PAYMENTS TO PHYSICIANS IN THE PERMANENTE MEDICAL GROUP

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1. SUMMARY

The Permanente Medical Group (TPMG) in Northern California contracts with Kaiser Foundation Health Plan to provide comprehensive medical care to Health Plan members within the Kaiser Foundation Hospitals and their associated medical offices. Forty years ago, this Medical Group had 30 physicians taking care of 40,000 Health Plan members. Now TPMG has more than 2,000 physicians providing care to almost two million members. TPMG has been organized as a proprietorship (1942-48), as a partnership (1948-82), and as a corporation since 1982. Payments to TPMG physicians include a basic monthly income which is supplemented by fringe benefits, a pension plan, and an incentive compensation plan linked to the financial success of the Kaiser Permanente program in the region. Kaiser Permanente operates under an annual operating budget formulated by managers of all professional and administrative departments. Health Plan generates an income flow, primarily from members' dues, to pay TPMG physicians, cover all operating requirements, and pay for facilities and capital equipment.

This review of the Northern California Region of Kaiser Permanente, an organization derived from a union of industry and medicine, attempts to analyze factors influencing its success, with special consideration to payments to TPMG physicians. It is important to know that, firstly, its industry founders developed a financial organization which made Kaiser Permanente financially self-supporting, and recognized the need for the professional autonomy of physicians and their responsibility for decisions

balancing quality of care with costs. Secondly, its physician founders recognized the expertise and responsibility of financial managers, and they selected physicians who committed themselves to providing good quality comprehensive care at an affordable prepaid cost to voluntary enrollees within integrated facilities. These physicians selected and trained new physicians who, in turn, commited themselves, and thereby perpetuated a strong internal commitment to the Kaiser Permanente program.

Incentives for maintaining and perpetuating these goals and principles have been supported by many factors, including the method of payment for physicians' services. A fixed annual budget provides incentives to prudently use Health Plan dollars. On a physician-patient decision level for balancing quality of care with costs, the income of the individual TPMG physician is negligibly affected by providing more or less than necessary procedures, office visits, or inpatient surgery. No TPMG physician makes money from doing or from denying an elective operation, for example. TPMG physicians know that their continuing financial success depends upon their satisfying the needs of the Health Plan members so that they will not move to other competitive health plans. Since fees-for-service and incentive compensation payments always accounted for only a small proportion of TPMG physicians' incomes, they have not shown a measurable effect upon physician's performance. Incentives have not been perceptively affected by organizational structure (i.e., proprietorship, partnership, or corporation). External competition to the organization always has been a strong motivator. Probably there is no more important incentive which has affected TPMG's physicians than

pride of their individual and of their Group's professional quality.

The lessons learned from Kaiser Permanente's experience can be applied to any group practice wishing to provide its voluntary enrollees (including Medicare beneficiaries) with prepaid comprehensive care. The current payment arrangements for TPMG physicians do not visibly affect their care of Medicare beneficiaries (who enroll in Health Plan's Medicare supplement plan) in any way different from other Health Plan members. The closer the organizational structure of a health care program resembles the Northern California Kaiser Permanente model, the more likely the results will be transferable. However, it is important to recognize that some of the Northern California experience has not been transferred to other Kaiser Permanente regions in that most do not have incentive compensation plans, and some do not own their hospitals. For an association of independent physicians, much of Kaiser Permanente's experience should be useful. For physicians in solo practice, Kaiser Permanente's experience will have limited applicability.

2. INTRODUCTION

A. KAISER PERMANENTE NATIONAL ORGANIZATION

The Kaiser Permanente Medical Care Program, usually referred to as "Kaiser Permanente", is a group practice, prepayment plan. It provides comprehensive medical and hospital services to about five million voluntarily enrolled members in twelve operating regions--Northern California, Southern California, Colorado, Connecticut, Georgia, Hawaii, Kansas, Mid-Atlantic States, Northwest, North Carolina, Ohio, and Texas. Kaiser Permanente is the acknowledged prototype for the group practice "health maintenance organization" (HMO) concept, and each of its regions is a federally qualified HMO.

Kaiser Permanente is organized on a decentralized basis, with each of its twelve regions managing its own operations. Almost all decisions on the day-to-day management of health care services and facilities are made at the regional level, through a structure consisting of separate but closely cooperating organizations with the common purpose of providing comprehensive health care to that region's Health Plan members.

Among these cooperating organizations, the Kaiser Foundation Health Plans, which are nonprofit and charitable corporations in each of the regions, contract with individual and group subscribers (enrollees/members) to arrange for their comprehensive health care benefits in return for dues paid on a monthly basis. Health Plans, in turn, contract with Kaiser Foundation Hospitals and Permanente Medical Groups to provide hospital and medical services, respectively, required to meet these covered health bene-

fits of its members in these regions. Kaiser Foundation Health Plans generally prefer not to rely on community hospital beds, since it has been a basic principle of Kaiser Permanente to operate in integrated outpatient and inpatient services with a unified professional staff and medical records as well as administrative control of available beds and operational costs. Kaiser Foundation Hospitals are nonprofit and charitable corporations which own and operate community hospital facilities in their regions, provide or arrange hospital services, and sponsor charitable, educational, and research activities.

