Implementing Health Care Reform in Israel: Organizational Response to Perceived Incentives

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Abstract Devising new incentives was a main element of health care reform in Israel, which created a regulated market that embodies many principles of managed competition. This study examined sick fund directors' perceptions of the new incentives and their strategic responses to these incentives, enabling the testing of how managed competition works in practice. The methodology used was a multiple case study of Israel's four sick funds. Data were gathered through in-depth interviews with 160 senior officials, analysis of national health insurance legislation, and analysis of published and unpublished archival documents, newspaper articles, public statements of senior managers, and other published data on the sick funds' behavior. The study revealed discrepancies between planned and perceived incentives and highlighted the effect of the latter on strategy formulation. Analysis of sick fund strategies showed that their responses to managed competition incentives deviated from theoretical expectations, compromising some of the objectives of the reform. The study also shows that contextual features account for the specific model of managed competition that was implemented and for the specific strategies employed by the sick funds. The study concludes by highlighting the need to build a process that will enable policy makers to consider local contextual factors when planning and implementing reform, involving health care providers in designing incentives, continuously monitoring processes and outcomes in the reformed system, and allowing for flexibility in policy making.

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Health Care Reform: The Signficance of Perceived Incentives

Changing incentives is a main element of health care reform in many countries (Houseman and LeGrand 1999; Brown and Amelung 1999; Tuohy 1999). The underlying assumption is that people and organizations that provide health care (e.g., hospitals, sick funds, physicians) will respond to the new incentives in a way that is compatible with the intentions of those who planned the reform. Theoretically, this assumption is related to the perception of organizations as open systems that are influenced by their environment and whose success depends on their ability to adapt to environmental change (Harrison 1994; Morgan 1986: 44–55; Pfeffer and Salancik 1978). Therefore, when faced with changes in their environment, organizations will change their internal operations as well as their strategies (Thompson 1967; Child 1972) in order to survive and more effectively achieve their goals. The conclusion arising from this perspective of organizations is best articulated by Jeffrey Pfeffer and Gerald Salancik (1978: 278): "Organizational behavior is determined through the design of organizational environments. The focus for attempts to change organizations, it would appear, should be the context of the organizations. By changing the context, the behavior of the organizations can be changed."

However, theories of organizational behavior have also noted that the environment is not an objective entity but rather is "enacted" (Weick 1979), in the sense that it is perceived subjectively by organizations. Although the objective environment determines the effectiveness of organizational strategies, the enacted environment appears to be a better predictor of strategy choice (Starbuck 1982; Miles 1980: 285). Therefore, it is reasonable to assume that the effects of incentives (i.e., the organizational actions they produce) will also be dependent on how the incentives are perceived by organization directors. It follows that incentives may prove to be ineffective or countereffective if organizations respond to them differently than anticipated or intended by policy makers.

Analysis of health care reform has concentrated to date on the elements of reform and their anticipated effect on the system (Saltman and Figueras 1997; Van de Ven 1996), decision making and the political processes leading to reform (Geva-May and Maslove 2000; Chernichovsky and Chinitz 1995; Chinitz 1995), analysis of the outcomes of reform (i.e., the effect of reform on system finances, on the quality of care, etc.; Batista et al. 1994; Henke, Murray, and Ade 1994; Porath and Lev 1995), and providers'

responses to reform (Harrison 1995; Hellinger 1996; Kwon 1996; Cook et al. 1983; Shortell, Morrison, and Friedman 1992; Gay-Greer et al. 1989). An important but rather neglected issue is that of health care providers' perception of the new incentives embodied in health care reform and the effect their perception of these incentives has on their choice of strategy.

Health care reform in Israel, implemented in January 1995 with the enactment of the National Health Insurance Law, created a regulated market that embodies many of the principles of managed competition, as outlined by Alain Enthoven (1993). These principles aim to overcome some major market failures in health care, such as cream skimming by insurers and a lack of information, which hinders informed consumer choice. However, the Israeli reform went beyond establishing a foundation for fair competition among insurers: the National Health Insurance Law also established regulations that increase centralized control of health care expenditures and limit sick fund autonomy (Gross and Harrison 2001).

Implementation of the national health insurance reform provided a unique opportunity to examine the sick funds' perceptions of the new incentives, as well as their strategic responses to these incentives. This enabled us to test how managed competition works in practice.

The objectives of this article are to analyze the incentives planned as part of the reform of the Israeli health system; analyze the sick funds' perception of these incentives, following enactment of the reform; examine the sick funds' strategic responses to the reform, in light of their perception of the new incentives; and discuss the policy implications for implementing managed competition and designing health care reform.

The strategies chosen by the sick funds in response to the incentives embodied in the National Health Insurance Law will have a decisive effect on the future of the health care system: They may ensure the law's success in achieving its desired objectives; they may perpetuate undesirable practices, such as cream skimming and accumulation of debt; or they may lead to new, equally unwanted outcomes, such as a decline in services or an increase in the financial burden on the public. Analysis of the sick funds' perception of and response to the new incentives is thus imperative to an evaluation of the new policy and to the improvement of policy formulation in the future. This analysis also contributes to better understanding of the managed competition model by examining not only outcomes of implementing that model, but also perceptions of the incentives inherent in the model and the ensuing strategies leading to these outcomes.

Methods

The methodology of this study was a multiple case study design, examining the four Israeli sick funds following introduction of the National Health Insurance Law. This is an accepted methodology in studies of organizational perceptions and behavior (Pettigrew, Ferlie, and McKee 1992; Yin 1984; Van Maanen 1979; Mintzberg 1979). The case study methodology is appropriate when addressing questions of how and why about a contemporary set of events, when relevant behaviors cannot be manipulated. The advantage of the case study approach under these circumstance is that it "allows an investigation to retain the holistic and meaningful characteristics of real-life events" (Yin 1984: 14), thus facilitating our understanding of complex social phenomena. Multiple-case designs are stronger than single-case designs, since they allow for replication and investigation of processes under different conditions, thereby reinforcing conclusions (Yin 1984).

The study data were collected during 1995–1996 using qualitative methods and employing multiple study tools. This facilitated the aggregation of comprehensive information and the validation of that information from various sources (ibid.). Sources of data included semi-structured, in-depth interviews with 160 senior officials employed by the sick funds and related organizations, which were conducted at the end of 1996; analysis of national health insurance legislation; analysis of published and unpublished archival documents and newspaper reports; analysis of statements by senior managers at conferences and government committee hearings; and the use of relevant findings from other studies of Israeli sick funds. In order to ensure the quality of the data, triangulation of the information received from these sources was conducted (Jick 1979). The data were analyzed by classifying and categorizing repeat patterns, trends, and conceptual categories (Miles and Huberman 1994; Patton 1987; Lincoln and Guba 1985; Yin 1984).

