RESEARCH REPORT

JDC Israel — Brookdale Cooperative Program Series

A Mapping of Health Care Reimbursement in Israel

Bruce Rosen

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RR–5–88

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מכון ברוקדייל: הספריה

JDC Israel — Brookdale Cooperative Program Series

A Mapping of Health Care Reimbursement in Israel

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and Adult Human Development

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February 1988 Jerusalem

RR–5–88

ISSN 0334-858X

Abstract

The way we reimburse our health services in Israel has not been fully documented and is not adequately understood. Moreover, there are a number of popular images of the system which do not match reality. One reason it is difficult to understand the system is the tremendous diversity of the arrangements. The understanding of existing reimbursement arrangements is a critical prerequisite for the identification of the need for reform and for evaluating the implications of various proposals for reform.

This paper analyzes Israel's system for reimbursing health-care professionals, health-care insitutions, and sick funds. The paper explores the likely influences of current reimbursement arrangements upon provider behavior. The relationships between the nation's health-policy objectives, the evolution of the health-care delivery system, and recent modifications in the reimbursement system are also reviewed. Comparisons with other countries are used to highlight the unique aspects of Israel's reimbursement system.

The description of Israel's reimbursement system is based primarily upon interviews with providers, insurers, and government analysts. These interviews were supplemented by an examination of publicly available documents, such as collective-bargaining agreements and government committee reports. The analysis of the system's possible impact on provider decision-making draws heavily on the conceptual and empirical literature from abroad.

A variety of arrangements exist for paying physicians in Israel. Most physicians in hospitals, and all public-health physicians, are paid on a salary basis. Capitation and salary systems predominate among community-based physicians employed by the sick funds, while private physicians tend to be paid on a fee-for-service basis. Each sick fund has emphasized a different variant of the capitation approach and the financial incentives for physicians vary accordingly. Fee-for-service arrangements are much rarer in Israel than in most other developed countries, but they are becoming increasingly prevalent, and Israel will have to grapple with the incentives that such arrangements create for increasing the volume of services provided.

In the acute-care sector, Israel's Ministry of Health establishes a per diem rate, that is uniform throughout all public hospitals and specialties. The practical significance of this rate has traditionally been limited, as it does not apply to private hospitals, and is meaningless in cases where a Kupat Holim Clalit (KHC) hospital is reimbursed by KHC for care provided to KHC members. Acute-care reimbursement moved even further away from a per diem system in 1979, when the government agreed to provide hospital care to KHC members in return for a lump-sum payment. Currently, depending on the hospital and service in question,

reimbursement for inpatient care in Israel may be based on the number of admissions, the number of patient days, or a pre-determined budget unrelated to utilization levels. Hospital outpatient care is reimbursed primarily on a fee-for-service basis, though there are some global budget arrangements. Hospital reimbursement in Israel is intermediate between the budgeted approaches of most Western European countries and the more open-ended systems prevalent in the United States.

In the psychiatric and long-term-care sectors, institution-specific per diem rates are derived from detailed budget reviews. Distinctions are made between private, public, and government institutions in the methods used to determine the per diem rates. In contrast to the situation in several other countires, no formal methods exist in Israel for relating reimbursement to either patient acuteness of the quality of the care provided.

The sick funds derive their revenues from four major sources: membership premiums, government subsidies, employer taxes, and user fees. As membership premuims and employer taxes are tied not to health risk but to income levels, sick funds have a financial incentive to seek out the young, the healthy, and the relatively well-off as members. Over time, the level of government subsidies to the sick funds has declined, and attempts are underway to rationalize the methods for determining the levels of the subsidy.

The research underscores the fact that health-care reimbursement in Israel is complex and changing. It also illustrates several ways in which Israel's reimbursement system is unique among developed countries.

The next stage of the research will consist of a critical assessment of proposals to modify Israel's reimbursement system. Subsequent work will consider the extent to which the behavior of health-care providers in Israel is influenced by reimbursement incentives.

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Acknowledgements

In preparing this analysis, we benefited greatly from discussions with many providers and planners of health services in Israel. Interviews were held with the following persons:

Yosef Frost	Kupat Holim Clalit
Aviva Ron	Kupat Holim Clalit
Michael Rosenblooth	Kupat Holim Clalit
Eli Shpanitz	Kupat Holim Clalit
Rachelle Kaye	Kupat Holim Maccabi
David Somech	Kupat Holim Meuhedet
Avraham Ben-Yaacov	Kupat Holim Leumit
Gabi Bin-Nun	Ministry of Health
Pini Peckler	Ministry of Health
Yaakov Nevo	Ministry of Health
Moshe Kalman	Ministry of Health
Rivka Almog	Ministry of Finance
David Milgrom	Ministry of Finance
David Applebaum	Sha'are Zedek Medical Center
Miriam Bar-Giora	Ministry of Labor and Social Affairs
Peter Ludikrass	Ministry of Labor and Social Affairs
Yehudah Machliv	National Insurance Institute
Yehudah Meir	United Home for the Aged
Yehudah Saroosi	Hof Hasela Home for the Aged
Ram Yishai	Israel Medical Association
Rami Levy	Hadassah Hospital
Moshe Aviram	Hadassah Hospital
Marjorie Korenblit	Hadassah Hospital
Hemda Cohen	Brookdale Institute/Ministry of Health
Haim Factor	Brookdale Institute
Harold Sgan Cohen	Hadassah—Hebrew University School of Dentistry

We wish to thank each of our interviewees for the information and insights they shared with us. In addition, we wish to thank Gur Ofer, Jack Habib, and Joe Lockard for their comments on a draft of this paper. The authors gratefully acknowledge the contributions of Leah Krikun, Eileen Kaplan, Bilha Allon, and David Green in preparing this draft. Responsibility for any errors remains ours alone.

An Overview of the Israeli Health Care System

In 1986, Israel had a population of approximately 4.3 million, of whom 83% were Jewish, 13% were Moslems and the remaining 4% were of other religions, primarily Christians and Druse. The country is heavily urbanized, and is considered one of the middle-income countries by the OECD; in 1983 per capita GNP was $5,748. Most indicators of health status are favorable such as an average life expectancy of 74.2, and an infant mortality rate of 13.9 per 100,000 live births (1983). Approximately 7.3% of GNP, or roughly $350 per capita, is allocated to health.

Israel's health-care system is dominated by two entities—the Ministry of Health and the General Workers' Sick Fund, which is part of Israel's powerful labor federation—the Histadrut. The Ministry of Health has responsibility for the development of health policy, operates the nation's public health services, and owns and operates approximately one-half of the nation's acute-care hospital beds, one-fifth of the beds in chronic-disease hospitals, and one-half of its psychiatric hospital beds. It also plays a major role in regulating the other actors in the health care system, and in subsidizing their operations.

The General Workers' Sick Fund is Israel's dominant provider of primary care services, operating approximately 1,300 clinics, and employing over 2,300 primary care physicians. Approximately 80% of Israel's population are insured through the General Workers Sick Fund (Kupat Holim Clalit—KHC); another 15% are insured in three smaller sick funds (Maccabi, Meuhedet, and Leumit), while 5% of the population—mostly Arabs—are uninsured. The KHC also owns approximately one-third of the nation's acute-care hospital beds. The KHC's special role in Israel's health care system is a product of both its size and its strong social welfare orientation. The KHC and its parent organization, the Histadrut, are ideologically committed to the provision of health services on the basis of need, irrespective of ability to pay.

Several recent developments are important. In recent years, the health services have been disrupted by prolonged strikes by both the nurses (1986) and the physicians (1983). There have been substantial cutbacks in real terms, and there are some indications that they have lead to a deterioration in services. Partly as a result of these two developments, Israel has witnessed major growth in private health care and steady growth in the smaller sick funds.

Introduction

The decisions made by the providers of health care services can have a significant impact upon the quantity, quality, and distribution of a society's health services. These decisions are likely to be influenced by both clinical and non-clinical considerations. Such factors as laws, ethics, culture, and financial arrangements can play an important role, irrespective of whether a particular provider is a governmental agency or a non-governmental entity, and irrespective of whether the provider is an institution (such as a hospital) or an individual (such as a dentist).

The analysis presented in this paper is limited to the financial considerations that influence provider decisions. Within the general category of financial considerations, there is a further focus on reimbursement issues. The objective of the paper is to describe the mechanisms that determine the revenues, or incomes, of the various types of health care providers in Israel. In the international health care literature, such mechanisms are referred to as "reimbursement systems" because they determine how each provider will be "reimbursed", or compensated, for the services he or she provides. Reimbursement is concerned with the unit of service that serves as the basis for payment calculations, the level of compensation per unit, and the method by which the level of compensation per unit is determined.

The health-policy community's interest in reimbursement systems derives from the common-sense recognition, supported by a large body of empirical research, that the behavior of individuals and institutions is determined *in part* by how they are paid.[1] Industrial concerns and labor unions long ago recognized that the pressures and incentives generated by a system of compensation based on an hourly wage were different from those generated by a piecework system. Each of the payment systems has its characteristic advantages. Piecework often generates higher levels of productivity, while hourly rates usually induce less stress and sometimes result in higher quality workmanship. How one weighs these advantages and disadvantages depends as much on one's values and position as upon the objective considerations posed by the particular market and technology at hand.

Just as industry has experimented with a variety of compensation schemes for managers and rank-and-file employees, so, too, health care policy-makers have invested a great deal of effort in designing their reimbursement systems, and evaluating the impact of reimbursement upon behavior. Most notable in this regard is the United States, where some new scheme for paying physicians, hospitals, or nursing homes is introduced every few years. In the U.S., evaluations of reimbursement sys-

tems account for a significant portion of the health services research literature. As a result of the strong American presence in the literature, there is a temptation to think that reimbursement "matters" only in systems such as the American one, where the financing of health services and the ownership of health institutions are largely under private control. However, even in countries whose health systems are much closer to Israel's, such as the United Kingdom, payment systems are an important topic of research and debate.[2]

In Israel, too, the importance of payment systems and their impact has been recognized. Halevi (1980) has analyzed the incentives created by the manner in which hospitals are reimbursed for maternity care. Ron (1983) has described the steps taken by Kupat Holim Clalit in response to the major changes in the hospital-reimbursement system that were implemented by the government in 1976. Ginzberg (1981) has discussed how the per diem system creates an incentive for the owners of private psychiatric hospitals in Israel to fill their beds. Ben-Sira (1985) has contended that the absence of a fee-for-service component in most physician-patient encounters in Israel has led to a situation where the affective component of the care provided by primary care physicians is deficient. Ofer (1986), in contrast, warns against the dangers of moving toward a fee-for-service system in Israel. Penchas (1986) and Modan (1986) have independently decried the inequity and inefficiency generated by a system where hospitals receive a level of payment for the early (resource-intensive) days of a hospital stay that is the same as that they receive for the later days of the stay. Ben-Nun (1986) has analyzed the desirability and feasibility of instituting a Diagnosis-Related Grouping system for hospital reimbursement in Israel.

As the above examples illustrate, several authors have commented on health care reimbursement in Israel, with most articles focusing on a particular historical change, a particular type of provider within the health care delivery system, or a particular problem related to the existing reimbursement arrangements. Baruch (1973) does provide a more general overview, but his material is quite dated. This paper constitutes an attempt to build upon the works of these authors by treating the subject in a unified fashion and providing a comprehensive description that spans issues, providers, and periods.

In the broad context, it is important to keep in mind the many different ways in which reimbursement can influence a health care system. To begin with, reimbursement rules can influence *which services* are produced and which remain unavailable. For example, community mental health services remained underdeveloped for many years because no one was willing to pay for them. Reimbursement can also influence the *quality of services* produced—both in terms of their clinical/technical characteristics and in terms of the patient-provider relationship. Other effects, to be discussed in more detail below, are the *quantity of services* provided, the *efficiency of service* provision, and the *distribution of services* among the citizenry.

The Limits of Reimbursement Analysis

The decision to undertake this paper was motivated by the belief that reimbursement "matters"; i.e., that neither health care systems in general, nor Israel's health care system in particular are insensitive to the incentives generated by payment systems. Having said that, five notes of caution are in order.

First, as noted above, reimbursement is just one among many influences upon health system behavior, and accordingly one should not expect simple, mechanistic relationships between payment systems and provider behavior. Even if attention is restricted to purely economic influences, it must be borne in mind that profit-maximizing providers must consider cost issues along with revenue/reimbursement issues. Moreover, while the professionals and non-profit organizations that dominate health care in Israel must take financial considerations into account, they are not the single-minded profit-maximizers of economic theory.[3] Altruism, "good medical practice" and notions of the public good, as well as bureaucratic, social, and political objectives will temper the influence of payment systems upon behavior.

Second, providers are not the only actors in the health care system whose objectives and actions can influence utilization patterns. Regulators can exercise important constraints on provider action. For example, reimbursement incentives may lead a health care institution to seek to expand its bed capacity, but such expansion often cannot proceed without regulatory approval. Similarly, the buyers of services act as a brake on provider actions. One of the critical issues we will need to consider in analyzing the influence of reimbursement in Israel, is the extent to which the power to influence admission and referral decisions is shared among the provider, the patient, and the insurers. The focus of this report remains provider behavior, and accordingly, such issues as the impact of "cost sharing" on consumer behavior are beyond the scope of this paper.

Third, while reimbursement "matters" in all health care systems, there is no doubt that it matters more in some systems and less in others, and Israel is probably one of those countries where it matters "less." This is primarily because reimbursement is concerned with flows of funds among organizations, whereas in Israel most health care transactions are intra-organizational. Israel's health system is dominated by two large entities—the Kupat Holim Clalit (KHC) and the Ministry of Health (MOH). Understanding the rules that govern the flow of funds *among the component parts* of each of these giants, and the associated behavioral incentives, can be as important for policy development as understanding health care reimbursement in Israel.

The significance of formal reimbursement arrangements in Israel may also be limited by various informal arrangements. Often the amount of payment due to a health care provider on the basis of the official reimbursement formula serves as just one input into the political/inter-organizational negotiation that ultimately determines how much money will change hands. While the official reimbursement rules may embody incentives to contain costs, acting in conformity with those incentives could work to the disadvantage of a health care provider when it comes to the potentially more important negotiation phase. In bureaucratic politics a manager who lives within his budget one year is often "rewarded" with a reduced budget for the following year.

The next notes of caution relate not to the dynamics of health care but to the scope of this paper. There is an important distinction to be made between "health care reimbursement", the topic of this paper, and the related issue of "health care financing", which will be touched upon only tangentially. Studies of health care financing focus on how the health care system secures funds from a variety of alternative sources, while reimbursement analysis looks at how those monies are used to pay various types of providers.

Finally, while the paper was motivated by the belief that reimbursement is interesting precisely because it influences provider behavior, *empirical* analyses of the relationships between reimbursement and behavior in Israel will be left largely to subsequent research. This paper is (with a few exceptions) limited to a description of the reimbursement system and an analysis of the behaviors that might result from the existing set of incentives. A companion paper is being prepared that reviews more fully the policy objectives that reimbursement is intended to serve, and the pros and cons of the major proposals for change that are currently being discussed in Israel.

The three sections that follow consider reimbursement of professionals (with a strong emphasis on physicians), institutional providers (acute care hospitals, long-term care hospitals, and chronic disease hospitals), and the sick funds. The final section draws some general conclusions about health care reimbursement in Israel.

Reimbursement of Physicians and Other Health Professionals

In the health care sector, consumers are generally unable to assess their need for services, and they therefore rely heavily on health care providers to advise them about the appropriateness of alternative treatment strategies.[4] As a result, providers have a great deal of influence not only upon the supply of health care services, but also upon the demand for such services.

This is especially true in the case of physicians. It has been estimated that, through the decisions they make on behalf of patients, physicians exercise direct control over approximately three-quarters of all health care expenditures. Because of their centrality in health care decision-making, this chapter on the reimbursement of health care professionals will focus on payment systems for physicians. For purposes of comparison, Israel's payment arrangements for dentists and nurses will be considered briefly at the end of the chapter.

Physician Reimbursement: Conceptual Overview

In most countries, direct payments to physicians constitute only a small proportion of total health care expenditures; it is the influence of physicians upon non-physician costs that accounts for the critical role of physician decision-making in health resource allocation. Accordingly, reimbursement analysis focuses on the incentives created by *the ways* the incomes of physicians are calculated, and how these incentives are likely to influence behavior, rather than the relatively straightforward issue of *how much* physicians themselves are paid.

Table 1 lists a sample of the types of decisions under the purview of physicians. The left column lists decisions that physicians make many times in the course of the day; these generally relate to care plans for particular patients. The right column lists decisions that are made less frequently, and that shape the context in which a physician provides care to individuals.

