Managed Care: Low Reputation but Most Effective

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Managed care refers to the employment of the management principle in the production process of health care services. It also refers to an integrated system of provision, where financing and production are governed by one source. The central goal of managed care is to control costs in an efficient way (see Frech III et al. 2000). The tasks of a managed-care organization exceed those of a classical health insurer because it attempts to influence the supply of and the demand for health care services either directly through the selection of providers or indirectly through adequate reimbursement schemes.

Managed care tackles potential market failures involved in hidden knowledge and hidden action both on the demand and supply side of the health care market. The insured have an informational edge regarding their health status (hidden knowledge) and their action to prevent the probability of an illness and to restrict the costs of treatment (hidden action). Likewise, a provider can hide information about his productivity as well as about his efforts to ensure the quality of treatment and to limit the costs. These informational asymmetries lead to adverse selection and to moral hazard, which can be dealt with by applying incentive-compatible contracts.

Different forms of managed care exist, including Health Maintenance Organizations (HMOs), Preferred Provider Organizations (PPOs) and Independent Practice Associations (IPAs). They differ with respect to the extent of the integration of providing insurance and organizing the provision of services. An HMO is an integrated product where insurance and provision come from one source. In PPOs and IPAs the degree of integration is less accentuated. Since an extensive literature exists on the various forms of managed-care organizations (see, among others, Glied 2000, and Schumann and Amelung 2000), this article focuses on managed-care measures available, and on the effect of managed care improving the quality of health care and controlling the costs in selected countries.

Instruments of managed care

Managed-care measures may be divided roughly into two groups. The first refers to forms of contracts, the second includes measures that address the quality and the costs of health care provision.

Forms of contract

a) Provider selection

Managed-care organizations may contract with selected individuals or a group of providers, and thereby influence the costs and the quality of in-patient and out-patient care. Given its market power, a managed-care organization can achieve lower prices for services and, thus, reduce the costs. Targeting experienced physicians with a high reputation ensures the quality of provision. This requires criteria that can be used to evaluate providers. For instance, it is well-known that the rate of successful operations depends on the number of operations a surgeon performs per year.

In a three-tiered system where insurers do not directly select health care providers, the insurer (or as in the US, the employer) contracts with a managed-care organization, fixing the terms under which the insured should be treated (range, price and quality of services). Then, the managed-care organization itself looks for providers that can supply the corresponding service spectrum.

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b) Provider reimbursement

Different forms of reimbursement have different incentives for physicians. A Fee-For-Services (FFS) scheme reimburses specific services, leaving the risk of high costs entirely to the insurer. In a staff-model HMO, physicians are paid a fixed salary. Again, the cost risk remains with the insurer. While, the HMO can control its physicians, physicians themselves have only small financial incentives for high quality and low cost provision. Of a quite different nature is a capitation system, where the physician receives a fixed sum per time period for each enrollee, irrespective of his/her health care utilization. Here, the incentives for reducing cost are maximal while the quality assurance depends on the degree of competition that takes place on the market for health care services. If competition is fierce and consumers are quality sensitive, then capitation ensures both the quality and the cost goal. Under different circumstances, providers may try to select patients according to expected treatment cost, and, therefore, impose a burden on the system. In this case, partly relying on cost reimbursement is warranted.

In general, managed-care organizations use a mixed-reimbursement scheme. In ambulatory care, capitation contracts are supplemented by measures that partly reimburse the costs of treating cost-intensive cases. Alternatively, a fixed salary or a reimbursement based on FFS is employed, and complemented by incentives to control the costs. The contract between a managed-care organization and an insurer usually applies risk-adjusted capitation.

c) Insurance contracts

The choice of providers is restricted for the insured covered by managed care. HMO enrollees, except for emergencies, always must first visit the HMO physician. In less integrated systems (PPOs and IPAs), the general practitioner is the person to contact. He then acts as a gatekeeper, treating or referring the patient to a specialist or a hospital. Sometimes demand-side co-insurance is also used in managed-care policies. However, the extent of patients' co-payments is less accentuated compared to traditional health care insurance policies, increasing the attractiveness of managed care for the consumers.