Background

The Structure and Historical Development of the Health Care System Prior to Reform

The roots of the institutional structure of the State of Israel and its health system can be traced to the period preceding independence, achieved in 1948. During the British Mandate, the Jewish community was semi-autonomous and provided its members with basic education, welfare,

employment, land development, and health care services. The provision of health care services was viewed by the Jewish political parties as an essential channel for gaining influence over the community. It was then that a tradition of politically linked sick funds began (Shuval 1991; Gross and Anson 2002).[1]

Israel's Ministry of Health also has roots in the prestate period. Having taken over the role of the British Mandatory Department of Health, it continued that department's pattern of combining administration and coordination with responsibility for delivering health care services and running hospitals. This dual function was strengthened during the state's initial years (1948–1953), when mass immigration compelled it to meet the urgent health care needs of a quickly growing population (Shuval 1991; Gross and Anson 2002).

Today, the Israeli health care system is dominated by four private, nonprofit sick funds and by the Ministry of Health and the Ministry of Finance. The sick funds resemble health maintenance organizations in the United States. Services are delivered at the sick funds' own facilities or through contracted providers. Clalit Health Services, the largest of the four sick funds, dominated the sick fund market until the mid-1980s (it held 86.2 percent of the market in 1984). Since then, Clalit's market share has consistently declined, while the shares of the three smaller sick funds have increased. Nevertheless, on the eve of reform, Clalit still held 64 percent of the market, while Maccabi Healthcare Services insured about 18 percent of the population (with a growing market share) and Meuhedet Health Services and Leumit Health Services each insured 9 percent of the population.

The Ministry of Health is a major provider of inpatient services (and owns about one-third of all hospital beds), public health services, and ambulatory psychiatric care. Traditionally, the Ministry of Health shared decision-making power with the dominant and influential Clalit Health Services, on one hand, and with Israel's powerful and prestigious Ministry of

1. Israel's largest sick fund, Clalit Health Services, was founded in 1920 by the General Federation of Labor, which was linked to the Labor Party—Israel's most powerful political party from the state's inception until 1977. The federation's socialist and nation-building ideology influenced how Clalit provided services—that is, through a nationwide network of comprehensive and egalitarian clinics and hospitals. Similarly, the smaller Revisionist Party founded its own trade union and sick fund, Leumit Health Services, in 1933. The roots of Meuhedet Health Services lie in the union of the Mercazit Fund, founded by the Liberal Party in 1936, and the Amamit Sick Fund, established by the Hadassah Medical Organization in 1931. Maccabi Healthcare Services was established in the 1940s by physician organizations seeking to ease unemployment among physicians who had emigrated from Germany following the Nazi takeover (Halevi 1979; Gross and Anson 2002).

Finance, on the other (State of Israel 1990). The Ministry of Finance allocates government funds to all ministries and must approve all Ministry of Health decisions that have budgetary implications, such as the rate of payment to hospitals and the working conditions of salaried employees.

The Ministry of Health's extensive involvement in direct care provision, as well as its limited decision-making power, limited its ability to regulate the health care system and assume a leading role in defining national health policy. This resulted in a lack of overall policy and manpower planning, poor technological regulation, inconsistent sick fund regulation, and inadequate resources for the provision of preventive care and health education (State of Israel 1990; Rosen 1991).

Another noteworthy feature of Israel's health system is the powerful Israel Medical Association (IMA), which operates both as a professional association and as a trade union of which nearly all Israeli physicians are members. IMA leaders have considerable influence over national policy on issues such as professional training, licensing, and standards of care and have successfully resisted any attempts to introduce lay monitoring and control of professional performance (Gross and Harrison 2001).

The Israeli Health Care Reform

In 1994, on the eve of enactment of the National Health Insurance Law, health care was offered by the country's four sick funds, with membership based on voluntary enrollment. The sick funds competed over premium fees and the benefits package, which were determined by internal regulations in each sick fund defining a member's rights and obligations. Sick fund revenues were linked to family income and were collected by the sick funds themselves; this gave them an incentive to attract small, wealthy families. Moreover, since resources were based on income, there was inequality in the provision of services to low-income versus high-income populations and to geographically peripheral areas of the country, where the sick funds had no incentive to develop services. Prior to enactment of the law, insurance coverage was incomplete: 4 percent of the total population and as much as 12 percent of the Arab population did not belong to a sick fund. Risk selection (cream skimming) was legal and widely practiced by the smaller sick funds, which also used flexible premiums and benefits to select more healthy and less costly members and reject elderly and ill applicants. This was reflected in the sick funds' membership composition. Clalit's members were (and are) significantly older, poorer, and less healthy than those of the other sick funds, particularly Meuhedet and

Maccabi. To illustrate, in 1994, 13.1 percent of Clalit's members were over age 65, compared to 9.5 percent in the total population, while only 4.8 percent and 4.2 percent of the members of Maccabi and Meuhedet, respectively, were over age 65. Similarly, 15.7 percent of Clalit's members were chronically ill, compared to 8.5 percent of those enrolled in Maccabi and 6.3 percent of those enrolled in Meuhedet (Rosen and Steiner 1996).

Thus, although the members of Clalit Health Services had (and have) more health needs, its per capita income was traditionally lower. This was attributed in part to the lower income of its members. (In 1994, 43.1 percent of Clalit's members earned the minimum wage, compared to 31.6 percent of Maccabi's members and 34.9 percent of Meuhedet's members; Bendelac 1998.) In addition, Clalit's owner, the General Federation of Labor, collected membership dues but transferred only 75 percent of them to the sick fund (and used the balance for its other activities). The federation also restricted discounts on dues, thereby impairing the sick fund's efforts to compete. Inefficient management, combined with these factors, led to financial instability: By 1995, Clalit Health Services had accumulated a deficit of about $1.5 billion. Prior to enactment of the law, sick fund deficits were regularly covered by the government. This induced some of the sick funds to accumulate debt and then petition the government to cover it. This was particularly true of Clalit, which the government was inclined to assist, given its central position as provider of care for the majority of the population.

In light of the deepening crisis in health care financing, the inequality in service provision, and the ensuing labor unrest and consumer dissatisfaction with sick fund services (particularly those of Clalit), a State Commission of Inquiry was established in 1988 (Chernichovsky and Chinitz 1995; Gross, Rosen, and Shirom 2001). National health insurance legislation, which was among the recommendations made in the commission's majority report,[2] was enacted in January 1995. It mandated compulsory universal health coverage for all residents of Israel by a sick fund of their choice.

The National Health Insurance Law was designed to stabilize the health system financially, achieve universal health insurance coverage, clarify citizens' rights to health insurance coverage, increase freedom of choice and transfer among sick funds, ensure distribution of resources among

2. Dissension within the Commission of Inquiry over the essence of the proposed reforms, particularly the National Health Insurance Law, resulted in a majority and a minority report (see State of Israel 1990, 1:78–83 and 2:38–64).

sick funds proportionate to health needs, improve the quality of services, and increase equality in the provision of services to different populations and geographic areas.

The national health insurance reform envisioned achieving these goals by regulating the previously unregulated competition in the sick fund market[3] and adopting many elements of Enthoven's (1993) managed competition model, including universal coverage, freedom of choice and transfer among insurers, a standard benefits package, and payment to insurers based on risk-adjusted capitation. However, two important principles of managed competition were not incorporated in the National Health Insurance Law: price competition among sick funds and dissemination of information on quality to consumers by a central body (e.g., employers, government).