TABLE 1: PARAMETERS INFLUENCED BY PHYSICIAN DECISION-MAKING

DECISIONS MADE FREQUENTLY	DECISIONS MADE OCCASIONALLY
Therapeutic Procedures	Employer
Diagnostic Procedures	Specialty
Referrals	Location of Practice
Time Spent with a Patient	Practice Size
Hours Worked per Day	Involvement of Paramedics
Patient Socio-Demographic Mix	Role of Affect in Caregiving

Reimbursement considerations can influence both treatment decisions (such as whether to order an X-ray for Mr. Cohen) and practice organization decisions (such as whether to work in a sick-fund clinic or on an independent basis).

Ultimately, one would like to quantify the extent to which reimbursement arrangements influence each of these types of decisions and how these decisions, in turn, influence such outcomes as equity, health status, and health care expenditures. Such a research agenda is beyond the scope of this work, and this chapter is limited to a description of how physicians' incomes are calculated. In this regard, three issues must be considered:

1. What is the unit of service that serves as the basis for the calculation?
2. How is the level of payment per unit of service determined?
3. Are payment levels per unit of service uniform across different categories of patients?[5]

This section considers the three issues at a conceptual level; the section that follows employs these concepts in an analysis of physician reimbursement in Israel.

1. *Unit of Service*

With regard to the unit of service that serves as the basis for calculating compensation, there are three main approaches, and an infinite number of variations.[6] The first approach is to compensate the physician based on the amount of time that he or she works. In terms of the incentives generated, it makes little difference whether the salaries are stated in hourly, weekly, or monthly terms. In all these cases

the amount of care provided within a given unit of worktime does not affect compensation levels. As a result, the physician has no incentives to "overtreat". In order to ease his work burden he may actually have an incentive to "undertreat", by limiting the amount of time spent with each patient and avoiding complex procedures.

At the other extreme is the approach which bases compensation on the number and type of procedures executed. In such fee-for-service systems, physicians have an incentive to execute as many procedures as conscience and the law will allow (by expanding work hours and by working at an efficient pace), and to concentrate on the most profitable procedures (usually those that are most complex and expensive). A variant of the fee-for-service approach, in which the incentives to increase the number of procedures are weaker, consists of paying physicians on a per visit, rather than a per procedure basis.

The third major approach—a capitation system—is intermediate between these two extremes. Physicians operating under a capitation arrangement can maximize their income by adding patients to their rosters, but have no direct financial incentive to increase the frequency with which they treat each patient on the roster.

Reimbursement analysis must also consider the extent to which the physician is at financial risk for the costs he generates. In many settings, physicians are employed by organizations that assume responsibility for all costs generated by the physicians. In other settings, physicians are "independent," in the sense of having to cover the costs of operating their offices out of their gross revenues. There are experiments in the U.S. that go even further, holding individual physicians or small groups of physicians responsible for all the outpatient costs generated by their patients, and in some cases even for the inpatient costs generated.

The extent to which a physician is at risk for outlays made on behalf of his patients can have a significant influence on the link between the unit of service used to calculate revenues and physician behavior. The physician whose parent organization assumes full responsibility for outlays will have less of an incentive to reduce ancillary testing than one who is fully "independent"—even if in both cases gross revenue is determined by the size of the patient roster.

It is rare for salaried physicians to be held financially responsible for the costs they generate. In contrast, capitation arrangements exist both in settings where physicians are responsible for costs and in settings where they are not responsible for costs. The same holds true for physicians paid on a fee-for-service basis. "Unit of payment" and "responsibility for costs" constitute separate, and to some extent, independent dimensions of a physician's practice. Accordingly, both factors must be considered when analyzing a physician's financial incentives.

2. *Determination of Payment Levels*

In some countries, payment levels are determined by the marketplace. In other countries they are determined by government fiat, or by negotiations—usually between the professional association and either the insurance funds or the government. When rates are left to the market, there tend to be significant variations among providers, which may or may not be quality-related. In contrast, when fees are set by negotiation or by government fiat, a certain amount of uniformity among providers results.[7]

3. *Uniformity of Payment Levels*

Similarly, there exist countries where the payment to the physician for a given service will depend on such factors as who it is that is paying for the service, and the patient's income level. In other countries, the form and level of payment are uniform among payers and patients. When payment levels vary in ways unrelated to differences in the cost of providing care, providers have an incentive to focus on the high-revenue categories of patients.

It is generally believed that almost all of Israel's physicians are paid on a salary basis.[8] This may have been the case at one time, but with the growth of private medicine and the gradual liberalization of public medicine, a growing portion of physicians' services are provided on a basis other than straight salary arrangements. In addition, a growing number of physicians are assuming risks for costs associated with their own practices.

Physician Reimbursement in Israel

The essential parameters of physician reimbursement in Israel are determined by the collective bargaining agreement between the Israel Medical Association, on the one hand, and the Ministry of Health, the Kupat Holim Clalit and the Hadassah Medical Organization on the other hand. While the smaller *kupot* (sick funds) are not signatories to the agreement, they are nonetheless influenced by its stipulations.

Contract negotiations in Israel exhibit several unique features. For example, the country's largest employer of physicians, the KHC, is affiliated with the labor federation, and the government's ability to act as a mediator is limited by its position as the second major employer of physicians. As a result of the involvement of the labor federation and the government in the negotiations, the pay increases granted physicians can have significant ripple effects for other categories of employees. Related to these inter-sectoral linkages is the fact that the Ministry of Finance, rather than the Ministry of Health, is the major player on the government side (Ellencweig, 1986).

The contract deals separately with clinic-based physicians and hospital physicians. According to the contract, hospital-based physicians in the public sector are to be paid on a salary basis. The rates are the same, irrespective of whether the employer is a government hospital, a Kupat Holim hospital or an independent public hospital. The same rates apply to chronic-disease hospitals, psychiatric hospitals, and acute hospitals. The salary constitutes compensation for all the various functions carried out by the physician, including teaching and research. Salary level is determined primarily by tenure and level of organizational responsibility. Generally speaking, base salaries for all specialties are paid according to the same scale, but special bonus payments are made to physicians in the less popular specialities of pathology, radiology and anesthesiology. A long list of fringe benefits is guaranteed by the contract, but only two of these are of substantial remunerative value for most physicians—night-duty payments and on-call payments. As the hourly payment rates for night-duty can be several times in excess of the equivalent hourly rate for regular daytime-duty, a situation is created whereby there is competition among physicians for the limited number of available night-duty slots. However, while night-duty and on-call payments can create an incentive for the physicians as a group to try to increase the number of such slots, they remain forms of salary payment and, as they are not related to the number of units of service provided per hour, they do not create incentives to provide additional units of care.

Hospital-based physicians can, nonetheless, provide care on a fee-for-service basis in several different contexts. First, the few private hospitals which exist in Israel make their facilities available to physicians, who bill patients directly for the physician component of the care they receive. Second, it is reported that some physicians receive illegal fee-for-service payments from patients for services provided within Kupat Holim and government hospitals. Finally, in several of Jerusalem's public, but independent, hospitals, senior physicians are permitted to provide services within the framework of the Private Medical Service (SHARAP). At the Hadassah Medical Center, for example, a fee schedule is established by the hospital which specifies rates for outpatient visits, ancillary services, and specific surgical and non-surgical procedures. The physician receives approximately two-thirds of the fee for those services which he provides directly, with the hospital retaining the remaining third to cover its expenses. Note that in none of these three cases is the physician at risk for the expenses which he generates on behalf of his patients; the risk is assumed by the hospital.

Among physicians working outside the hospitals, by far the largest group is employed by the KHC. As of March 1986, the KHC employed approximately 2,800 physicians in its clinics and outpatient regional centers, of whom approximately 75% were primary-care physicians (family physicians, pediatricians, or general practition-

ers). Roughly four-fifths of the primary-care physicians were employed on a full-time basis. In addition, as of December 1985, KHC employed approximately 570 independent physicians, who work out of their own offices on the basis of personal contracts. Roughly 30% of the independents were specialists, and 70% were primary-care physicians (General Workers Sick Fund, 1986). As the reimbursement arrangements for these two groups is slightly different, we consider them in turn.

In the clinics, each primary-care physician is responsible for the care of a roster of patients. Compensation depends, in part, on the size of the roster, but the relationship is somewhat complex, and has changed over time. A base salary plus the standard fringe benefits are guaranteed to each physician, irrespective of roster size, and their magnitudes are determined primarily by tenure of service. However, those physicians whose patient loads exceed an agreed-upon "norm" receive an additional payment for each patient above the norm. The level of the "norm" will depend on many factors including whether the physician treats adults or children, whether the practice is urban or rural, the age of the physician, and whether the physician works alone or with a nurse.[9]

Primary-care physicians have a *prima facie* incentive to increase the size of their rosters. There are, of course, some offsetting considerations. The contract stipulates that the larger the roster size, the longer the physician is expected to remain in the clinic in the afternoons (though this is rarely enforced). More significant may be the concern that a physician with too large a practice may incur the anger and envy of his peers. In addition, for virtually all the physicians, the base salary plus fringes account for the bulk of their compensation, and these payments are not tied to roster size. Finally, the tariff may simply not be high enough to have a significant impact on behavior; one Kupat Holim official suggested that the primary function of the payments was to ensure that physicians felt that the system was treating them fairly, rather than to actually change behavior.

However, it remains a fact that physicians do receive extra payments for increasing the size of their rosters above the norms, and the size of the payments appear to be large enough to induce at least some physicians to incur the additional burden. In April 1987, several KHC officials estimated that approximately two-thirds of clinic-based primary-care physicians in the KHC had patient loads in excess of the norms. If this is true, the majority of clinic physicians work in a capitation mode, while a sizeable minority work in a salary mode. The behavioral differences between these two groups of Israeli physicians and their relationship to the differences in incentives have not been analyzed in the Israeli health policy literature. For some physicians above the norm, the capitation bonuses can constitute 20–50% of total compensation.

The claim that most physicians are above the norm has been disputed by the Chairman of the Israel Medical Association. He contends that in the greater Tel Aviv area, virtually all physicians are below the norm, and that large practices are to be found primarily in the Galilee and the Negev.

One of the major concerns with capitation-related reimbursement is that it creates an incentive for physicians to seek out patients who do not generate high costs. To some extent, this is not a factor in the KHC clinics, as the physician is not at risk for ancillary and hospital outlays. Nonetheless, physicians do have an incentive to avoid patients who visit often and who, by so doing, impose substantial demands on the physician's time. They might seek out younger and healthier patients by trying to secure employment in clinics and areas where patients are relatively healthy. Within a given clinic, they could be particularly attentive to prime-age patients and rely on word of mouth to bring similar patients to their practices.

To some extent, this situation is avoided in KHC by adjusting the capitation calculation to reflect the level of patient need. Children under the age of three are counted as 1.75 patients for reimbursement calculations, and elderly patients count as 1.5 patients.

In practice, "skimming" (deliberate efforts to attract the most profitable patients) has not been a serious concern to date. In general, the market for physicians has been a buyer's market—at least in urban areas[10]—with the KHC claiming to have little difficulty recruiting physicians even for relatively undesirable urban clinics. Moreover, until recently, even within clinics, there has been little physicians and patients could do to influence which physicians were assigned to which patients; that determination was typically in the hands of the clinic secretary. However, as patients come to exercise more control over physician assignment, the skimming issue may require additional attention.

There are two additional ways for KHC clinic-based primary-care physicians to receive payments, aside from the basic salary route. First, there is a per-visit payment for home-care visits when such visits are carried out in response to patient requests. However, the level of these payments is low, and physicians do not have a major financial incentive to visit patients at their homes. More significant are the special payments physicians can receive in return for physician-initiated, pre-scheduled clinic visits. These payments were initiated several years ago, when the KHC decided to promote lengthier, more in-depth, visits for patients with numerous, complicated problems. Such visits can also play an important role in disease prevention and the promotion of healthful behavior. In introducing the new type of clinic visit, KHC recognized that physician cooperation could not be taken for granted. The clinic physicians were under tremendous pressure from the crowds of patients in

the waiting rooms to process patients rapidly. As a counterbalance to these pressures, a special per-visit payment was introduced for the new type of visit. These lengthy visits are confined to one hour per day, in the late morning, and as such, there are limits on the number of such visits the physician can initiate. Nonetheless, as the payment per visit is not negligible, the per-visit fees for pre-scheduled visits can constitute a noticeable component of the physician's monthly paycheck.

Most specialists in KHC who provide care in regional specialty centers are primarily employed by one of the KHC hospitals. For the care provided in the specialty centers, they receive a "per session" fee for each three-hour session. There are norms that state the expectations of the employer and the physicians' union regarding the maximum number of patients per session. If the number of patients seen by the physician is above the norm, he receives a per-visit fee for the additional visits that is added to his basic per-session salary. On the other hand, if the number of patients seen is below the norm there is no penalty. Essentially, this is a hybrid salary/per-visit system. The salary component probably predominates, as the per-visit fee is not large and few physicians can process patients much faster than the rate implicit in the official norms. Note, however, the incentives in a "per session" arrangement are slightly different from the incentives in a full-time salary setup. A specialist who wants to influence a sick fund to employ her for additional sessions might encourage repeat visits so that, in negotiations with managers of the sick fund, she could point to a heavy workload and long waiting times.

The approximately 400 KHC independent physicians who are primary-care providers were responsible for the care of over 150,000 patients (or approximately 5% of the fund's total enrollment) as of the end of 1985. Their compensation is governed by a contract between KHC and the Association of KHC Physicians, which is affiliated with the IMA. They are paid on a straight capitation basis, and are not covered by the collective-bargaining agreement. Patients can switch independent physicians every three months. Physicians receive a fixed quarterly payment for all patients on their roster, irrespective of whether the patient sought care in the course of the quarter. The physicians are at risk for the costs incurred in running their own offices, but are not at risk for ancillary and inpatient costs.

The approximately 150 independent specialists affiliated with the KHC are paid on a hybrid capitation/per visit basis. A patient is considered "enrolled" with a particular specialist for a given quarter only if care was actually provided in the course of the quarter. The specialists receive the same fee for patients seen once, twice, or three times in the course of the quarter. For subsequent visits, the specialists receive an additional per-visit payment.

It is important to emphasize the differences between the two different forms of capitation in Kupat Holim Clalit—that for clinic physicians and that for "independents". The independents have an incentive to reduce all practice expenses, while the clinic physicians have an incentive to economize demands on their own time only. The physician's ability to skim is also greater in the case of the "independents", where the clinic clerk does not mediate the pairing of patients and physicians.

The second largest sick fund in Israel, with approximately 10% of the insured population, is Maccabi. Maccabi is affiliated with approximately 1,100 physicians, of whom approximately 60% are primary-care physicians. The payment of physicians in Maccabi is governed by a collective-bargaining agreement between the fund and a union representing affiliated physicians. Most Maccabi physicians operate out of their own homes or offices, though Maccabi does maintain a small number of clinics. Approximately 90% of Maccabi's physicians are reimbursed on a fee-for-service/"active capitation" basis. According to this system, the physician's compensation, for each quarter, depends in part on the number of patients who actually visited the physician during that three-month period. However, the physician receives the same fee for each "active" patient, irrespective of the number of repeat visits. This component of the compensation system encourages physicians to satisfy patients so that they will continue to seek care from the same source in subsequent quarters, but discourages physicians from inviting patients to return for a series of visits within the same quarter. Interestingly, the active capitation system is used in calculating compensation for both specialists and primary care physicians in Maccabi.

Note that Maccabi has established two different quarterly capitation rates. Only physicians who make several specific commitments to the sick fund (such as setting aside certain hours exclusively for Maccabi members) are entitled to the higher rate.

Physician compensation in Maccabi contains a fee-for-service component as well. The fee schedule, which is set in consultation with the Maccabi Physicians' Assocation, consists of a relative value scale for approximately 400 different procedures. Some of the procedures are office-based, while others tend to be carried out in hospitals or in ambulatory surgery settings. The relative values are meant to reflect differences in skill requirement, material costs and time needed to carry out the various procedures. All affiliated physicians (primary care physicians and specialists alike) are eligible to bill for some of the procedures, while only particular specialties can bill for many of the procedures. It is primarily for surgeons that billings for particular procedures constitute a major component of total income; for most other Maccabi physicians the active capitation payments constitute the major part of their reimbursement.

In the Maccabi system, the patients face a complementary set of incentives. A small co-payment (approximately $2 in 1987) is required for the first visit made each quarter. Thus, for those visits most likely to be initiated by patients (the first visit of the quarter), the patient is discouraged from seeking unnecessary care, while for those visits most likely to be initiated by physicians (second and subsequent visits within the quarter), the physician is discouraged from providing unnecessary care.[11]

As noted above, 90% of Maccabi's physicians are independent contractors who are paid by the fee-for-service/active-capitation method. Most of the others are salaried primary-care physicians, many of whom work in Maccabi clinics. There are also a small number of specialists who work as consultants and are paid according to a variety of other methods including per-visit payments, per-session payments, and fee-for-service payments.