Permanente Medical Groups are partnerships or professional corporations of physicians--one Medical Group in each region. The full responsibility for providing and arranging the medical care necessary to satisfy Health Plans' contracts with the membership is assumed in each region by a Permanente Medical Group. Each of the Permanente Medical Groups is responsible for its own physician recruitment and staffing patterns and for the quality of medical services for the Health Plan population. In some regions the Medical Group also employs and supervises allied health professionals and administrative personnel. Many Permanente physicians also hold appointments in the clinical facilities of nearby medical schools and are responsible for specialty residency training programs in Kaiser Hospitals, some in affiliation with the nearby medical schools.

Kaiser Permanente's principles of operation have always included: (a) prepayment of health plan dues under a community rating structure, which tends to provide a predictable flow of income; (b) organized group practice for the physicians in each

region; (c) hospital and medical office services integrated into medical centers ("vertical integration"), with detached or satellite medical offices operated as extensions of the nearest medical center; (d) voluntary enrollment of health plan members, with a dual choice for an alternative plan available to group subscribers; (e) comprehensive benefits including preventive care and health promotion; and (f) physician participation in management, in that physician leaders participate in all major policy decisions, in allocation of resources, and in planning and directing the program.(1)

This organizational structure and these operational principles have created a partnership-like approach between the professions of medicine and management and have assured physicians and managers of a voice in all major policy decisions.

B. NORTHERN CALIFORNIA REGION

In the Northern California region, Kaiser Permanente had its beginnings as a prepaid industrial health care program for the World War II workers in the Kaiser-managed shipyards in Richmond, California. In August, 1942, the Health Plan for non-industrial care was started in the Richmond shipyards, and the Plan had 90,600 shipyard workers in March, 1943.(2) At the end of the War, the shipyards closed, and in October, 1945, the Health Plan membership decreased to 14,500.(3) In 1946, the service area was expanded across the San Francisco Bay with the opening of medical offices in San Francisco.(4,5)

Since then, growth in the Northern California region has been

steady with the addition of both medical centers and free-standing medical offices paralleling increases in membership. At the end of 1984, this region included 13 hospitals, 19 outpatient medical offices, 1,789 physicians and 14,884 employees. It served a total membership of more than 1.7 million people--or approximately one of every four people in the San Francisco Bay Area.(6,7) The range of resources and scope of services qualify the Northern California Region as one of the largest and most comprehensive private sector health care delivery systems anywhere.

In the Northern California region, as in the others, Kaiser Permanente's financial organization is complex; its success depends upon close planning, cooperation and support between the three major organizational entities in the region. The dues paid by its Health Plan members are the primary assurance of the financial success of the total program. The Medical Group operates on a year-to-year contract with Health Plan. The Medical Group budget in the Northern California region includes all the outpatient offices and the outpatient non-doctor personnel, all laboratories located in and out of the hospitals, x-ray and imaging departments, and physical medicine.(10,11)

A combined operating budget for Medical Group, Hospitals and Health Plan is put together each fall which includes the financial requirements estimated by managers for regional service divisions as well as those of the physicians-in-chief and administrators of the 13 medical centers. These, in turn, include the requirements of the individual professional departments. The budgetary process flows upward and downward through the organization so that the final budget represents a coordinated program for the coming year

financed from dues paid by or on behalf of the members. Regional management views the budget as a whole and communicates its dimensions and limitations to managers throughout the organization. Medical center administrators seek approval from regional management for their respective budget requests.

Meanwhile, regional management must agree on several key issues: staffing ratios for physicians, nurses, and non-nursing personnel, patient day forecasts for each hospital, capital needs for expansion or refurbishing of existing facilities, new facilities and equipment, and new or modified Health Plan benefits. About five percent of the Hospital's operating costs is used for its community services budget for charity, medical research and education.

Health Plan membership is forecast by a regional Department of Medical Economics using statistical formulas, economic reports, historical data, and information from Health Plan marketing representatives. The biggest factors in predicting membership are the regional economy and competition. Based on this forecast, they also provide patient day and service population projections, which are used for medical center staff allocations. Once regional management has approved the membership forecast, program revenues are estimated. Eighty percent of revenues come from members' dues. The remaining 20 percent is derived from supplemental charges to member patients for specific services received, from Medicare reimbursements, non-member fees-for-services, and other small miscellaneous sources.

The last step in creating a budget is projecting what it will

cost to provide administrative and medical services, pay salaries and benefits, and purchase supplies. Over the past 25 years, annual rate increases have averaged 9.1 percent.(5) Health Plan does not seek to maximize revenue, its rates are set at a level that can meet contractual obligations to members and remain competitive in the marketplace. Health Plan seeks to generate an income flow sufficient to cover all operating requirements and sufficient capital for facility improvement and reasonable growth. It has always been a conscious objective of the program to provide good quality of care at a reasonable cost.