Based on the theoretical premises underlying the managed competition model, the Israeli reform was expected to discourage cream skimming and ensure freedom of choice and transfer among sick funds by prohibiting selection and providing adequate compensation in the capitation formula. These elements were also expected to lead to greater equity in care provided to all citizens. The uniform benefits package was expected to simplify comparison among sick funds and provide a minimum level of reasonable care. The Israeli reform does not rely on market forces alone to generate efficiencies and uses additional devices that are not included in the managed competition model. The main additional devices are a rigid fixed budget for the health system as a whole and an updating mechanism for the budget, controlled by the Ministry of Finance and the Ministry of Health. Under the reform, the Ministries of Finance and Health are also to closely monitor the sick funds' financial operation. Another deviation from the ideal model of managed competition was allowing the sick funds to market supplemental insurance, which covers benefits that are not included in the universal basic benefits package. The modified model of managed competition implemented in Israel is an outgrowth of local political and organizational forces, as well as of historical policy precedents (for a detailed analysis of the forces that shaped the Israeli reform, see Gross and Harrison 2001 and Gross and Anson 2002). The significance of these deviations will be discussed in the final section of this article.

The following analysis of the incentives introduced by the reform

3. It should be noted that the National Health Insurance Law dealt exclusively with community-based primary and secondary medical services. Although the Commission of Inquiry also recommended reforming the hospital sector and the structure of the Ministry of Health, these recommendations have yet to be adopted and therefore are not discussed in this article.

addresses both those generated by elements of the managed competition model and those generated by other elements of the reform.

Analysis of the Incentives Introduced by the Reform

Since enactment of the National Health Insurance Law, health care has indeed become a universal entitlement provided through a publicly regulated system. The reform engendered far-reaching change in the operating principles and incentives of the health system. By establishing a rigid budgetary framework for the system, the law aimed to limit the total sum of all resources and subject the system to government control, thereby motivating the sick funds to reduce their expenditures and operate more efficiently so as to stay within this budget.

The cost of providing the standard benefits package was set in the law, and a mechanism for updating this cost was devised based on several indices, including the Health Price Index published by the Central Bureau of Statistics and demographic parameters linked to population growth and aging. Furthermore, to ensure that the sick funds would remain financially viable, the National Health Insurance Law charged the minister of finance and the minister of health with monitoring their financial performance; the sick funds are obligated to cooperate and provide any information necessary to facilitate this. By legally defining the total sum of resources, as well as the mechanism of allocation, planners intended to remove the government's discretion in allocating additional monies to the sick funds and thereby to eliminate the sick funds' incentive to negotiate with or lobby the government for additional resources. These mechanisms, along with tight monitoring of the sick funds' financial operation, were also meant to prevent the sick funds from accumulating deficits so as to beg more resources from the government.

The law ensures eligibility for services regardless of one's financial ability and establishes progressive uniform health tax premiums (4.8 percent of income, with reductions granted to the elderly and poor), which are collected by the National Insurance Institute (the social security administration). These funds are combined with direct government contributions and distributed by the National Insurance Institute to the sick funds according to a risk-adjusted capitation formula that is based on the number of members of a sick fund and their age distribution—a proxy for health needs.[4]

4. The structure of the capitation formula was defined by a professional committee headed by a senior official of the Ministry of Health. Data on health-related factors are not collected regu-

National health insurance planners assumed that the sick funds would compete over the elderly population, given the relatively heavy weight assigned this population in the capitation formula (a person between the ages of 65 and 74 is given a weight of 2.9, while a person aged 75 or older is given a weight of 3.64). Planners also assumed that since the reform provides an incentive to attract members regardless of their financial situation, the sick funds would prefer large families (which are more prevalent among vulnerable populations, such as Arabs, ultra-orthodox Jews, and the poor).

To ensure freedom of choice and transfer among sick funds, the law prohibits sick funds from rejecting candidates for membership. In other words, cream skimming is now legally prohibited. Planners assumed that this prohibition would stop risk selection practices and give sick funds an incentive to develop needed services for ill members, whom they could no longer reject.

The law also defined a standard benefits package, thereby eliminating competition over the scope of services. By making premiums and the benefits package uniform, planners intended sick funds to compete only over the quality of services. Consequently, quality of care was expected to improve.

However, the law allows sick funds (for an additional fee) to offer supplemental insurance for services not included in the standard benefits package; this has created a niche in which competition over premiums and the scope of services can and does take place and in which the incentive to attract high-income members still exists. Planners assumed that competition over supplemental insurance, although it does compromise the value of equality somewhat, would boost the desired competition over the quality of the services provided in the basic benefits package.

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larly by a national body and therefore cannot be easily included in the capitation formula. The decision to adjust for number of members and age alone was made based on the desire of the Ministry of Health that the allocation criteria be available and accessible, easy to measure but difficult to manipulate, and able to be implemented immediately. Furthermore, this method of allocation had been used by the National Insurance Institute since 1991 to distribute employer contributions for health premiums among the sick funds. The new capitation formula used the same weights for age groups as its predecessor, thereby facilitating immediate implementation. Both the Ministry of Health and the powerful Clalit Health Services (which stood to gain from the new allocation system because of its relatively large percentage of elderly members) wanted the National Health Insurance Law to be implemented immediately and therefore supported this method of allocation, even though they recognized its imperfection. Maccabi Health Services and Meuhedet Health Services (which stood to lose under the new formula because of the young age composition of their membership bases) opposed the proposed capitation formula, arguing that age does not adequately reflect health needs. However, they were overruled by the committee and subsequently by the Knesset.

Sick Fund Perceptions of the Incentives Introduced by the Reform

In-depth interviews with senior managers of all of the sick funds revealed that their perceptions of the new incentives were not entirely compatible with the incentives as planned and expected by proponents of the managed competition model (for a comparative summary of perceived versus planned incentives, see Appendix A).

Although the reform was designed to introduce a series of changes into the health system, sick fund managers perceived the restriction of the system's budget to be the greatest change introduced by national health insurance. They felt the new, rigid financial framework was inadequate, given what they perceived to be the system's needs. They also perceived the formula for annually updating the overall health budget as being inadequate, because it does not correctly reflect the aging of the population or take into account technological advances (which are not compensated for by the formula). "The system is under-funded, and even existing capital is not distributed fairly among the sick funds," said a senior manager of Clalit Health Services. "A car cannot run without fuel" was the colorful expression used by a senior manager of a smaller sick fund.

On the other hand, despite its rigidity, managers perceived the budgetary framework as being negotiable and believed there was a good chance they would succeed in obtaining additional financial resources. A senior manager of Clalit Health Services articulated this position: "The deficit is an eternal problem; therefore, part of our activity is to continuously confront the government and convince it of our position. Confrontation is an important process in a democratic system; it is legitimate because no one distributes funds for no good reason." A senior manager of a smaller sick fund expressed a similar view: "There is no other way but to convince every parliament member, because they are the legislators and they have to understand the problems with the National Health Insurance Law."