Meuhedet, with roughly 4% of the insured population, has affiliated with it approximately 800 physicians. Roughly half of the sick fund's physicians work in the sick fund's clinics, and they are paid on a salary basis. Among the independent physicians, there is a small contingent of specialists who work on a per-session basis—with roughly the same incentives as those prevailing in a salary system. The bulk of the independent physicians are paid on a non-salary basis; their numbers are approximately equally divided between those reimbursed on a per visit basis and those reimbursed on a per capita basis.

Meuhedet was created out of the merger of two smaller sick funds, and as a result of this history, the type of capitation system used varies by geographic area. In Jerusalem, Meuhedet uses the same active-patient system employed by Maccabi, whereas in other parts of the country, a simple capitation system—similar to that prevailing in KHC—is used.

Kupat Holim Leumit similarly employs both clinic-based and independent physicians. In the clinics, salary and session payments predominate, while capitation is the dominant form of reimbursement for independents. The Ministry of Health employs approximately 200 physicians outside the hospital setting (Government of Israel, 1986). Most of these physicians have responsibilities in the areas of public health or general administration. They are paid on a salary basis, with their compensation governed by the collective bargaining agreement with the Israel Medical Association. A small number of physicians work for Magen David Adom (MDA), Israel's emergency medical service, with the vast majority of these working on a part-time basis. Physicians who staff the mobile intensive care units are hired through the hospitals. The physicians are paid on the same salary basis as would be in force if the physician was working in the hospital proper. As hospital wage rates are highest for the nighttime shift, MDA usually finds it easiest to hire physicians for the night shifts.

Magen David Adom also employs physicians to staff its home visit services and the emergency centers that it operates during evening hours. These physicians are hired directly by MDA and are paid on a per visit basis. This would appear to create an incentive to increase the number of visits, but, it is difficult to see how the MDA physician can exert a significant influence on demand for his services.

Increasingly, physicians' services are becoming available on a private basis in Israel. These arrangements, which most often serve as supplements to the services provided via the sick funds (rather than substitutes) are usually provided on a fee-for-service basis. The private practices are concentrated in the country's urban areas, and are most common in the pediatric, obstetric, gynecologic, and orthopedic specialties. Generally speaking, these physicians are free to set rates, subject only to market considerations. However, to the extent that the services are covered by one of the major insurance plans, the insurance funds have established fee schedules. When physicians charge rates above these schedules, patients sometimes must assume responsibility for the differential. The Maccabi sick fund operates a supplemental insurance program entitled "Maccabi Magen". Subscribers, who must be Maccabi members, are entitled to reimbursement of 75% of the fees incurred in outpatient consultations with chiefs or deputy chiefs of hospital departments. The 75% reimbursement is available for up to three such consultations per year.

Physician Reimbursement: Possible Impact on Decisions About Practice Setting

The analysis to this point has focused on the likely impact of reimbursement arrangement for physicians *within* each of several different practice settings. Reimbursement can also influence physicians' choices *among* practice settings. In this section we consider the relationship between reimbursement and two dimensions of practice setting that are of major policy interest in Israel today: employer and geographic location.

Choice of employer

With regard to choice of employer, physicians must make several related decisions, including:

1. Whether to work for more than one employer,
2. Who the principal employer should be, and,
3. How to divide the workday among the various employers.

Aside from physicians employed at the generally low-prestige private hospitals, all hospital physicians are governed by the same collective bargaining agreement. Accordingly, hospitals do not compete with one another for physicians on a financial basis, but rather in terms of physical location, opportunities for teaching and research, prestige, and promises of medical equipment.

In the ambulatory sector, the situation is different, as the sick funds differ not only with regard to the level of payment for a given unit of service, but also with regard to the choice of service unit for reimbursement calculation. Naturally, factors other than reimbursement considerations will influence physicians' choices among the sick funds. Some such factors are whether the sick fund relies primarily on solo or on group-practice settings, whether the sick fund also offers opportunities for hospital-based practice, and the compatibility of the physician's world outlook with the sick fund's ideological orientation. It may well be impossible empirically to disentangle the influence of financial considerations from the impact of these other factors. All that can be said at this time is that the sick funds do monitor the compensation levels offered by their competitors, suggesting that they believe it to be an important factor in their ability to attract quality physicians.

In Israel, it is rare for physicians to be completely self-employed, but a sizeable and growing number of physicians who are employed on a full-time basis by the government or one of the sick funds also allocate part of their time to the care of private patients outside their primary employment setting. Generally speaking, self-employment is the far more lucrative option, and there is some concern in Israel that the time and energy of its physicians are being drawn away from the hospital and sick fund clinics as a result.

Sick fund "independent physicians" work on a contractual basis, which can be viewed as an intermediate category situated between self- employment and working as someone else's employee. No data are currently available to evaluate whether working as an independent is more lucrative than working as a salaried employee. However, the widespread interest among physicians in switching to the contractual arrangement suggests that, at the very least, contractual work does not entail severe financial hardship.

Choice of location

Ellencweig and Grafstein (1987) have found that there are approximately 30% fewer physicians per capita in Israel's development towns than in the country's older, more established towns of similar size. This uneven distribution of physicians is probably accounted for by a combination of many different factors, including physicians' desires to be close to major medical centers in order to maintain technical

proficiency, and the social/cultural attraction that the veteran towns seem to have for all professional groups—not just physicians. A detailed empirical analysis is needed to estimate the specific impact of reimbursement factors; the objective here is merely to identify some of the relevant characteristics of the reimbursement system that could influence decisions about geographic location.

To some extent, the geographic location decision is related to the choice of employer. As development towns tend to be inhabited by relatively low-income persons, opportunities for private practice are limited. Similarly, a relatively small percentage of development town residents are enrolled in the smaller sick funds. As a result, physicians who wish to be self-employed or who wish to work in one of the smaller sick funds will face a financial incentive to avoid development towns. This would not be the case if reimbursement was purely salary-based, but in the small sick funds it is generally tied to practice size whereas among the self-employed, it depends on the quantity of services provided.

For someone who wishes to work exclusively for KHC within a clinic setting, there may be a marginal financial incentive to locate in a development town. As patient/physician ratios are high in development towns, there are more opportunities to build up large practices and earn a large amount of money through capitation payments. However, this advantage may be offset by the higher rate of physician-patient encounters per capita in development towns.

Interestingly, the collective bargaining agreement between KHC and the Israel Medical Association distinguishes between urban and rural practices. For rural practices, base salaries are higher, as are the per-capita payments to physicians whose practice sizes are above the norm. No such arrangements are in place for physicians serving development towns. There is only one allusion in the contract to "distressed areas"; the travel allowance for physicians serving such areas is approximately 20% higher than that for physicians serving in other locations.

There are financial advantages to living in a development town, and while these are not targeted specifically at physicians, physicians are obviously eligible for these benefits. These include tax credits and lower fees for a variety of municipal and governmental services. It should be noted, however, that the physician who works in a development town, but does not live there, would not enjoy those benefits.

Physician Reimbursement in International Perspective

In the conceptual component of this chapter, three main approaches to physician reimbursement were identified: fee-for-service, capitation, and salary. Fee-for-service medicine comes in two major forms—fees can be tied to the number of visits or to

the number of specific procedures performed. As we have seen, each of these approaches can be found to some extent in Israel. In addition, a rich variety of hybrid forms have developed. Table 2 categorizes the physician reimbursement arrangements in Israel. Note that hybrid systems abound in Israel, and an attempt has been made to reflect the complexity of the arrangements in the chart.

TABLE 2: PHYSICIAN REIMBURSEMENT ARRANGEMENTS IN ISRAEL

	FFS PER PROCEDURE	FFS PER VISIT	ACTIVE CAPITATION	SIMPLE CAPITATION	SALARY
Private Practice	X	X			
Private Medical Services	X	X			
Independent MD Smaller Funds	X		X		
KHC Independent Specialist			X		
KHC Independent PCP				X	
KHC Clinic-Based PCP				X	X
KHC Clinic-Based Specialist		X			X
Clinic-Based MD— Smaller Funds					X
Public Hospitals					X
Public Health Services					X

FFS = Fee-for-service

PCP = Primary care physician

We turn now to the issue of how the distribution of physicians among payment arrangments in Israel compares with the comparable distributions for other developed countries.

Table 3 summarizes the payment arrangements for hospital physicians, primary-care physicians, and community-based specialists in Israel, the United States, Canada, France, the United Kingdom, and Sweden. For each cell, the most prevalent approaches are noted.

TABLE 3: PHYSICIAN REIMBURSEMENT IN SELECTED COUNTRIES

	HOSPITAL PHYSICIANS	PRIMARY CARE	OUTPATIENT SPECIALISTS
Israel	SAL	SAL/CAP	ALL TYPES
United States	FFS	FFS/SAL	FFS
Canada	SAL	FFS	FFS
France	FFS/SAL	FFS	FFS
United Kingdom	SAL	CAP/FFS	SAL
Sweden	SAL	SAL	SAL

FFS = Fee-for-service

CAP = Capitation

SAL = Salary

The role of fee for service as a reimbursement mechanism for physicians is more limited in Israel than in almost all other industrialized countries. There are many examples of other countries relying wholly, or in part, on salary arrangements within hospitals (e.g., Canada, Sweden, Great Britain, etc.). But, on the outpatient side, only a few countries, such as the Netherlands and Great Britain, have extensive experience with capitation arrangments for general practitioners. Only a few, such as Sweden, employ salary arrangements for GPs (Glaser, 1970; Roemer and Roemer, 1981). With regard to Great Britain, moreover, it is important to note that capitation

payments account for roughly only half of GP income; they are supplemented by special fee-for-service payments for specific preventive care measures and compensation for certain categories of practice-related expenses. Interestingly, even several countries with national health insurance programs, such as Canada and France (Rodwin, 1981), pay physicians on a fee-for-service basis.

As a result of their greater reliance on fees for all categories of physicians, the nations of North America and Europe have more experience than Israel in developing mechanisms for exerting public influence on rate levels. To the extent that fee-for-service arrangements become more prevalent in Israel, and the Israeli government considers instituting some form of rate setting for physicians' services, Israel may have much to learn from the experience of these other countries. Capitation arrangements are more widespread in Israel than in most other Western countries. Not only is the compensation of most primary-care physicians related in some way to their practice size, but Israel has also experimented with capitation-like arrangements for outpatient specialists. The variety of capitation arrangements for primary-care physicians is also noteworthy; Israel provides a fertile setting for comparisons of different capitation systems that could be instructive for other nations as well.

Reimbursement of Nurses

Most nurses in the public sector in Israel work on a salary basis. Even in the growing market for private nurses, the amount of money received by the individual nurse is usually determined by how many hours he or she works. Thus, in both the public and private sectors there are few links between reimbursement on the one hand, and the number and type of treatments provided to patients on the other.

In other countries, as well, nurses tend to be paid on a salary basis. This apparent uniformity may account for the relatively scant attention nurses have received in the international reimbursement literature. It would be a mistake to follow the international pattern and neglect this topic in Israel. For while, as stated above, reimbursement probably has only a minimal impact on nursing behavior in Israel at the individual patient level, it has significant implications for the overall dynamics of the nursing labor market. Among the decisions made by nurses which could be influenced by reimbursement considerations, are the following:

1. Whether to remain in the profession,
2. How many hours to work per week,

3. What shift to work,
4. Whether to work in the public sector or the private sector,
5. Whether to work in a clinic, a hospital outpatient department, an acute ward or a long-term care facility, and
6. Whether to seek to advance along the administrative hierarchy.

Compensation for all nurses in the public sector is governed by a contract between the Histadrut-affiliated nurses' union and the principal employers (Kupat Holim Clalit, the government, and Hadassah). The contract covers both registered nurses and practical nurses working in hospitals, long-term care institutions, clinics, and public health settings. Some of the differences among the interests of these various groups were manifest in the course of the 1986 nurses' strike, when the hospital nurses almost split off from the nurses' union.

The high marginal tax rate, combined with strong cultural support for part-time work (especially among women of childbearing age), has led to a situation where a large portion of Israel's nursing workforce works part-time. Recently, a major objective of the employers in Israel has been to increase the number of nurses working on a full-time basis. The latest collective bargaining agreement includes special bonus payments for full-time work, but the differential between full- and part-time work is much smaller than that sought by employers.

The contract also provides for significant rate differentials among shifts and between weekend and weekday work. The objective of these differentials is to attract workers to the less convenient shifts. At present, the differential is so great that many nurses choose to work a limited number of weekend or night shifts per week, instead of a full-time daytime assignment; it is simply more lucrative to work a smaller number of hours at night.

The financial benefits to be derived from advancing up along the promotional ladder are not very great. This is to some extent due to the fact that most nurses in managerial roles must work the day shifts, while an industrious staff nurse can work the higher-paying night shifts.

Hospital nurses are paid at a higher rate than non-hospital nurses. The appropriate size of this differential has emerged as a major public policy issue. Primary-care proponents contend that there is a policy interest in attracting high-quality nurses to community and clinic settings. Hospital nurses counter with an equity-based argument; their jobs entail more nighttime hours and harder and more skilled work.

The "hospital differential" is not limited to nurses; it applies to many other categories of health care workers as well. This explains the significance of the word "hospital" in the terms "chronic disease hospital" and "psychiatric hospital". Unfortunately, the differential also creates an incentive for employee groups to oppose the transfer of patients and activities from inpatient settings to community-based settings.

According to the latest agreement, hospital nurses are also entitled to a shorter workweek than community clinic nurses (36 hours vs. 40 hours). In implementing this agreement, disputes have arisen regarding the extent to which nurses working in a variety of hospital-based outpatient settings should be considered hospital nurses.

The current reimbursement arrangements limit somewhat the competition for nurses among providers. As all the major employers are bound by the same collective bargaining agreement, they cannot compete with one another on a salary basis. There may be some minor differences among the major employers with regard to how comparable jobs are graded for salary purposes, but this is kept in check by a committee officially charged with ensuring such comparability. Competitive energies are largely channeled into the provision of such fringe benefits as subsidized housing, child care, and transportation services. While the contract presumably guarantees these in an equal manner to all hospital nurses, in practice, the availability of such services can vary a great deal among hospitals and hospital systems.

The Reimbursement of Dentists

An interesting development is taking place in dentistry, long one of the strongholds of private health services in Israel. Traditionally, dental services have not been covered by the sick funds. Dentists operated independently, with fees determined by the individual dentist (and sometimes altered by negotiation with particular patients).

Recently the sick funds have expanded their offerings in the dental-service area, and a growing proportion of Israel's dentists is employed by the sick funds. Nonetheless, even today it is estimated that approximately 80% of Israel's dental workforce is self-employed. An additional 10% are employed by large commercial dental-care chains, 10% by the sick funds, and a handful by the government to serve in public-health roles. The dominant mode of payment among independent dentists, the bulk of the dental workforce, is fee-for-service. Generally speaking, prices are set by the market, and there is substantial variation in price levels among dentists. However, the government has made some efforts to limit the possibility that dentists

will charge inappropriately high prices. In 1978, the Ministry of Health developed a recommended price list for common dental procedures. The Israel Dental Association accepted this price list as a legitimate guideline to pricing for its members, with the understanding that compliance would be purely voluntary. The system is reported to have worked reasonably well for several years, but eventually the price list ceased to be updated frequently enough to be taken seriously. If anything, the price list created a floor rather than a ceiling for fees.

In 1984, the Ministry of Health attempted to institute a compulsory price list. This effort lasted 12 days, after which the Minister of Health withdrew the plan, in response to strong opposition from the Dental Association and individual dentists.

Currently, the Ministry of Health's price list is intended to serve as a guideline. The rates are far below market levels, and as a result are generally ignored. This is unfortunate, as a more reasonable price list could probably influence the rate of price increases among independent dentists, as consumers would be able to compare the prices being asked by their own dentists with the published guidelines. Similarly, the fee schedules established by the dental insurance firms would be influenced by the MOH price list. Many dentists do not accept the rates established by the dental insurance companies as payment in full, and engage in balance billing. Nonetheless, the rates established by the insurance firms can act as a brake on dental fees. And while fewer than one-quarter of Israelis are covered by dental insurance at present, their numbers are growing.

A reasonable official price list could also have a major impact upon the dental practices operated by the sick funds and the large commercial firms, perhaps to a greater extent than among the solo practitioners. While they, too, are not bound by the guidelines, their prices would have to be reasonably close to the official rates, as their rates tend to be more a matter of public knowledge than are the rates of solo practitioners.

For our purposes, there is an even more important difference between the solo dentists and those working for these larger organizations. This relates to the method of payment of dentists.

In KHC, the dentists are clinic-based, and they are paid primarily on a salary basis. However, in addition to these base salaries, dentists can receive payments on a complicated type of fee for service arrangement. A point system has been established for a small number of complicated procedures, with the number of points varying with the complexity of the procedure. If a dentist accumulates more points in the course of a month than the pre-specified cutoff level, then he or she receives a

bonus payment for each point beyond that level. These special payments tend to be small, and, in comparison with independent dentists, those employed by KHC have less of an incentive to provide treatments at the margin.