Certain services are quite often not covered by social health insurance. Managed care contracts sometimes cover additional services, such as preventive and maternity services. But it also works in the other direction, that is, some services are excluded from coverage under managed-care plans. The danger with optional coverage is that insurers try to skim off the good risks, which of course run counter to the goals of social health insurance.

Instruments for cost-control and quality improvement

a) Gatekeeping

Gatekeeping is widespread in the managed-care system. It refers not only to patients but also to physicians. The gatekeeper is supposed to overlook the whole treatment process of a patient, that is, to decide on his own part for the treatment as well as coordinate the part of other providers. He may also collect and keep his patients' illness histories and medical data. A cost sharing contract usually goes along with gatekeeping.

b) Guidelines

Treatment guidelines and standard operating procedures play an important role within managed care. These guidelines refer to the treatment of certain illnesses, the decision process between physicians and extend to topics like the continued education of health care personnel.

Drug formularies, a special form of guidelines, specify a list of approved pharmaceuticals, typically based on the effectiveness and costs (Robinson and Steiner 1998). These formularies often prescribe generics instead of brand drugs.

c) Utilization review and management

Utilization reviews are a cornerstone among managed care measures. They prevent physicians from performing unnecessary therapies and guide them to treat patients in an adequate way (do the right thing – do things right) (Amelung and Schumacher 2000). They refer to the specific case and instruct physicians to reveal their actions and plans to external referees who decide on the adequacy of the therapy.

Utilization management by comparison relates to the aggregate performance of a physician or a hos-

pital compared to their peers. Benchmarking allows the evaluation of the productivity and the efficiency of individual providers, giving the managed-care organization its requisites for provider selection, contract design and reimbursement schemes.

d) Disease and case management

Disease management is supposed to optimize the treatment process for specific patients. In particular, special programs for the treatment of a chronic illness, for instance, diabetes, have been developed, since they have a large potential to improve the health status of the patients.

Case management deals with optimization when the treatment is expensive, acting retrospectively and prospectively. If complicated operations are carefully planned, the average length of a hospital stay can significantly be reduced. Close retrospective inspections of very expensive or bad outcome cases help physicians to take preventive actions for similar future cases.

Managed care in selected countries

An appropriate comparison of the effects of managed care in different countries is difficult since the organization and regulation of the markets for health care and health insurance differ. The table characterises the health care system and the application of managed care in three selected countries. There is social insurance in Switzerland and Germany, while health insurance in the United States mostly depends on a private system. Managed care is most common in the US where it has a long tradition. In Switzerland, which has a similar market oriented health care system like the US, managed care is also important. However, special arrangements with individual providers has not been possible yet and health insurance contracts have been heavily regulated. Germany is the latecomer since it has only started to enter the managed care era.

United States

Managed care dominates the health care market in the United States. In 1999, only 8 percent of persons with employer-sponsored health insurance coverage had a traditional indemnity insurance (Dudley and Luft 2001). Of the total US population, 70 percent with insurance were enrolled in a managed-care plan. Furthermore, the two federal programs for the elderly and the poor, Medicare and Medicaid, use managed-care measures to a large extent. In recent years, the growth of managed care and the satisfaction of consumers with it

Managed Care in Selected Countries

	USA	Switzerland	Germany
Main source of finance	private	social insurance	social insurance
MC–forms	HMO, PPO, IPA, ...	HMO, PPO	pilot projects
MC–share	70%	8%	0[a)]
	MC instruments (MC sector / traditional sector)		
Provider selection	yes / no	no / no	no / no
Provider reimbursement	cost-sharing / FFS	cost-sharing, FFS / FFS	? / FFS – budget
Insurance contracts	different benefits different forms of co-payments	equal benefits regulated co-payments	equal benefits some regulated forms of co-payments
Gatekeeping	yes / no	yes / no	(yes) / no
Guidelines / formularies	yes / no	yes / yes	? / no
Utilization review and management	yes / no	yes / no	(yes)
Disease and case management	yes / no	yes / yes	(yes) / yes
	Effects (MC vs. traditional)[b)]		
Utilization	–10% - –20%	–16%	?
Quality	no difference	no difference	?
Consumer satisfaction	lower in MC	no difference	?