3. ALTERNATIVE PAYMENT PLANS TO TPMG PHYSICIANS

A. EMPLOYED PHYSICIANS IN A PROPRIETORSHIP (Garfield and Associates, 1942-48)

In the beginning of this organization, all physicians were employees, and they were paid a monthly salary in accordance with a schedule established by the sole proprietor and medical director, Sidney R. Garfield, M.D. About once a year, the medical director met with his chiefs of services and they reviewed each physician's salary. Criteria for salary adjustments included the physician's level of administrative responsibility, tenure, assessment of professional skills by the chief of service, and the going market rate for new physician hires. In these beginning years, Permanente had to aggressively compete in physician acquisition, since, as Garfield wrote at the time, "Our relations with the medical profession have been poor, chiefly because of lack of understanding of our motives, distrust of our financial plan, and fear of what it might do to the economy of private practice."(2) Acquisition of well qualified physicians was very difficult as a result of the efforts by organized medicine and some certifying specialty boards to discredit the Garfield group's professional reputation.

The responsibility for supervising the quality of medical care was delegated to the chiefs of services, who were urged by the medical director to "always recruit the best physicians." Dr. Garfield established early that the mission of the Kaiser Permanente program was to provide "Good quality care at a cost the members can afford." Another aphorism frequently heard was that

"Poor quality medicine always turns out to be expensive medicine." Accordingly, the chiefs of services closely monitored each physician in their departments as to the quality of medical practice and the patients' satisfaction with the professional services.

The organization was in considerable debt in those early years, incurred by the purchase of its facilities. Dr. Garfield's strong control on costs is still remembered to this day by the "Pencil Stub Club", so named because in order to obtain a new lead pencil in those early days, a used short stub was required for exchange. New facilities were added in accordance with the slow establishment of bank credit. Maintaining a positive cash flow was a serious problem due to the relatively low capitalization and small membership base. Competition for patients from fee-for-service community physicians was severe. Individual physicians were aware of the need to control expenses to the extent that they were so informed by administration. Although a pharmacy committee published a drug formulary informing physicians of available low cost, in-house manufactured generic drugs (by Royfield, Inc.), physicians were never forbidden to order whatever they felt was needed for their patients.

Reliable statistics are not available for the proprietorship period. Data published for 1944 apply to the wartime shipyard workers. The first useful statistics for the Health Plan are for 1949 when it provided service entirely to community members. Health Plan membership was about 13,000 in 1944 and 70,000 in 1948. The ratio of physicians to members averaged about 1:1200.(2-5)

B. PARTNERS IN A PARTNERSHIP (TPMG, 1948-82)

By 1948, it had become apparent to Dr. Garfield that the program was growing so rapidly that a for-profit, sole proprietorship was no longer suitable. Accordingly, there were established the two non-profit entities: Kaiser Foundation Health Plan, Inc., and Kaiser Foundation Hospitals, Inc., (originally called "Permanente" instead of "Kaiser"); and the for-profit partnership, The Permanente Medical Group. In 1948, there were only seven founding partners; but partners rapidly were added after they completed three years of employee status. As Kaiser Permanente's reputation grew and competition from fee-for-service groups decreased, physician acquisition became easier and patients joined the Health Plan in increasing numbers. By 1974, TPMG had about 1,200 physicians, of whom [illegible] were partners, Health Plan membership exceeded one million members, and the physician-to-member ratio was reduced to below 1:1000.(8,9)

TMPG was governed by an Executive Committee comprised of the Executive Director, Physicians-in-Chief, and one elected Representative from each Medical Center. The partnership negotiated each year with Health Plan for a basic per capita payment--a contractually agreed upon dollar amount per member per month. In addition, Health Plan reimbursed TPMG for specified expenses not within Medical Group's control, such as office rental, equipment, etc.

After three years of salaried employment by TPMG, physicians were eligible for election to become partners. In order to maintain a base of working capital for TPMG, at the time of

election to partnership, each physician made a modest financial contribution to the partnership which was returned to the physician upon termination from the partnership. Partners would draw monthly against a fixed annual income and also share periodically in any incentive compensation plan which was linked to the financial success of the program as a whole. An incentive compensation arrangement between the Health Plan, Hospitals and Medical Group was initiated in the late 1950s and has been continued to the present time with some modifications. The incentive formula was based on the concept that if the Northern California region as a whole had planned and performed well, then there should still be some net revenue remaining for the Hospital. Originally, one-half of this net revenue was distributed to the Medical Group to be divided equally by all partners as incentive compensation, and the remainder was retained by Hospitals as additional earnings available for facility development, repayment of loans, financing equipment, or other program purposes.

Health Plan and Medical Group projected for each year the financial operating requirements agreed upon for the Medical Group, to be made up by a fixed per capita payment based upon the actual membership during the year and a contingent contractual incentive payment. In order to develop a dollar requirement for Health Plan's dues rate for the year, there was included a targeted amount for the contingent incentive payment. The contingent contractual payment was an additional amount agreed upon in advance that became an addition level of earnings for Medical Group partners to be distributed among them on a share alike basis. It was contingent because even though a mutually agreed upon target

figure was included in the financial forecast, it was more or less dependent upon the overall results of operations for the year, and thus was not precisely predictible. Through this incentive compensation arrangement, the partners shared in both favorable and adverse financial results and were directly involved in the financial success of the total program. It was not considered to be a "surplus" or an "excess" of earnings, but it was a planned feature of the Medical Group's physician compensation program. Consistent failure to achieve the planned level of total income could represent a detriment with regard to retaining partner physicians. In the 1970s, to minimize the effects of major fluctuations, a "corridor concept" was agreed upon which set for TPMG partners a target incentive income, with adjustments applied for the year to decrease the additional income if over the target, or to supplement the income deficiency if under target. Although the incentive compensation was never substantial (in 1974, e.g., it amounted to 4 percent of the average total physician's revenues) (12), it recognized that the performance of individual physicians influenced the effectiveness and economy of the total program--Hospitals and Health Plan as well as the Medical Group.