Meuhedet and Maccabi employ dentists in their own clinics and also have agreements with a few independent dentists. In both of these funds, the independent dentists are paid according to a fee schedule established by the funds (members pay out-of-pocket, but rates are lower than on the open market). In the clinics, dentists receive a percentage of the revenue that they generate. From a strict reimbursement perspective, it might appear that those dentists employed in the clinics of the smaller sick funds, should have even more of an incentive to provide marginal treatments than independent dentists, as the sick fund dentists do not have to worry about the costs generated in terms of materials and equipment. The funds have instituted utilization review and quality-control mechanisms to mitigate this danger.

The commercial dental firms employ most of their dentists on a percentage-of-the-gross basis. Clinic managers, however, receive a salary plus a percentage of the profits. With compensation linked to profits rather than revenues, these managers have an incentive to reduce unnecessary expenditures.

Summary: Reimbursement of Physicians, Nurses and Dentists

The preceeding discussion demonstrates that a variety of reimbursement arrangements for health-care professionals exist in Israel. The form varies by occupation, by practice setting, and by employer. Salary systems dominate among nurses, hospital physicians, and Kupat Holim Clalit dentists. Capitation payments, of which a variety of subtypes have been distinguished, are most prevalent among outpatient physicians—primarily, but not exclusively, general practitioners. Fee-for-service arrangements are most prevalent among dentists, but are becoming increasingly important among outpatient specialty physicians. One of the issues that has been identified in the international literature is the variety of methods for setting rates for fee-for-service care, and it remains to be seen how large a role the Israeli government will play in rate setting in the future.

Reimbursement of Health Institutions

In Israel there are three major types of institutional providers of health services—acute-care hospitals, psychiatric hospitals, and long-term care institutions. The system of reimbursement for each of these institutional types will be considered separately. Before doing so, however, some of the conceptual issues that cut across institutional types will be presented.

As with the analysis of professional reimbursement, the emphasis will be placed on the choice of the unit of service that serves as the basis of payment.

One possibility is to set a total "annual budget" for a hospital, which will not be affected by the amount of service actually provided. In such cases, there is no clear financial incentive to expand the volume of services provided; but neither is there an incentive, in most such "global budget" systems, either to reduce costs (by increasing efficiency) or to improve the quality of the services. This approach is analogous to a salary system for physicians.

At the other extreme is a fee-for-service system, where each laboratory test, radiology scan, and operation provided by the hospital carries its own price tag. In such systems, hospitals have incentives not only to increase the number of days of care provided, but also to maximize the number of ancillary services and treatments provided for each day of care.

In between are compensation systems based on the number of admissions or the number of patient-days. In both such systems there is an incentive to maximize admissions and minimize the use of expensive diagnostic procedures and treatments (Berki, 1983). There is nonetheless an important difference between the two. In per diem systems, hospitals have an incentive to maximize length of stay. The latter days of a patient's stay tend to be the least expensive, while the hospital receives the same per diem payment for these days as for the more resource-intensive early days. In reimbursement systems based on the number of admissions the incentive is to shorten length of stay (as even the final days of a patient's stay generate some costs, but no additional revenues). Naturally, the importance of these incentives depends largely on the extent to which providers can influence utilization of their services.

While the focus of this analysis will be on the *unit of service* for institutional reimbursement, several other dimensions of institutional reimbursement will be considered as well. One of the most important dimensions is the extent to which reimbursement of institutions is *cost-based.*

The advantage of guaranteeing that providers will be reimbursed for all their outlays is that it encourages the provision of high quality care. By reducing risks for providers, it also encourages the development of additional capacity. This can be especially important for new services, when expansion is desired, and where the cost of providing the service is not yet known. The disadvantage of basing reimbursement on costs is that it removes any incentive for the provider to produce the service economically, and may encourage provision of unnecessary services.

A related issue is whether rates should be *set prospectively or retrospectively.* Prospective rate setting means that the level of payment for each unit of service is known at the time that the service is provided; in a retrospective rate-setting environment, the level of compensation is determined only after the fact—usually after the end of the budget year. The advantage of setting rates before a service is rendered is that it enables providers to make informed economic calculations and permits better planning. The advantage of retrospective rate-setting is that there is a built-in mechanism for adapting rates in lieu of circumstances that could not have been foreseen in advance (such as wars, strikes, or the high cost of serving previously unserved population groups).[12]

Similarly, there are pros and cons to establishing a *uniform rate for all institutions,* versus a system in which adjustments are made for differences in patient load, teaching responsibilities, labor costs, etc. Where differences are justified, the principle of dealing equitably with providers would suggest that rates should not be uniform. However, such distinctions can be difficult to implement administratively, if they entail the development of new data systems. By increasing the level of payment for sophisticated services, relative to the level of payment for basic services, such a change would also encourage the development of tertiary care; the social desirability of such a development must be considered carefully.

The issue of whether rates should be *uniform among payers* usually arises in contexts where the government covers services on behalf of part, but not all, of the population. Governments often seek a lower rate for the beneficiaries of government programs, in order to reduce the burden on the taxpayer. In addition to raising the issue of equitable treatment of providers, this approach creates a danger that certain categories of patients will be rendered unprofitable and as a result will be avoided by providers.

The analysis also will consider whether rates are set by market forces, government fiat, or negotiation. To the extent that government sets rates, attention must be paid to whether rates are set on the basis of a formula or on the basis of a detailed case-by-case review.

With regard to institutional reimbursement, it is important to keep in mind that the short-term incentives may not correspond to what is best for the institution in the long-run. Most institutional decisions have a long time horizon, and institutions in Israel know that existing reimbursement agreements will eventually be modified, either by contract (in the case of the psychiatric hospitals) or by new government regulations (in the case of the other institutional providers). Institutions recognize that their behavior during the current period will influence the extent to which their needs are recognized when it next comes time to change the reimbursement system.

As we shall see in what follows, per diem arrangements figure prominently in all three of the sectors—acute care, psychiatric care and long-term care. There are, nonetheless, important differences among the sectors regarding the extent to which other units of service also play a role in determining compensation, and with regard to the other dimensions of institutional reimbursement.

Acute-Care Hospitals

In Israel, there are four major categories of providers of acute-care services: the government, the KHC, independent public hospitals, and private (for-profit) hospitals. The distribution of beds among different ownership types is summarized in Table 4, which shows that approximately 80% of the beds are controlled by either the government or the KHC. Each type of hospital faces a different set of reimbursement rules.

Hospital reimbursement is an important subject for study because hospitals, as organizational entities, are among the most influential decision-makers in our health care system. To be sure, their capacity to influence utilization levels and patterns of care is constrained. It is the physician, rather than hospital management, who decides which treatments should be administered to a particular patient and when each individual patient should be discharged. Similarly, hospitals do not have a free hand in determining admission rates. Non-emergency admissions will be reimbursed only if the patient's sick fund has approved the admission in advance and urgent admission decisions are made by the emergency-room physicians, almost exclusively on the basis of clinical criteria. In the short-term, hospitals are often power-

less to change utilization patterns unless they can convince the physicians in their employ to incorporate the hospital's needs into their clinical decision-making.

TABLE 4: ACUTE-CARE HOSPITALS BEDS, BY SECTOR (1984)

SECTOR	# OF BEDS	% OF BEDS
Government	5,630	48%
KHC	3,650	31%
Public	1,693	14%
Private/Mission	876	7%
TOTAL	11,849	100%

Nonetheless, over the longer term, hospital directors have several means at their disposal to influence the quantity and quality of the services provided in the hospital. A decision to shorten length of stay can be implemented by strengthening the hospital's discharge-planning capacities, by introducing pre-admission diagnostic testing, and by reducing turnaround times for ancillary tests carried out on an inpatient basis. Admission rates can be influenced by the speed with which outpatient alternatives to hospital admission are developed, and by changes in the size of the hospital's bed complement. Treatment patterns can be influenced by the manner in which the hospital's bed complement is distributed among specialties, by the extent to which the hospital has invested in sophisticated equipment, and by the criteria that the hospital employs in recruiting physicians.

Thus, in the short-term and with regard to care for individual patients, the physician rather than the hospital is the key decision-maker. However, via its control over the larger environment, hospital management can significantly influence utilization levels in the aggregate and over the long-term. The bulk of the discussion in this section will focus on reimbursement for inpatient operating costs. The section concludes with a discussion of reimbursement for capital outlays and outpatient care.

The basic starting point for inpatient reimbursement in Israel is the uniform per diem rate established by the Ministry of Health. In recent years, this rate has supposedly represented the average operating cost per day of care—where the averaging is done over all departments in all non-private acute-care hospitals in the country. The rate is cost-based, but for the industry as a whole rather than for an individual hospital. The rate is set prospectively with the exception that adjustments are made for inflation; in Israel such adjustments were quite large and unpredictable prior to the economic reform of 1985. Before going into effect, any rate change must be approved by the inter-ministerial "price commission", which includes representation from the Ministry of Finance. The per diem is intended to be all-inclusive, with no separate charges for specific treatments or ancillary services.

Uniform per diem reimbursement systems provide incentives to maximize length of stay, to minimize cost per day, to concentrate beds in low-cost specialties, and, even within each specialty, to admit those patients who will not require costly treatments. If the official per diem was the sole component of the hospital reimbursement system and hospitals were pure profit-maximizers, one would expect all Israeli hospitals to behave along these lines.

However, the extent to which Israel's acute-care reimbursement system actually conforms to a classic per diem system is limited in several ways. To begin with, certain types of care are not governed by the per diem arrangements. Most notable among these are maternity care and neonatal care. Irrespective of the type of hospital in which such care is provided, and irrespective of the length of stay of the mother and the child, the National Insurance Institute makes the same lump sum "per delivery" payment to the hospital (Halevi, 1980). There is a clear financial incentive for hospitals to concentrate on simple, uncomplicated births and to discharge both the mother and the baby as soon as is possible.

A second departure from the per diem model is limited to Israel's private hospitals; the private hospitals and those who purchase services from them are not required to adhere to the official per diem rates. When services are being sold to private individuals, physicians' fees are often sold separately from the hospitals' fees, and elements of fee for service reimbursement are included in the hospitals' billing procedures. In addition, many of the private hospitals have developed creative financial arrangements with the sick funds that are the major purchasers of hospital services. For example, Assuta hospital sells services to Maccabi on a per-admission basis, where the price per admission varies with the reason for admission. Essentially, this system is similar to the DRG (Diagnosis-Related Grouping) system recently introduced in the United States. When Kupat Holim Clalit purchases ser-

vices from private hospitals in Nazareth it pays a per diem, but the per diem is lower than the official public hospital rate.[13] The rationale, accepted by both the fund and the hospitals, is that the level of the facilities available is lower than that found in most public hospitals. In contrast, by law, the fund cannot negotiate a per diem that is lower than the official rate with particular public hospitals where the level of service is comparable to that available in Nazareth.

The third major reason that Israel's hospitals do not face the incentives inherent in a pure per-diem system is that for one-third of Israel's hospital capacity, the owner of the hospitals is also the primary purchaser of services—the KHC. KHC hospitals have no incentive to generate unnecessary admissions nor to prolong hospital stays for those patients insured in the KHC sick funds. To the contrary, as far as KHC patients are concerned, these hospitals have every incentive to reduce length of stay and prevent unnecessary hospitalizations altogether. Of course, with regard to patients whose bills will be covered by other organizations, the KHC hospitals face the traditional per diem imperatives—encourage admissions and prolong stays. Further empirical study is needed to evaluate whether it is feasible for the hospitals to game the system by developing different discharge policies for different categories of patients.

The fourth issue to keep in mind is that most Israeli hospitals are part of large multi-hospital systems under the auspices of either the government or KHC. In general, even if an individual hospital succeeds in increasing its revenues, the hospital and its medical/administrative leadership do not derive any direct benefits from that accomplishment. All revenues revert to headquarters, to be distributed among the operating units as headquarters sees fit.[14] To the extent that an organization is driven by profit considerations, then under a per diem system, *headquarters* will want to extend length of stay, increase admissions, and concentrate on less seriously ill patients. It will also encourage its field units to undertake actions that promote these objectives. In Israel, however, neither of the two major health care organizations is a strict profit-maximizer. Furthermore, there may be some limitations on the ability of headquarters to influence the activities of the hospital managers and the physicians in the field. In practice, the Ministry of Health does not divide up the monies available to its own hospital division in strict proportion to patient volume. While there is no formal system for taking case mix into account, the Ministry does try to provide additional funds to those hospitals which tend to care for the most severely ill patients.

While these four factors are important, the fifth and most significant departure from the per diem model is to be found within the government hospital system specifically with regard to its relationship with KHC-insured patients. As of 1981, the

KHC ceased to reimburse the government hospitals on a per diem basis, and instead switched to a system of annual lump-sum payments not related to utilization levels. To be properly understood, that change in reimbursement regulations must be seen in its proper context—as a part of a larger attempt to reorganize the country's hospital services. And to understand some of the forces behind the regionalization effort itself, some of the "ancient history" of hospital reimbursement in Israel must be reviewed.

Prior to 1975, hospitals in Israel received most of their revenue via government grants which were not directly tied to utilization levels. There was an official per diem rate, but it was substantially below the average cost of providing a day of care. Per-diem payments by the users of the hospitals' services were not expected to cover the hospitals' outlays, as the function of the direct grants was to subsidize that care. As the per diem rates were well below true cost, the KHC had an incentive to hospitalize a major percentage of its members at government hospitals rather than to care for them at KHC hospitals. After all, at KHC hospitals, the KHC, and not the government, would bear most of the cost of the care.

In 1975, the government made drastic cuts in the direct grants and, at the same time, raised the per diem rates substantially. While in 1975 the rates were still kept below actual cost levels, the clear intention was to gradually raise the rates until they were brought into line with actual costs. Accordingly, the incentives for the KHC changed dramatically. It no longer had a financial interest in hospitalizing its members at government hospitals. A "Hospitalization Plan" was developed by KHC, with two major objectives: a reduction in cost per day at KHC hospitals, and a shift in KHC referral patterns, away from MOH hospitals and toward KHC hospitals (Ron, 1983).

In 1980, the KHC and the government agreed on a plan to regionalize acute-hospital services. According to that plan, the country was divided into fourteen regions, and patients were to receive care for most of their inpatient needs from their own "regional hospital". Care in several of the most expensive subspecialties was further concentrated in six "supraregional hospitals". Both the KHC and the government were motivated by the hope that regionalization would improve the quality of care by providing services close to the patient's home. For the government, there was an additional motivation as well—its hospitals were gradually becoming depopulated as, in response to the rise in the hospital per diem (and the continuing physical decay of MOH hospitals), the KHC had been rechanneling its patients to its own hospitals. Regionalization served MOH interests by ensuring that KHC enrollees who lived near government-owned hospitals would get their care at those hospitals (Modan, 1986).

Naturally, some of the fourteen regions were served by Ministry of Health hospitals, while other regions were served by hospitals under the jurisdiction of the KHC, or other entities. Analysts estimated that approximately 1.15 million KHC members lived in regions served by MOH hospitals, and it was agreed that a reasonable target rate of hospitalization for these persons was 0.94 days per year. Accordingly, the KHC agreed to pay the MOH, as a lump sum, the charges that which would have been generated at the usual per-diem rate, by 1.15 million persons using an average of 0.94 days per year.[15] On the inpatient side, actual utilization levels would cease to influence the flow of funds from the KHC to the MOH. Outpatient care continued to be governed by the fee-for-service arrangements until 1985, when the global-payment system was expanded to cover outpatient care as well.

It is important to understand the incentives created for both buyer and seller in this global-payment arrangement. Unlike the pre–1981 situation, when a classical per diem system prevailed, KHC has a financial incentive to hospitalize as many of its patients as possible at government hospitals—higher utilization will not increase the bill it receives. On the other hand, the MOH has an incentive to reduce admissions and length of stay for KHC-insured patients—it will receive the same lump-sum income, but costs will be reduced. With regard to patients insured by other sick funds, however, MOH continues to operate with the traditional per diem incentives—increase admissions and increase length of stay.

Compliance with the requirement to hospitalize patients at their regional hospitals was monitored closely for several years and efforts were made to enforce it. However, with the chaos brought upon the health care system by the 1983 physicians' strike, and a general deterioration in KHC-MOH relations, the machinery for monitoring the system fell apart. The 1986 Comptroller General's Report[17] cites data that suggest that the plan may have had little real impact on inter-regional flows of patients. It may be that the major legacy of the initiative is the change it brought about in hospital reimbursement.

