Is the Kingdom of Saudi Arabia getting value for money invested in health? Quality care is being provided throughout health facilities in the Kingdom, however there is minimal control of utilization in all health sectors, consequently leading to abuse and over utilization, particularly in the public sector. Managed care programs have proven effective in reducing unnecessary inpatient and ancillary service utilization by reducing use of expensive procedures and unnecessary, highly specialized services, and shifting to less expensive care options. Health maintenance organizations are the best example of a managed health care model; tracking good performance and cost savings averaging between 20-40% compared to more traditional health plans. Key features of health maintenance organizations include serving a defined population voluntarily enrolled in the health plan; assumption of contractual responsibility and financial risk by plan to provide a range of services, and payment of a fixed periodic payment by the enrollee, independent of the actual use of services. The key characteristic that distinguishes health maintenance organizations from other delivery systems is prepayment for the care that is provided. Preferred Provider Organizations offer discounts for services received from a selected set of physicians and hospitals. Services received by enrollees are not fully reimbursed from this selected list of providers. Preferred Provider Organizations use health maintenance organizations administrative processes for controlling costs but do not include some of the intrinsic cost and quality controls of health maintenance organizations. Review of several studies indicate that patients enrolled in prepaid group practices (managed care organizations) were hospitalized 15-40% less often than those enrolled in fee-for-service health plans.

Keywords: Managed Care Programs, Health Maintenance Organizations, Preferred Provider Organizations, quality care, utilization management, prepayment, reimbursement, fee-for-service.


Health services provided by the government sector in the Kingdom of Saudi Arabia are mostly free and account for over 80% of total services.\(^1\) Thanks to the government policy of providing the highest possible quality care to citizens and the huge investment in resources, residents in the Kingdom are able to receive all levels of health services with relative ease. There is very minimal control of utilization in all sectors and this is said to have led to abuse and over utilization in the public sector. The referral system adopted by the Ministry of Health (MOH) has reduced the problem of multiple visits and related abuse. The referral system is, however, not an effective cost-control tool. Once referral is made, there is no regulation as to the number of visits or level of care provided. Patients are able to ask/demand referral to a higher level facility and there does not appear to be very strict guidelines for referral.

The availability of highly specialized and expensive medical equipment in most Saudi hospitals makes the use of highly specialized procedures for minor problems the preferred option for health professionals, with no less encouragement from patients. Public sector health professionals are reimbursed on a salary basis - which is a reimbursement method that has little or no incentives to control cost. Public sector health professionals are in no financial risk of loosing money in the event of inefficient use of resources. The lack of financial

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inappropriate patterns of medical care. Practice patterns, many of which result in costly, inefficient use of resources in situations where benefits are at best marginal.2

There is no doubt that high quality care is being provided in health facilities in the Kingdom. The question that needs to be asked is ‘at what cost?’ In other words, is the Kingdom getting value for money invested in health?

Administrators of non-profit health facilities such as the public sector hospital directors here in the Kingdom, are said to be motivated by prestige, and seek to provide higher quality care than consumers would be willing to pay for.1 If that is the case, then given the abundance of highly specialized equipment and facilities in the Kingdom, a delivery system that prevents abuse and excessive use of resources is urgently needed.

**Managed health care in the Saudi system.** Health service delivery in the Kingdom, whether public or private, and particularly under the proposed national health insurance (NHI), should be through a managed health care model. Health maintenance organizations (HMO),4 widely available in the United States, are the best examples of managed health care models. The key features of an HMO includes serving a defined population voluntarily enrolled in the health plan; the assumption of contractual responsibility and financial risk by plan to provide a stated range of services; and the payment of a fixed annual or monthly payment by the enrollee, independent of the actual use of services. Managed care programs have proven effective in reducing unnecessary inpatient and ancillary service utilization; reducing utilization of expensive procedures and unnecessary, highly specialized services; and shifting utilization to less expensive care options, such as emergency room to outpatient clinics and acute care to preventative care, ambulatory services and early detection.