The National Health Insurance Law was further perceived by all of the sick funds as restricting the administrative discretion that is necessary to their ability to balance their budgets. "We have become government employees," said one manager. Sick fund managers felt that they could no longer generate new income by raising premiums or copayments, nor could they use their discretion to adapt services to the level of funding or participate in making decisions that affect the level of expenses (e.g., regarding salary agreements with health sector personnel and hospitalization rates, both of

which are negotiated with the Ministries of Finance and Health). An expression that recurred in the sick fund managers' descriptions of this process was "nationalization of the sick funds."

Despite their objection to the new budgetary framework, sick fund managers did understand the need to stay within it by reducing expenses. However, they did not see why this should preclude them from trying to increase revenues (i.e., to increase their sick fund's budget). As one senior sick fund manager explained, "We need to adapt resources to services, as well as to adapt services to available resources." Several strategies were perceived as being a means of increasing revenue: lobbying the government for additional funds, attracting more members, and selling supplemental insurance and services not included in the mandatory benefits package (e.g., alternative medicine, dental services) to sick fund members for an additional fee.

Regarding the capitation formula for allocating financial resources among the sick funds, two of the smaller sick funds, Maccabi and Meuhedet, have lost income relative to the period preceding national health insurance (as they insure younger and wealthier people; Gross, Rosen, and Shirom 2001). Clalit and Leumit Health Services have in practice benefited from the law, as the income per standardized person based on the capitation formula is greater than the income they collected through premiums prior to national health insurance (see Appendix B). Indeed, the interviews revealed that managers of Clalit and Leumit Health Services were in favor of this allocation method and perceived it as a positive change, even though they insisted that it did not reflect the true health care needs of their members. However, while their income from the capitation formula grew, their total income per standardized member did not change significantly because of the reduction in government subsidies (see Appendix B). This led the managers of these sick funds to believe that they would also not be able to balance their budgets and would have to reduce expenditures and increase income to avoid deficits. Nevertheless, Clalit managers felt the reform had enabled them to improve services because their regular per capita income had increased and because they were no longer dependent on government subsidies, which were granted only when the sick fund had accumulated dangerous deficits: "The National Health Insurance Law restored this sick fund to life from a state of total collapse. The law put the sick fund back on its feet financially," said a senior Clalit manager.

Not surprisingly, managers of Maccabi and Meuhedet perceived the capitation-based allocation mechanism as being unfair; they felt their members paid high taxes and therefore subsidized the services provided by the other sick funds. "We don't get what we deserve . . . [based on] what our members pay," explained a senior Meuhedet manager. Although these

sick funds received subsidies to compensate for their immediate loss of income, and therefore their total income per capita was still higher than that of Clalit or Leumit Health Services (see Appendix B), managers of Maccabi and Meuhedet felt that national health insurance had restricted their budgets and hindered them from providing care at the high level of quality to which they were accustomed. "The law has placed us on spindly legs; we have less money now, so the customer suffers," said a manager of Maccabi. However, both Maccabi Healthcare Services and Meuhedet Health Services emphasized their efforts to maintain quality: "Our top priority is to make every effort to prevent a decline in services . . . to maintain the same level of service to the customer, despite the lack of money," one manager said. Managers of both of these sick funds perceived the gap between income and expenses as being huge, impossible to eliminate solely through efficient operation and reasonable cutbacks: "How much can we actually save by becoming more efficient? Not even 10%." Another manager said: "All the efficiency in the world can't get rid of a deficit of NIS [new Israeli Shekel] 130 million."

In the eyes of sick fund managers, the main incentive provided by the capitation formula was that of competition over members regardless of their financial status, as sick fund income is now based on the number of members. Sick fund managers perceived this new kind of competition as being "market-oriented" and "gimmick-based"; they described the ensuing competition as being "wild," "a jungle," "a market atmosphere," and "dog eat dog," as all of the sick funds "are battling each other for the same population."

Interviews with managers of all of the sick funds revealed that they felt that the capitation formula encouraged competition over *visible* elements of service (e.g., facilities, waiting times) rather than over quality of care, which actually affects health status, since "competition is a war of survival and the key to survival is the number of members." Consequently, the sick funds will do anything to attract members, and immediately. Improving the quality of medical care is much less visible and has a long-term rather than an immediate outcome; it is therefore perceived as being a less efficient way to attract new members.

Furthermore, senior managers explained that in light of the new prohibition on risk selection, they did not want to invest in improving medical services for the severely or chronically ill in order to avoid the "mass immigration" of ill members, which could jeopardize their financial equilibrium. Moreover, when improvements are made, they are intentionally not publicized. "I try to hide the fact that I'm good, so that ill people won't come to me," said a senior manager of one fund.

The Arab sector was perceived as having become especially profitable: income per family is high, but expenses per family are low, as Arab families tend not to demand services and because fewer services are available in the Arab sector. The young and healthy (who were also profitable before national health insurance), residents of geographically peripheral areas (where the supply of services is scarce and the use of services is therefore less extensive), and large families (usually ultra-orthodox Jews or Arabs with low income) also were perceived as profitable populations.[5]

Although the capitation formula compensates for the expected increase in expenditures for an elderly member, the sick funds nevertheless did not perceive this population as worthwhile. Sick fund managers reportedly believed that sick fund expenses for elderly members, who are likely to become terminally ill, would ultimately be extremely high. Thus, although the sick funds receive more money for an elderly person in the short run, the cost of treatment far exceeds income in the long run. "If I could, I would give every elderly person a car and send him off to my competitors," one senior manager said candidly.

In the eyes of sick fund managers, the National Health Insurance Law affected competition by changing the "rules of the game," as one senior manager called them. Sick fund managers came to believe that, in addition to the competition to attract members, the "real competition" was now over supplemental insurance, rather than over the basic benefits package. "We want to give our members more services, but this is prohibited by law. Competition over quality is therefore manifested in supplemental insurance," explained a senior manager. Furthermore, supplemental insurance is perceived as a profitable market (by bringing in additional income through premiums and copayments) and as a risk selection device (through designing the benefits package). For example, by offering child development services or vaccinations for young travelers to exotic countries, sick funds can attract the young and healthy.

Analysis of the Sick Funds' Strategies in Light of Their Perceptions of Incentives

The sick funds' perceptions of the incentives introduced by the national health insurance reform account to a large extent for their financial and competitive strategies, some of which were unanticipated by policy mak-

5. Prior to the law's enactment, premiums were paid per family, such that large families (especially poor families) were less profitable for sick funds than were small ones.

ers, differed from what they had hoped for, and were perceived as being antithetical to the intentions of the reform.

Financial Strategies

In response to the financial incentives introduced by the law, all of the sick funds employed similar short- and long-term strategies to increase income and reduce expenditures, and thereby balance their budgets. However, they differed in the types of strategy they chose and the balance between short- and long-term strategies. For example, while Maccabi Healthcare Services and Meuhedet Health Services emphasized short-term strategies because of the reduction in their income from national health insurance resources, Clalit and Leumit Health Services, whose income from such resources increased, favored long-term strategies.