The evidence regarding the impact of the change in reimbursement regulations is equivocal. As Table 5 shows, admissions of KHC patients to government hospitals increased by 55%, while admissions of patients insured by the other sick funds increased at much slower rates. This was predictable, as the KHC now had an incentive to direct patients toward government hospitals. There is no way of knowing for sure whether the increase in admission of KHC patients to government hospitals was the result of the introduction of the regionalization policy or of the change in reimbursement rules. However, the regionalization policy applied to all the sick funds, while the change in reimbursement rules affected only the KHC. This gives credence to the proposition that at least the *difference* among the funds with regard to the rate of change in admissions, can be attributed in part to the change in reimbursement arrangements.

TABLE 5: ADMISSIONS TO GOVERNMENT HOSPITALS, BY PAYOR (1977 AND 1984)

PAYOR	1977	1984	PERCENT CHANGE
Clalit	102,975	159,128	+55 %
Leumit	8,785	11,627	+32 %
Maccabi	17,233	20,065	+16 %
Meuhedet	4,285	4,989	+16 %
Other Funds	565	636	+13 %
Total Funds	133,843	196,445	+47 %
Other Payors (*)	114,902	119,542	+4 %
Grand Total	248,745	315,987	+27 %

(*) Includes Ministry of Defence, National Insurance Institute, etc.

The evidence regarding the impact of the reimbursement change on average length of stay (ALOS) is even less clear. As Table 6 indicates, between 1977 and 1984, average length of stay at government hospitals dropped significantly, suggesting that the hospitals responded to the change in incentives. However, it is also possible that the length of stay decline was due to other factors, such as technological changes, changing attitudes about the substitutability of home care for hospital care, and a shift in the balance between the supply of hospital beds and demands for hospitalization. A comparison of the length of stay decline in government hospitals with the decline in other Israeli hospitals could help clarify the factors responsible for the decline.

There are two reasons to suspect that the reimbursement change was not the critical factor. First, the rate of decline in ALOS was more rapid in the 1977–1981 period than in the 1981–1984 period. Second, ALOS declined for all the sick funds. However, it could be argued that the hospitals considered it neither feasible nor proper to distinguish between KHC patients and other patients in their discharge policies. As the KHC patients constitute the majority, the reimbursement incentives that obtained regarding KHC patients may simply have dominated.

TABLE 6: AVERAGE LENGTH OF STAY AT GOVERNMENT HOSPITALS, BY PAYOR (1977 AND 1984)

PAYOR	1977	1984	PERCENT CHANGE
Clalit	9.4	7.9	-16 %
Leumit	9.2	7.3	-21 %
Maccabi	8.9	7.4	-17 %
Meuhedet	9.6	7.9	-18 %
Other Kupot	9.0	8.4	-7 %
Total Kupot	9.3	7.8	-16 %
Other Payers (*)	6.3	5.4	-14 %
Grand Total	7.9	6.9	-13 %

(*) Includes Ministry of Defence, National Insurance Institute, etc.

Some informants have suggested yet a sixth departure from the per diem model. They note that the Ministry of Health must approve operating budgets for each government and public hospital prior to the start of the fiscal year. According to one interpretation, the government then guarantees to subsidize any difference between the *approved* amount and the revenue realized from the purchasers of service. If this were true, hospitals would have no incentive to increase volume and billings, as the government could be depended upon to pick up any shortfall from projected revenues.

Other informants have raised serious questions about this interpretation. They note that subsidy levels are set prior to the budget year in question, and in most cases have been constant for several years now. In addition, they note that the hospitals indeed act as if increasing their volume will improve their bottom line—contrary to the behavior one would expect if net income was firmly under government control.

It has been argued that, the widespread *perception* that the system is basically a per diem system may be more important than the fact that the *reality* contains elements of other reimbursement arrangements as well. Israel's hospital system keeps its records in terms of patient-days, carries out negotiations in terms of patient-days, and by and large, thinks in terms of patient-days. According to this interpretation, a department chairperson's ability to secure personnel is largely dependent on

the number of days of care she provides, irrespective of whether keeping beds full actually contributes to her organization's financial well-being.

In a sense, the reliance on a uniform per diem rate may be a vestige of a former era where government subsidies were more significant. An official per diem was established which influenced how the financing burden was shared among the various sick funds and the government. However, the per diem did not affect the total revenue of any particular hospital, which was determined prospectively by the government via a hospital-by-hospital budget review. Accordingly, there was no need to reflect cost differences among hospitals in institution-specific per diem rates.

Capital Costs

Hospital capital costs are funded on a lump-sum basis at the time when the assets are purchased. Financing comes either via the government or via donations, often from abroad. In either case, government approval is required prior to the purchase of major pieces of capital equipment, or the execution of extensive renovations or rebuilding projects (Shani, 1986). Thus, hospital capital outlays are handled entirely outside the system by which the per diem rate is set. One possible advantage of this is that it increases government influence on capital budgeting decisions and hence provides opportunities for coordination and planning. The main disadvantage is that it probably discourages hospital managers from pursuing efficient ways of substituting capital for labor.

Outpatient Fees

Outpatient fees are set on a disaggregative basis, but here, too, the rate for any specific procedure is uniform for all hospitals. The open-ended nature of the fee-for-service arrangements available for most services on the outpatient side[16] may create an incentive for hospitals to move activity from the wards to outpatient clinics. At the same time, the rate set for outpatient surgical services is all-inclusive (i.e., the insurer is not billed separately for the surgeon's fee, use of the operating room, medical supplies, drugs, etc.). The all-inclusive rate may not have been set high enough to encourage hospitals to act vigorously in shifting minor surgical procedures to the outpatient setting. The outpatient fee schedule may be ready for a major review as, aside from inflation adjustments and a few specific corrections, it has not been revised in over a decade. The methodology for relating rates to costs has advanced significantly in the intervening years.

In summary, there are elements of fee-for-service, per diem, per admission, per capita, and global budget arrangements in acute-care reimbursement in Israel. The type of incentives that the reimbursement system generates for a hospital is related, in large part, to who owns the hospital. There are also significant differences between

inpatient and outpatient hospital care, with fee-for-service arrangements largely limited to the outpatient sector.

Hospital Reimbursement in International Perspective

This section's comparative analysis will consist of two parts. The first part will deal with the dimension of hospital reimbursement that has been the primary focus of the preceding discussion—the service unit which serves as the basis of payment. The second part of this section will deal with other dimensions of reimbursement, such as how the rates-per-unit of service are set, and the extent to which rates are uniform across hospitals and payors.

At this stage, a word of caution about the limits and dangers of such international comparisons of reimbursement arrangements is in order. Reimbursement is just one component of a health-care system. The significance of whether hospital reimbursement is fee-for-service or per diem, will depend on such issues as whether hospitals are owned by the government or by private entrepreneurs, whether admissions decisions are controlled by community-based physicians or hospital-based physicians, and the extent to which government regulates the bed supply. Such organizational and structural features vary widely among countries.

The Unit of Service

Table 7 indicates the unit that serves as the basis of payment for each category of hospital in Israel. The table also indicates examples of other countries in which these payment systems prevail. Each of the arrangements to be found in Israel has an analogue in at least one other country.

In the United Kingdom, hospitals are owned by the principal purchaser of services (which in this case happens to be the government). The situation is similar to that which prevails in Kupat Holim Clalit hospitals, and the incentives in both situations are to reduce total hospital expenditures per capita.

The global budget arrangement that covers KHC members at MOH hospitals is similar to arrangements that prevail at the majority of hospitals in Canada, France, and Italy. At the same time, the MOH-KHC agreement has certain features in common with the U.K. system, in that reimbursement in both is based on estimated need for a defined population. The U.K. is somewhat more sophisticated, as explicit adjustments are made to take into account demographic characteristics of the population served.

TABLE 7: HOSPITAL REIMBURSEMENT—UNITS OF SERVICE

	PAYOR = OPERATOR	GLOBAL BUDGET	PER DIEM	PER ADMISSION	FEE-FOR-SERVICE
Israel	KHC	MOH (for KHC members)	Private non-profits	Some for-profits	Outpatients
Other Countries	UK Sweden	Canada France Italy	Belgium W. Germany	US	US

Israel's private non-profit hospitals are governed by a per diem approach, as are those of many European countries. Some of these countries, such as Belgium, have developed hybrid per diem/global budget systems that may be of interest to Israeli policy-makers. As of 1982, hospital reimbursement in Belgium has reflected the difference between fixed costs and variable costs. It is estimated that 55% of costs are variable, and these are reimbursed on a per diem basis. Reimbursement for the estimated 45 % of costs that are fixed is not related to volume; these costs are reimbursed essentially on a "global budget" basis (De Cooman and Marchand, 1987).

The wave of the future in the United States appears to be inpatient reimbursement based on Diagnosis-Related Groupings (DRGs). Here, the key unit is the admission, and a different reimbursement rate is set for each of approximately 500 different types of admissions (based on such variables as admitting diagnosis and age of the patient). As yet, only some of the payors in the U.S. have adopted the system. Several European nations are considering adoption of some elements of the DRG approach, but few have to date taken concrete steps. In Israel, a greatly simplified version of DRGs is in place in some of the nation's proprietary hospitals; it is important to keep in mind that they constitute a very small fraction of the nation's total bed capacity. The fee-for-service arrangements that prevail in the outpatient area for most of Israel's hospitals are reminiscent of the situation in the United States, though it is worth noting that in the U.S. the fees are set largely by market forces, whereas in Israel they are set by government.

Other Dimensions of Reimbursement

There is substantial variation among countries in Europe, and among the various states in the United States, with regard to such dimensions of reimbursement as government's role in rate setting and the extent to which rates are determined prospectively. At the same time, it is possible to identify general tendencies within both the U.S. and Europe (Abel-Smith, 1985), and it is far simpler and easier to compare these two generic approaches than to consider the scores of variations on these themes. Accordingly, Table 8 contrasts the European and American approaches and indicates those areas where Israel is closer to the American model, those where it is closer to the European model, and those where it is unique.

TABLE 8: HOSPITAL REIMBURSEMENT—INTERNATIONAL COMPARISON

	UNITED STATES	EUROPE	ISRAEL
Number of Payers	3 large, many small	1—1,000, varies by country	1 large, 5–10 others
Uniformity among Payers	Not uniform	Uniform	Uniform until 1980
Uniformity among Hospitals	Not uniform	Not uniform	Uniform for public sector
Retrospective/Prospective	Moving to prospective	Prospective	Prospective
Use of Formulas	Supposedly determinative in some states	Input to analysis	Determinative
Government Role in Rate Setting	Weak	Strong	Strong
Link between Operating and Capital Reimbursement	Largely integrated	Variable	Largely separate

A striking feature of the American system is that there are substantial differ-

A striking feature of the American system is that there are substantial differences among payors with regard to both the unit of service that serves as the basis for reimbursement and the level of payment per unit of service. In Israel this was true until 1980. However, since then, Kupat Holim Clalit has paid for government hospital services in a manner that is radically different from that of the other purchasers of services. In most European countries, even those with several sick funds, the same system of calculating rates is in force for all payors (Glaser, 1984).

As noted above, many European countries use the "hospital day" as the basic unit for computing hospital reimbursement—in sharp contrast with the far more administratively complex American approach where each item of service is reimbursed separately. While the "hospital day" is also the principal basis of payment in Israel, Israel appears to be unique in having a uniform rate for all institutions. In contrast, in most countries of continental Europe, the proposed budget of each hospital is reviewed on its own merits (either by the government or by a consortium of the sick funds). Once an approved total budget has been established for a hospital, it is divided by the projected number of patient days to derive a per diem rate.

Reimbursement is largely prospective in Europe. This was not the case in the U.S. until several years ago, but most payers in the U.S. are moving rapidly in the direction of prospective arrangements. Israel, with its pre-specified per diem and pre-specified global budgets is much like the European model in this regard.

An interesting issue is the way in which formulas are used in the reimbursement process. All countries use some form of quantitative analysis in setting rates; the question is really the extent to which formulas are used as a *substitute* for judgment and negotiation. Officially, several of the states in the U.S. with rate-setting programs are supposed to rely heavily on such "objective" formulas. In practice, the dictates of the formulas are often overridden by legal appeals and political maneuverings, in which the formulas' rigidity and lack of sensitivity to particular situations are cited. In Europe, formulas are accorded a much more modest role. They are intended to serve as an aid to the review of individual hospital budgets, as a refinement of judgment, rather than as a substitute to judgment. Officially, Israel appears to rely more heavily on formulas than either the U.S. or Europe. The official per diem is completely determined by formula. While its significance is somewhat offset by supplementary subsidies and a variety of inter– and intra-organizational overlays, the formula-driven per diem remains nonetheless an important component of Israel's health care reimbursement system.

Hospital Reimbursement and Public Policy

In the past decade, control of health care expenditures, and in particular of hospital expenditures, has been a major preoccupation of government in many countries. Reimbursement systems have been scrutinized and modified with this objective in mind. The modifications can be grouped into two major categories. The first approach, which dominated in the early part of the period, was to concentrate on the *rate of increase* in hospital expenditures. Many countries in Europe and several states in the U.S. attacked the problem by constraining the rate at which each particular hospital's total revenues would grow each year.

The limitation of this approach was that, if a hospital was inefficient or overfunded in the year that served as the base for the calculations, then that inefficiency would get built into the system. Accordingly, governments began to turn their attention from the rate of change in reimbursement to the appropriateness of inter-hospital differences in outlays. In some places, such as Belgium and New York, this took the form of grouping together hospitals of a similar level of sophistication and trying to narrow the differentials among them in per diem costs (Hermess, 1986). The Federal government in the U.S. has taken a different approach to tackling the same problem. DRGs use a different yardstick of efficiency (the diagnosis rather than the day) and a different reference group (the nation or region, rather than a smaller grouping of hospitals). However, the goal—that of making reimbursement a function of the current level of production of well-defined products, rather than an outcome of history and tradition—is very much the same.

Israel, with its industry-wide per diem, has already overcome the problems inherent in trending forward past inefficiencies—at least as far as inter-organizational reimbursement is concerned. However, the tendency to trend forward the past is reported to characterize the allocation of monies to individual hospitals within the large provider organizations—the MOH and the KHC. The difference between inter- and intra-organizational arrangements in Israel is striking, and while the intra-organizational issues are beyond the scope of this paper, it is clear that they deserve further attention on the part of policy-makers.

Psychiatric Hospitals

Approximately half of Israel's inpatient psychiatric beds are owned by the government; the other half are privately-owned. Until recently, there was a clear division of labor between these two types of institutions, with the government institutions providing active treatments for short-term patients and the private institutions providing custodial care for long-term patients.

In addition to controlling half of the bed supply, the government is also the direct purchaser of inpatient psychiatric services for over 90% of psychiatric admissions. The government does seek payments from patients and their families to recoup a portion of the outlays. However, the reimbursement provided to a private psychiatric hospital on behalf of government-referred patients will depend only on the reimbursement rate set by the government; it will not be affected by the extent to which the government succeeds in collecting monies from private citizens. There are some instances where patients purchase services directly from the private psychiatric hospitals, but the number of such cases is very small.

Psychiatric hospitals, both public and private, are reimbursed on a per diem basis. According to government officials, the per diem is intended to cover those expenses that are "appropriate" given the nature of the particular hospital's patient population and assuming full capacity. As of 1983, the *method* for computing the rates for the private hospitals has been governed by a contract between the association of private psychiatric hospitals and the government, but the rate itself varies substantially from hospital to hospital. The contract specifies that the per diem rates should be based on the assumption that wage rates are the same in the private sector as in the government sector. However, as the private psychiatric hospitals care for a less acutely ill population, the staffing ratios that the government has determined to be "appropriate" for these institutions are significantly lower than those which prevail in government hospitals. Thus, while it is assumed that non-wage expenses (food, maintenance, etc.) per patient, per day, will be the same in private hospitals as in the government hospitals, the per diem for the average private hospital is approximately one-third of the per diem for the government hospitals. There is also substantial variation among the private hospitals themselves; in 1983 the per diem for the hospital with the highest rate was more than 50% higher than the per diem for the hospital with the lowest rate. Rates must be approved by the inter-ministerial "price commission".

When per diem rates are uniform among institutions, in terms of the incentives generated it matters little how the per diem is determined. In all such cases, providers have an incentive to increase the number of days of care provided and to decrease costs per day. However, when the per diem rates are set on an institution-specific basis, one needs to inquire further into how they are calculated in order to determine what incentives flow from them. The crucial factor is whether the rate is in any way related to the expenses actually incurred by the institution. If reimbursement is unrelated to actual expenditures, then profit-maximizing providers will be encouraged to reduce per diem costs. However, if income goes up when one's expenditures go up, the incentive to reduce costs may be neutralized, and in certain situations there may even be an incentive to increase costs.