Variants of HMOs include the staff model HMO, in which the physicians are employed by the HMO; group model HMOs, in which the HMO contracts with a multi-speciality physician group to provide services to HMO members; the network model HMO, in which the HMO contracts with more than one group: the independent practice association (IPA) model, HMO contracts with an association of physicians to provide services to members. Interest in managed care plans, such as HMOs in the United States, stems from the performance of such plans.5,6 Early experience placed the magnitude of cost savings by HMOs between 20-40%, compared to those enrolled in more traditional health plans. On the other hand, many studies in the United States have documented the wide variation in medical practice patterns, many of which result in costly, inappropriate patterns of medical care.7 Some estimate that up to 30% of all health care costs result from unnecessary medical and surgical tests, treatment and procedures.8

**Prepayment for services.** The key characteristic that distinguishes HMOs from other delivery systems is the prepayment for the care that is provided. Providers of health services (physicians, hospitals) are paid a predetermined amount per HMO member for an agreed length of time, regardless of the volume of services provided. The intent of managed health care models in using capitation reimbursement is to shift some financial risk to providers (physicians, hospitals). This would in theory, create incentives for providers to provide appropriate levels of medical care in general, and preventive care in particular.9 Anything to involve health providers - in the Kingdom - with some financial risk of loosing money for provisions of excessive and inappropriate medical care, is highly called for. Because the amount providers are paid is fixed under capitation reimbursement method, the more services provided, the less money providers can keep, and vice versa. The hypothesized effects of fixed capitation payment on providers include, incentives for efficiency; less duplication of facilities; minimizing the cost of medical treatment; increased physician productivity; incentives for preventive care and health education; use of generic drugs; and innovations in the delivery of medical care.9

Another type of managed health care organization is the Preferred Provider Organizations (PPOs). Preferred Provider Organizations are associations or organizations of physicians, hospitals or both. These organizations contract with employers and insurers to provide comprehensive health care services to subscribers on a fee-for-service basis. Enrollees (from employers/insurers) are offered discounts, usually 15-20% for services received from a selected set of physicians and hospitals. Services received by enrollees from the selected list of providers are not reimbursed fully. PPOs do not include some of the intrinsic costs and quality controls of HMOs, and services are usually reimbursed on fee-for-service. However, PPOs use HMO’s administrative processes for controlling costs, such as negotiated provider discounts, selective contracting, utilization management, and even fixed per capita pricing in capitated PPOs.

Managed health care, particularly along the lines of the PPO models, are currently, to varying degrees, used by some private hospitals in the Kingdom. Such hospitals go into contract with employers (some private companies) to provide services to employees, also to the NCCI medical insurance subscribers. Unless in emergency cases, where illness occurred in areas where there is no preferred providers, enrollees must use the services of the selected hospitals.

Health maintenance organizations modelled managed health care system’s is highly desirable for
the Kingdom. As much as possible, all the fee-for-service reimbursement models currently prevalent in the private sector, should be replaced with capitation payment models. Because providers (physicians and hospitals) reimbursed under capitation have a fixed amount and therefore have an interest in limiting the amount of services provided, some cost-effective and cost-containment measures are used. The following Utilization Management Programs widely used by HMOs have been found effective in controlling health services utilization: use of primary care physicians (general practitioners) to act as gatekeeper; requiring prior approval for referrals and high-level procedures; mandatory outpatient surgery/same day surgery; pre-admission testing and same day surgery; setting a maximum allowable length of stay for various diseases; concurrent stay review; second surgical opinion; mandatory use of generics; case management; discharge planning; charge auditing.

From the foregoing page, it is evident that major cost savings by HMOs occur as a result of reduction in hospital utilization. Review of several studies indicate that patients enrolled in prepaid group practices (managed care organizations) were hospitalized from 15-40% less often than those in fee-for-service.

Finally, introducing a managed care delivery system in the Kingdom may not be as novel as it sounds. Some managed care tools are already being applied in the Kingdom. Most of the tools used by the National Company for Cooperative Insurance to control utilization of services by their enrollees are similar to those of managed care plans. It is not necessary to adopt the names used in other countries like HMO, PPO, IPAS, etc. The important thing is to apply the tools used to control inappropriate use of medical services. As long as providers/consumers have the incentives to use services efficiently, it does not matter how each agency chooses to implement it.

References