Short-term strategies to reduce expenditures included internal reorganization: for example, increasing internal supervision of physicians, directing patients to receive care at sick fund facilities rather than at hospitals, and closing facilities that proved not to be profitable. Other strategies were directed at providers: increasing external supervision of hospitals and other providers and negotiating with providers over better terms for the purchase of medications and other services. A third strategy involved cooperation among sick funds, the terms of which were explicitly stated in a joint document, which was subsequently disqualified by the Israeli antitrust authority. According to this document, the sick funds tried to save money by opening joint clinics, selling services to each other in small towns, negotiating as a group with providers, and setting identical, restrictive medical policies (e.g., limiting the number of ultrasound examinations for pregnant women, closing community clinics on Fridays).

The sick funds' strategies were reflected in their financial status. Analysis of the expenses and income of all of the sick funds revealed that standardized income per capita remained stable following national health insurance and standardized expenditure per capita declined by almost 3 percent (although the drop was much steeper for the smaller sick funds than for Clalit; Gross, Rosen, and Shirom 2001). In 1995, all of the sick funds managed to strike a balance between current income and current expenditures, without incurring a significant deficit (Bin Nun 1999). Between 1996 and 1997, there was an average decline of 6 percent in total standardized per capita income (4 percent in Clalit and 10 percent in the smaller sick funds) and an average increase of 2 percent in total standardized per capita expenditures (3 percent in Clalit and a decline of 4–13

percent in the smaller sick funds; Gross, Rosen, and Shirom 2001). Between 1997 and 1998 there was an additional decline of 3.3 percent in total standardized per capita expenditure (3.1 percent in Clalit and between 2 and 6.9 percent in the smaller sick funds; Arbel 1999).

Long-term strategies to reduce expenditures included developing infrastructure (e.g., computerization) that would enable the sick funds to operate more efficiently and developing in-house services that would preclude the sick funds from having to purchase services from external providers. They also included improving the professional level of staff so as to provide more adequate, and hence less expensive, care; establishing control units; and operating units as profit centers, which would eventually become more cost effective. It should be noted that some of these strategies actually incur expenditures in the short term.

Short-term strategies to increase income included using savings and reserve money (a strategy favored by Maccabi Healthcare Services and Meuhedet Health Services, which had such reserves) and taking loans from banks. Other actions focused on attracting new profitable members (e.g., healthy young people, large families, Arabs) so as to receive a larger portion of national health insurance allocations. In order to attract members, the sick funds opened new clinics, renovated older ones, and developed services not included in the mandatory benefits package that could be sold for extra income (e.g., supplemental insurance, dental care, alternative medicine). All of the sick funds also applied to the government to ask for additional support, loans, and credit. These strategies were reflected in their financial reports. Income per standardized person rose by 2.6 percent between 1997 and 1998 (Arbel 1999).

Long-term strategies to increase income included improving the level of services (so as to attract more members) by upgrading employees' professional and interpersonal skills and developing attractive community services, such as centers for women's health and specialist and diagnostic services. Other long-term strategies included lobbying the government to change the capitation formula (each sick fund promoted parameters that would be to its advantage) and the formula used to update the health care budget. In this way, the sick funds hoped to attract more money to the system as a whole. Sick funds with wealthy members lobbied to collect part of the health tax themselves as a means of increasing their income.

Competitive Strategies

Based on their perception of the incentives to competition introduced by the National Health Insurance Law, the sick funds employed several com-

petitive strategies. An *emphasis on marketing and advertisement* included advertising in newspapers and the electronic media and on street signs; telemarketing; deploying sales agents; contracting with local leaders of peripheral settlements, Arab and ultra-orthodox Jewish communities; using sick fund employees to recruit new members; and holding "health days" at clinics and public places (malls, central bus stations, etc.). The budget for marketing rose from NIS 51.4 million in 1994 to NIS 62.6 million in 1995 and to NIS 91.2 million in 1996. It should be noted that some of the activities were illegal, such as forgery of membership forms, or perceived as immoral, such as tempting people to sign a membership form by offering gifts.[6]

The sick funds also *targeted financially desirable populations*—that is, they split the market so as to focus on the target populations perceived as being the most profitable (see above). Sick funds used focus groups and other marketing techniques to learn the needs and preferences of these populations and to cater to them in both advertising campaigns and service development. For example, they responded to the preference of ultra-orthodox Jewish women to be treated by a woman physician, they responded to the needs of young families by emphasizing the development of services for children, and they attempted to make services more accessible in the Arab sector by hiring more Arabic-speaking physicians and using mobile diagnostic and specialty services in Arab villages. Survey findings offer evidence supporting the existence of such strategies. In 1997, Arabs and residents of peripheral towns perceived more of an improvement in services than did others: 71 percent of Arabs compared to 33 percent of Jews and 44.4 percent of residents of the periphery compared to 35 percent of residents of the center of Israel reported sensing an improvement in sick fund services since the introduction of national health insurance (Gross et al. 1998).

At the same time, some managers revealed that they also actively discouraged ill or old applicants from joining their sick fund. Clerks were instructed to tell these applicants that "the sick fund does not have appropriate services for your condition." They were also instructed not to encourage enrollment or to be too forthcoming or helpful to these applicants.

6. The prevalent belief arising from interviews with sick fund and government officials was that gifts could be used to persuade people to switch sick funds based on irrelevant considerations and to neglect considering the more important aspects and consequences of changing funds. Gifts were therefore seen as a means of tempting people to hastily make a major decision without considering that changing health care providers is different from choosing a bank or other service—especially since the decision is irreversible for an entire year. Consequently, the law was modified to forbid the use of gifts or sales agents and to determine that the transition to a sick fund be registered at the post office, not at the sick fund's offices.

All of the sick funds *improved the level of visible services* in order to attract members; this included improving access and availability (e.g., hiring more staff, implementing appointment systems), improving the attitudes of physicians and nurses (e.g., special courses in customer service), and upgrading the maintenance of facilities (e.g., renovation of clinics, purchase of new furniture, landscaping). Here, too, survey findings support the existence of such strategies. According to population surveys conducted in 1995 and 1997, 40 percent of those surveyed in 1997 reported sensing an improvement in their sick fund's services during the previous year, compared to 18 percent who so reported in 1995. Satisfaction (those who reported being satisfied or very satisfied) with sick fund services rose from 83 percent in 1995 to 91 percent in 1997. Improvement was also found in other indices of quality, such as waiting times at clinics (68 percent reported waiting up to 15 minutes at a primary care clinic in 1997, compared to 59 percent in 1995; 66 percent reported waiting up to one week for an appointment to see a specialist in 1997, compared to 56 percent in 1995; Gross, Rosen, and Shirom 2001). As can be seen in Appendix C, improvement was especially notable in Clalit and Leumit Health Services, which had offered lower-quality service prior to the reform and which experienced the greatest increase in reform-related income.

All of the sick funds *added supplemental insurance programs and developed services not included in the mandatory basic benefits package*, such as dental clinics, alternative (e.g., homeopathic) medicine, old age homes, and spas. The sick funds featured these services—which generated extra revenue—in marketing campaigns. In 1995, 37 percent of all sick fund members had supplemental insurance, although there was wide variance among the sick funds: 80 percent of Maccabi's members, 65 percent of Meuhedet's members, 50 percent of Leumit's members, and 15 percent of Clalit's members had purchased supplemental insurance.[7] The market continued to grow, so that 44 percent of the population owned supplemental insurance in 1997 and 51 percent of the population owned such insurance in 1999.