In the case of reimbursement of private psychiatric hospitals in Israel, the per diem is set in such a way that, at least in the short run, it is not affected by the actual expenditures of the particular institution, *with regard to most types of expenses.* An increase in non-wage expenses does not lead to an increase in rates, as the non-wage component of the formula is driven by the level of expenditure in the government psychiatric hospitals. The resulting incentive is to try to economize on these non-wage items. Similarly, the formula assumes government sector wage rates, irrespective of the wage levels actually prevailing in the particular private hospital. This creates an incentive to keep wage levels low. The situation for staffing levels is more complicated. The "appropriate" staffing level computed by the government for each private hospital is based not on actual staffing, but on professional judgment of the complexity of the patient load.[18] This would seem to give management an incentive to reduce staffing levels. However, the contract stipulates that the per diem rates will be determined not by the "appropriate" level alone, but by the lower of the "actual" and the "appropriate" staffing levels. This clause, which deters understaffing, was apparently put in as a quality control measure.

One of the most interesting features of the 1983 contract between the Ministry of Health and the private psychiatric hospitals is that it stipulated that rates could be adjusted (on a one-time basis) up to 5% in either direction, depending on each hospital's degree of compliance with the recommendations of a quality inspection team from the Ministry. The team did indeed carry out such inspections, and produced a report with detailed quality ratings for each facility (Ministry of Health, 1984). However, the rate adjustments were never implemented.

Over the life of the contract, staffing at levels in excess of that determined "appropriate" by the government committee of experts does not lead to an increase in the per diem rate. The only adjustments that have been made have been inflation offsets. However, contracts are periodically renegotiated, and hence the long-run dynamics are more complicated. A particular hospital may choose to staff at a level similar to those of hospitals with higher per diem rates, and absorb losses in the short-term, in the expectation that doing so will increase its chances of securing a high per diem rate in the next round of negotiations.

As a corollary to its policy of deinstitutionalization of the mentally ill the government is attempting to decrease the country's per capita supply of psychiatric beds. It is seeking to implement the reductions primarily among the private institutions. Given this objective and the influence the government can exert on the per diem levels (as the primary purchaser of services), it is quite natural to inquire whether, and to what extent, government has used the reimbursement system to encourage bed reductions in the private sector. To what extent is the government keeping reimbursement rates low to squeeze the private hospitals financially and encourage them to close their doors?

Government officials claim that this has not been the case. Doing so might lead to a reduction in beds over time, but in the interim patients would suffer as quality of care declined. Moreover, the government has a more precise and effective tool in its hands with which it can promote its objectives regarding system capacity—it has simply ceased to refer patients to most of the private psychiatric hospitals. In the past, patients in the government psychiatric hospitals who were judged to lack further rehabilitation potential were transferred to the private hospitals, and the vast majority of patients admitted to private hospital arrived via that route. Now, such patients continue to be treated in the government hospitals. The patient loads at the private hospitals can be decreased without reducing the reimbursement rates and thereby jeopardizing the quality of care.

The focus of this analysis has been reimbursement of the private psychiatric hospitals, as the level at which the per diem is set for the government hospitals is less significant than the level at which it is set for the private hospitals. In the case of most patients at government psychiatric hospitals, the government is simply selling services to itself. At first glance, it appears that an incentive to reduce costs would exist, irrespective of the level at which the per diem is set—much akin to the situation in KHC hospitals in the acute care sector.

However, the per diem for government hospitals does have some relevance, as it influences the flow of funds among government ministries (primarily from the Ministry of Defence to the Health Ministry), and the magnitude of the payments the government can seek from the families of patients hospitalized in government hospitals. And, of course, the level at which the per diem is set at government hospitals becomes an important item of information, which feeds into the negotiations with the private hospital association.

For the government hospitals, the per diem for psychiatric care is uniform across institutions. It is set by dividing projected cost for the government system as a whole by the number of days projected for the coming year. In effect, payments made by patients at lower quality government institutions are used to subsidize the care of patients at higher quality institutions within the system.

Long-Term Care Institutions

Many of the same issues that are of concern in acute-care reimbursement also play a major role in long-term care reimbursement. However, two issues in this sector have received particular attention: quality and capital costs.

As in the psychiatric sector, the need to promote and preserve high quality has been an important consideration in reimbursement policy in the long-term-care sector, both in Israel and abroad. Smits (1984) notes:

There is an important difference between nursing homes and hospitals: the pervasive concern that nursing-home care may not be of adequate quality. . . many commentators on long-term care would express concern that cost savings in this field can arise from poor care rather than efficiency. (p. 54)

Vladeck (1980) describes how, in the United States, efforts to promote quality have been hindered by the venality of private nursing-home owners and government efforts to reduce expenditures on nursing-home services.

Attempts have been made to use reimbursement systems to promote quality or, at least, to ensure that they are quality-neutral. These include making bonus payments to homes that score high on various indicators of quality and experimenting with nursing-home reimbursement systems that are sensitive to case mix (Smits, 1984 and Weissert *et al.*, 1983).

Capital reimbursement is another major challenge. Cohen and Holahan (1986), addressing the situation in the United States, declare:

The reimbursement of capital costs has been perhaps the most complicated aspect of nursing-home payment policy. Because of the direct effect on nursing-home profitability, capital reimbursement methods have been highly controversial, despite the fact that capital costs are, typically, less than 15% of the nursing-home costs. (p. 23)

Two major approaches to capital reimbursement are evident in long-term care in the U.S. One approach is to link reimbursement to the actual costs incurred by the owner. The cost at which the facility was initially acquired serves as the basis for depreciation payments. Interest payments on any loans taken to acquire the facility are reimbursed on an ongoing basis. The second major approach is to pay a flat rate which does depend on actual historical costs, to compensate for the provision of capital.

The main disadvantages of the first approach (institution-specific rates) are that it encourages excessive reliance on debt financing instead of equity financing (to maximize interest payments), and that it encourages the purchase and sale of nursing homes as a real-estate investment. The main disadvantage of a uniform flat-rate system is that it creates an incentive to underinvest in construction and maintenance. If the flat rate is too low, entrepreneurs will seek other industries in which to invest their capital.

The sections that follow will provide a brief introduction to the organization and financing of long-term care in Israel. Then the systems of reimbursement for each of

the major levels of care will be considered in turn. Special attention will be given to the issues of quality of care and capital reimbursement.

In Israel, four levels of need have been defined for the purpose of differentiating among institutional long-term care services: nursing level, mentally frail, frail, and independent. Government, public non-governmental organizations, and private for-profit entrepreneurs all play a role in the provision of long-term care services, with the mix of ownership varying significantly among levels of care. Approximately one-half of the long-term care beds in Israel are for the independent elderly. Public, non-governmental agencies are the major providers of this level of care, with responsibility for over two-thirds of independent beds. Nursing-level beds account for approximately one-third of institutional long-term care capacity, with private for-profit institutions accounting for roughly half of the nursing-level beds. The voluntary sector's role in the provision of nursing-level care is very limited. Beds for the frail and mentally frail account for less than one-eighth of the total capacity; at this level of care, government is the dominant provider (Factor, Guttmann, and Shmueli, 1982).

The extent to which long-term care institutions are dependent on government for financing also varies according to level of care. Government finances the care of approximately three out of every four patients in nursing-level and mentally frail beds (taken together), whereas it finances the care of fewer than one-third of patients at the independent level. The situation for patients in beds for the frail elderly is somewhere between these two extremes. In the case of nursing-level and mentally frail beds, it is the Ministry of Health that finances the care of government-sponsored patients, whereas among independent and frail patients the principal government payor is the Ministry of Labor and Social Affairs.

Reimbursement rates for long-term care institutions are stated in per diem terms. As in the case of private psychiatric hospitals, and unlike the situation in acute-care hospitals, rates are assigned on an institution-specific basis. The method for determining the official government rate, and the incentives emanating from the reimbursement system vary somewhat with ownership status and the intensity level of the service. However, irrespective of the methodology used, all these rates must be approved by the "price committee". Note that in the long-term care sector the government-established per diem applies only in those cases where the government is either the purchaser or provider of services; when private individuals purchase services from either the private sector or the public sector, rates and terms are set by the market.

Nursing-Level and Mentally Frail Care

The official government per diem is an important influence on nursing-level services, as government is the dominant purchaser of services at this level. Rates vary substantially among the various ownership types, with the government hospitals receiving the highest rates, the public hospitals an intermediate rate, and the private hospitals receiving the lowest rate. The differences are even greater than they appear to be in the officially quoted rates. This is because among private institutions, municipal taxes, pension expenses, employee-compensation payments, and capital expenditures must all be financed out of the official per diem. In contrast, government institutions are exempt from municipal taxes, while pensions, employee-compensation payments, and capital acquisitions are all funded through sources that supplement the official per diem.

The issue of the appropriateness of such differences between the rates for public and private nursing homes emerges periodically onto the policy agenda. Those who support the higher rates for public institutions make two major contentions. First, they argue that the public institutions tend to get the most seriously ill patients. Indeed, they note as proof, those public institutions that tend to care for the most seriously ill patients (the government geriatric centers and ESHEL) receive higher rates than the other public institutions. This argument is buttressed by the second contention—that the public institutions provide higher-quality care. With regard to the first argument, those who would eliminate, or at least narrow, the differentials respond that private institutions also get many very ill patients and that the extent to which public institution patients require more intensive care has never been documented and quantified. With regard to the second argument, many of those who would narrow the differentials acknowledge that *at present*, quality tends to be higher in the public institutions. However, they contend that the rate differentials are the *cause*, rather than the *outcome* of the lower level of quality in the private institutions. They argue that many of the private institutions wish to raise their staffing levels, enrich their programs, and improve their physical facilities, but that this will not be possible until rates are raised to the levels prevailing in the public sector. Finally, advocates of rate equalization argue that it is not fair to the nation's elderly persons that some of them are fortunate enough to receive high-quality/high-cost care, while others are "sentenced" to low-quality/low-cost care.

Behind the specific arguments about the extent to which the public sector has more seriously ill patients and the extent to which the public sector provides higher-quality care lies a more fundamental ideological difference. Many of those who argue in favor of higher rates for public institutions believe that, by their very nature, private institutions tend to be more interested in profitability than in patient welfare. Accordingly, to the extent that growth in long-term care is required, they

wish to see it occur in public institutions. Many of those who wish to narrow the rate differentials believe that competition is a positive force in health care and that private providers tend to be more efficient than public providers. They wish to concentrate capacity expansion in the private sector, both because they feel private providers can do a better job, and because they wish to avoid a situation where the government will have to incur major capital expenditures.

At least until recently, it appears that the champions of the public provision of care have prevailed. Recently, the political shift to the right and growing budgetary pressures have led to a reconsideration, in some circles, of the appropriate role of the private sector.

In terms of the technical procedures used to set rates for individual institutions, the procedures used for public sector providers appear to have been rather ad hoc, and have never been clearly articulated. For example, when nursing-level units were set up at Sha'are Zedek and Hadassah Hospitals, their rates were set at 40% of the acute hospital per diem rate, and were significantly higher than the rates for nursing beds in other institutions. The rates appear to have been based on qualitative 'expert judgment' of the level of patient need, rather than a systematic assessment of a sample of patients.

To some extent the lack of clarity regarding how rates are set for government and ESHEL institutions is an outcome of the fact that such institutions essentially operate under global budget arrangements, despite the fact that per diem rates are often quoted. In budgeted systems, it is natural for revenues to be determined by negotiation rather than by clear-cut formulas. That the government institutions should be operating under a budget system is obvious; the Ministry of Health is both the purchaser and provider of the services. Less obvious is the fact that ESHEL institutions also operate in many ways as if they were owned by government. In ESHEL institutions, capital outlays are financed via government grants, which are made before the asset is acquired, in contrast to the situation in private institutions, where capital expenses are reimbursed over the long-term (via imputed rental fees to be discussed below). As ESHEL operates as a quasi-governmental agency, it is understandable that the rules for setting budgets and per diem rates remains somewhat fuzzy.

The system for setting rates within the private sector is clearer. Reimbursement for personnel expenditures is cost-based, up to a prescribed ceiling. Food, maintenance, and other categories of operating costs are reimbursed at a flat rate, which is not determined by actual outlays. Capital expenses are reimbursed via a per-patient rental allowance, rather than in accord with historical cost, or market value. Entrepreneurs receive an additional "profit payment," which is set equal to 10% of all

approved expenditures, with the exception of the rental allowance. No adjustments are made for differences in patient needs.

The largest category of expenditure in nursing homes, and the category of greatest interest to those concerned about quality of care, is manpower. The reimbursement ceiling for manpower is set in accord with a staffing norm that states how many nurses, aides, maintenance personnel, etc., are required per patient. The ratio varies with institutional size, as the need for certain types of personnel does not vary with size of patient load in a linear fashion. Nursing-home owners have no financial incentive to staff above the norms, as doing so will bring them no additional reimbursement. And, indeed, as of February 1987, virtually all the private nursing homes were staffing at levels which ensured them per diem rates within one shekel of the maximum provided by the regulations. In effect, the reimbursement formula's staffing norm has set both a floor and a ceiling on a major component of the quality of care in Israel's nursing homes.

This may not always have been the case. In the mid–1970s, reimbursement is reported to have been based on a complicated point system, which sought to reflect the quality of care provided by the institution (Kane and Kane, 1976). The point system considered six different criteria: the staffing ratio (up to a specified maximum), the need for beds in the area where the facility was located, the physical condition of the facility, the quality of the physician caring for the residents of the home, the mix of non-medical personnel, and a subjective assessment of the human-relations component of the care provided. As a result, there was significant variation among the privately-owned chronic disease hospitals; in 1975 the highest rate was 45% higher than the lowest rate. Further research is needed to determine why the system has been modified.

While there is no formal contract between the chronic-disease hospitals and the government, government does nonetheless consult with the industry in setting rates. In the past few years, these consultations/negotiations have been quite tumultuous, with the industry threatening several times to discharge all its government-sponsored patients, and, on one occasion, even following through on that threat.

For several years, Israel's nursing-home operators have been contending that the current rate levels are inadequate. Government has held back increases, in part because of budgetary necessities, and in part because the nursing homes were below the staffing norms and hence were in a position to increase their rates by increasing their staffing levels.

At present, the contention that the private homes are below the staffing norms is no longer tenable. Government is currently concerned about the quality of care in the private nursing homes, and a rate increase is under consideration. In all likeli-

hood, it will be made conditional on increases in staffing levels, as would seem appropriate. Technically, it should be possible to develop mechanisms to ensure that these staffing increases are actually implemented. Budgetary constraints, however, could prevent these changes in staffing norms and reimbursement levels, and improvements in quality that would be likely to come in their wake.

As noted above, there exists a small contingent of residents who purchase care from private chronic disease hospitals through the free market, rather than via government referral and financing. Interestingly, in some institutions, the rates charged private patients are the same as the rates charged to the government. Apparently, the numbers of patients involved is so small that instituting a two-tiered price structure would not generate enough additional revenues for the private institutions to offset the bureaucratic and political difficulties that would be created by doing so.

Frail and Independent Level Care

The rates for government-financed patients requiring frail-level care are set not by the Ministry of Health, but by the Ministry of Labor and Social Affairs—which also finances the care. Whereas government is the dominant purchaser of chronic-hospital services, it purchases only a small portion of frail-level care. This has two important implications. First, it makes it difficult for the government to dictate terms to the owners of the homes for the aged. As there exist alternative sources of patients, if the government rates are not set high enough, the homes will not agree to accept government patients. Such a situation prevails now, and a committee has been established to review and update the rates.

The government's relatively minor role in the marketplace also limits the sensitivity of a rest home's affordable quality level to changes in the level of government reimbursement; almost all the homes have additional sources of revenue that can be put toward quality improvements.

While the government uses the same formulas to calculate the per diem for each rest home, there is some variation in the actual rate for different homes. The variations arise from several sources. First, the patient mix—between nursing-level, frail, and independent residents—varies among institutions. Second, the per diem rate will to some extent decrease with institutional size, as the budgeting methodology recognizes that certain types of staffing expenses (such as that of the home's director) and other expenses (such as that of maintenance equipment) are essentially fixed, and do not rise in proportion to the number of patients. Third, the budgeters have some discretion in determining the appropriateness of some types of non-personnel expenses. For example, while the guidelines specify that each home should be reim-

bursed for appropriate transportation expenses, the transportation needs of a rest home in Zefat are likely to be greater than the transportation needs of a rest home in Tel Aviv.

The variation in actual rates, combined with the complexity of the calculations, does provide government with some ability to reward providers whose past behavior is considered socially beneficial, or to use the per diem level to encourage certain types of behavior in the future. This discretionary power may have been used recently in attempts to expand the supply of beds available to government-subsidized patients; newer homes were accorded higher rates than some of the Labor Ministry's established vendors. Reportedly, the assumption was that continued access to the established vendors could be taken for granted, while the newer homes had to be courted. This assumption appears to have proven false.