C. SENIOR PHYSICIANS IN A CORPORATION (TPMG, Inc., 1982-)

In 1982, TPMG became incorporated in order to implement an IRS qualified retirement program with protected pension funds, and to better protect its physicians' personal assets from seizure from lawsuits against TPMG. The articles of incorporation were carefully drafted so as to impact TPMG as little as possible in

its internal organization and operation and in its relations with the Health Plan and Hospitals. The hoped for result was that TPMG physicians would continue to perform as they did in the partnership but for them to have greater personal financial security.

TPMG, Inc., is governed by a Board of Directors, constituted similarly to the partnership's Executive Committee, and with similar policy responsibilities and duties. All partners at the time of incorporation were designated "senior physicians". For their initial contribution, now transferred to TPMG, Inc., they received shares which provided voting rights and eligibility to receive dividends. Currently, payments to TPMG physicians are divided into four portions: (a) "distributed earnings", which constitute the basic fixed monthly income of senior physicians; (b) "undistributed income", which is "at risk" and is paid out on a quarterly basis; (c) if there are earnings in excess of the targeted sum for (a) and (b), this amount is analogous to the "incentive compensation" of the former partnership, and is divided equally between Medical Group and Hospitals in accordance with the "corridor concept", which was developed during the partnership period; and (d) lastly, there is a dividend declared and distributed after each year's financial books are closed.

TPMG, Inc., in 1984 had more than 2,000 physicians and provided care to almost two million Health Plan members. The current rate of growth in the Health Plan's membership has slowed, and Medical Group physicians are now acutely aware of the need to control Health Plan dues in order to meet the intense competition from the new HMOs, which tend to have a younger group of members,

and as yet have not built-up their full utilization experiences and costs.

4. FACTORS INFLUENCING MEDICAL PRACTICE IN KAISER PERMANENTE

A. INTRODUCTION

Motivations that drive physicians include the professional's desire to serve the patient, ego and self-satisfaction, and fear and insecurity. The physician's practice of medicine within Kaiser Permanente, as in any health maintenance organization (HMO), will be influenced by the operational principles of the organization. For Kaiser Permanente, as described in Section 2.A., these included voluntary enrollment of health plan members who receive comprehensive services by prepayment to a medical group practice within integrated care facilities. As in any medical practice situation, the Health Plan patient usually visits the Medical Group physician because of a medical problem and expects the physician to provide a problem definition (i.e., an accurate diagnosis) and a problem solution (i.e., an appropriate treatment). The patient evaluates the care experience on the basis of the outcome of the problem; satisfaction with the relationship established with the physician and other personnel encountered, and with the process by which the diagnosis and treatment were provided; the acceptability of the care environment; the cost to the patient in money, time, and transportation; and may consider missed alternative opportunities for obtaining medical care elsewhere. As in any other medical practice situation, the TPMG physician is aware of the patient's expectations and professionally recognizes that a physician's first responsibility is to the patient. When a physician is in a solo, self-employed practice, he must balance what may be in the best interest of the patient

and what may be his own interest. In a group practice, the physician is subject to additional pressure from the interests of the medical group. In Kaiser Permanente, as in any HMO, the pressures on the physician are further augmented by the fixed budgetary operation of the HMO.

Fear and insecurity are not the best, but they certainly can be strong motivators. Job insecurity and financial insecurity motivate physicians to join professional groups, societies, guilds, and even unions; and to seek secured tenured positions. These feelings motivate physicians to support their organizational objectives and comply with organization policies. Physicians who feel insecure seek the greater financial security of a group practice. A sole proprietorship retains a high degree of insecurity since, unless protected by a specified term of contract, the sole proprietor may fire an employed physician at any time. Group physicians desiring to increase their security will form partnerships or corporations from which it is much more difficult for them to be terminated.

Ego and self satisfaction motivate physicians to fulfill their personal objectives and drive individuals to excel in their professions, to achieve professional and organization status and rank, and to seek power and respect. The professional ethic, the commitment to serve the patient first, motivates the physician to consider the patient first, then loyalty to the medical profession and, finally, to the organization. The organization seeks physicians who are ambitious to excel, who consider the advantages of group practice to exceed its disadvantages (i.e., they are

group practice oriented), who will commit themselves to the group's objectives, and who also can satisfy patients' expectations. Thus, the TPMG physician is influenced by a complex array of patient, professional, organizational, and external community-societal expectations.