7. The lower purchase rates in Clalit are attributed to its having to develop and market a new supplemental insurance plan, unlike the three smaller sick funds, which continued to offer the same plans they had offered prior to national health insurance. The reason for this was that the benefits package deemed mandatory by the National Health Insurance Law was based on the basket of regular and supplemental services offered by Clalit Health Services prior to the law. Therefore, in order to compete, Clalit had to add supplemental services, while the other sick funds merely had to adjust the balance between their mandatory and supplemental packages.

Analysis of Sick Fund Strategies in Light of Managed Competition Theory and the Goals of the Reform

How does managed competition theory work in practice? Did the incentives introduced by the Israeli reform have the effect expected by managed competition proponents and envisioned by policy makers and planners? Did sick fund strategies match the objectives of national health insurance?

As anticipated by managed competition theory, allocation of funds based on a capitation formula (which severs the link between sick fund revenue and a member's income) does provide an incentive to improve services to underserved populations and therefore leads to greater equality in the provision of services to different population groups. The Israeli case shows that sick funds have improved services to Arab citizens (Farfel et al. 1997; Farfel and Yuval 1999), to those with low incomes (Berg, Rosen, and Morginstin 1998), and to those in geographically peripheral areas (Nirel et al. 2000). However, services for the elderly and the chronically and severely ill have not been improved. Moreover, sick funds perceive these groups as being unprofitable and therefore have avoided taking any action that might attract them as members.

Our analysis revealed that these strategies grew out of the perception that the risk adjustment offered by a capitation formula based only on age is inadequate. This suggests that the principle of prospective payments is not in itself enough to provide the incentives foreseen by managed competition theory. It is imperative that payments be based on correct risk adjustment parameters. However, correct pricing is very hard to achieve (Newhouse 1998), as it necessitates the time-consuming and expensive collection of information—if it is even obtainable. Furthermore, in order to induce the desired behavior, the risk adjustment formula must be *perceived* by the competing sick funds as being correct—that is, as leading to fair compensation for expenses incurred by elderly and ill members. This would necessitate also having information on managers' perceptions, which is even more expensive and time consuming to collect. Therefore, as the Israeli case emphasizes, risk adjustment—a popular panacea among policy makers—is not only difficult to calculate, but may also have undesirable consequences when implemented partially.

The managed competition elements of the Israeli reform were expected to *eliminate risk selection* and *ensure freedom of choice* of a sick fund by prohibiting sick funds from rejecting applicants. This study found that

while sick funds no longer formally reject applicants, their marketing strategies are still geared toward attracting the more profitable segments of the population. Groups that are perceived as being unprofitable are indirectly rejected. In other words, contrary to the expectations from a managed competition model, sick funds still find it worthwhile to practice risk selection, although less extensively and in more subtle and discreet ways. These practices were not anticipated and are not desired by policy makers.

Regarding freedom of choice of sick fund, data from the National Insurance Institute (Bendelac 1998) reveal that the annual rate of transfer among sick funds following implementation of the law (1995–1997) was 4 percent—identical to that prior to implementation of the law. The elderly are less apt to change sick funds: 1 percent of members ages 65–74 transfer among sick funds, compared to 8 percent of members in the 15–25 age group.[8] However, the growth rates in the number of elderly members of Maccabi Healthcare Services and Meuhedet Health Services were higher in the period 1994–1997 than were the growth rates of members who were not elderly during the same period (while in the period 1991–1994 there was an opposite trend); this might indicate that there is greater freedom to transfer among sick funds since implementation of the law, but it might also be attributable to the aging of sick fund members.

An important objective of national health insurance was to *improve quality of care* to the public, and the incentives were expected to encourage this. Policy makers believed that restricting competition over premiums and the benefits package would induce sick funds to compete over quality of care to attract members and increase income. In fact, sick funds preferred to improve visible services rather than the quality of medical care, both because they feared attracting ill members (who incur expenses) and because improved quality would not have had an immediate impact on their membership base, although it might have attracted new members in the long run. These strategies are in line with the literature, indicating that when risk adjustment is perceived as being insufficient, and when measures of quality do not actually reflect health outcomes, health care organizations do not make an effort to maximize quality, regardless of payment scheme (Dudley et al. 1998; Kindig 1998).

Lack of competition over quality improvement may be related to the element of managed competition that is missing in the Israeli system: the failure to assign a central body to collect and distribute information on the quality of care provided by the sick funds. Such information is

8. There are no comparable data on the period prior to national health insurance.

expected to induce competition over quality since it sensitizes patients and enables them to take quality parameters into account when choosing a provider. However, the value of improving visible aspects of care (e.g., waiting times, facilities) should not be underrated. Managed competition apparently does succeed in inducing sick funds to better respond to patients' preferences and demands (although these do not refer to quality of medical care, as policy makers would prefer). This was reflected in the impressive rise in levels of patient satisfaction with sick fund services.

This study also found that sick funds preferred competing over supplemental insurance services and premiums, which they perceived as being profitable both financially (i.e., generating more income) and commercially (i.e., the sick fund can market itself as being unique). Although policy makers expected competitive activity in this field, they were surprised and displeased by its scope for several reasons. Although the demand for supplemental insurance may reflect consumer preferences, policy makers perceived it as supply induced (a known market failure in health care). Therefore, the services offered through supplemental insurance were perceived by Ministry of Health and Ministry of Finance officials as being largely superfluous or redundant and incurring unnecessary expense to citizens. Ministry of Health policy makers also opposed supplemental services because they create a two-tiered system, thus undermining the goal of equality. However, despite the growing dissatisfaction of government officials, the sick funds lobbied to continue to market supplemental insurance, which was a good source of income, and vehemently opposed policy attempts to transfer the marketing of supplemental policies to private insurance companies (Brammli-Greenberg and Gross 1999).

The incentives introduced by the national health insurance reform gave rise to several other competitive strategies that were not foreseen by managed competition theory and that were viewed as being problematic by policy makers in Israel. For example, alongside market competition, the sick funds found it profitable to cooperate among themselves to strengthen their position vis-à-vis providers, members, and the government (which is rather easy to accomplish in Israel, given the small number of sick funds). Although reducing duplication and negotiating better prices with providers are in line with national health insurance goals, they are reminiscent of a cartel's activities; consequently, they were disqualified by the Israeli antitrust authority. Similarly, although the restriction of services to save money can be a rational response to financial constraints, it was perceived as an undesirable cost-containment strategy because it was detrimental to consumers.