Rates for private pay patients—whether at public homes or private homes—are not regulated by either the Ministry of Labor and Social Affairs or by the Ministry of Health. In normal times, the rates are set by market conditions. During the recent emergency economic program, rate *changes* were subject to the review of the Ministry of Industry and Trade. That ministry did not conduct any in-depth analyses of the conditions in a home, so as to evaluate the appropriateness of proposed rate increases. Neither did the ministry review whether the rates that were in effect when the price controls were instituted (1985) were justified. The ministry focused on rate changes rather than base rates, and its primary consideration was the good of the economy as a whole, rather than the specific needs of the long-term care sector.

Many private and public homes charge lump-sum admission fees, in addition to monthly payments. The appropriateness of such lump-sum payments is one of the major topics of discussion among industry leaders. Some argue that requiring such payments forces elderly persons to sell their homes and thereby increases feelings of dependency upon the institution among the residents. Others counter that financing care in this manner permits homes to improve the quality of care, and to reduce monthly payments to more manageable levels.

The other major issue of interest regarding the private market is the extent to which rates are adjusted to reflect differences in patient condition. Data on this issue are lacking. Industry sources suggest that rates are largely uniform, with patient-specific rates set only in cases of extreme need.

Private patients tend to pay approximately two to three times the rates available from the government, yet the number of persons seeking private placement is substantial. Accordingly, it is no suprise that many proprietary rest homes have chosen not to rely exclusively on government-sponsored patients.

The Ministry of Social Affairs purchases services from private homes for the aged, from homes sponsored by the Association for the Planning and Development of Services for the Aged in Israel (ESHEL), from homes sponsored by other voluntary organizations, and from government geriatric centers. ESHEL operates eight facilities that were built with funds from the Joint Distribution Committee and the Government of Israel, and then turned over to independent, local, voluntary organizations that are responsible for operating the homes. They tend to be of higher quality than the other homes—both in terms of physical facilities and in terms of staffing levels.

The Ministry of Social Affairs uses the same methods for setting rates for private homes and for those public homes that are not ESHEL homes. A key determinant of those rates are the staffing patterns recommended by the inter-ministerial "Darbassi Committee" in 1981 (Ministry of Labor and Social Affairs, 1981). The committee employed the term "minimum" staffing levels to refer to the staffing patterns it felt were appropriate for non–ESHEL homes. The term is somewhat misleading, as the prescribed levels also serve as the *maximum* for reimbursement purposes. The committee specified separate "minimum" staffing ratios for independent, frail, and nursing/mentally frail patients. Most institutions contain a mix of patients from these different categories. Therefore, before determining an approved staffing pattern for a particular institution, a government social worker will estimate the distribution of patients among the three need levels.

Wage levels equivalent to those in the civil service are assumed. A food budget is set at a uniform rate for all the homes. After the calculated expenditures for food and wages are summed together, each home is granted an additional 20% to account for supplies, maintenance, and related costs. Private homes that utilize rented facilities are reimbursed for these outlays, up to a total of $50 per person, per month. Finally, private homes are granted an additional 4% as a profit allowance. Once a total approved budget is determined for a particular home, it is "allocated" among the patients. Rates are set separately for nursing-level, frail, and independent patients, at the ratio of 2.5:1.5:1.0.

The ESHEL homes benefit from two significant variations from this formula. First, approved staffing at the ESHEL homes is based upon the "maximum" staffing pattern developed by the Darbassi committee. Second, salaries at ESHEL homes are set at the same levels as in hospitals, and hospital employees receive a number of bonuses and benefits not given to other civil service employees.

It is not certain whether the higher levels received by the ESHEL homes are justified in terms of a more complex case load. The higher rates do, however, serve a very important function. Unlike the other homes for the aged, most ESHEL homes receive almost no private-pay patients. Accordingly, they lack the capacity to cross-

subsidize the care of government-financed patients with monies derived from private pay patients.

The current reimbursement arrangement—in both ESHEL and non–ESHEL homes—creates an incentive to economize on maintenance and food expenditures and an incentive to locate employees willing to work at low wage rates. There is also a clear incentive to rent a facility rather than to purchase it, as no depreciation payments are made in lieu of rental reimbursement.

With regard to actual staffing levels, the incentives are somewhat complicated. As in the case of psychiatric and chronic disease hospitals, reimbursement depends on "approved" staffing, not actual staffing. This would appear to create an incentive to understaff. However, the "minimum staffing level" serves a quality-control function as well as a reimbursement function. Homes staffing below that level can have their licenses revoked, though in practice this is seldom done. Thus, homes have an incentive to understaff to the extent that they can get away with it.

Homes for the aged have a great deal of control over whom they admit. Each institution has an admissions committee, which determines whether particular potential patients are "appropriate" to the facility. There is an incentive to avoid patients with heavy care needs. However, this is mitigated somewhat by the fact that approved staffing levels can vary among institutions in accord with their mix of frail and independent patients.

Long-Term Care Reimbursement in International Perspective

It is hard to carry out useful comparisons between Israel's approach to the reimbursement of proprietary nursing-level services and the systems for reimbursing such services in other countries. In most industrialized nations other than Israel, the United States and Canada, nursing-level facilities tend to be owned by either the government or the voluntary sector (Kane and Kane, 1976).

One of the most striking features of long-term care reimbursement policy in Israel is that the rules that apply depend in large part on who owns a facility. These distinctions are made at all levels of care. Many Canadian provinces follow a similar approach, with reimbursement being calculated differently for proprietary, voluntary, and government institutions (Kane and Kane, 1985).

In most of the nations of Europe, nursing-level care is reimbursed on a per diem basis that is derived from a prospectively approved annual budget. The U.S. is moving away from cost-base reimbursement, in the direction of prospective payment for nursing homes. In this regard, Israel is not lagging, as its long-term care reimburse-

nursing homes. In this regard, Israel is not lagging, as its long-term care reimbursement system is already largely prospective. Several other countries have begun to experiment with reimbursement methods which are based on some explicit measure of patient need or case mix; Israel has not yet experimented with such tools.

The difficulty the Ministry of Labor and Social Affairs has had in finding long-term care placements for frail persons in its charge has much in common with the dilemma faced by Medicaid in the United States. There may be lessons to learned from the Medicaid experience—perhaps as much from the mistakes made as from the solutions developed.

The reimbursement of capital costs via imputed rental costs, which characterizes nursing-level reimbursement in Israel, could serve as a model both to the Ministry of Social Affairs and to other countries. It is indeed such an approach that is currently being recommended by several experts on nursing-home finance (Cohen and Holohan, 1986).

Institutional Reimbursement—Differences Among Types of Institutions

There are several important differences between acute-care hospitals, long-term care institutions, and psychiatric hospitals that are worth noting. First, per diem arrangements are much more significant in the non-acute institutions than in the acute-care hospitals—the former are not modified by anything analogous to the Kupat Holim-government package deal. Generally speaking, psychiatric hospitals, chronic disease hospitals, and rest homes have an incentive to keep their beds filled; the current imbalance between marginal costs in the rest homes and the rates specified by the government is probably temporary. At the same time, it is not clear whether the daily rates in any of these types of institutions are high enough to induce an investment in additional bed supply.

Second, as Table 9 indicates, the type of per diem system in place varies among sectors. Whereas the acute-care sector's per diem is uniform across all hospitals, in the other two sectors the per diem is calculated separately for each hospital. Reimbursement of private psychiatric hospitals is governed by an industry-wide contract, but there is substantial variation among hospitals, whereas in the long-term care sector there is no such contract, but little variation among institutions.

It is noteworthy that the government's rate-setting role in the psychiatric and long-term care sectors is confined to those situations where it is the purchaser of the services; in the acute-care sector, government reimbursement regulations also govern transactions between public, non-governmental organizations.

TABLE 9: THE PER DIEM IN INSTITUTIONAL REIMBURSEMENT —SUMMARY

	ACUTE HOSPITALS	PSYCHIATRIC HOSPITALS	CHRONIC DISEASE HOSPITALS	REST HOMES
Uniform across hospitals?	Yes	No	No	No
Based on a contract?	No	Yes	No	No
Formula dependent on ownership type?	No	Partially	Yes	Yes
Is staffing ratio facility specific?	Not applicable	Yes; ratio based on judgment	Yes; ratio based on formulas	Yes; ratio based on formulas
Profit allowance for proprietaries?	Not applicable	10%	10%	4%
Reimbursement of capital outlays?	Handled via separate process	Included in "profit"	Imputed rent	Actual rent
Impact of staffing ratios below norms?	No norms; no impact	Lowers rate	Lowers rate	Lowers rate
Impact of non-staffing outlays below norms?	No norms; no impact	No norms; no impact	No norms; no impact	No norms no impact

There are important differences among sectors in policy objectives regarding bed capacity. In the psychiatric sector, the objective is to decrease bed supply substantially; in the acute sector, the objective is to keep the bed supply at approximately the current level (or perhaps to decrease slightly); and in the long-term care sector, with the expected growth in Israel's frail elderly population, government policy is to expand the bed supply. Interestingly, these differences have not been given a clear expression in reimbursement policy. For example, there has been no deliberate policy to raise rates for nursing-level beds in order to encourage new construction.

The extent to which institutions face a financial incentive to improve the quality of care varies by institutional type. The rest homes, which can benefit from attracting more lucrative private-paying patients, do have an incentive to improve quality. Note, however, that this applies primarily to those dimensions of quality important to prospective customers, rather than the dimensions of quality emphasized by professionals. Among chronic disease hospitals, the rewards for quality improvements are slimmer, as the private market is very small, and public rates do not respond to quality changes. In the psychiatric sector, quality improvements have not been rewarded in the short term (despite contractual commitments to the contrary). However, as rates are institution-specific, investments in quality can bear fruit in subsequent contract negotiations. In the acute-care sector, reimbursement is related to volume in some institutional settings, suggesting that there would be a financial incentive to provide quality care at least in terms of customer service. However, to the extent that the regionalization policy is effective and eliminates customer choices, this financial incentive is eliminated.

In thinking about how and whether to create stronger links between reimbursement and quality in institutional reimbursement in Israel, policy-makers will have to consider several issues. The first issue is whether quality should be defined in terms of inputs, processes or outcomes, for purposes of reimbursement. A second issue is whether to build quality adjustments directly into the rates-per-unit of service or to increase the ability of consumers to choose among institutions, and supply them with information on quality differences among institutions. A final issue is whether the methods of quality assessment that are appropriate for quality assurance efforts are also appropriate for reimbursement purposes.

The Sick Funds

Papers on reimbursement do not usually include analyses of the determinants of insurance firms' revenues. This is because most of the health-care reimbursement literature originates in the United States where, at least until the relatively recent growth in HMOs, the insurance function and the provision of care were kept, for the most part, organizationally distinct. As reimbursement is a "provider" issue, the revenues of insurers could safely be ignored.

This analysis of reimbursement in Israel does consider reimbursement of the nation's sick funds. In Israel, the sick funds are not merely insurers, but are also major providers of care—particularly of outpatient care. Moreover, as substantial components of sick fund revenue are determined by governmental decisions, there is an important place for public policy to determine what financial incentives should be established to guide the sick funds.

Israel has four major sick funds. Kupat Holim Clalit (KHC) is affiliated with the Histadrut labor federation and covers close to 80% of the insured population. Leumit is affiliated with the National Workers Labor Federation and covers approximately 5% of the population. The Maccabi and Meuhedet Sick Funds are independent, and cover approximately 10% and 5% of the population, respectively.

The sick funds receive income from four principal sources: premium payments from members, co-payments from members, parallel-tax payments from the members' employers (which are channelled via the National Insurance Institute), and, in the case of some sick funds, direct government subsidies. The Gadish Report (1986) indicated that in recent years approximately 50% of KHC revenues have come from the parallel tax, that the government subsidy accounts for an additional 10% and that the remaining 40% have come from premium payments and co-payments. Government payments to the sick funds takes two forms. First, government pays the premiums for several specific categories of citizens, including new immigrants (for their first six months in the country), welfare recipients, and elderly persons who were never sick fund members. After consultations with the sick funds, the government specifies the amount it is willing to pay for persons in each of these categories (the rate is the same for all sick funds) and then leaves it to the individual to select among the sick funds.

Second, government provides the sick funds with direct subsidies. The reliance on direct government subsidies as a funding source varies among the funds; it is

greatest at the KHC, while Maccabi does not currently receive any government subsidy. The role of government subsidies in financing the health-insurance system has declined dramatically over the past decade; in 1976 it accounted for 33% of revenues, while in 1984 it accounted for 11%, and in 1986 it was expected to account for approximately 4% (Ron, 1986). The cutback in government subsidies has increased dependence on the alternate, more market-related,[19] sources of financing—members' premium payments and parallel tax payments. The amount of revenue that a sick fund can derive from either of these two categories of payments depends on the sick fund's position in the market—how many members it has and the income levels of its members. Associated with the cutback in the magnitude of the subsidies have been efforts to determine the subsidy level on a prospective basis.[20] There is some feeling among health-care analysts that the days when sick funds could run up significant deficits, and then rely on government to bail them out, have ended. However, it is too soon to tell if such a radical change has indeed occurred.

With only a few exceptions, parallel-tax payments are made to the National Insurance Institute on behalf of all working persons in Israel; employers make payments on behalf of salaried personnel, while independents make payments on their own behalf. The tax is set at 5% of taxable income, with the definition of "taxable income" being the same as for all other payments to the NII.[21] Income above a certain ceiling (which was four times the average wage, as of July 1987) is exempt from the tax. As a result, the tax for persons in the highest income brackets constitutes a smaller percentage of total income than does the tax for persons of moderate income: i.e. the tax is regressive. However, the ceiling has been raised considerably in recent years, and for the vast majority of insurees, the NII payments currently constitute a proportional taxation system.

Whether parallel tax monies should be considered part of government's contribution to health care constitutes an important conceptual and political issue. Those who wish to emphasize government's role in financing health services note that the NII is a government institution and that parallel-tax payments are required by law. Those who wish to portray government's contribution to the system as minimal contend that the source of parallel-tax payments is the employers, rather than the government. Indeed, employer contributions to health insurance from Israel historically were guaranteed by collective bargaining agreements, rather than statute. Even today the NII sees its role in the health system in very narrow terms. Whereas in other areas of NII activity the Institute sees itself as insurer and advocate, in the health field it acts solely as an administrative agency for collecting monies in an efficient manner.

The monies raised via the parallel tax are distributed among the sick funds according to a formula written into the national insurance statutes. After a small percentage of the monies collected are set aside to underwrite NII administrative expenses, the total amount that remains is divided into two separate components. One component, which contains 4/5 of the total, is divided among the sick funds in proportion to the value of the parallel-tax contributions made on behalf of each sick fund's members. The second component, which contains 1/5 of the total, is divided in proportion to the number of contributors who belong to each sick fund. The result is that, generally speaking, a sick fund gets more money from the parallel-tax system if its members are wealthier than if they are poorer.

The same is true of the premium payments received directly from the members. Here, too, the absolute level of the payment to the sick fund rises with income, though as a proportion of income the payment declines with income because premium payments are regressive. Over time, the premiums—at least at the KHC—have become less regressive.

From a public-policy perspective, it is not immediately clear whether it is preferable to have premiums rise with income level. From one perspective, this may be preferable, as (to some extent) it distributes the financing burden on the basis of ability to pay. However, tying premiums to income creates an incentive for sick fund managers to seek patients from higher income groups and to avoid lower income areas. A professional committee has recently completed an analysis of various proposals for changing the formula for distributing the *mas makbil* (parallel tax) monies among the sick funds, and a report has been submitted to the policy-making level. The committee considered various ways of compensating those funds which care for the most illness-prone citizens.

While both parallel-tax payments and direct member premiums are income related, there is an important difference between the two payment sources. The formulas for collecting and distributing the parallel tax are set by law, and, as a result, they are uniform across all sick funds. By contrast, sick funds are free to set their own premium schedules, and do not require government approval. As a result of different philosophies and market strategies, there are interesting, and in some cases significant, differences in fee schedules. Consider the following examples:

- While premiums at all the other sick funds are regressive, premiums at Meuhedet are a straight 5% of income, up to a prescribed ceiling.
- Meuhedet calculates premiums on the basis of total family income, while the other sick funds calculate premiums for each wage earner separately (though discounts of varying sizes are offered to the second wage earner).

- For persons with very high incomes there are substantial differences in premium requirements. Premiums are lowest at Maccabi, highest at KHC and intermediate at Meuhedet and Leumit.

These differences, along with comments from sick-fund managers, suggest that at least some of the sick funds give careful consideration to whom they attract and how much money they derive from different categories of members. What are the sick funds' marketing objectives? Under existing conditions, a sick fund that is a textbook profit-maximizer has an incentive to market to the relatively well-off (as revenues from both members' premiums and from the parallel tax rise with income) and to those who are well (as costs are lower). The elderly are a triply undesirable population—they tend to be sick, they generate little in the way of parallel-tax payments (as most of them are retired), and they tend to have relatively low incomes. For most of the elderly, sick fund income is limited to 4% of the pension distributed by the NII.