B. PHYSICIAN ATTRIBUTES

a. The Professional Imperative

The practice of medicine combines clinical judgment in decision-making, interpersonal skills for communication, and the appropriate use of current medical technology. Professionalism is the imperative to achieve and maintain the respect of one's professional peers. This drives the physician to attempt to excel in technical skill with current technology, to attain a reputation for a high quality of medical practice, to advance within one's organization and in professional societies, to seek academic affiliations and clinical professional appointments, to conduct clinical investigations, and to publish in peer-reviewed journals.

The physician-patient relationship is governed by organizational, legal, ethical, and moral considerations. The physician often faces patients who have unrealistic expectations and limited finances, practices a profession short on science and long on art, works withinan environment with limited resources and with an increasing tendency to regulate, ration and budget. As a result, the clinical and management decision-making process associated with many physician-patient encounters is becoming increasingly complex. More health care organizations seek policies and strate-

gies which will permit the physician to satisfy professional and patient expectations for good quality of care services at affordable and competitive costs.

Physicians are motivated to satisfy and win the trust and confidence of their patients and to earn the respect of their professional associates and peers. This motivation results in physicians joining professional societies and in writing for professional publications. In group practice, pride in the professional status of the group is a good assurance of the quality of its care.

The survival of any HMO depends upon the extent to which its physicians can (a) commit to the organization's goals, objectives, and principles, (b) practice at an acceptable level of professional excellence while allocating their services within a fixed budget which is based upon health plan dues rates, and (c) accept physician incomes within the prevailing competitive market. It is generally acknowledged in Kaiser Permanente that it is essential to recruit Permanente physicians of high quality who will make a career commitment to the program, and to convince them that their professional careers are intimately involved with and dependent upon the success of the total program.

b. The Technology Imperative

The peer pressures on physician specialists to acquire and use the same innovations in technology employed by others in their specialty must be balanced in a HMO by the financial constraints of the fixed budget. This requires prudent allocation of limited resources among competing alternative technologies and specialties

and provides strong incentives to obtain the most cost-effective technology. This incentive is present in any hospital with a fixed budget; but an essential difference is that the HMO cannot balance an overspent equipment budget by utilizing the new equipment to generate more revenues from its Health Plan patients.

The assessment of medical technology is a necessary management tool for a HMO, whose expenditures are limited by prospective annual budgets and whose revenues are primarily generated by periodic payments of fixed dues from its members. Within the constraint of a fixed annual budget, the HMO administration strives to improve managerial efficiency by modifying care processes to decrease costs yet provide adequate quality and quantity of services to satify and retain its members. This they try to do by selecting the most cost-effective technology, training lower cost personnel when appropriate for technical procedures, and motivating physicians to improve their clinical efficiency to arrive at the best diagnosis and treatment at the lowest cost.

Although a physician traditionally attempts to provide clinically effective care at a cost acceptable to the patient, per capitation prepayment reverses the traditional financial incentives of fee-for-service practice. Thus Kaiser Permanente advises Health Plan members to seek "well care" in addition to "sick care". Under a fee-for-service or cost-reimbursement financial arrangement, a medical care provider's income is dependent upon revenues generated from the services provided to patients. In Kaiser Permanente, under community-rated dues, the program profits from its well members, with the additional direct financial

incentive to provide to the sick the most appropriate effective care at the lowest cost.

Within the usual HMO financing structure, an increase in the use of a technology may increase expenses and not generate revenues as it might in a fee-for-service or cost-reimbursement program. Accordingly, the HMO has incentives to acquire and employ only those technologies that maintain or increase the effectiveness of medical care yet contain or decrease costs. Under the newly increasing competition from other HMOs, Kaiser Permanente physician-managers must prudently select cost-effective technology to sustain an appropriate balance between quality of medical care services to its patients and costs (dues) for its members.(1) However, Kaiser Permanente can regionalize expensive high technology centers, share these services with multiple facilities, and spread its costs over a large membership base.

Kaiser Permanente in Northern California assesses new medical technology by a variety of management review processes. Its purchasing department routinely studies competitive pricing for established medical products. New laboratory equipment and the use of laboratory procedures are reviewed by a "Laboratory Utilization Committee" represented by one physician specialist from each of the 13 Northern California medical centers. New imaging equipment and procedures are reviewed by a similarly constituted "Imaging Utilization Committee". All other capital equipment is reviewed by an "Equipment Committee" comprised of appropriate medical and technical experts. Ultimately, all expensive capital equipment is reviewed by TPMG's Board of Directors prior to purchase.

c. Physicians' Compensation

Basic Compensation--Few will question the importance of physicians' compensation as a factor influencing their satisfaction with professional practice. The majority of physicians in the U.S.A. are still compensated on some basis for their individually provided services. An increasing number of physicians now work within an organizational or group environment where they receive fixed incomes, sometimes with profit-sharing incentive programs.

Under a fee-for-service or cost-reimbursement arrangement, physicians have a financial incentive to increase their services since, generally, more services tend to generate more revenues than expenses. Under a fixed prepayment or prospective budgetary arrangement, physicians have a financial incentive to furnish only necessary and appropriate services, while providing a good quality of care and satisfying patients' expectations.