Another strategy employed by the sick funds to increase their income and balance their budgets was lobbying to change "the rules of the game" (i.e., the capitation formula, price rates, and so on). This, too—perhaps naively—was not foreseen by managed competition theory and not envisioned by reform planners, and was undesirable in their eyes. "They'd rather sit in my office for hours than operate their sick funds more efficiently," complained a senior Ministry of Finance official. Since the reform aimed to instate a professional system with objective rules that would remove political influences from the health system, planners believed that it would depoliticize the health system, enabling management according to professional, technocratic principles (e.g., formulas for allocating funds, for updating the health budget). They believed that severing the financial and organizational bonds among sick funds, labor unions, and political parties would abolish the funds' ability to influence political and administrative decisions regarding the health system and induce them to concentrate on the rational management of their organizations. However, since the sick funds perceived some of the new rules embodied in the National Health Insurance Law as being unfair, unclear, and unreasonable, and since they perceived government officials and elected personnel as prey to pressure, they employed a strategy of trying to change the rules of the game to their advantage. Such behavior has been described in the literature as a common response to changes in laws and regulations that affect an organization (Oliver 1991). Nevertheless, it surprised Ministry of Finance officials, who were trained in rational economics and were unfamiliar with theories of political science or organizational behavior.

The findings of this study further indicate that sick fund strategies did correspond to the planners' aim of increasing the sick funds' *financial responsibility* and inducing them to balance their budgets. The means for achieving this were regulations regarding the level of the overall health budget and tight control of the sick funds' activities, rather than price competition, as suggested by the managed competition model. Similar results were reported in an analysis of the National Health Service reform in the United Kingdom, which also used budget limits in combination with elements of the managed competition model (Light 1997). However, as the sick funds used both short- and long-term strategies, there was a risk that their budgets might not be balanced in the short term. This was especially true of Clalit Health Services. Since its income rose following the national health insurance reform, it felt less pressure to cut expenses immediately and could invest in long-term strategies aimed at increasing efficiency.

Other sick funds, whose budgets were compromised by the new law, put more energy into short-term strategies.

Policy makers who were concerned about the overall deficit of the health system (which had reached NIS 1.5 billion by 1997) had the impression that the sick funds were operating inefficiently and wasting resources. However, they were unaware of internal processes in the sick funds, which increased efficiency within a few years. The overall deficit of the health system decreased to NIS 400 million in 1998 and was nearly balanced by 1999 (NIS 200 million). This change was due in part to an increase in the health budget (largely the fruit of lobbying) and in part to the sick funds' long-term financial strategies, which indeed led to greater efficiency and decreased per capita expenditures.

However, some of these strategies were not perceived by policy makers as being desirable, especially since the sick funds tried to increase revenue and not only to reduce expenditure, as state officials had hoped. For example, in order to attract members and increase income, the sick funds increased their marketing budget very significantly, thereby diverting funds from service provision. The sick funds also tried to develop facilities for specialty care in the community in order to reduce waiting times and avoid purchasing services from hospitals at a much higher cost. However, in addition to requiring an investment in infrastructure, this strategy led to system-wide inefficiency and the duplication of hospital services in the community. Although policy makers are aware of this problem, they have not yet adjusted the rates of outpatient hospital services or introduced incentives that might change sick fund policy.

Discussion

The Israeli reform implemented many principles of Enthoven's (1993) managed competition model. Analysis of providers' perception of and response to these incentives can increase our understanding of how managed competition works in practice and contribute to avoiding similar pitfalls when designing reform.

Analysis of the Israeli case indicates that, during implementation of the reform, there were deviations from the ideal model envisioned by Enthoven and that sick funds did not respond to the new incentives as they would have been expected to by managed competition theory. In this section I will discuss these conclusions in light of the specific features of the Israeli system. I will then claim that the Israeli case is indicative of a main weakness of the managed competition model: that is, that it does not take

into account the political, historical, and organizational context in which reform is implemented.

Deviations from the Ideal Model

In Israel, the notable deviation from the ideal model involved instituting cost containment measures and close regulation of the sick funds by the Ministry of Finance, prohibiting price competition over basic premiums, allowing sick funds to offer supplemental insurance, and failing to provide information about quality to consumers. These deviations can be explained by the specific historical, institutional, and political features of the Israeli system (Gross and Harrison 2001). For example, the traditional power of the Ministry of Finance accounts for the rigid financial constraints on health system expenditure and the sick funds' financial activity. These in fact restrict the scope of competition much more than was envisioned by Enthoven's ideal model.

The ban on price competition is related to the historical importance ascribed to equality in Israeli society. The socialist ideology on which the country was founded is still highly valued; it directs public policy, in general, and health policy, in particular (State of Israel 1990). The opening clause of the National Health Insurance Law (1994) illustrates this by stating that "national health insurance under this law will be based on the principles of justice, equality, and solidarity." The elimination of price competition is also related to the opposition of the powerful Clalit Health Services, which stood to lose income if price competition were allowed, since its members had relatively lower incomes and could pay less. When the law was passed, the Labor party—the patron of the General Federation of Labor, Clalit's former owner—was in office.

The decision to allow supplemental insurance under the National Health Insurance Law was also related to political and organizational influences. It was a response to pressures from Maccabi Healthcare Services and Meuhedet Health Service, which were supported by several economically liberal members of the Knesset (the Israeli parliament). In effect, the decision to allow supplemental insurance was their attempt—supported by the Ministry of Finance—to compensate these sick funds for their anticipated loss of income following introduction of the capitation scheme. In addition, Ministry of Finance economists who believed in competition saw the supplemental insurance market as an opportunity to induce competition among the sick funds to improve services.

The failure to disseminate information on quality to consumers can also

be explained in the Israeli case by the country's power structure and history. None of the stakeholders in the system (physicians, sick funds, the Ministry of Health) stood to gain from the dissemination of information to the public. Information on poor quality could threaten a physician's professional prestige and the competitive edge of the sick funds or the Ministry of Health's hospitals. In addition, the IMA has traditionally opposed quality assurance measures initiated by administrative bodies such as the sick funds and the Ministry of Health. Therefore, collection of data on quality could be expected to lead to conflict with the IMA and then to strikes and other sanctions that might harm service to the public. Furthermore, to date, Israeli health organizations have not had the technical capacity to collect reliable and comprehensive data on quality; substantial financial investment would be needed to establish it. Yet such an investment is also not in the interest of the Ministry of Finance, which probably fears that data on quality of care could lead to demands for additional funds to improve the quality of services (Gross and Harrison 2001).

Sick Funds' Responses to the New Incentives

Analysis reveals that the sick funds' responses to managed competition incentives also deviated from theoretical expectations. Our findings indicate that, from the perspective of competing sick funds, improving quality is less viable—and may even be undesirable (serving to attract high-cost members)—than is improving visible elements of service and employing marketing tactics. Furthermore, risk-adjustment parameters are perceived as being highly imperfect, generating inadequate payments for the elderly and ill and generous per capita payments for others, and providing an incentive to the sick funds to avoid attracting elderly and ill members. Finally, risk selection is still viewed as a desirable strategy and is practiced informally when possible.

These responses were tightly linked to sick fund managers' perceptions of the incentives in the reformed system. However, the specific strategies employed by the sick funds can be explained by the local context in which they thrived. For example, the Ministry of Health's traditionally weak position in the system curtails its ability to effectively regulate that system. This is exacerbated by a lack of infrastructure for collecting data on sick fund performance and a lack of enforcement mechanisms. Sick funds are thus free to engage in aggressive marketing and other strategies that reform planners deem undesirable. The historical organizational structure and small size of the Israeli health system make it especially vulnerable

to the formation of a cartel. (Following pressure from the sick funds, the National Health Insurance Law prohibits the entry of new sick funds into the market.) The tradition of politically linked sick funds accounts for the use of lobbying and other political measures to influence the rules of the game and to broker power. Continuation of indirect risk-selection practices can be attributed to weak supervision by the Ministry of Health, as well as to the tradition of risk selection practiced before the reform (especially by the smaller sick funds). Therefore, organizationally, continuing this tradition was feasible and acceptable to employees who identified with the rationale behind it and who saw the benefit to the sick funds.

