocally states that “if price becomes the driving principle for delivering care, quality will suffer.”

Physicians will be forced into the role of entrepreneurs, within which it will be difficult to separate personal and patient interests. Energies given to marketing and competing are taken away from the care of the sick.

Rosko, Michael D. “**The Impact of Prospective Payment: A Multi-Dimensional Analysis of New Jersey’s SHARE Program.**” *JOURNAL OF HEALTH POLITICS, POLICY, AND LAW* 9(1): 81-101, Spring 1984.

An evaluation of New Jersey’s Standard Hospital Accounting and Rate Evaluation (SHARE) program explores the efficiency of a state-mandated prospective payment system. SHARE, in effect from 1975-1982, preceded New Jersey’s present DRG payment program. An analysis of the strengths and weaknesses of SHARE, considered in relation to efficiency, provider viability, purchaser equity, and low administrative costs, provides implications for DRG programs. Since SHARE mandated payments for two groups of patients, those covered by Medicare and Blue Cross, it differs from New Jersey’s DRG system which applies to all payers, and from the national prospective payment system which applies only to Medicare recipients. It is determined that SHARE did succeed in constraining the rate of increase of hospital expenditures and incurred very low administrative costs. However, its lack of universal rate regulation led to cost shifting to other payers and threatened the viability of inner city hospitals because of their uncontrollable financial burdens (indigents, higher input prices, bad debts) which were not accounted for in the payment methodology. It has been determined that nonregulated, charge-based purchasers paid up to 25% more per patient day than regulated purchasers. Rosko predicts that the Medicare prospective payment system will severely jeopardize the existence of many inner city hospitals. While New Jersey moved to universal rate regulation, architects of the U.S. Medicare payment program have not learned this lesson. Another disadvantage of a DRG program is heavy reliance on diagnostic reporting by hospitals. In

the absence of sophisticated monitoring, “upcoding” of patients to higher paying DRGs is almost a certainty.

Spivey, Bruce B. “**The Relation Between Hospital Management and Medical Staff Under a Prospective Payment System.**” *NEW ENGLAND JOURNAL OF MEDICINE* 310(15): 984-986, 12 April 1984.

An M.D. explores the potential for crisis between hospital managers and medical staff generated by the advent of prospective payment systems. The success of a hospital may well become dependent on the ability of the two factions to work together. Marketing and advertising will become more common, and physicians will attempt to align themselves with a specific hospital or large system thus affecting patterns of patient referral. Management may be placed in the inappropriate role of regulating or modifying physician behavior. Sophisticated information systems will allow managers to monitor physician activities. If a strong partnership does not exist, a “blood bath” could result. Since evaluation of the cost-effectiveness of DRGs is simple to accomplish, management will have more input into eliminating expensive tertiary services and acquiring new technologies. The medical staff will become more actively involved in management when they are provided with detailed information on costs. Compensation for such activities may be demanded. Under the DRG system, standards of care and protocols will increase in importance and national societies will be called on to develop such guidelines.

Wasserman, Jeffrey; May, J. Joel; and Schwartz, Daniel H. “**The Doctor, The Patient, and the DRG.**” *HASTINGS CENTER REPORT* 13(5): 23-24, October 1983.

A case study occurring at Lakeview Hospital in New Jersey, where reimbursement on the basis of DRGs has been in effect since 1980, demonstrates the pressure that can be placed on doctors to perform procedures that may not be

patient’s interest. A computer report revealed to hospital management that Dr. Daniel Weiner performed comparatively fewer caesarian deliveries than other physicians, and that reimbursement for routine deliveries fell just short of covering incurred expenses while payment for caesarian sections allowed the hospital to make a “profit.” Dr. Weiner was urged by the hospital’s medical director to follow tradition and utilize the caesarian mode for women with a history of such deliveries. Dr. Weiner, however, disagreed with his colleagues regarding the necessity for repeat caesarian deliveries. Commentary on this case centers on the ethical implications of weighing financial considerations against a physician’s judgment. J. Joel May contends that it is ethical for hospital management to point out financial considerations but that final treatment decisions must remain with the physician

Wirtschafter, David. “**The Impact of DRCs on Medical Management.**” *ALABAMA JOURNAL OF MEDICAL SCIENCES* 21(1): 86-95, 1984.

The Assistant Chief of Staff, University of Alabama Hospitals, discusses his hospital system’s response to Medicare’s prospective pricing and DRG classification. Although national payment standards were developed using a 20 percent sample of Medicare claims, the large number in the database is insufficient to provide statistically valid means and standard deviations. Since the DRGs are based on historical data and have a built-in four year administrative lag period, they are guaranteed to be a “fossilized nomenclature for clinical medicine.” The system emphasizes surgery and makes no explicit reference to severity of illness. Physician assignment of the principal diagnosis is the critical ingredient. The university hospitals have upgraded computer systems, reporting procedures, and data gathering since medical records are central to reimbursement. The problems of sequencing errors, that is, the selection of a different condition as the one chiefly responsible for admission, must be recognized by hospital administration. A typical example demonstrates

reimbursement difference between functional disorder of the intestine (\$1,856) versus infectious mononucleosis (\$502). Hospital administrators interpret the new program as meaning one thing: "more computers."

ADDITIONAL REPORTS AND MONOGRAPHS

Boerma, Hans. **DRG EVALUATION VOLUME 4-B: THE ORGANIZATIONAL IMPACT OF DRGS**. Princeton: Health Research and Educational Trust of New Jersey, 1983.

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Gray, Bradford H. **THE NEW HEALTH CARE FOR PROFIT: DOCTORS AND HOSPITALS IN A COMPETITIVE ENVIRONMENT**. Washington, D.C.: National Academy Press, 1983.

Grimaldi, Paul L., and Micheletti, Julie A. **DIAGNOSIS RELATED GROUPS: A PRACTITIONER'S GUIDE**. 2nd ed. Chicago: Pluribus Press, 1983.

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Kiger, Anne Fox. "DRGs and Prospective Pricing; May 1982 through March 1984." National Library of Medicine Literature Search no. 84-7. 354 citations from the HEALTH PLANNING AND ADMINISTRATION database.

Menzel, Paul T. **MEDICAL COSTS, MORAL CHOICES; A PHILOSOPHY OF HEALTH CARE ECONOMICS IN AMERICA**. New Haven: Yale University Press, 1983.

Shakno, Robert J., ed. **PHYSICIAN'S GUIDE TO DRGs**. Chicago: Pluribus Press, 1983.

Wasserman, Jeffrey. **DRG EVALUATION VOLUME 1: INTRODUCTION AND OVERVIEW**. Princeton: Health Research and Educational Trust of New Jersey, 1982.

Yale University School of Management. Health Systems Management Group. **THE NEW ICD-9-CM DIAGNOSIS RELATED GROUPS CLASSIFICATION SCHEME. FINAL REPORT**. May 1982.

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