A generally accepted hypothesis is that an appropriate provision of health care services will be achieved when the physician's professional judgment is not subject to direct influence by monetary considerations. However, it is generally viewed that the collecting of fees from patients for professional services or being reimbursed by a third party for the costs of services provided can furnish incentives for some unnecessary services in order to increase revenues. On the other hand, it is expected that a fixed budgetary operation can provide incentives for prioritizing some expensive services or scarce resources in order to contain costs within the allocated budget.

A physician's individual compensation in TPMG has always been established as a basic monthly income. For an employee, this is paid as a semi-monthly salary. For a shareholder (as formerly for a partner), this is received monthly as a "draw" against an estimated annual income. This basic income is approved periodically by the corporation's Board of Directors (as formerly by the partnership's Executive Committee), upon recommendation of the individual's physician-in-chief and chief-of-service. The basic income depends upon the physician's professional and technical qualifications, organizational administrative responsibilities, tenure in the Group, and merit as to productivity; also his relationship with patients and other group professionals and the prevailing competitive market for physician acquisition. TPMG physicians have never been paid on any basis of fee-for-services. Any income from non-Health Plan patients (amounting to less than 5 percent (12) of total TPMG revenues) goes into the general revenue pool and is shared equally by all shareholders (formerly partners).

Fringe Benefits--Fringe benefits to TPMG physicians are a substantial portion of their total income and are an expense of the Health Plan. Physicians continually seek greater fringe benefits in lieu of basic compensation. These benefits include annual holidays, vacation leave, sick leave, educational leave, disability leave, paid time for administration, for hospital rounds, and for research, compensating pay for night duty, supplemental pay for extra half-days beyond 10 half-days per week, health insurance, life insurance, dental insurance, pension plan,

and medical liability coverage.

Since TPMG operates on a fixed annual budget it controls the total amount allocated for fringe benefits. TPMG'S Board periodically distributes a survey questionnaire to all shareholders asking them to rank their priorities for each of the above fringe benefits for the distribution of any increase in compensation in the next year. Almost uniformly the majority of physicians rank as the highest priority an increase in basic monthly income over any fringe benefit.

Incentive Compensation--It is generally agreed in the Northern California region that the incentive compensation payment, which has averaged less than 5 percent of the average physician's income (12), is an important concept in physician compensation, but it is not certain that the incentive compensation arrangement has any significant effect on utilization of resources. The available utilization data (e.g., age-sex rate of office visits and hospital days per 1000 members per year) are not significantly different in Kaiser Permanente regions with and in those without incentive compensation programs.(6) Perhaps the most important aspect of the incentive compensation arrangement is that it embodies in financial terms the fundamental concept of mutuality of interest, the partnership between the Medical Group and the Health Plan and Hospitals.

d Physician-Patient Relationships

Physicians joining TPMG have already been trained in their professional responsibilities to their patients. When the health care services are prepaid, Health Plan members may have the

feeling that during the immediate experience with their doctor they are not paying for their care, so that Health Plan patients need some education as to the economics of a HMO. Physicians need to be educated that their Health Plan patients trust them enough to pay in advance, and that by its contract with members, Health Plan commits the availability of quality health care services.

C. ORGANIZATIONAL ATTRIBUTES

The attributes of a health care organization which influence significantly the physician's practice include the size of the program, the number of patients in a physician's panel (i.e., physician-population ratio), the size and composition of the physician group, the comprehensiveness of the services provided, the organization's quality assurance program, its continuing medical education and research opportunities, the administrative structure of the group (i.e., proprietorship, partnership, corporation), the supporting personnel, facilities, and equipment, its leadership development program, its utilization review and cost containment programs, and the organization's financing and marketing strategies.

a. Physician-Member Ratio

The physician-to-population ratio is sometimes used as a proxy measure of the availability of physician services to the population served. The average ratio of full-time equivalents of TPMG physicians to Health Plan members has steadily decreased over the past 40 years, from 1:1200 in 1944-48, to 1:955 in 1974, to

1:890 in 1984. This substantial proportionate increase in the number of physicians has been due to greater availability of physicians to HMOs as they became more acceptable, increased benefits and new specialist services being provided by Health Plan (e.g., high technology surgery, imaging services, psychiatric care, etc.) and increased amounts of physician time for other than direct patient care (for administration, education and research, vacation and sick leave, etc.).

Attributes of Kaiser Permanente which favor cost containment and improved productivity include: (a) integrated facilities, which permit conservation of physician time by minimizing travel between office and hospital; (b) substituting office care for hospital care when appropriate; (c) shared support services (laboratory, x-ray, medical records, scheduling functions, etc., between offices and hospital) to exploit possible economies of scale; (d) regionalizing high technology, "super-specialist" services (e.g. cardiac surgery, neurosurgery, regional laboratory); (e) common centralized administrative, business, purchasing and personnel services; (f) prepayment, which permits prospective budgeting and stable cash flow; (g) group practice, including all specialists, resulting in decreased outside referral and consultative services; and (h) a continuing educational program in leadership development and cost-effective decision-making.