There are indications in the literature that the Israeli experience is not unique. Reports from other countries attempting to implement managed competition reveal that, indeed, it is seldom implemented as it has been envisioned by its proponents. Significant adjustments are made in the process of designing and implementing reform in order to adapt the model to the needs and constraints of each health system (Light 2001; Lieverdink 2001; Cabiedes and Guillen 2001; Fougere 2001). Strategies that were not foreseen by policy makers or that were deemed undesirable also have been observed in other countries that have attempted to implement managed competition reform. As in the Israeli case, the responses of providers appear to be related to the specific political and historical circumstances of the country implementing the reform (Light 2001).

Policy Implications

The Israeli case raises the question of whether the managed competition model can indeed induce the competitive behavior it aspires to induce. On one hand, the failure to achieve the desired result in the Israeli system may be attributed to imperfect implementation of the managed competition model and to the specific circumstances described above. On the other hand, it may be that the managed competition model contains unrealistic assumptions about the response of providers to incentives and about government's ability to regulate the system (e.g., to design correct risk adjustment and to collect and disseminate information on quality; Light 1999).

It is difficult to distinguish which of these two factors better explains the failure of managed competition to produce the desired results. Probably, both the theoretical weaknesses of the managed competition model (Light 2001) and the specific political, historical, and organizational context of the Israeli system play a part. In any case, the managed competition model does not account for those factors that have a crucial effect on both the

implementation of the model and providers' responses to new incentives. These factors constrain the generalizability of the model: If they are taken into account, we can expect the model to be implemented differently in different countries and to elicit different strategies from providers in each country. Therefore, the broader implication of our analysis is the need to design a process that will better enable policy makers to consider local contextual factors when planning and implementing reform.

The findings of this research study suggest an approach for building such a process, based on this analysis of the Israeli case. The first element of this approach is to *involve health care providers in planning* reform and designing incentives. As has been shown, there is a strong link between managers' perceptions of incentives and the strategies employed. Also evident is the fact that these perceptions are often unanticipated and differ from the incentives intended by planners of the reform. Involving providers in structuring reform will help planners understand how incentives are in fact perceived, before they are enacted. This will give them an opportunity to redesign incentives so that they have a better chance of actually being effective. For example, in Israel, although perfect risk adjustment is unattainable, the method of payment to the sick funds could be modified to provide a stronger incentive to improve care for the seriously ill and to develop services for the elderly (e.g., home care, comprehensive geriatric care). This might be achieved by combining capitation with direct compensation for services or activities that policy makers wish to encourage.

The second element of this approach is to *continuously monitor the reformed system*. Although it is convenient to believe that incentives can be designed so as to ensure the achievement of objectives and preclude the need for constant surveillance, the Israeli experience indicates that this is not the case. The intricacy of organizational behavior, on one hand, and the difficulty of foreseeing the interplay of factors affecting organizational response, on the other, makes continuous surveillance and monitoring of providers' behavior necessary for identifying the strategies employed and assessing the degree to which national objectives are being met. It is important to monitor not only the outcomes of reform, but also the processes within health organizations, so as to detect activities that may have a positive or negative effect in the long term. This would enable policy makers to encourage desired activities and discourage undesirable ones, before either long- or short-term strategies have had a deleterious effect.

The third element of this approach is *flexibility* in policy making and the

willingness to introduce changes in incentives and other elements of reform over time, in response to outcomes and in accordance with the results of continued surveillance. This would contribute to improving the outcomes of reform and help it to achieve its aims.

Although the cost of adopting this approach cannot be underestimated, and the results cannot be guaranteed, the Israeli case suggests that the cost of *not* following it might be even higher—especially if it involves compromising key objectives of health system reform.

Appendix A Planned and Perceived Incentives in National Health Insurance Legislation

Main Components of Legislation	Incentives As Planned	Incentives As Perceived by Sick Funds
Legally mandated, fixed budget for the health system	Economize, reduce expenditures, increase efficiency	Balance the budget (increase revenue and reduce expenditures)
Legally mandated, fixed formula for annual updating of budget and government monitoring of the sick funds' financial operation	Avoid deficits, end negotiation with the government for subsidies	Impossible to balance the budget (formula is incorrect), necessitating constant negotiation with the government to increase overall budget and receive special subsidies
Allocation of funds according to a capitation formula based on the number and age of members	Attract members regardless of economic status and age, by improving level of services	Attract members regardless of economic status, with priority to large families and those living in peripheral regions (where the supply of services is lower and therefore members incur fewer costs); elderly still viewed as bad risk Impetus to compete over visible components of service; loss of revenue leads to reduction in the level of services in less visible areas so as not to lose market share
Prohibition of risk selection (cream skimming)	Stop risk selection; provide high-quality care for ill members	Indirect rejection of ill and elderly applicants; avoidance of development of special services for the severe and chronically ill
Uniform premium and benefits package	Impetus to compete over quality of services	Impetus to compete over supplemental insurance for services not included in the basic benefits package

Appendix A (continued)

Main Components of Legislation	Incentives as Planned	Incentives as Perceived by Sick Funds
Allow sick funds to market supplemental insurance	Augment competition over quality of mandatory benefits package, at the risk of continuing to provide an incentive to attract wealthy members	Attract young and wealthy members and develop supplemental insurance packages attractive to them

Appendix B Sick Fund Revenues Following the National Health Insurance Law (in NIS Prices for December 1995)

	Clalit	Meuhedet	Maccabi	Leumit
Standardized per capita income from national health insurance resources[a]				
1994	1,857	2,251	2,383	1,979
1995	2,057	2,093	2,038	2,118
Standardized per capita income from national health insurance resources, government subsidies, and copayments				
1994	2,360	2,445	2,623	2,420
1995	2,307	2,406	2,477	2,403

Source: Rosen, Ivancovsky, and Nevo 1998.

[a]National health insurance resources include all revenue allocated through the capitation formula.

Appendix C Selected Indices of Quality of Sick Fund Services, Prior to and Following National Health Insurance

	Clalit	Meuhedet	Maccabi	Leumit
Perceived improvement in services, compared to last year				
1995	23	8	7	11
1997	46*	34*	23*	38*
Overall satisfaction with sick fund services				
1995	80	91	91	85
1997	90*	95	94	91
Wait up to 15 minutes to see a primary care physician				
1995	56	75	70	52
1997	66*	80	69	69
Wait up to a week for an appointment with specialist				
1995	49	51	76	68
1997	58*	74	80	69
Laboratory hours "very convenient"				
1995	9	10	21	12
1997	16*	14	26	28

Note: Values are percentages. *Source*: Gross, Rosen, and Shirom 2001.
*p value for difference between 1995 and 1997 < 0.05 (chi-square test)

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