[a)] Projects only. – [b)] Risk adjusted.

have declined. However, this perception contrasts with the scientific evidence on the effects of managed care (see Robinson 2000). Glied (2000) ascertained that overall reductions in utilization due to HMOs are in the range of 10 to 15 percent, comparable to earlier surveys. Other researches show an even stronger effect in case studies. Cutler et al. (2000), for instance, discovered in the fields of coronary diseases that the expenditure of HMO enrollees were 30 to 40 percent below those with conventional insurance coverage.

Literature on outcome differences for enrollees in managed-care plans relative to conventional insurance arrangements suggests that there are few consistent differences between the quality of care in managed care and the traditional sector (see Glied 2000). Consumer satisfaction tends to prefer conventional insurance to managed care for most (but not all) populations (Miller and Luft 2002). This result is consistent with the nature of rationing in managed care. Managed-care enrollees are more likely to face a situation where the insurer or provider denies access to a medical service compared to persons with a conventional health insurance policy.

Switzerland

In Switzerland managed-care organizations emerged in 1990. The first network of primary physicians, a kind of PPO, was introduced in 1994. A reform of social health insurance in 1996 fostered new forms of health care organizations. Afterwards, managed care began to grow. In 2000, about 8 percent of the population was enrolled in a managed-care plan (see BSV 2002).

The euphoria, however, has been dampened in recent months. Although the demand for managed care is still high and the cost of treatment has come down, cost savings are said to be the consequence of a favorable risk selection. Again, this contradicts scientific evidence, which has recently estimated a cost advantage for managed care of 16 percent, even if risk selection is factored in (see Werblow 2003). This confirms older results for HMOs showing cost reductions between 30 and 35 percent (see Baur and Stock 2002). Since a risk selection bias is always a problem with aggregate data, it is important to look at future studies that deal with specific illnesses where it is easier to compare the effects of different forms of insurance on cost and quality of care.

The outcome of treating hypertension in different settings was studied in Baur and Stock (2002). The authors found no significant difference between managed-care and conventional plans, while the average performance was poor in both forms. Managed-care organizations in Switzerland have set up a foundation for external quality control. This institute has started to certify HMOs and PPOs. With respect to consumer satisfaction, again no significant differences could be detected. Consumer dissatisfaction with managed care is less of a problem in Switzerland, as enrollees can withdraw from a managed-care plan and take up conventional health insurance by the end of a year.

Germany

In Germany managed care is being introduced at a very slow pace. Although PPOs in ambulatory care have been legally possible since 1998, only a few pilot projects have started since then. Major obstacles to the introduction of managed care are the sectoral separation of budgets and the fear of sickness funds attracting high risk patients when they, for instance, offer disease management plans. An intersectoral integration of health care cannot be achieved if financial responsibilities lies in different hands. Currently, sickness funds have no control over the ambulatory sector, as they only contract with the physicians' association about the total budget.

The present system is characterized by a non-systematic application of managed-care elements. Reimbursement in ambulatory care is FFS but capped by physician-specific budgets. Hospitals will face a diagnosis-related-groups financing scheme, the G-DRG, which will start in 2004. Co-payments for patients are more or less absent, only drug use is covered by a fixed, package-size-related co-payment. The reform of social health insurance, currently in the pipeline, will not produce any significant step in loosening the heavily regulated German health care market.

Summary and conclusion

Managed care is a powerful tool to control costs and to foster quality of provision in health care. Even though costs have been reduced without compromising quality in those countries that apply managed care, some consumers are rather disappointed. This may have to do with the fact that

enrollees who prefer restrictions on the access to health care to high premiums ex ante may be dissatisfied with their choice afterwards.

There is no doubt that most instruments work: managed-care organizations can select the best providers, gatekeeping allows for removing double diagnoses and for monitoring the treatment process, and disease and case management ensures good and cost-effective medicine. Research evidence, stemming mostly from the US where managed care plays a dominant role, confirms the advantages of managed care over conventional health insurance plans. However, the perception in the public is different. One further reason for the mismatch between research evidence and public opinion relates to the role of the medical profession in influencing the public perception (Robinson 2000). Managed care is unpopular within the medical profession because it restricts the clinical autonomy and possibly the income of physicians. Not surprisingly, many doctors have complained that their ability to offer the appropriate quantity and quality of care has been compromised. The discrepancies between research evidence and public opinion represent something of a dilemma for European policy makers who seek to introduce and implement managed care in their countries.

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