b. Cost Containment

Physicians have not generally shared in the economic risks of their hospital, but Kaiser Permanente has always recognized the

ability of physicians to substantially affect utilization and costs of inpatient services and has linked the success of the hospital to that of its medical staff. Dr. Garfield often said that the Health Plan's success was the result of Medical Group physicians' commitment to make it succeed. Accordingly, an objective of the Health Plan was to develop a continuing incentive for physicians to feel committed to the financial success of the Hospitals and Health Plan and to be concerned about the costs of patient care services delivered. This was accomplished by developing an incentive strategy within the Medical Group to share to some extent the economic risks of Hospital and Health Plan, to commit physicians to cooperate and support Hospitals and Health Plan, and to eliminate the competition seen in the fee-for-service environment between physicians and hospitals for the same patients in primary, emergency,and ambulatory care settings. Current financing trends (e.g., Medicare Prospective Payment System) put the hospital at risk, and in order for it to survive, a hospital must obtain the support and cooperation of its medical staff. This shifts a considerable economic responsibility to the physicians when any fixed price payment (per case, per patient, or per subscriber) results in a fixed budget.

Due to the constant uncertainty about treatment, patients and physicians are encouraged to seek a "second opinion". Similarly for diagnosis, physicians tend to increase the certainty of their decisions by ordering second tests and multiple diagnostic procedures, all of which are intended to decrease the likelihood of error and potential malpractice suits but result in increased

medical costs. Physicians learn to select the most necessary and appropriate procedures to assure certainty of diagnosis and quality of treatment, to defend against medical liability claims, and to contain costs sufficiently to meet market competition. Medical Group physicians have always had to adapt to this environment, but the current increasing HMO competition and increasing medical liability costs demand an even higher level of commitment to the financial success of Health Plan and Hospitals and a keener ability for clinical decision-making, balanced with economic decision-making. That is, they must use both clinical and financial data and consider the economic implications of clinical decision-making. The physician always considers the relative effectiveness of each treatment mode that is appropriate for the patient, and should also consider the costs associated with each treatment mode. There is a continuing inhouse staff educational program on cost-effective decision-making based to some extent on the data obtained from committees that review the cost-effectiveness of laboratory and x-ray procedures. Utilization committees study usage patterns and "profiles" of tests ordered, which are compared by departments and facilities on a per 1000 member basis to suggest when significant differences could be due to differences in patient characteristics or physician practice styles.

Cost control is dependent upon physicians appropriately using resources. Patients often expect and sometimes ask for specific diagnostic tests or treatment procedures. Whenever these are inappropriate or unnecessary, physicians must take the time to persuade patients that their request is not in their best

interest. Physicians must balance being the representative of the Health Plan and advocate of the patient.

The most conspicuous saving in a HMO has been the result of its lower utilization of general hospital services. Since TPMG surgeons do not earn more per hour in surgery nor are they compensated for the number of surgeries they perform, they do not have any financial incentives to do "unnecessary" or "unjustifiable" operations. This attribute has resulted in some critics accusing HMOs of "skimping" on the quality of care. It is an important circumstance that the continuing responsibility for the medical care of its members provides incentives for both Health Plan and patient to benefit from early investment in appropriate, effective care.(13) Skimping on quality may save some short term costs but can result in more expensive long term care if the inappropriately treated patient becomes more severely ill. Furthermore, since members are not "captive" patients and have the free choice to switch to alternative programs of care, or sue for malpractice, skimping on quality is not conducive to the long term health of a HMO. Similarly, physicians themselves will eventually switch to an alternative system where they can practice a level of quality care compatible with their professional standards.

c. Organizational Structure

The organizational structure of a medical group, i.e., whether it is a proprietorship, partnership, or corporation, has substantial impact upon the financial arrangements and the

security under which a physician works. Section 3 reviews the historical organizational arrangements for TPMG and describes the differences in the various methods used for payments to its physicians. It is evident that in order to retain TPMG physicians, the total annual income must satisfy individual physicians' expectations and meet the prevailing market price. However, the mix (i.e., basic pay, fringe benefits, incentive compensation) or the method of payment (i.e., salary, draw, bonus, dividend) has never been shown to significantly affect physicians' incentives or motivations towards quality, services, or costs of patient care.

d. Quality Assurance

In its early years, as a small organization, the quality of professional care was directly the responsibility of the chiefs of the professional services who were committed to the philosophy that pride in the quality of the medical group was the best assurance of quality of care. As the organization grew in size, it gradually added the usual programs and procedures for assuring quality of care. Its quality assurance program is directed by a regional director with a committee comprised of physicians in every medical center who are responsible to carry out all procedures needed to satisfy all accreditation requirements.

e. Leadership Development

In 1955, Kaiser Permanente founders developed an internal agreement in which the individual responsibilities were identified

and recognized for Medical Group, Hospitals and Health Plan. A management team concept was initiated to permit participation, cooperation and coordination on major joint policy decisions. When it comes to difficult decisions in allocation of medical resources, Kaiser Permanente has recognized that physicians are best qualified to balance quality and costs.(1)

A continuing inhouse training and development program moves TPMG physicians up its organizational ladder. Each chief at a departmental or facility level selects and trains one or more assistant chiefs, the majority of whom eventually assume increasing management responsibilities in existing or new facilities. Selected administratively placed physicians receive educational leave for external training in business management at recognized university schools of business.