Of course, a major question in the attempt to understand and predict sick-fund behavior is whether or not they should be viewed as pure profit-maximizers. It seems clear that, at least in the case of the KHC and Leumit, one of the functions of the sick funds is to draw persons into their parent organizations—the labor federations. A poor, illness-prone member is no less valuable to a labor organization than a wealthy, relatively healthy member. Moreover, an ideology of social welfare constrains the pure economic calculus. And even the independent sick funds may function more as physicians' cooperatives—where the objective is to maximize the revenue of affiliated physicians—than as profit-driven capitalistic firms. Nonetheless, in all of the sick funds, even if profit maximization is not the sole objective, the need to maintain a positive budget balance must serve as an important constraint on sick-fund behavior.

A related issue is the extent to which the sick funds are free to set premium levels in accord with their own objectives. Due to the dominant market position of the KHC, its pricing decisions act as a major constraint on the decisions of the other sick funds. The KHC's premium rates, in turn, are set not by the fund's management, but by the governing body of its parent organization—the Histadrut.

The role of Shiloach must be mentioned in this regard. Shiloach is a private medical insurance company that does not itself directly provide any health-care services. Its role has not been stressed in this report because it cannot be considered a health care provider. However, it is important that Shiloach be considered here, because, as a competitor to the sick funds, in their capacity as insurers, Shiloach can serve as an important constraint on sick-fund behavior.

Shiloach does not receive any monies from the government or the National Insurance Institute. All its funds come directly from subscribers. Premiums are unrelated to income, and pre-existing conditions are excluded from coverage.

Shiloach is especially attractive to upper-income persons. To begin with, its rates do not rise with income. Second, persons who enroll in Shiloach instead of (as opposed to in addition to) one of the sick funds, are entitled to a partial refund from the NII. Finally, Shiloach's rates are high and are beyond the means of many low- and middle-income persons.

The presence of Shiloach in the market puts a constraint on the ability of sick funds to subsidize the care of poorer members out of premiums received from wealthier members. If this is done to too great a degree, then there will be a tendency for the wealthy members simply to switch over to Shiloach.

Recently, an important quirk was introduced into the rules of the game that detracts somewhat from the pressures on the sick funds to recruit members from the upper income groups. As part of the 1986 agreement between the government and the KHC, the government partially insulated the KHC from changes in its share of the parallel-tax pie. The government promised that, if the KHC's income from the NII fell below a certain agreed-upon level, it would make up the shortfall.[22] Should this arrangement become a lasting fixture of the system (and not just a short-lived expedient), and should similar arrangements be developed for the other sick funds (as is being considered), then it will be advantageous to market to higher income persons only to the extent that they pay higher direct premiums.

Sick-Fund Reimbursement in International Perspective

Like Israel's sick funds, the sick funds in European countries receive revenues from several different sources: the government, employers, premiums, and user fees.

The extent of dependence on government for financing varies substantially among countries; it is close to 40% in Belgium, but little more than 5% in West Germany and France (Henke, 1986). Israel is at the low end in this regard. More striking is the fact that the size and method for calculating government's contribution is explicitly spelled out in legal statutes in most European countries. In France, government is obligated to cover the deficits of the sick funds; in Belgium, the Netherlands, Luxembourg, and West Germany, the government's main responsibility to the sick funds is to cover the premiums for specific high-risk or low-income groups. In Israel, no such statutory obligations exist. The rules of the game that govern the distribution of government largesse among the sick funds are unclear, and the arrangements must be renegotiated with every change in political power (Ron, 1986).

As in Israel, both employer and employee contributions are income related in most European countries. In most cases, contributions are a fixed percentage of earnings, up to a specified ceiling. As in Israel, there is an incentive for sick funds to direct their marketing efforts at the higher income, healthier portions of the population.

Theoretically, there is a way to ensure that low-income persons remain attractive to sick funds, and at the same time preserve the relationship between premium levels and ability to pay. The way to do so is to have government subsidize, in part, the premiums of lower income persons.

Conclusions

This review of health care reimbursement in Israel has considered the incentives created by the reimbursement system for professionals, for institutions and for the sick funds. At this point, it is useful to review several themes that cut across the various types of providers.

The first theme is that the system is complex. Substantial changes have been introduced over time, perhaps most notably with regard to how revenues are calculated for hospitals and for the sick funds. The system also exhibits substantial variation within any particular category of provider. In long-term care institutions, reimbursement rules vary with ownership type, while among physicians, there is diversity among practice setting and employers.

The second theme is that the reimbursement system may not be fully prepared to handle some of the changes currently taking place in Israel's health care system. Israel has little experience with the setting of rates for independent physicians. Similarly, as the significance of government subsidies to the hospitals and the sick funds declines, the method by which the hospital per diem and insurance premiums are set will require additional attention.

A third, and final, theme is that much still needs to be learned about the links between reimbursement and provider behavior in Israel. Reimbursement theory has been used to suggest possible relationships between unit of payment and provider behavior, for each sector considered. However, the magnitude of the effect was not considered, and, in some cases, the payments involved may be so small that the behavioral implications will be minimal. We do not know how the practice patterns of clinic physicians working on a capitation basis differ from those of their colleagues working under straight salary arrangements. Similarly, theory alone is insufficient to predict whether insulating a sick fund from variations in its receipts from the parallel tax will render it more willing to accept low-income patients.

Notes

1. Holahan (1985) summarizes the U.S. evidence regarding long-term care institutions. The evidence on physician reimbursement is summarized in Langwell and Nelson (1986). For a discussion of hospital reimbursement see Becker and Sloan (1983).

2. The focus of the current debate in the U.K. is whether quality incentives should be incorporated into the reimbursement for GPs. See Gray, Marinker, and Maynard (1986) for further details.

3. There is an extensive literature that seeks to model the objectives and the economic behavior of voluntary hospitals. See Newhouse (1970), and Pauly and Redisch (1973).

4. Physicians are believed to be able to induce demand for their services because patients, lacking the necessary technical expertise, rely on physicians' assessments of what constitutes their "best interests" (Arrow, 1963).

5. Wilensky and Rossiter (1986) suggest several other dimensions of physician compensation. Emphasis is placed on the issue of "Who shall be paid?," i.e., whether payment is directed to the patient, the individual physician, or an organization (such as a medical group) with which the physician is affiliated. While this is a major issue in the American context, it is of lesser relevance in Israel, where payment is almost always made to the individual physician.

6. In their conceptual discussion, Wilensky and Rossiter (1986) discuss "the case" and "the episode" as alternatives to "the procedure" and capitation as possible bases for physician reimbursement. As such systems are rare, to date, they will not be emphasized in our analysis.

7. Glaser (1970) provides a thorough analysis of the systems for negotiating fee schedules in several Western countries. His analytic scheme considers such issues as the number and the nature of the parties to the negotiation, whether the negotiations are conducted in an atmosphere of calm, the mechanisms for resolving impasses, and whether a standing organization exists to manage the negotiations.

8. Ben-Sira (1985) discusses the related lack of incentive to satisfy patient demands.

9. The level of the "norm" is a major negotiating point at contract renewal time. Generally speaking, the norm has been reduced in successive contracts. An important exception occurred in the 1979 negotiations, when the norm was raised by 300 patient-units in return for a lump-sum payment equal to approximately 15% of the average clinic-physician salary at the time.

10. There has been difficulty in attracting physicians to rural areas and other locations distant from the country's center. Financial incentives are used to lure physicians to those areas. The incentives include a special bonus payment (unrelated to practice size) and a lower caseload norm.

11. The copayments were introduced in 1983. Visits per capita dropped by 14%.

12. While cost-based reimbursement is usually associated with retrospective rate setting, the two concepts are neither synonomous nor inextricably linked. It is possible to set rates prospectively, using each particular institution's prior year's costs as the basis for the calculations.

13. The per diem was recently increased in exchange for a commitment to upgrade the facility and staffing.

14. Hospitals run jointly by the government and a municipality probably have more autonomy in this regard than do other government hospitals, but less autonomy than freestanding hospitals.

15. The parameters were changed in subsequent agreements to 1.10 million persons and 0.85 days per person-year.

16. A sick fund will not reimburse a hospital for outpatient services unless prior authorization is given via a "Form 17." However, the sick fund's ability to control utilization is nonetheless quite limited, as the "Form 17" provides blanket access to all hospital outpatient services. It is left to the hospital's physicians to decide which outpatient services will be provided.

17. See pp. 254–264.

18. Note that here, as in long-term care, the government has no formulas that relate staffing to patient acuity.

19. The amount of revenue derived from the parallel-tax is not determined purely by the market; the allocation formula is renegotiated periodically, and is largely politically determined.

20. See Gadish Report (1985) and Controller General's Report (1986), pp. 292–301.

21. As of April 1987, "taxable income" included, along with the base salary, such fringe benefits as car and phone allowances.

22. For the government, the current system has the advantage of constituting a move away from the blank-check method of subsidizing the sick funds. For Clalit, there are also advantages, as knowing the available budget in advance facilitates rational planning.

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דו"ח מחקר

סידרת פירסומים משותפים ג'וינט-ברוקדייל ישראל

שיטות תיגמול במערכת הבריאות בישראל: סקירת הקיים

ברוך רוזן

אבי יקר אלנצווייג

דמ-5-88

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ירושלים פברואר 1988

דמ-5-88

תקציר

שיטת התיגמול של שרותי הבריאות בישראל טרם תועדה במלואה ואין היא מובנת די צורכה. יתר על כן, קיימות מספר תפיסות ואמונות לגבי השיטה,אשר אינן תואמות את המציאות. אחד הגורמים המקשים על הבנת השיטה היא השונות המאפיינת את הסדרי התיגמול. הבנת הסדרי התיגמול היא תנאי הכרחי להגדרת הצורך בשינויים ולהערכת ההשלכות הנובעות מן ההצעות להנהגת שינויים אלה.

מחקר זה מנתח את השיטה הנהוגה בישראל לתיגמול אנשי מקצוע במערכת הבריאות ולתיגמול מוסדות וקופות חולים. המחקר בודק את ההשפעות האפשריות של שיטות התיגמול בישראל על התנהגותם של מספקי השירותים. נסקרים גם הקשרים בין יעדי מדיניות הבריאות בארץ, התפתחות מערכת הבריאות והשינויים שנעשו לאחרונה בשיטות התיגמול. המחקר משווה בין שיטת התיגמול הנהוגה בארץ ובין אלו שבשימוש במדינות אחרות, כדי להבליט את ההיבטים הייחודיים לשיטה בישראל.

תיאור שיטת התיגמול בישראל מבוסס בעיקר על ראיונות עם מספקי שירות, עם מבטחים ועם אנשי מטה בגופים ממשלתיים. כן נבדקו מסמכים שפורסמו בציבור, כמו הסכמי עבודה ודו"חות של ועדות ממשלתיות. ניתוח ההשלכות האפשריות של שיטות התיגמול על קבלת ההחלטות של מספקי השירותים מסתמך במידה רבה על התיאוריות והניסיון המתוארים בספרות של מדינות אחרות.

בישראל קיים מיגוון של שיטות תיגמול לרופאים. רוב הרופאים בבתי החולים וכל הרופאים ברפואה הציבורית מקבלים משכורת קבועה. תשלום לפי מספר נפשות או משכורת שכיחים בקרב רופאים המועסקים על ידי קופות החולים, ואילו רופאים פרטיים נוטים לקבל תשלום לפי יחידות שירות. כל קופת חולים מדגישה היבט אחר של גישת התשלום לפי מספר נפשות, והתמריץ הכספי לרופאים שונה ביניהן בהתאם. שיטת התשלומים לפי יחידות שירות נדירה יותר בישראל מאשר במדינות מפותחות אחרות, אולם שכיחותה הולכת וגדלה. בעתיד יהיה על ישראל להתמודד עם העובדה ששיטה כזו יוצרת תמריצים למתן שירותים רבים יותר.

במגזר הטיפול הכללי הנהיג משרד הבריאות הישראלי תעריף יומי אחיד לכל המחלקות ולכל בתי החולים הציבוריים והממשלתיים. המשמעות המעשית של תעריף זה היתה מוגבלת גם בעבר, כיוון שהוא אינו מתייחס לבתי חולים פרטיים, וכאשר בית חולים של קופת החולים הכללית מספק שירות לחברי קופת החולים ומקבל תשלום מאותה קופה, מאבד התעריף את משמעותו כליל.

התיגמול לטיפול אקוטי מנותק עוד יותר מהתעריף היומי, מאז שהממשלה הסכימה (ב- 1980) להעניק טיפול אקוטי לחברי קופת החולים הכללית תמורת סכום קבוע מראש.

כיום התיגמול לטיפול במאושפזים בישראל נקבע על פי מספר הקבלות, או על פי מספר ימי האשפוז, או על פי תקציב שהוחלט עליו מראש בלא התחשבות ברמות השימוש. התעריף לחולי מרפאה בבתי חולים נקבע בעיקר על בסיס תשלום עבור שירות. בנוסף לכך קיים הסדר תעריפים כוללני בין קופ"ח הכללית לבין בתי חולים ממשלתיים. תיגמול בתי החולים בישראל נמצא בתווך, בין הגישה התקציבית של רוב מדינות מערב אירופה ובין הגישה של תקציב פתוח, השכיחה בארצות הברית.

במגזר הטיפול הפסיכיאטרי והטיפול הממושך נקבע לגבי כל בית חולים תעריף יומי על סמך סקירת תקציב מפורטת. לקביעת התעריף היומי נעשות אבחנות בין מוסדות פרטיים, ציבוריים וממשלתיים. בישראל אין כל שיטה רשמית לחישוב התיגמול על סמך חומרת מצבו של החולה או על סמך איכות הטיפול הניתן לו.

ההכנסות של קופות החולים נובעות מארבעה מקורות עיקריים: מיסי חבר, מס מקביל, סובסידיות ממשלתיות ותשלומים אחרים. כיוון שמיסי חבר ומס מקביל אינם צמודים לסיכון הבריאותי אלא לרמת ההכנסה של החבר, יש לקופות החולים תמריץ לצרף לשורותיהן אנשים צעירים, בריאים ובעלי רמת הכנסה גבוהה יחסית. במשך השנים פחתה תמיכת הממשלה בקופות החולים, וכיום יש נסיונות לשפר את השיטות לקביעת רמת הסבסוד.

המחקר מדגיש את העובדה, שהתיגמול במערכת הבריאות בישראל הוא מורכב ונמצא בתהליך שינוי. הוא אף מצביע על מספר דרכי תיגמול ייחודיות לישראל.

בשלב הבא במחקר תובא הערכה להצעות שינוי של שיטת התיגמול בישראל. עבודה נוספת תדון במידה שבה משפיעים תמריצי תיגמול על התנהגותם של מספקי שירותי הבריאות בישראל.

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תודות

לשם הכנת מחקר זה הסתייענו במידה רבה בדיונים עם מתכנני שירותי בריאות בישראל ועם מספקי השירותים וערכנו ראיונות עם האנשים הבאים:

יוסף פרוסט	קופת־חולים כללית
אביבה רון	קופת־חולים כללית
מיכאל רוזנבלוט	קופת־חולים כללית
אלי שפניץ	קופת־חולים כללית
רחל קאי	קופת־חולים מכבי
דוד סומך	קופת־חולים מאוחדת
אברהם בן־יעקב	קופת־חולים לאומית
גבי בן־נון	משרד הבריאות
פיני פקלר	משרד הבריאות
יעקב נבו	משרד הבריאות
משה קלמן	משרד הבריאות
רבקה אלמוג	משרד האוצר
דוד מילגרום	משרד האוצר
דוד אפלבאום	מרכז רפואי שערי צדק
מרים בר־גיורא	משרד העבודה והרווחה
פטר לודיקראס	משרד העבודה והרווחה
יהודה מחליב	המוסד לביטוח לאומי
יהודה מאיר	בית הזקנים המאוחד
יהודה סרוסי	בית אבות חוף הסלע
רם ישי	ההסתדרות הרפואית בישראל
רמי לוי	בית חולים הדסה
משה אבירם	בית חולים הדסה
מרג'ורי קורנבליט	בית חולים הדסה
חמדה כהן	מכון ברוקדייל / משרד הבריאות
חיים פקטור	מכון ברוקדייל
הרולד סגן־כהן	הדסה, בית־הספר לרפואת שיניים, האוניברסיטה העברית

ברצוננו להודות לכל אחד ממרואיינינו על המידע והמחשבות שחלקו איתנו. כן ברצוננו להודות לגור עופר, לג'ק חביב ולג'ו לוקרד,על הערותיהם בעת כתיבת הדו"ח.

המחברים מודים גם ללאה קריקון, איילין קפלן, בלהה אלון ודוד גרין על הדפסת המחקר.

האחריות לכל טעות היא על המחברים בלבד.