D. ENVIRONMENTAL AND COMMUNITY ATTRIBUTES

External factors which significantly influence the physicians' practices within a health care organization include the amount of community competition for patients, the economic status of the community, legislation, methods of payment for care services, and the socio-educational status of the service population.

a. Competition for Patients/Members

In the early years, the severe competition for patients from the surrounding fee-for-service physicians was the greatest threat to Kaiser Permanente's survival. Patients were then unfamiliar with prepaid group practice, and the greatest influx of new members came from unions and industries through their negotiated

health and welfare benefits.

In the middle years, the main competition was from the health insurance indemnification plans (e.g., Blue Cross-Blue Shield Plans). Competition from the fee-for-service physicians gradually decreased, and there was as yet no serious competition from other HMOs.

Following the enactment of the Health Maintenance Organization (HMO) Act of 1973, Kaiser Permanente became acutely aware of the rapid acceptance of the HMO concept in the country and the emergence of serious competition from other HMOs.(14) Currently, increasingly severe competition has developed from other HMOs which have many of the same attributes as Kaiser Permanente for providing comprehensive health care services at an affordable cost, and they can compete very effectively against Kaiser Permanente.

Some critics have accused HMOs of "skimming" from the available population pool a favorable selection of the healthy young enrollees. Surprisingly, this is an emerging problem for an older HMO, like Kaiser Permanente. The termination rate in Health Plan members after two years of enrollment is very much lower than it is in the first two years. In addition, non-terminated members naturally age each year. Newly formed HMOs, with which Kaiser Permanente is now competing, have a higher proportion of new enrollees with a younger average age, which puts new HMOs in a favorable competitive position. Some new HMOs specialize in selecting young members with a favorable health experience, which permits them to easily compete with Kaiser Permanente which

community rates its dues over its entire membership's experience.

HMOs have to compete on price (dues to members), benefits (services provided), access (availability of facilities and ability to obtain desired services in an acceptable time), and quality of care (patient outcomes and satisfaction with professional services).

In this competitive environment, a technology innovation which improves the quality of care often introduces a new or increased cost. As for any hospital with a fixed budget, priorities must be established to permit adding new technology within the budgetary constraints. Kaiser Permanente's physician-managers have always participated in these difficult decisions which require carefully balancing quality of care and costs.

Patients usually select physicians on the basis of reputation, recommendations of friends, or on referral from other physicians. Members select the Health Plan primarily on cost, scope of benefits, recommendations of employers or unions, media marketing, and reputation. Members mainly leave the Health Plan because they change jobs or move out of the area; but some leave because of dissatisfaction with accessibility to services (excessive wait for appointments), dissatisfaction with non-professional services (e.g., telephones busy, clerks discourteous, etc.), or dissatisfaction with quality of professional services (e.g., "Doctor didn't explain my problem", "Treatment didn't help", etc.). With increasing demand for lower cost care, much of the risk and responsibility is being transferred to the physicians, who must establish, e.g., the appropriate use of hospital care vs. outpatient care vs. home care. The challenge to the HMO is to

maintain a competitive level of quality in the appropriate setting at an affordable competitive price.

b. Competition for Physicians

Physicians joining and remaining with Kaiser Permanente are, of course, a self-selected group who enjoy the professional stimulus of group practice with ready access to specialized resources, acceptable stable incomes and fringe benefits, regular, predictible working hours, and relief from the business aspects of medical practice. In return they accept some restrictions in professional autonomy and limitations of their control over patient workload and scheduling. Within a short time, the physicians become aware of the need to consider costs to the program for the services they order for their patients. Serious differences between professional and organizational objectives may lead to physician dissatisfaction; but professional autonomy and quality of care is not a common issue; the physicians for whom this has been an issue usually terminate within the first two year employment period. TPMG termination rates for partners (or shareholders) for other than normal retirement or long term disability has been about 1% per year. Only once (in 1970) did this termination rate reach 3.7% when annual incomes dropped below that of the competition.(15)

c. General Economic Factors

The state of the nation's economy affects the economic status of the Health Plan member population. The adverse effects of

inflation or recession in the regional economy upon dues revenues can be lessened only to the extent that Kaiser Permanente can effect internal economies, increase productivity, or raise Health Plan dues. A HMO, along with the rest of the health care industry, is not insulated against the impact of inflation, which increases operating costs of utilities, of supplies, of remuneration to professional and non-professional personnel, and of capital expenditures such as facilities and equipment.

Organized labor continually pressures Kaiser Permanente to increase its union workers' salaries and to also increase Health Plan's benefits to union members, all with minimal increases in member dues.

d. Legislative, Ethical, and Social Factors

The control of the practice of medicine by laws, licensing, and regulatory agencies have a major impact on all medical practitioners, including TPMG physicians. The ethical standards promulgated by professional societies are having an increasing influence on medical decision-making, especially as to the responsibility for rationing and allocating scarce services (e.g., organ transplants), which is shifting directly onto physicians. TPMG physicians incur some benefits from participating in a large organization with resources responsible for helping to inform and advise them in accommodating to new legislation and regulations.

Social and cultural factors in the population served substantially affect TPMG physicians' practice and costs. The current increasing interest in health promotion and physical fitness has required the addition of health educators and

counselors to meet members' expectations.

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